

MFRA Reference List

Contents

MFRA Citations.....	1
Looking Forward to MFRA 2021-2030	2
Reference of papers that your institute/university/department/research group has already published on one or more of these new research themes, including the ones we proposed and the ones you suggest.....	2
Thematic Area 1	6
Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.NOTE: by “papers” we refer to published scientific articles. Please, give priority to documents in English, but also indicate publications in other languages when relevant.	6
Reference of papers that your institute/university/department/research group has already published on one or more of these new research themes, including the ones we proposed and the ones you suggest.....	25
Thematic Area 2	36
Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.....	36
Reference of papers that your institute/university/department/research group has already published on one or more of these new research themes, including the ones we proposed and the ones you suggest.....	46
Thematic Area 3	54
Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.....	54
Thematic Area 4	60
Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.....	60

Looking Forward to MFRA 2021-2030

Reference of papers that your institute/university/department/research group has already published on one or more of these new research themes, including the ones we proposed and the ones you suggest.

Alfaro R.I., Fady B., Vendramin G.G., Dawson I.K., Fleming R.A., Sáenz-Romero C., Lindig-Cisneros R.A., Murdock T., Vinceti B., Navarro C.M., Skråppa T., Baldinelli G., El-Kassaby Y.A., Loo J., 2014. The role of forest genetic resources in responding to biotic and abiotic factors in the context of anthropogenic climate change. *Forest Ecology & Management* 333, 76-87.
<https://doi.org/10.1016/j.foreco.2014.04.006>

Álvarez-Garrido, L.; B. Viñepla, S. Hortal, J. Powell, J.A. Carreira. 2019. Distributional shifts in ectomycorrhizal fungal communities lag behind climate-driven tree upward migration in a conifer forest-high elevation shrubland ecotone. *Soil Biology and Biochemistry* 137: 107545 (11 pp.). <https://doi.org/10.1016/j.soilbio.2019.107545>

Blanes, M.C., B. Viñepla, J. Merino & J.A. Carreira. 2013. Nutritional status of *Abies pinsapo* forests along a N deposition gradient. Do C/N/P stoichiometric shifts modify the photosynthetic nutrient-use efficiency? *Oecologia* 171: 797- 808. DOI: 10.1007/s00442-012-2454-1

Blanes, M.C., B. Viñepla, M.T. Salido & J.A. Carreira. 2013. Coupled soil-availability and tree-limitation nutritional shifts induced by N deposition: insights from N to P relationships in *Abies pinsapo* forests. *Plant & Soil* 366: 67-81. DOI: 10.1007/s11104-012-1397-y

Blanes, MC; Emmett, BA; Viñepla, B; Carreira JA. 2012. Alleviation of P limitation makes tree roots competitive for N against microbes in a N-saturated conifer forest: A test through P fertilization and 15N labeling. *Soil Biology & Biochemistry* 48: 51-59. DOI: 10.1016/j.soilbio.2012.01.012

Bontemps, A., Davi, H., Lefèvre, F., Rozenberg, P., & Oddou-Muratorio, S. (2017). How do functional traits syndromes covary with growth and reproductive performance in a water-stressed population of *Fagus sylvatica*?. *Oikos*, 126(10), 1472-1483. <https://doi.org/10.1111/oik.04156>

Building resilience to climate change through forest landscape restoration in the Shouf Biosphere Reserve (Lebanon)

Carrière SD, Martin-StPaul NK, Cakpo CB, Patris N, Gillon M, Chalikakis K, Doussan C, Oliosio A, Babic M, Jouineau A, Simioni G, Davi H, 2020. The role of deep vadose zone water in tree transpiration during drought periods in karst settings – Insights from isotopic tracing and leaf water potential. *Science of The Total Environment* 699, 134332.
<https://doi.org/10.1016/j.scitotenv.2019.134332>.

de Lafontaine G, Ducouso A, Lefèvre S, Magnanou E, Petit RJ (2013) Stronger spatial genetic structure in recolonized areas than in refugia in the European beech *Molecular Ecology* 22(17) : 43974412.

Doublet, V., Gidoin, C., Lefèvre, F. et al. Spatial and temporal patterns of a pulsed resource dynamically drive the distribution of specialist herbivores. *Sci Rep* 9, 17787 (2019).
<https://doi.org/10.1038/s41598-019-54297-6>

- Dupuy, J. L., Fargeon, H., Martin-StPaul, N., Pimont, F., Ruffault, J., Guijarro, M., ... & Fernandes, P. (2020). Climate change impact on future wildfire danger and activity in southern Europe: a review. *Annals of Forest Science*, 77, 35.
<https://link.springer.com/content/pdf/10.1007/s13595-020-00933-5.pdf>
- Eggermont H., Balian E., Azevedo J.M.N., Beumer V., Brodin T., Claudet J., Fady B., Grube M., Keune H., Lamarque P., Reuter K., Smith M., van Ham C., Weisser W.W., Le Roux X., 2015. Nature-based solutions: new influence for environmental management and research in Europe. *GAIA – Ecological Perspectives for Science and Society* 24(4), 243 – 248.
<https://doi.org/10.14512/gaia.24.4.9>
- Fady B., Aravanopoulos F.A, Alizoti P., Mátyás C., von Wühlisch G., Westergren M., Belletti P., Cvjetkovic B., Ducci F., Huber G., Kelleher C.T., Khaldi A., Bou Dagher Kharrat M., Kraigher H., Kramer K., Mühlethaler U., Peric S., Perry A., Rousi M., Sbay H., Stojnic S., Tijardovic M., Tsvetkov I., Varela M.C., Vendramin G.G., Zlatanov T., 2016. Evolution-based approach needed for the conservation and silviculture of peripheral forest tree populations. *Forest Ecology & Management* 375, 66–75, doi: 10.1016/j.foreco.2016.05.015.
- Fady B., Cottrell J., Ackzell L., Alía R., Muys B., Prada A., González-Martínez S.C., 2016. Forests and global change: what can genetics contribute to the major forest management and policy challenges of the twenty-first century? *Regional Environmental Change* 16(4), 927-939. Doi: 10.1007/s10113-015-0843-9.
- Fargeon H., F. Pimont, N. Martin-StPaul, M. Caceres, J. Ruffault, R. Barbero, J-L. Dupuy, 2020. Projections of fire danger under climate change over France: where do the greatest uncertainties lie? *Climatic Change*, 160(3), pages 479-493. DOI: 10.1007/s10584-019-02629-w
- Friess N, Müller JC, Aramendi P, Bässler C, Brändle M, Bouget C, Brin A, Bussler H, Georgiev KB, Gil R, Gossner MM, Heilmann-Clausen J, Isacson G, Krištín A, Lachat T, Larrieu L, Magnanou E, Maringer A, Mergner U, Mikoláš M, Opgenoorth L, Schmidl J, Svoboda M, Thorn S, Vandekerckhove K, Vrezec A, Wagner T, Winter MB, Zapponi L, Brandl R and Seibold S (2019) The species-rich arthropod communities in fungal fruitbodies are weakly structured by climate and biogeography across European beech forests. *Diversity and Distribution*: 25(5): 783-796
- Giuseppe Carrus, Massimiliano Scopelliti, Raffaele Laforteza, Giuseppe Colangelo, Francesco Ferrini, Fabio Salbitano, Mariagrazia Agrimi, Luigi Portoghesi, Paolo Semenzato, Giovanni Sanesi (2015). Go greener, feel better? The positive effects of biodiversity on the well-being of individuals visiting urban and peri-urban green areas. *Landscape and Urban Planning*, 134: 221-228.
- Lechuga, V.; V. Carraro, B. Viñegla, J.A. Carreira, J.C. Linares. 2019. Carbon limitation and drought sensitivity at contrasting elevation and competition of *Abies pinsapo* Forests. Does experimental thinning enhance water supply and carbohydrates?. *Forests* 10 (12): 1132 (17 pp.).
<https://doi.org/10.3390/f10121132>
- Lechuga, V; V. Carraro, B. Viñegla, J.A. Carreira, J.C. Linares. 2017. Managing drought-sensitive forests under global change. Low competition enhances long-term growth and water uptake in *Abies pinsapo*. *Forest Ecology and Management* 406: 72-82.
<http://dx.doi.org/10.1016/j.foreco.2017.10.017>

- Lefèvre F., Boivin T., Bontemps A., Courbet F., Davi H., Durand-Gillmann M., Fady B., Gauzere J., Gidoïn C., Karam M.-J., Lalagüe H., Oddou-Muratorio S., Pichot C., 2014. Considering evolutionary processes in adaptive forestry. *Annals of Forest Science* 71, 723-739.
<https://doi.org/10.1007/s13595-013-0272-1>
- Linares, J. C.; Carreira, JA.; Ochoa, V. 2011. Human impacts drive forest structure and diversity. Insights from Mediterranean mountain forest dominated by *Abies pinsapo* (Boiss.) *European Journal of Forest Research* 130 (4): 533-542. DOI: 10.1007/s10342-010-0441-9
- Linares, JC; Camarero, JJ; Carreira, JA. 2009. Interacting effects of changes in climate and forest cover on mortality and growth of the southernmost European fir forests. *Global Ecology and Biogeography* 18 (4): 485-497. DOI: 10.1111/j.1466-8238.2009.00465.x
- Linares, JC; Covelo, F; Carreira, JA; Merino JA. 2012. Phenological and water-use patterns underlying maximum growing season length at the highest elevations: implications under climate change. *Tree Physiology* 32: 161-170. DOI: 10.1093/treephys/tps003
- Linares, JC; Delgado-Huertas, A; Carreira, JA. 2011. Climatic trends and different drought adaptive capacity and vulnerability in a mixed *Abies pinsapo*-*Pinus halepensis* forest. *Climatic Change* 105: 67-90. DOI: 10.1007/s10584-010-9878-6
- Lorenza Gasparella, Antonio Tomao, Mariagrazia Agrimi, Piermaria Corona, Luigi Portoghesi, Anna Barbati (2017). Italian stone pine forests under Rome's siege: learning from the past to protect their future. *Landscape research*, 42: 211-222.
- Marie G., Simioni G. 2014. Extending the use of ecological models without sacrificing details: a generic and parsimonious meta-modelling approach. *Methods in Ecology and Evolution* 5: 934-943.
<https://doi.org/10.1111/2041-210X.12250>
- Martin-StPaul, N., Delzon, S., & Cochard, H. (2017). Plant resistance to drought depends on timely stomatal closure. *Ecology letters*, 20(11), 1437-1447. <https://doi.org/10.1111/ele.12851>
- Moreira, F., Ascoli, D., Safford, H., Adams, M., Moreno, J.M., Pereira, J.C., Catry, F., Armesto, J., Bond, W.J., Gonzales, M., Curt, T., Koutsis, N., McCaw, L., Price, O., Pausas, J., Rigolot, E., Stephens, S., Tavsanoğlu, C., Vallejo, R., Van Wilgen, B., Xantholoulos, G., Fernandes, P. (2020). Wildfire management in Mediterranean-type regions : paradigm change needed Wild fire management in Mediterranean-type regions : paradigm change needed. *Environ. Res. Lett.*, 15.
<https://iopscience.iop.org/article/10.1088/1748-9326/ab541e/pdf>
- Oddou-Muratorio S., Davi H. 2014. Simulating local adaptation to climate of forest trees with a Physio-Demo-Genetics model. *Evolutionary Applications* 7: 453-467.
<https://doi.org/10.1111/eva.12143>
- Pimont F., Dupuy J.L., Rigolot E., Prat V., Piboule A. 2015. Estimating leaf bulk density distribution in a tree canopy using terrestrial LiDAR and a straightforward calibration procedure. *Remote Sensing*, 7: 7995-8018. <https://doi.org/10.3390/rs8010064>
- Plomion C., Bastien C., Bogeat-Triboulot M.-B., Bouffier L., Déjardin A., Duplessis S., Fady B., Heuertz M., Le Gac A.-L., Le Provost G., Legué V., Lelu-Walter M.-A., Leplé J.-C., Maury S., Morel A., Oddou-

- Muratorio S., Pilate G., Sanchez L., Scotti I., Scotti-Saintagne C., Segura V., Trontin J-F., Vacher V., 2016. Forest tree genomics: 10 achievements from the past 10 years and future prospects. *Annals of Forest Science* 73, 77-103. DOI : 10.1007/s13595-015-0488-3
- Sánchez-Salguero, R., C. Ortíz, F. Covelo, V. Ochoa, R. García-Ruíz, J.A. Carreira, J.Á. Merino, J.C. Linares. 2015. Regulation of water in the southernmost European fir (*Abies pinsapo* Boiss.): Drought avoidance matter. *Forests* 6: 2241-2260. DOI: 10.3390/f6062241
- Sánchez-Salguero, R.; J.J. Camarero, M. Carrer, E. Gutiérrez, A. Alla, L.A. Hayles, A. Hevia, A. Koutavas, E. Martínez-Sancho, P. Nola, A. Papadopoulos, E. Pasho, E. Toromani, J.A. Carreira, J.C. Linares. 2017. Climate extremes and predicted warming threaten Mediterranean Holocene firs forests refugia. *PNAS - Proceedings of the National Academy of Sciences of the United States of America* 114 (47): E10142–E10150. doi:10.1073/pnas.1708109114
- Scotti-Saintagne C., Giovannelli G., Scotti I., Roig A., Spanu I., Vendramin G.G., Guibal F., Fady B., 2019. Recent, late-Pleistocene fragmentation shaped the phylogeographic structure of the European black pine (*Pinus nigra* Arnold). *Tree Genetics & Genomes* 15: 76, <https://doi.org/10.1007/s11295-019-1381-2>.
- Sylvie Oddou-Muratorio, Cathleen Petit-Cailleux, Valentin Journé, Matthieu Lingrand, Jean-André Magdalou, Christophe Hurson, Joseph Garrigue, Hendrik Davi, Elodie Magnanou. Crown defoliation decreases reproduction and wood growth in a marginal European beech population. doi: <https://doi.org/10.1101/474874>
- Wazen N., Garavaglia V., Picard N., Besacier C., Fady B., 2020. Distribution maps of twenty-four Mediterranean and European ecologically and economically important forest tree species compiled from historical data collections. *Annals of Silvicultural Research* 44(2), 95-101 (<http://dx.doi.org/10.12899/asr-1933>).

Thematic Area 1: The impact of climate and land-use change on Mediterranean forest ecosystems

Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020. NOTE: by "papers" we refer to published scientific articles. Please, give priority to documents in English, but also indicate publications in other languages when relevant.

- Achten WMJ, Trabucco A, Maes WH, Verchot LV, Aerts R, Mathijs E, Vantomme P, Singh VP, Muys B (2013) Global greenhouse gas implications of land conversion to biofuel crop cultivation in arid and semi-arid lands - lessons learned from *Jatropha*. *Journal of Arid Environments*, 98, 138-145.
- Acton, W. J. F., Schallhart, S., Langford, B., Valach, A., Rantala, P., Fares, S., ... Nemitz, E. 2016. Canopy-scale flux measurements and bottom-up emission estimates of volatile organic compounds from a mixed oak and hornbeam forest in northern Italy. *Atmospheric Chemistry and Physics* 16, 7149–7170. doi:10.5194/acp-16-7149-2016 (IF=5.51).
- Aguadé, D; Poyatos, R; Gómez, M; Oliva, Jonàs; Martínez-Vilalta, Jordi; ,The role of defoliation and root rot pathogen infection in driving the mode of drought-related physiological decline in Scots pine (*Pinus sylvestris* L.),*Tree physiology*,35,3,229-242,2015,Oxford University Press
- Alberdi, Iciar; Vallejo, Roberto; Alvarez-Gonzalez, Juan G.; Condes, Sonia; Gonzalez-Ferreiro, Eduardo; Guerrero, Silvia; Hernandez, Laura; Martinez-Jauregui, Maria; Montes, Fernando; Oliveira, Nerea; Pasalodos-Tato, Maria; Robla, Elena; Ruiz-Gonzalez, Ana D.; Sanchez-Gonzalez, Mariola; Sandoval, Vicente; San Miguel, Alfonso; Sixto, Hortensia; Cañellas, Isabel (2017). The multi-objective Spanish National Forest Inventory. *FOREST SYSTEMS* 26. doi:10.5424/fs/2017262-10577
- Aldea, J.; Bravo, F.; Bravo-Oviedo, A.; Ruiz-Peinado, R.; Rodriguez, F.; del Rio, M. (2017). Thinning enhances the species-specific radial increment response to drought in Mediterranean pine-oak stands. *AGRICULTURAL AND FOREST METEOROLOGY* 237. doi:10.1016/j.agrformet.2017.02.009
- Aldea, J.; Bravo, F.; Vazquez-Pique, J.; Rubio-Cuadrado, A.; del Rio, M. (2018). Species-specific weather response in the daily stem variation cycles of Mediterranean pine-oak mixed stands. *AGRICULTURAL AND FOREST METEOROLOGY* 256. doi:10.1016/j.agrformet.2018.03.013
- Alivernini A., Barbati A., Fares S., Corona, P. 2016. Unmasking forest borderlines by an automatic delineation based on airborne laser scanner. *International Journal of Remote Sensing*. Doi: 10.1080/01431161.2016.1201225 (IF=1.65).
- Alivernini, A., Fares, S., Ferrara, C., Chianucci, F., 2018. An objective image analysis method for estimation of canopy attributes from digital cover photography. *Trees - Structure and Function* 32(3), 713-723 doi:10.1007/s00468-018-1666-3. (IF=2.3)
- Allard G., Berrahmouni N., Besacier Ch., Boglio D., Briens M., Brizay A., Camia A., Colletti L., Conigliaro M., D'annunzio R., Ducci F., Duclercq M., Dupuy J.L., Fady B., Fages B., Garavaglia V., Gauthier

- M., Giraud J.P., Huc R., Gonzalez-Martinez S., Gouriveau F., Gracia C., Lefevre F., Mavsar R., Michel E., Milano M., Moore M., Mutke S., Muys B., Numa C., Palahi M., Piazzetta R., Pique M., Plana E., Rego F., Rigolot E., Salbitano F., Sanesi G., San-Miguel-Ayanz J., Sebastia M.T., Solano D., Valdebarrano M., Vayrand R., Vendramin G. G., 2013. (Editors Christophe Besacier (FAO), Roberto Cenciarelli (FAO), Jean-Pierre Giraud (Plan Bleu), Valentina Garavaglia (FAO), Alastair David Sarre (FAO). State of the Mediterranean Forests 2013. E-ISBN 978-92-5-107538-8 (PDF), FAO 2013: 191 p.
- Alonso, R., Elvira, S., González-Fernández, I., Calvete-Sogo, H., García-Gómez, H., Bermejo V. (2014). Drought stress does not protect *Quercus ilex* L. from ozone effects: results from a comparative study of two subspecies differing in ozone sensitivity. *Plant Biology* 16: 375-384.
- Anderegg, William RL; Martinez-Vilalta, Jordi; Cailleret, Maxime; Camarero, Jesus Julio; Ewers, Brent E; Galbraith, David; Gessler, Arthur; Grote, Rüdiger; Huang, Cho-ying; Levick, Shaun R; ,When a tree dies in the forest: scaling climate-driven tree mortality to ecosystem water and carbon fluxes, *Ecosystems*, 19, 6, 1133-1147, 2016, Springer US
- Aranda, Ismael; Cadahía, Estrella; Fernández de Simón, Brígida (2020). Leaf ecophysiological and metabolic response in *Quercus pyrenaica* Willd seedlings to moderate drought under enriched CO₂ atmosphere. *JOURNAL OF PLANT PHYSIOLOGY* 244. doi:10.1016/j.jplph.2019.153083
- Aromolo, R.; Savi, F.; Salvati, L.; Ilardi, F.; Moretti, V.; Fares, S. 2015. Particulate matter and meteorological conditions in Castelporziano forest: a brief commentary. *Rend. Lincei* 26: 269-273. DOI 10.1007/s12210-015-0414-5 (IF=0.75).
- Ascoli D., Vacchiano G., Turco M., Conedera M., Drobyshev I., Maringer J., Motta R., Hacket-Pain A. (2017) Inter-annual and decadal changes in teleconnections drive continental-scale synchronization of tree reproduction. *Nature Communications*, 8: 2205.
- Ayan S., Ünalán E., Sakicio. S., Yer E.N., Ducci F., Isajev V.V., Özel H.B. 2018. Preliminary results of Turkish hazelnut (*Corylus colurna* L.) populations for testing the nut characteristics. *GENETIKA*, Vol. 50, No2, 669-686. UDC 575.630 <https://doi.org/10.2298/GENSR1802669A>
- Barbati A., Scarascia Mugnozza G., Ayan S., Blasi E., Calama R., Canaveira P., Cicatiello C., Collalti A., Corona P., Del Río M., Ducci F., Lucia Perugini L., 2018. Chapter 8 - Adaptation and mitigation. In: *State of Mediterranean Forests 2018*. Food and Agriculture Organization of the United Nations, Rome and Plan Bleu, Marseille: 128 – 146.
- Benavides, Raquel; Escudero, Adrián; Coll, Lluís; Ferrandis, Pablo; Gouriveau, Fabrice; Hódar, José A; Ogaya, Romà; Rabasa, Sonia G; Granda, Elena; Santamaría, Blanca P; ,Survival vs. growth trade-off in early recruitment challenges global warming impacts on Mediterranean mountain trees,"*Perspectives in plant ecology, evolution and systematics*", 17, 5, 369-378, 2015, Urban & Fischer
- Besacier Ch., Ducci F., Malagnoux M., Souvannavong O. (Eds.), 2011. Status of the Experimental Network of Mediterranean Forest genetic resources. CRA SEL, Arezzo, FAO Rome, (ISBN 978-88-901923-4-0) Italy: 208 p.

- Bisi, F., Chirichella, R., Chianucci, F., Von Hardenberg, J., Cutini, A., Martinoli, A., & Apollonio, M. (2018). Climate, tree masting and spatial behaviour in wild boar (*Sus scrofa* L.): insight from a long-term study. *Annals of Forest Science*, 75(2), 46.
- Bogdziewicz, Michal; Zywiec, Magdalena; Espelta, Josep M.; Fernandez-Martinez, Marcos; Calama, Rafael; Ledwon, Mateusz; McIntire, Eliot; Crone, Elizabeth E. (2019). Environmental Veto Synchronizes Mast Seeding in Four Contrasting Tree Species. *AMERICAN NATURALIST* 194. doi:10.1086/704111
- Bottalico, F., Travaglini, D., Chirici, G., Garfi, V., Giannetti, F., Marco, A. De, Fares, S., Marchetti, M., Nocentini, S., Paoletti, E., Salbitano, F., Sanesi, G., 2017. A spatially-explicit method to assess the dry deposition of air pollution by urban forests in the city of Florence, Italy. *Urban For. Urban Green*. 27, 221–234. doi:10.1016/j.ufug.2017.08.013. (IF=2.11).
- Bravo-Oviedo, Andres; Condes, Sonia; del Rio, Miren; Pretzsch, Hans; Ducey, Mark J. (2018). Maximum stand density strongly depends on species-specific wood stability, shade and drought tolerance. *FORESTRY* 91. doi:10.1093/forestry/cpy006
- Bravo-Oviedo, Andres; Ruiz-Peinado, Ricardo; Onrubia, Raquel; del Rio, Miren (2017). Thinning alters the early-decomposition rate and nutrient immobilization-release pattern of foliar litter in Mediterranean oak-pine mixed stands. *FOREST ECOLOGY AND MANAGEMENT* 391. doi:10.1016/j.foreco.2017.02.032
- Brilli, F., Fares, S., Ghirardo, A., de Visser, P., Calatayud, V., Muñoz, A., Annesi-Maesano, I., Sebastiani, F., Alivernini, A., Varriale, V., Menghini, F., 2018. Plants for Sustainable Improvement of Indoor Air Quality. *Trends Plant Sci*. 23(6), 507-512 doi:10.1016/j.tplants.2018.03.004 (IF=7.14)
- Brilli, F.; Gioli, B.; Fares, S.; Zenone, T.; Zona, D.; Gielen, B.; Loreto, F.; Janssens, I. A.; Ceulemans, R. 2015. Rapid leaf development drives the seasonal pattern of volatile organic compound (VOC) fluxes in a “coppiced” bioenergy poplar plantation. *Plant. Cell Environ*. 39 (3): 539-555. doi/10.1111/pce.12638.(IF=6.96).
- Cabon, Antoine; Fernandez-de-Una, Laura; Gea-Izquierdo, Guillermo; Meinzer, Frederick C.; Woodruff, David R.; Martinez-Vilalta, Jordi; De Caceres, Miquel (2020). Water potential control of turgor-driven tracheid enlargement in Scots pine at its xeric distribution edge. *NEW PHYTOLOGIST* 225. doi:10.1111/nph.16146
- Cailleret, Maxime; Dakos, Vasilis; Jansen, Steven; Robert, Elisabeth M. R.; Aakala, Tuomas; Amoroso, Mariano M.; Antos, Joe A.; Bigler, Christof; Bugmann, Harald; Caccianaga, Marco; Camarero, Jesus-Julio; Cherubini, Paolo; Coyea, Marie R.; Cufar, Katarina; Das, Adrian J.; Davi, Hendrik; Gea-Izquierdo, Guillermo; Gillner, Sten; Haavik, Laurel J.; Hartmann, Henrik; Heres, Ana-Maria; Hultine, Kevin R.; Janda, Pavel; Kane, Jeffrey M.; Kharuk, Viachelsav, I; Kitzberger, Thomas; Klein, Tamir; Levanic, Tom; Linares, Juan-Carlos; Lombardi, Fabio; Makinen, Harri; Meszaros, Ilona; Metsaranta, Juha M.; Oberhuber, Walter; Papadopoulos, Andreas; Petritan, Any Mary; Rohner, Brigitte; Sanguesa-Barreda, Gabriel; Smith, Jeremy M.; Stan, Amanda B.; Stojanovic, Dejan B.; Suarez, Maria-Laura; Svoboda, Miroslav; Trotsiuk, Volodymyr; Villalba, Ricardo; Westwood, Alana R.; Wyckoff, Peter H.; Martinez-Vilalta, Jordi (2019). Early-Warning Signals of Individual

Tree Mortality Based on Annual Radial Growth. FRONTIERS IN PLANT SCIENCE 9.
doi:10.3389/fpls.2018.01964

- Cailleret, Maxime; Dakos, Vasilis; Jansen, Steven; Robert, Elisabeth MR; Aakala, Tuomas; Amoroso, Mariano M; Antos, Joe A; Bigler, Christof; Bugmann, Harald; Caccianaga, Marco; ,Early-warning signals of individual tree mortality based on annual radial growth,Frontiers in plant science,9,,1964,2019,Frontiers
- Cailleret, Maxime; Jansen, Steven; Robert, Elisabeth MR; Desoto, Lucia; Aakala, Tuomas; Antos, Joseph A; Beikircher, Barbara; Bigler, Christof; Bugmann, Harald; Caccianiga, Marco; ,A synthesis of radial growth patterns preceding tree mortality,Global change biology,23,4,1675-1690,2017,
- Calama, Rafael; Conde, Mar; de-Dios-Garcia, Javier; Madrigal, Guillermo; Vazquez-Pique, Javier; Javier Gordo, Francisco; Pardos, Marta (2019). Linking climate, annual growth and competition in a Mediterranean forest: Pintas pinea in the Spanish Northern Plateau. AGRICULTURAL AND FOREST METEOROLOGY 264. doi:10.1016/j.agrformet.2018.10.017
- Calama, Rafael; Manso, Ruben; Lucas-Borja, Manuel E.; Espelta, Josep M.; Pique, Miriam; Bravo, Felipe; del Peso, Carlos; Pardos, Marta (2017). Natural regeneration in Iberian pines: A review of dynamic processes and proposals for management. FOREST SYSTEMS 26.
doi:10.5424/fs/2017262-11255
- Calafapietra, C., Fares, S., Manes, F., Morani, a, Sgrigna, G., Loreto, F., 2013. Role of Biogenic Volatile Organic Compounds (BVOC) emitted by urban trees on ozone concentration in cities: A review. Environ. Pollut. 183: 71-80. doi:10.1016/j.envpol.2013.03.012. (IF=4.09)
- Calafapietra, C.; Morani, A.; Sgrigna, G. ; Di Giovanni, S.; Muzzini, V.; Pallozzi, E.; Guidolotti, G.; Nowak, D.; Fares, S. 2015. Removal of ozone by urban and peri-urban forests: evidences from laboratory, field and modeling approaches. Journal of Environmental Quality 45(1): 224-233. doi:10.2134/jeq2015.01.0061 (IF=2.65).
- Calsamiglia A, Fortesa J, García-Comendador J, Lucas-Borja ME, Calvo-Cases A, Estrany J. 2018. Spatial patterns of sediment connectivity in terraced lands: anthropogenic controls of catchment sensitivity. Land Degradation & Development 29: 1198-1210. doi: 10.1002/ldr.2840
- Calsamiglia A, Lucas-Borja ME, Fortesa J, García-Comendador J, Estrany J. 2017. Changes in Soil Quality and Hydrological Connectivity Caused by the Abandonment of Terraces in a Mediterranean Burned Catchment. Forests 8(9): 333. doi: 10.3390/f8090333
- Calzone, A., Podda, A., Lorenzini, G., Maserti, B. E., Carrari, E., Deleanu, E., Y. Hoshika, M. Haworth, C. Nali, O. Badea E. Pellegrini, S. Fares, Paoletti, E. (2019). Cross-talk between physiological and biochemical adjustments by *Punica granatum* cv. Dente di cavallo mitigates the effects of salinity and ozone stress. Science of The Total Environment, 656, 589–597.
<https://doi.org/10.1016/j.scitotenv.2018.11.402>.
- Carriero, G., Brunetti, C., Fares, S., Hayes, F., Hoshika, Y., Mills, G., Tattini, M., Paoletti, E. 2016. BVOC responses to realistic nitrogen fertilization and ozone exposure in silver birch. Environ. Pollut. 213:988-95. doi:10.1016/j.envpol.2015.12.047. (IF=4.83).

- Castagneri D., Bottero A., Motta R., Vacchiano G. (2015) Repeated spring precipitation shortage alters individual growth patterns in Scots pine forests in the Western Alps. *Trees*, 29:1699-1712.
- Castaldi C., Marchi E., Vacchiano G., Corona P. (2019). Douglas-fir climate sensitivity at two contrasting sites along the southern limit of the European planting range. *Journal of Forestry*, in press. doi: 10.1007/s11676-019-01041-5
- Chambel M.R., Climent J., Ducci F., Pichot Ch., 2013. Species breeding monograph: Current State of the art. Chapter 5, Aleppo pine (*Pinus halepensis* Mill.) and Brutia pine (*Pinus brutia* Ten.)01/2013; In book: *Forest tree breeding across Europe.*, Publisher: © Springer Science+Business media Dordrecht 2013, DOI 10.1007/978-94-007-6146-9_5, Editor: Luc E. Pâques: 229 - 265.
- Chaparro, David; Vayreda, Jordi; Vall-Llossera, Mercè; Banqué, Mireia; Piles, Maria; Camps, Adriano; Martínez-Vilalta, Jordi; ,The role of climatic anomalies and soil moisture in the decline of drought-prone forests,IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing,10,2,503-514,2016,IEEE
- Clifton OE, Fiore AM, Massman WJ, Baublitz CB, Coyle M, Emberson L, Fares S, Farmer DK, Gentine P, Gerosa G, Guenther AB, Helmig D, Lombardozzi DL, Munger JW, Patton EG, Pusede SE, Schwede DB, Silva SJ, Sörgel M, Steiner AL, Tai APK (2020). Dry Deposition of Ozone over Land: Processes, Measurement, and Modeling. *Reviews of Geophysics*. Vol. 58 - doi: 10.1029/2019rg000670.
- Collalti A, Perugini L, Santini M, Chiti T, Nolè A, Matteucci G, Valentini R (2014) A process-based model to simulate growth in forests with complex structure: Evaluation and use of 3D-CMCC Forest Ecosystem Model in a deciduous forest in Central Italy. *Ecological Modelling*, 272, 362-378. DOI: 10.1016/j.ecolmodel.2013.09.016
- Conte, A., Fares, S.,* Salvati, L., Savi, F., Matteucci, G., Mazzenga, F., Spano, D., Sirca, C., Marras, S., Galvagno, M., Cremonese, E., Montagnani, L. (2019). Ecophysiological Responses to Rainfall Variability in Grassland and Forests Along a Latitudinal Gradient in Italy. *Frontiers in Forests and Global Change* 2 (May):1–12. Doi: 10.3389/ffgc.2019.00016. *Corresponding author.
- Costa-Saura JM, Martínez-Vilalta J, Trabucco A, Spano D, Mereu S (2016) Specific leaf area and hydraulic traits explain niche segregation along an aridity gradient in Mediterranean woody species. *Perspectives in Plant Ecology, Evolution and Systematics*, 21, 23–30.
- Costa-Saura JM, Trabucco A, Spano D, Mereu S (2017) Environmental filtering drives community specific leaf area in Spanish forests and predicts relevant changes under future climatic conditions. *Forest Ecology and Management*, 405, 1-8
- Costa-Saura JM, Trabucco A, Spano D, Mereu S (2019) A height-wood-seed axis which is preserved across climatic regions explains tree dominance in European forest communities *Plant Ecol.* doi.org/10.1007/s11258-019-00928-x
- De Cáceres, Miquel; Martínez-Vilalta, Jordi; Coll, Lluís; Llorens, Pilar; Casals, Pere; Poyatos, Rafael; Pausas, Juli G; Brotons, Lluís; ,Coupling a water balance model with forest inventory data to predict drought stress: the role of forest structural changes vs. climate changes,*Agricultural and Forest Meteorology*,213,,77-90,2015,Elsevier

- De Dato G., Teani A., Mattioni C., Marchi M., Monteverdi M.C., Ducci F. (2018). Delineation of seed collection zones based on environmental and genetic characteristics for *Quercus suber* L. in Sardinia, Italy. *iForest* 11: 651-659. – doi: 10.3832/ifor2572-011 [online 2018-10-04]
- de Dato G.D., Teani A., Claudia Mattioni A., Aravanopoulos F.A., Avramidou E.V., Stojnic S., Ganopoulos I., Belletti P., Ducci F., 2020. Genetic analysis by nuSSR markers of silver birch (*Betula pendula* Roth) populations in their southern European distribution range. *Frontiers in Plant Science*, section Functional Plant Ecology, Manuscript ID: 484256, Edited by: Hojka Kraigher (accepted in press).
- De Marco, A. Proietti, C., Anav, A., Ciancarella, L., Elia, I. D., Fares, S., ... Leonardi, C. (2019). Impacts of air pollution on human and ecosystem health, and implications for the National Emission Ceilings Directive : Insights from Italy. *Environment International*, 125(November 2018), 320–333. <https://doi.org/10.1016/j.envint.2019.01.064>.
- De Marco, A., Sicard, P., Fares, S., Tuovinen, J.-P., Anav, A., Paoletti, E., 2016. Assessing the role of soil water limitation in determining the Phytotoxic Ozone Dose (PODY) thresholds. *Atmos. Environ.* 147, 88–97. doi:10.1016/j.atmosenv.2016.09.066. (IF=3.45).
- DeSoto, Lucía; Cailleret, Maxime; Sterck, Frank; Jansen, Steven; Kramer, Koen; Robert, Elisabeth MR; Aakala, Tuomas; Amoroso, Mariano M; Bigler, Christof; Camarero, J Julio; ,Low growth resilience to drought is related to future mortality risk in trees,Nature communications,11,1,1-9,2020,Nature Publishing Group
- Di Paola A, Paquette A, Trabucco A, Mereu S, Valentini R, Paparella F (2017) Coexistence trend contingent to Mediterranean oaks with different leaf habits. *Ecology and Evolution*, 7(9) 3006-3015.
- Doblas-Miranda, E., Alonso R., Arnan X., Bermejo V., Brotons L., de las Heras J., Estiarte M., Hódar JA., Llorens P., Lloret F., López-Serrano F.R., Martínez-Vilalta J., Moya D., Peñuelas J., Pino J., Rodrigo A., Roura-Pascual N., Valladares F., Vilà M., Zamora R., Retana J. (2017). A review of the combination among global change factors in forests, shrublands and pastures of the Mediterranean Region: beyond drought effects. *Global and Planetary Change* 148: 42–54.
- Doblas-Miranda, Enrique; Alonso, R; Arnan, X; Bermejo, Victoria; Brotons, L; De las Heras, J; Estiarte, Marc; Hódar, José A; Llorens, Pilar; Lloret, F; , "A review of the combination among global change factors in forests, shrublands and pastures of the Mediterranean Region: Beyond drought effects", *Global and Planetary Change*, 148, 42-54, 2017, Elsevier
- Doblas-Miranda, Enrique; Martínez-Vilalta, J; Lloret, F; Álvarez, A; Ávila, A; Bonet, FJ; Brotons, L; Castro, J; Curiel Yuste, J; Díaz, M; , Reassessing global change research priorities in mediterranean terrestrial ecosystems: how far have we come and where do we go from here?, *Global Ecology and Biogeography*, 24, 1, 25-43, 2015,
- Dorado Linan I., Piovesan G., Martínez-Sancho E., Gea-Izquierdo G., Zang C. Cañellas I., Castagneri D., Di Filippo A., Gutiérrez E., Ewald J., Fernández de Uña L., Hornstein D., Jantsch M., Kölling C., Levanic T., Mellert K.H., Vacchiano G., Zlatanov T., Menzel A. (2018) Geographical adaptation

- prevails over species-specific determinism in trees' vulnerability to climate change at Mediterranean rear-edge forests. *Global Change Biology*, 25:1296-1314.
- Dorado Liñan I., Zorita E., Martínez-Sancho E., Gea-Izquierdo G., Di Filippo A., Gutiérrez E., Levanic T., Piovesan G., Vacchiano G., Zang C., Zlatanov T., Menzel M. (2017) Large-scale atmospheric circulation enhances the Mediterranean East-West tree growth contrast at rear-edge deciduous forests. *Agricultural and Forest Meteorology*, 239:86-95.
- Dorado-Linan, Isabel; Piovesan, Gianluca; Martinez-Sancho, Elisabet; Gea-Izquierdo, Guillermo; Zang, Christian; Cañellas, Isabel; Castagneri, Daniele; Di Filippo, Alfredo; Gutierrez, Emilia; Ewald, Joerg; Fernandez-de-Una, Laura; Hornstein, Daniel; Jantsch, Matthias C.; Levanic, Tom; Mellert, Karl H.; Vacchiano, Giorgio; Zlatanov, Tzvetan; Menzel, Annette (2019). Geographical adaptation prevails over species-specific determinism in trees' vulnerability to climate change at Mediterranean rear-edge forests. *GLOBAL CHANGE BIOLOGY* 25. doi:10.1111/gcb.14544
- Druckenbrod, D. L., Martin-Benito, D., Orwig, D. A., Pederson, N., Poulter, B., Renwick, K. M. & Shugart, H. H. (2019). Redefining temperate forest responses to climate and disturbance in the eastern United States: New insights at the mesoscale. *Global Ecology and Biogeography* 28. doi:10.1111/geb.12876
- Ducci F., Cutino I., Monteverdi M.C., Proietti R., 2018. Marginal/peripheral populations of forest tree species and their conservation status: report for Mediterranean region. *Annals of Silvicultural Research*, v. 41, n. 3: 31-40, apr. 2018. ISSN 2284-354X. doi: <http://dx.doi.org/10.12899/asr-1533>.
- Ducci F., 2010. Capitolo 8. La composizione specifica e la struttura genetica delle foreste naturali. "Chapter 8. The specific composition and the genetic structure of natural forests." In: "Restauro della Foresta Mediterranea" (The Restoration of the Mediterranean Forest) (Roberto Mercurio ed.) CLUEB, Bologna, Italia (ISBN 978-88-491-3399-8): 78-89.
- Ducci F., 2014. Species restoration approach, chapter 15.1. Species restoration through dynamic ex situ conservation: *Abies nebrodensis* as a model. In: Bozzano, M., Jalonen, R., Thomas, E., Boshier, D., Gallo, L., Cavers, S., Bordács, S., Smith, P. & Loo, J., eds. *Genetic considerations in ecosystem restoration using native tree species. State of the World's Forest Genetic Resources – Thematic Study*. Rome, FAO and Bioversity International. ISBN 978-92-5-108469-4 (print), E-ISBN 978-92-5-108470-0 (PDF), © FAO, 2014: 225 – 232.
- Ducci F., Donnelly K., 2018. Forest tree Marginal Populations in Europe - Report on the state of knowledge on forest tree marginal and peripheral populations in Europe. *Annals of Silvicultural Research* - 41 (3), 2017: 1 – 12. <http://dx.doi.org/10.12899/asr-1586>
- Ducci F., Garavaglia V., Monteverdi M.C., 2014. Conserver les populations marginales d'essences forestières en Europe. *Unasylva*, FAO, Rome: Vol. 65, 2014/1, N. 242:51-55. DUCCI F., 2016. Genetic resources and forestry in the Mediterranean region in relation to global change. *Annals of Silvicultural Research*, v. 39, n. 2, p. 70-93, dec. 2015. ISSN 2284-354X. doi:<http://dx.doi.org/10.12899/asr-779>.

- Ducker, J.A., Holmes, C.D., Keenan, T.F., Fares, S., Mammarella, I., William Munger, J., Schnell, J., 2018. Synthetic ozone deposition and stomatal uptake at flux tower sites. *Biogeosciences* 15, 5395-5413 doi 10.5194/bg-15-5395-2018.
- Dupuy, Jean-Luc; Fargeon, H  l  ne; Martin-StPaul, Nicolas; Pimont, Fran  ois; Ruffault, Julien; Guijarro, Mercedes; Hernando, Carmen; Madrigal, Javier; Fernandes, Paulo (2020). Climate change impact on future wildfire danger and activity in southern Europe: a review. *ANNALS OF FOREST SCIENCE* 77. doi:10.1007/s13595-020-00933-5
- Estrany J, Calsamiglia A, Carriqu   M, Garc  a-Comendador J, Nadal M, Fortesa J, Ruiz M, Alorda B, Gago J. 2015. Ecogeomorfologia i drones com a eines de gesti   din  mica post- incendi. El cas de la comarca del Pariatge, Mallorca. *Treballs de la Societat Catalana de Geografia* 80, 71-89. DOI: 10.2436/20.3002.01.91
- Estrany J, Gago J. (eds.) 2019. Monitoratge i gesti   ambiental post-incendi: control de processos ecogeomorfol  gics amb tecnologies de precisi  . Conselleria de Medi Ambient, Agricultura i Pesca. Govern de les Illes Balears, 145 pp.
- Estrany J, L  pez-Taraz  n JA, Smith H. 2016. Wildfire effects on suspended sediment delivery in a Mediterranean catchment using fallout radionuclides as source tracers. *Land Degradation & Development* 27(5), 1501-1512. DOI: 10.1002/ldr.2462
- Estrany J, Ruiz M, Calsamiglia A, Carriqu   M, Garc  a-Comendador J, Nadal M, Fortesa J, L  pez-Taraz  n JA, Medrano H, Gago J. 2019. Sediment connectivity linked to vegetation using UAVs: High-resolution imagery for ecosystem management. *Science of The Total Environment* 671: 1192-1205. doi: 10.1016/j.scitotenv.2019.03.399
- Fady B., Aravanopoulos F. A., Alizoti P., M  ty  s C., Von W  hlisch G., Westergren M., Belletti P., Cvjetkovic B., Ducci F., Huber G., Kelleher C. T., Khaldi A., Dagher Kharrat M. B., Kraigher H., Kramer K., M  hlethaler U., Peric S., Perry A., Rousi M., Sbay H., Stojnic S., Tijardovic M., Tsvetkov I, Varela M. C., Vendramin G. G., Zlatanov T. Evolution-based approach needed for the conservation and silviculture of peripheral forest tree populations. *Forest Ecology and Management* 375 (2016) 66–75
- Fares S, Alivernini A, Conte A, Maggi F (2019). Ozone and particle fluxes in a Mediterranean forest predicted by the AIRTREE model. *Science of The Total Environment*. - doi: 10.1016/j.scitotenv.2019.05.109.
- Fares S., Loreto F. 2014. Isoprenoid emissions by the Mediterranean vegetation in Castelporziano. *Rendiconti lincci* 26, 493-498. DOI 10.1007/s12210-014-0331-z (IF=0.75)
- Fares S., Savi F., Muller J., Matteucci G., Paoletti, E. 2014. Simultaneous measurements of above and below canopy ozone fluxes help partitioning ozone deposition between its various sinks in a Mediterranean Oak Forest. *Agricultural and Forest Meteorology* 198-199: 181-191. doi:10.1016/j.agrformet.2014.08.014 (IF=3.89)
- Fares, S., Bajocco, S., Salvati, L., Camarretta, N., Dupuy, J.-L., Xanthopoulos, G., Guijarro, M., Madrigal, J., Hernando, C., Corona, P., 2017. Characterizing potential wildland fire fuel in live vegetation in the Mediterranean region. *Ann. For. Sci.* 74, 1. doi:10.1007/s13595-016-0599-5. (IF=2.08).

- Fares, S., Conte, A., Chabbi, A., 2018. Ozone flux in plant ecosystems: new opportunities for long-term monitoring networks to deliver ozone-risk assessments. *Environ. Sci. Pollut. Res.* 25 (9), 8240-8248. doi:10.1007/s11356-017-0352-0. (IF=2.8)
- Fares, S., Gentner, D.R., Park, J.-H., Ormeno, E., Karlik, J., Goldstein, A.H., 2011. Biogenic emissions from Citrus species in California. *Atmos. Environ.* 45: 4557–4568. doi:10.1016/j.atmosenv.2011.05.066. (IF=3.01)
- Fares, S., Goldstein, A., Loreto, F., 2010. Determinants of ozone fluxes and metrics for ozone risk assessment in plants. *J. Exp. Bot.* 61: 629–633. doi:10.1093/jxb/erp336. (IF=5.21)
- Fares, S., Mahmood, T., Liu, S., Loreto, F., Centritto, M., 2011. Influence of growth temperature and measuring temperature on isoprene emission, diffusive limitations of photosynthesis and respiration in hybrid poplars. *Atmos. Environ.* 45: 155–161. doi:10.1016/j.atmosenv.2010.09.036. (IF=3.01)
- Fares, S., Matteucci, G., Scarascia Mugnozza, G., Morani, a., Calfapietra, C., Salvatori, E., Fusaro, L., Manes, F., Loreto, F., 2013. Testing of models of stomatal ozone fluxes with field measurements in a mixed Mediterranean forest. *Atmos. Environ.* 67: 242–251. doi:10.1016/j.atmosenv.2012.11.007. (IF=3.11)
- Fares, S., McKay, M., Holzinger, R., Goldstein, A.H., 2010. Ozone fluxes in a *Pinus ponderosa* ecosystem are dominated by non-stomatal processes: Evidence from long-term continuous measurements. *Agric. For. Meteorol.* 150, 420–431. doi:10.1016/j.agrformet.2010.01.007. (IF=3.89)
- Fares, S., Oksanen, E., Lännenpää, M., Julkunen-Tiitto, R., Loreto, F., 2010. Volatile emissions and phenolic compound concentrations along a vertical profile of *Populus nigra* leaves exposed to realistic ozone concentrations. *Photosynth. Res.* 104: 61–74. doi:10.1007/s11120-010-9549-5. (IF=3.15)
- Fares, S., Park, J.-H., Gentner, D.R., Weber, R., Ormeño, E., Karlik, J., Goldstein, a. H., 2012. Seasonal cycles of biogenic volatile organic compound fluxes and concentrations in a California citrus orchard. *Atmos. Chem. Phys.* 12: 9865–9880. doi:10.5194/acp-12-9865-2012. (IF=5.51)
- Fares, S., Park, J.-H., Ormeno, E., Gentner, D.R., McKay, M., Loreto, F., Karlik, J., Goldstein, A.H., 2010. Ozone uptake by citrus trees exposed to a range of ozone concentrations. *Atmos. Environ.* 44: 3404–3412. doi:10.1016/j.atmosenv.2010.06.010. (IF=3.01)
- Fares, S., Savi, F., Fusaro, L., Conte, A., Salvatori, E., Aromolo, R., & Manes, F. 2016. Particle deposition in a peri-urban Mediterranean forest. *Environmental Pollution* 218, 1278-1286. <http://doi.org/10.1016/j.envpol.2016.08.086>. (IF=4.83).
- Fares, S., Scarascia Mugnozza, G., Corona, P., Palahi, M. 2015. Five steps for managing Europe's forests. *Nature* 519, 407–409 doi: 10.1038/519407a. (IF=42.3).
- Fares, S., Schnitzhofer, R., Jiang, X., Guenther, A., Hansel, A., Loreto, F., 2013. Observations of Diurnal to Weekly Variations of Monoterpene-Dominated Fluxes of Volatile Organic Compounds from Mediterranean Forests: Implications for Regional Modeling. *Environ. Sci. Technol.* 47: 11073–11082. doi:10.1021/es4022156. (IF=5.25)

- Fares, S., Vargas, R., Detto, M., Goldstein, A.H., Karlik, J., Paoletti, E., Vitale, M., 2013. Tropospheric ozone reduces carbon assimilation in trees: estimates from analysis of continuous flux measurements. *Glob. Chang. Biol.* 9 (8): 2427-2443 doi:10.1111/gcb.12222. (IF=6.91)
- Fares, S., Weber, R., Park, J.-H., Gentner, D., Karlik, J., Goldstein, A.H., 2012. Ozone deposition to an orange orchard: Partitioning between stomatal and non-stomatal sinks. *Environ. Pollut.* 169: 258–266. doi:10.1016/j.envpol.2012.01.030. (IF=4.09)
- Fares, S.; Paoletti, E.; Loreto, F.; Brillì, F. 2015. Bidirectional Flux of Methyl Vinyl Ketone and Methacrolein in Trees with Different Isoprenoid Emission under Realistic Ambient Concentrations. *Environ. Sci. Technol.* 49: 7735–7742. doi:10.1021/acs.est.5b00673. (IF=5.25).
- Feng, Z., Yuan, X., Fares, S., Loreto, F., Li, P., Hoshika, Y., & Paoletti, E. (2019). Isoprene is more affected by climate drivers than monoterpenes: a meta-analytic review on plant isoprenoid emissions. *Plant, Cell & Environment*, (December 2018), 1–11. <https://doi.org/10.1111/pce.13535>.
- Fernández de Simón, Brígida; Sanz, Miriam; Sánchez-Gómez, David; Cadahía, Estrella; Aranda, Ismael (2020). Rising [CO₂] effect on leaf drought-induced metabolome in *Pinus pinaster* Aiton: Ontogenetic- and genotypic-specific response exhibit different metabolic strategies. *PLANT PHYSIOLOGY AND BIOCHEMISTRY* 149. doi:10.1016/j.plaphy.2020.02.011
- Fernandez-Fernandez, Mercedes; Naves, Pedro; Musolin, Dmitry L.; Selikhovkin, Andrey V.; Cleary, Michelle; Chira, Danut; Paraschiv, Marius; Gordon, Tom; Solla, Alejandro; Papazova-Anakieva, Irena; Drenkhan, Tiia; Georgieva, Margarita; Altunisik, Aliye; Morales-Rodriguez, Carmen; Tabakovic-Tosic, Mara; Avtzis, Dimitrios N.; Georgiev, Georgi; Doychev, Danail D.; Nacheski, Sterja; Trestic, Tarik; Elvira-Recuenco, Margarita; Diez, Julio J.; Witzell, Johanna (2019). Pine Pitch Canker and Insects: Regional Risks, Environmental Regulation, and Practical Management Options. *FORESTS* 10. doi:10.3390/f10080649
- Ferrara C, Marchi M, Fabbio G, Fares S, Bertini G, Piovosi M, Salvati L (2019). Exploring Nonlinear Intra-Annual Growth Dynamics in *Fagus sylvatica* L. Trees at the Italian ICP-Forests Level II Network. *Forests* 10: 584. doi:10.3390/f10070584.
- Ferrara, C., Marchi, M., Fares, S., Salvati, L., 2017. Sampling strategies for high quality time-series of climatic variables in forest resource assessment. *iForest - Biogeosciences For.* 10, 739–745. doi:10.3832/ifor2427-010 (IF=1.24).
- Finco, A., Coyle, M., Nemitz, E., Marzuoli, R., Chiesa, M., Loubet, B., Fares, S., Diaz-Pines, E., Gasche, R., Gerosa, G. (2018). Characterisation of ozone deposition to a mixed oak-hornbeam forest - Flux measurements at 5 levels above and inside the canopy and their interactions with nitric oxide. *Atmos. Chem. Phys.* 18, 17945–17961, 2018 <https://doi.org/10.5194/acp-18-17945-2018>.
- Fitzky AC, Sandén H, Karl T, Fares S, Calfapietra C, Grote R, Saunier A, Rewald B (2019). The Interplay Between Ozone and Urban Vegetation — BVOC Emissions, Ozone Deposition, and Tree Ecophysiology. *Frontiers in Forests and Global Change* 2: 1–17. - doi: 10.3389/ffgc.2019.00050.
- Forner, Alicia; Morán-Lóopez, Teresa; Flores-Rentería, Dulce; Aranda, Ismael; Valladares, Fernando (2020). Fragmentation reduces severe drought impacts on tree functioning in holm oak forests. *ENVIRONMENTAL AND EXPERIMENTAL BOTANY* 173. doi:10.1016/j.envexpbot.2020.104001

- Forner, Alicia; Valladares, Fernando; Bonal, Damien; Granier, Andre; Grossiord, Charlotte; Aranda, Ismael (2018). Extreme droughts affecting Mediterranean tree species' growth and water-use efficiency: the importance of timing. *TREE PHYSIOLOGY* 38. doi:10.1093/treephys/tpy022
- Fusaro, L., Gerosa, G., Salvatori, E., Marzuoli, R., Monga, R., Kuzminsky, E., Angelaccio, C., Quarato, D., Fares, S., 2015. Early and late adjustments of the photosynthetic traits and stomatal density in *Quercus ilex* L. grown in an ozone-enriched environment. *Plant Biology* 18 (Suppl. 1): 13–21. doi:10.1111/plb.12383 (IF=2.63).
- Fusaro, L., Mereu, S., Salvatori, E., Agliari, E., Fares, S., Manes, F., 2017. Modeling ozone uptake by urban and peri-urban forest: a case study in the Metropolitan City of Rome. *Environ. Sci. Pollut. Res.* 25(9), 8190-8205 doi:10.1007/s11356-017-0474-4. (IF=2.8)
- Gallo Granizo C, Berrahmouni N., Cortina J., Ducci F., Fortas S., Moreira F., Parfondry M., Regato P., Karakus B. Y., 2018. Chapter 7. Forest and landscape restoration. In: *State of Mediterranean Forests 2018*. Food and Agriculture Organization of the United Nations, Rome and Plan Bleu, Marseille: 109 - 127.
- García-Comendador J, Fortesa J, Calsamiglia A, Calvo-Cases A, Estrany J. 2017. Post-fire hydrological response and suspended sediment transport of a terraced Mediterranean catchment. *Earth Surface Processes & Landforms* 42: 2254-2265. doi: 10.1002/esp.4181
- García-Comendador, J., Fortesa, J., Calsamiglia, A., Garcias, F., & Estrany, J. (2017). Source ascription in bed sediments of a Mediterranean temporary stream after the first post-fire flush. *Journal of Soils and Sediments*, 17(11), 2582-2595. DOI: 10.1007/s11366
- Garcia-Forner, Núria; Sala, Anna; Biel, Carme; Savé, Robert; Martínez-Vilalta, Jordi; , Individual traits as determinants of time to death under extreme drought in *Pinus sylvestris* L., *Tree physiology*, 36, 10, 1196-1209, 2016, Oxford University Press
- Gatti CR, Di Paola A, Bombelli A, Noce S, Valentini R (2017) Exploring the relationship between canopy height and terrestrial plant diversity. *Plant Ecology*, 218, 899–908. DOI: 10.1007/s11258-017-0738-6
- Gea-Izquierdo, Guillermo; Ferriz, Macarena; Garcia-Garrido, Sara; Aguin, Olga; Elvira-Recuenco, Margarita; Hernandez-Escribano, Laura; Martin-Benito, Dario; Raposo, Rosa (2019). Synergistic abiotic and biotic stressors explain widespread decline of *Pinus pinaster* in a mixed forest. *SCIENCE OF THE TOTAL ENVIRONMENT* 685. doi:10.1016/j.scitotenv.2019.05.378
- Gentner, D.R., Ormeño, E., Fares, S., Ford, T.B., Weber, R., Park, J., Brioude, J., Angevine, W.M., 2014. Emissions of terpenoids, benzenoids, and other biogenic gas-phase organic compounds from agricultural crops and their potential implications for air quality. *Atmospheric Chemistry and Physics* 14: 5393–5413. doi:10.5194/acp-14-5393-2014. (IF=5.51)
- Gerosa, G.; Fusaro, L.; Monga, R.; Finco, A.; Fares, S.; Manes, F.; Marzuoli, R. 2015. A flux-based assessment of above and below ground biomass of Holm oak (*Quercus ilex* L.) seedlings after one season of exposure to high ozone concentrations. *Atmos. Environ.* 113: 41–49 doi:10.1016/j.atmosenv.2015.04.066 (IF=3.11).

- Greenwood, Sarah; Ruiz-Benito, Paloma; Martínez-Vilalta, Jordi; Lloret, Francisco; Kitzberger, Thomas; Allen, Craig D; Fensham, Rod; Laughlin, Daniel C; Kattge, Jens; Bönisch, Gerhard; , "Tree mortality across biomes is promoted by drought intensity, lower wood density and higher specific leaf area", *Ecology Letters*, 20, 4, 539-553, 2017,
- Grossman JJ, Vanhellefont M, Barsoum N, Bauhus J, Bruelheide H, Castagneyrol B, Cavender-Bares J, Eisenhauer N, Ferlian O, Gravel D, Hector A, Jactel H, Kreft H, Mereu S, Messier C, Muys B, Nock C, Paquette A, Parker J, Perring MP, Ponette Q, Reich PB, Schuldt A, Staab M, Weih M, Zemp DC, Scherer-Lorenzen M, Verheyen K (2018) Synthesis and future research directions linking tree diversity to growth, survival, and damage in a global network of tree diversity experiments. *Environmental and Experimental Botany*. 152, 68-89
- Grote, R., Samson, R., Alonso, R., Amorim, J.H., Cariñanos, P., Churkina, G., Fares, S., Thiec, D. Le, Niinemets, Ü., Mikkelsen, T.N., Paoletti, E., Tiwary, A., Calfapietra, C., 2016. Functional traits of urban trees: air pollution mitigation potential. *Front. Ecol. Environ.* doi:10.1002/fee.1426. (IF=8.50).
- Guérin, Marceau; Arx, Georg von; Martin-Benito, Dario; Andreu-Hayles, Laia; Griffin, Kevin L.; McDowell, Nate G.; Pockman, William; Gentine, Pierre (2020). Distinct xylem responses to acute vs prolonged drought in pine trees. *TREE PHYSIOLOGY* 40. doi:10.1093/treephys/tpz144
- Hackett-Pain A., Ascoli D., Vacchiano G., Biondi F., Cavin L., Conedera M., Drobyshev I., Dorado Liñán I., Friend A., Grabner M., Hartl C., Kreyling J., Lebourgeois F., Levanič T., Menzel A., van der Maaten E., van der Maaten-Theunissen M., Muffler L., Motta R., Roibu C.C., Popa I., Scharnweber T., Weigel R., Wilmking M., Zang C. (2018) Climatically controlled reproduction drives inter-annual growth variability in a temperate tree species. *Ecology Letters*, 21: 1833-1844.
- Hernandez-Escribano, L., Visser, E.A., Iturrutxa E., Raposo R., Naidoo S. (2020). The transcriptome of *Pinus pinaster* under *Fusarium circinatum* challenge. *BMC GENOMICS* 21. doi:10.1186/s12864-019-6444-0
- Hernandez-Escribano, L.; Iturrutxa, E.; Elvira-Recuenco, M.; Berbegal, M.; Campos, J. A.; Renobales, G.; Garcia, I.; Raposo, R. (2018). Herbaceous plants in the understory of a pitch canker-affected *Pinus radiata* plantation are endophytically infected with *Fusarium circinatum*. *FUNGAL ECOLOGY* 32. doi:10.1016/j.funeco.2017.12.001
- Hernandez-Escribano, Laura; Iturrutxa, Eugenia; Aragones, Ana; Mesanza, Nebai; Berbegal, Monica; Raposo, Rosa; Elvira-Recuenco, Margarita (2018). Root Infection of Canker Pathogens, *Fusarium circinatum* and *Diplodia sapinea*, in Asymptomatic Trees in *Pinus radiata* and *Pinus pinaster* Plantations. *FORESTS* 9. doi:10.3390/f9030128
- Hoshika Y, De Carlo A, Baraldi R, Neri L, Carrari E, Agathokleous E, Zhang L, Fares S, Paoletti E (2019). Ozone-induced impairment of night-time stomatal closure in O₃-sensitive poplar clone is affected by nitrogen but not by phosphorus enrichment. *Science of The Total Environment*. 692: 713–722. - doi: 10.1016/j.scitotenv.2019.07.288

- Hoshika Y, Fares S, Pellegrini E, Conte A, Paoletti E (2020). Water use strategy affects avoidance of ozone stress by stomatal closure in Mediterranean trees—A modelling analysis. *Plant Cell and Environment*. 43: 611–623. - doi: 10.1111/pce.13700.
- Hoshika, Y., Fares, S., Savi, F., Gruening, C., Goded, I., De Marco, A., Sicard, P., Paoletti, E., 2017. Stomatal conductance models for ozone risk assessment at canopy level in two Mediterranean evergreen forests. *Agric. For. Meteorol.* 234–235, 212–221. doi:10.1016/j.agrformet.2017.01.005. (IF=4.46).
- Jardine, K.J., Monson, R.K., Abrell, L., Saleska, S.R., Arneth, A., Jardine, A., Ishida, F.Y., Serrano, A.M.Y., Artaxo, P., Karl, T., Fares, S., Goldstein, A., Loreto, F., Huxman, T., 2012. Within-plant isoprene oxidation confirmed by direct emissions of oxidation products methyl vinyl ketone and methacrolein. *Glob. Chang. Biol.* 18: 973–984. doi:10.1111/j.1365-2486.2011.02610.x. (IF=6.91)
- Jump, Alistair S; Ruiz-Benito, Paloma; Greenwood, Sarah; Allen, Craig D; Kitzberger, Thomas; Fensham, Rod; Martínez-Vilalta, Jordi; Lloret, Francisco; ,Structural overshoot of tree growth with climate variability and the global spectrum of drought-induced forest dieback,*Global change biology*,23,9,3742-3757,2017, Ruiz-Benito, Paloma; Ratcliffe, Sophia; Zavala, Miguel A; Martínez-Vilalta, Jordi; Vilà-Cabrera, Albert; Lloret, Francisco; Madrigal-González, Jaime; Wirth, Christian; Greenwood, Sarah; Kändler, Gerald; ,Climate-and successional-related changes in functional composition of European forests are strongly driven by tree mortality,*Global change biology*,23,10,4162-4176,2017,
- Juráň, S., Pallozzi, E., Guidolotti, G., Fares, S., Šigut, L., Calfapietra, C., Alivernini, A., Savi, F., Večeřová, K., Křůmal, K., Večeřa, Z., Urban, O., 2017. Fluxes of biogenic volatile organic compounds above temperate Norway spruce forest of the Czech Republic. *Agric. For. Meteorol.* 232, 500–513. doi:10.1016/j.agrformet.2016.10.005. (IF=4.46).
- Juráň, S., Šigut, L., Holub, P., Fares, S., Klem, K., Grace, J., Urban, O. (2019). Ozone Flux and Ozone Deposition in a Mountain Spruce Forest Are Modulated by Sky Conditions. *Science of the Total Environment* 672:296–304. <https://doi.org/10.1016/j.scitotenv.2019.03.491>.
- Kantola T, Tracy JL, Lyytikäinen-Saarenmaa P, Saarenmaa H, Coulson RN, Trabucco A, Holopainen M (2019) Hemlock woolly adelgid niche models from the invasive eastern North American range with projections to native ranges and future climates. *iForest - Biogeosciences For.*, 12(2), 149–159.
- Kattge, Jens; Boenisch, Gerhard; Diaz, Sandra; Lavorel, Sandra; Prentice, Iain Colin; Leadley, Paul; Tautenhahn, Susanne; Werner, Gijbert D. A., et al. (2020). TRY plant trait database - enhanced coverage and open access. *GLOBAL CHANGE BIOLOGY* 26. doi:10.1111/gcb.14904
- Kemper, C., Fares, S., Ciccioli, P., 2014. A highly spatially resolved GIS-based model to assess the isoprenoid emissions from key Italian ecosystems. *Atmos. Environ.* 96: 50–60. doi:10.1016/j.atmosenv.2014.07.012. (IF=3.11)
- Kint V, Aerts W, Fyllas NM, Trabucco A, Janssen E, Özkan K, Muys B (2014) Ecological traits of Mediterranean tree species as a basis for modeling forest dynamics in the Taurus mountains, Turkey. *Ecological Modelling*, 286, 53-65.

- Konnert, M., Fady, B., Gömöry, D., A'hara, S., Wolter, F., Ducci, F., Koskela, J., Bozzano, M., Maaten, T. And Kowalczyk, J. European Forest Genetic Resources Programme (EUFORGEN). 2015. Use and transfer of forest reproductive material in Europe in the context of climate change. European Forest Genetic Resources Programme (EUFORGEN), Bioversity International, Rome, Italy (E ISBN 978-92-5-107538-8): xvi and 75 p.
- Langford, B., Cash, J., Acton, W.J.F., Valach, A.C., Hewitt, C.N., Fares, S., Goded, I., Gruening, C., House, E., Kalogridis, A.-C., Gros, V., Schafers, R., Thomas, R., Broadmeadow, M., Nemitz, E., 2017. Isoprene emission potentials from European oak forests derived from canopy flux measurements: An assessment of uncertainties and inter-algorithm variability. *Biogeosciences* 14, 5571–5594. doi: 10.5194/bg-14-5571-2017. (IF=3.85)
- Lin M, Malyshev S, Shevliakova E, Paulot F, Horowitz LW, Fares S, Mikkelsen TN, Zhang L (2019). Sensitivity of ozone dry deposition to ecosystem-atmosphere interactions: A critical appraisal of observations and simulations. *Global Biogeochemical Cycles*. 2018GB006157. - doi: 10.1029/2018GB006157.
- Lucas-Borja M.E., Vacchiano G. (2018) Interactions between climate, growth and seed production in Spanish black pine (*Pinus nigra* Arn. ssp *salzmannii*) forests in Cuenca Mountains (Spain). *New Forests*, 49:399-414.
- Lucas-Borja ME, Calsamiglia A, Fortesa J, García-Comendador J, Lozano Guardiola E, García-Orenes F, Gago J, Estrany J. 2018. The role of wildfire on soil quality in abandoned terraces of three Mediterranean micro-catchments. *CATENA* 170: 246–256. doi: 10.1016/j.catena.2018.06.014
- Marchi M., Chiavetta U., Castaldi C., Di Silvestro D., Contu F., Ducci F., 2016. Regions of provenance for reproductive materials of the three main forest species of Abruzzi. *JOURNAL OF MAPS VOL. 12*, ISS. SUP1,2016, To link to this article: <http://dx.doi.org/10.1080/17445647.2016.1159886>
- Marchi M., Chiavetta U., Castaldi C., Ducci F., 2017. Does complex always mean powerful? A comparison of eight methods for interpolation of climatic data in Mediterranean area. *Italian Journal of Agrometeorology* 1(1):59-72. DOI: 10.19199/2017 .1.2038-5625.059
- Marchi M., Ducci F. (2018). Some refinements on species distribution models using tree-level National Forest Inventories for supporting forest management and marginal forest population detection. *iForest*11: 291-299. – doi: 10.3832/ifer2441-011 [online 2018-04-13]
- Marchi, M., Ferrara, C., Bertini, G., Fares, S., Salvati, L., 2017. A sampling design strategy to reduce survey costs in forest monitoring. *Ecol. Indic.* 81, 182–191. doi:10.1016/j.ecolind.2017.05.011. (IF=3.19).
- Marchi, M., Nocentini, S., Ducci, F., 2016. Future scenarios and conservation strategies for a rear-edge marginal population of *Pinus nigra* Arnold in Italian central Apennines. *Forest Systems*, Volume 25, Issue 3, e072. <http://dx.doi.org/10.5424/fs/2016253-09476>.
- Martin-Benito, D., Pederson, N., Vollenweider, C., Köse, N., Doğan, M., Bugmann, H. & Bigler., C (2019). Disturbances and climate drive structure, stability and growth in mixed temperate old-growth rainforests in the Caucasus. *Ecosystems*. *Ecosystems* . doi:10.1007/s10021-019-00462-x

- Martinez-Jauregui, Maria; Jesus Serra-Varela, Maria; Diaz, Mario; Sollino, Mario (2018). Mitigation strategies for conserving bird diversity under climate change scenarios in Europe: The role of forest naturalization. PLOS ONE 13. doi:10.1371/journal.pone.0202009
- Martinez-Jauregui, Maria; Soliño, Mario; Martinez-Fernandez, Jesus; Touza, Julia (2018). Managing the Early Warning Systems of Invasive Species of Plants, Birds, and Mammals in Natural and Planted Pine Forests. FORESTS 9. doi:10.3390/f9040170
- Martinez-Vilalta, Jordi; Anderegg, William RL; Sapes, Gerard; Sala, Anna; ,Greater focus on water pools may improve our ability to understand and anticipate drought-induced mortality in plants,New Phytologist,223,1,22-32,2019,
- Martínez-Vilalta, Jordi; Lloret, Francisco; ,Drought-induced vegetation shifts in terrestrial ecosystems: the key role of regeneration dynamics,Global and Planetary Change,144,,94-108,2016,Elsevier
- Martin-Garcia, J.; Zas, R.; Solla, A.; Woodward, S.; Hantula, J.; Vainio, E. J.; Mullett, M.; Morales-Rodriguez, C.; Vannini, A.; Martinez-Alvarez, P.; Pinto, G.; Alves, A.; Amaral, J.; Wingfield, M. J.; Fourie, G.; Steenkamp, E. T.; Ahumada, R.; Sera, B.; Sanz-Ros, A. V.; Raposo, R.; Elvira-Recuenco, M.; Iturrityxa, E.; Gordon, T. R.; Diez, J. J. (2019). Environmentally friendly methods for controlling pine pitch canker. PLANT PATHOLOGY 68. doi:10.1111/ppa.13009
- Marzuoli,R., Bussotti, F., Calatayud, V., Calvo, E., Alonso, R., Bermejo, V., Pollastrini, M., Monga, R., Gerosa, G. (2018) Dose-response relationships for ozone effect on the growth of deciduous broadleaf oaks in Mediterranean environment. Atmospheric Environment 190: 331-341
- Mechergui, Taher; Pardos, Marta (2018). Effects of moderate water stress and shading on survival, growth and resource allocation of two cork oak (*Quercus suber* L.) provenances. REVUE D ECOLOGIE-LA TERRE ET LA VIE 73. doi:
- Mechergui, Taher; Pardos, Marta; Jacobs, Douglass F. (2019). Influence of mulching and tree shelters on 4-year survival and growth of zeen oak (*Quercus canariensis*) seedlings. JOURNAL OF FORESTRY RESEARCH 30. doi:10.1007/s11676-018-0606-9
- Merganicova K., Merganic J., Lehtonen A., Vacchiano G., Ostrogovic Sever M., Augustynczyk A., Grote R., Kyselova I., Makela A., Yousefpour R., Krejza J., Collalti A., Reyer C. (2019) Forest carbon allocation modelling under climate change. Tree Physiology, 39:1937–1960.
- Metzger MJ, Brus DJ, Bunce RGH, Carey PD, Gonçalves J, Honrado JP, Jongman RHG, Trabucco A, Zomer R (2013) Environmental stratifications as the basis for national, European and global ecological monitoring. Ecological Indicators, 33, 26-35.
- Metzger MJ, Bunce RGH, Jongman RHG, Sayre R, Trabucco A, Zomer RJ (2013) A high resolution bioclimate map of the world: a unifying framework for global biodiversity research. Global Ecology and Biogeography, 22(5), 630-638.
- Misztal, P. K.; Hewitt, C. N.; Wildt, J.; Blande, J. D.; Eller, a. S. D.; Fares, S.; Gentner, D. R.; Gilman, J. B.; Graus, M.; Greenberg, J.; Guenther, a. B.; Hansel, a.; Harley, P.; Huang, M.; Jardine, K.; Karl, T.; Kaser, L.; Keutsch, F. N.; Kiendler-Scharr, a.; Kleist, E.; Lerner, B. M.; Li, T.; Mak, J.; Nölscher, a. C.; Schnitzhofer, R.; Sinha, V.; Thornton, B.; Warneke, C.; Wegener, F.; Werner, C.; Williams, J.;

- Worton, D. R.; Yassaa, N.; Goldstein, A. H. 2015- Atmospheric benzenoid emissions from plants rival those from fossil fuels. *Scientific Reports* 5, 12064. (IF=5.58).
- Moncrieff GR, Scheiter S, Langan L, Trabucco A, Higgins SI (2016) The future distribution of the savannah biome: model-based and biogeographic contingency. *Philos Trans. R Soc. London B Biol. Sci.*, 371(1703).
- Morani A., Nowak D., Hirabayashi S., Guidolotti G., Medori M., Muzzini V., Fares S., Scarascia Mugnozza G., Calfapietra, C. 2014. Comparing modeled ozone deposition with field measurements in a periurban Mediterranean forest. *Environmental Pollution* 195: 202-209. (IF=4.09)
- Moreno-Fernandez, Daniel; Ledo, Alicia; Martin-Benito, Dario; Cañellas, Isabel; Gea-Izquierdo, Guillermo (2019). Negative synergistic effects of land-use legacies and climate drive widespread oak decline in evergreen Mediterranean open woodlands. *FOREST ECOLOGY AND MANAGEMENT* 432. doi:10.1016/j.foreco.2018.10.023
- Niinemets, U., Fares, S., Harley, P., Jardine, K.J., 2014. Bidirectional exchange of biogenic volatiles with vegetation: emission sources, reactions, breakdown and deposition. *Plant. Cell Environ.* 37 (8): 1790-1809. doi:10.1111/pce.12322. (IF=5.13)
- Noce S, Collalti A, Santini M (2017) Likelihood of changes in forest species suitability, distribution, and diversity under future climate: The case of Southern Europe. *Ecology and Evolution*, 7(22), 9358-9375. DOI: 10.1002/ece3.3427
- Nunes, Lenia; Alvarez-Gonzalez, Juan; Alberdi, Iciar; Silva, Vasco; Rocha, Marta; Rego, Francisco Castro (2019). Analysis of the occurrence of wildfires in the Iberian Peninsula based on harmonised data from national forest inventories. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0811-5
- Ochoa-Hueso, R., Munzi, S., Alonso, R., Arroniz-Crespo, M., Avila, A. Bermejo, V., Bobbink, R., Branquinho, C., Concostrina-Zubiri, L., Cruz, C. et al (2017) Ecological impacts of atmospheric pollution and interactions with climate change in terrestrial ecosystems of the Mediterranean Basin: Current research and future directions. *Environmental Pollution* 227: 194-206
- Ormeño, E., Gentner, D.R., Fares, S., Karlik, J., Park, J.H., Goldstein, A.H., 2010. Sesquiterpenoid emissions from agricultural crops: correlations to monoterpenoid emissions and leaf terpene content. *Environ. Sci. Technol.* 44: 3758–64. doi:10.1021/es903674m. (IF=5.25)
- Pardos, M.; Calama, R. (2018). Responses of *Pinus pinea* seedlings to moderate drought and shade: is the provenance a differential factor?. *PHOTOSYNTHETICA* 56. doi:10.1007/s11099-017-0732-1
- Park J.-H., A. H. Goldstein, J. Timkovsky, S. Fares, R. Weber, J. Karlik, and R.H., 2013. Eddy covariance emission and deposition flux measurements using proton transfer reaction – time of flight – mass spectrometry (PTR-TOF-MS): comparison with PTR-MS measured vertical gradients and fluxes. *Atmospheric Chemistry and Physics* 13: 1439–1456. doi:10.5194/acp-13-1439-2013. (IF=5.51)

- Park, J.-H., Fares, S., Weber, R., Goldstein, a. H., 2014. Biogenic volatile organic compound emissions during BEARPEX 2009 measured by eddy covariance and flux–gradient similarity methods. *Atmos. Chem. Phys.* 14: 231–244. doi:10.5194/acp-14-231-2014. (IF=5.51)
- Park, J.-H., Goldstein, a. H., Timkovsky, J., Fares, S., Weber, R., Karlik, J., Holzinger, R., 2013. Active Atmosphere-Ecosystem Exchange of the Vast Majority of Detected Volatile Organic Compounds. *Science* 341: 643–647. doi:10.1126/science.1235053. (IF=31)
- Patsiou, Theofania S.; Shestakova, Tatiana A.; Klein, Tamir; Matteo, Giovanni di; Sbay, Hassan; Chambel, M Regina; Zas, Rafael; Voltas, Jordi (2020). Intraspecific responses to climate reveal nonintuitive warming impacts on a widespread thermophilic conifer. *NEW PHYTOLOGIST* . doi:10.1111/nph.16656
- Proietti, C., Anav, A., Vitale, M., Fares, S., Fornasier, M. F., Screpanti, A., ... Marco, A. De. (2019). A New Wetness Index to Evaluate the Soil Water Availability Influence on Gross Primary Production of European Forests. *Climate* 1–22. <https://doi.org/10.3390/cli7030042>.
- Rigling A., Bigler C., Eilmann B., Feldmeyer-Christe E., Gimmi U., Ginzler C., Graf U., Mayer P., Vacchiano G., Weber P., Wohlgemuth T., Zweifel R., Dobbertin M. (2013). Driving factors of a vegetation shift from Scots pine to pubescent oak in dry Alpine forests. *Global Change Biology* 19:229–240
- Roeland S, Moretti M, Humberto J, Cristina A, Amorim J., Branquinho, C., Fares, S., Morelli, F., Niinemets, U., Paoletti, E., Pinho, P., Sgrigna, G., Stojanovski, V., Tiwary, A., Sicard P., Calfapietra, C. (2019). Towards an integrative approach to evaluate the environmental ecosystem services provided by urban forest. *J For Res.* <https://doi.org/10.1007/s11676-019-00916-x>.
- Rubio-Cuadrado, Alvaro; Bravo-Oviedo, Andres; Mutke, Sven; Del Rio, Miren (2018). Climate effects on growth differ according to height and diameter along the stem in *Pinus pinaster* Ait.. *IForest-BIOGEOSCIENCES AND FORESTRY* 11. doi:10.3832/ifor2318-011
- Rubio-Cuadrado, Alvaro; Camarero, J. Julio; Del Rio, Miren; Sanchez-Gonzalez, Mariola; Ruiz-Peinado, Ricardo; Bravo-Oviedo, Andres; Gil, Luis; Montes, Fernando (2018). Drought modifies tree competitiveness in an oak-beech temperate forest. *FOREST ECOLOGY AND MANAGEMENT* 429. doi:10.1016/j.foreco.2018.06.035
- Rubio-Cuadrado, Alvaro; Camarero, J. Julio; del Rio, Miren; Sanchez-Gonzalez, Mariola; Ruiz-Peinado, Ricardo; Bravo-Oviedo, Andres; Gil, Luis; Montes, Fernando (2018). Long-term impacts of drought on growth and forest dynamics in a temperate beech-oak-birch forest. *AGRICULTURAL AND FOREST METEOROLOGY* 259. doi:10.1016/j.agrformet.2018.04.015
- Sallustio, L., Perone, A., Vizzarri, M., Corona, P., Fares, S., Coccozza, C., Tognetti, R., Lasserre, B., Marchetti, M., (2019). The green side of the grey: Assessing greenspaces in built-up areas of Italy. *Urban Forestry & Urban Greening* 37, 147-153. doi:10.1016/j.ufug.2017.10.018. (IF=2.78)
- Sánchez de Dios, Rut; Gómez, Cristina; Aulló, Isabel; Cañellas, Isabel; Gea-Izquierdo, Guillermo; Montes, Fernando; Sainz Ollero, Helios; Velázquez, Juan Carlos; Hernández; Laura (2020). *Fagus sylvatica* L. Peripheral Populations in the Mediterranean Iberian Peninsula: Climatic or Anthropic Relicts? . *ECOSYSTEMS* . doi:

- Sanchez-Gomez, David; Cervera, M.Teresa; Escolano-Tercero, Miguel A.; Velez, M. Dolores; de Maria, Nuria; Diaz, Luis; Sanchez-Vioque, Raul; Aranda, Ismael; Guevara, M. Angeles (2019). Drought escape can provide high grain yields under early drought in lentils. *THEORETICAL AND EXPERIMENTAL PLANT PHYSIOLOGY* 31. doi:10.1007/s40626-018-0136-z
- Sánchez-Martín, L., Bermejo-Bermejo, V., García-Torres, L., Alonso, R., de la Cruz, A., Calvete-Sogo, H., & Vallejo, A. (2017). Nitrogen soil emissions and belowground plant processes in Mediterranean annual pastures are altered by ozone exposure and N-inputs.
- Santini M, Collalti A, Valentini R (2014) Climate change impacts on vegetation and water cycle in the Euro-Mediterranean region, studied by a likelihood approach. *Reg Environ Change*, 14, 1405–1418 DOI 10.1007/s10113-013-0582-8
- Savi F, Nemitz E, Coyle M, Aitkenhead M, Frumau K, Gerosa G, Finco A, Gruening C, Goded I, Loubet B, Stella P, Ruuskanen T, Weidinger T, Horvath L, Zenone T, and Fares S* (2020). Neural Network Analysis to Evaluate Ozone Damage to Vegetation Under Different Climatic Conditions. *Frontiers in Forests and Global Change* 3: 1–14. - doi: 10.3389/ffgc.2020.00042. *Corresponding author.
- Savi, F., Di Bene, C., Canfora, L.; Mondini, C., Fares, S. 2016. Environmental and biological controls on CH₄ exchange over an evergreen Mediterranean forest. *Agr. For. Met.* 226-227: 67-79 10.1016/j.agrformet.2016.05.014. (IF=4.46).
- Savi, F., Fares, S., 2014. Ozone dynamics in a Mediterranean Holm oak forest : comparison among transition periods characterized by different amounts of precipitation. *Annals Of Silvicultural Research* 38: 1–6.
- Seidl R., Thom D., Kautz M., Martin-Benito D., Peltoniemi M., Vacchiano G., Wild J., Ascoli D., Petr M., Honkaniemi J., Lexer M.J., Trotsiuk V., Mairota P., Svoboda M., Fabrika M., Nagel T.A., Reyer C.P.O. (2017) Forest disturbance in a changing world. *Nature Climate Change*, 7: 395-402.
- Sergio Noce S, Caporaso L, Santini M (2014) Climate Change and Geographic Ranges: The Implications for Russian Forests. *Frontiers in Ecology and Evolution*, Published march 2019. DOI: 10.3389/fevo.2019.00057
- Serra-Maluquer, X; Mencuccini, M; Martínez-Vilalta, J; , "Changes in tree resistance, recovery and resilience across three successive extreme droughts in the northeast Iberian Peninsula", *Oecologia*, 187, 1, 343-354, 2018, Springer Berlin Heidelberg
- Soteriades AD, Murray-Rust D, Trabucco A and Metzger MJ (2017) Understanding global climate change scenarios through bioclimate stratification. *Environmental Research Letters*, 12, 084002.
- Steckel, M.; del Rio, M.; Heym, M.; Aldea, J.; Bielak, K.; Brazaitis, G.; Cerny, J.; Coll, L.; Collet, C.; Ehbrecht, M.; Jansons, A.; Nothdurft, A.; Pach, M.; Pardos, M.; Ponette, Q.; Reventlow, D. O. J.; Sitko, R.; Svoboda, M.; Vallet, P.; Wolff, B.; Pretzsch, H. (2020). Species mixing reduces drought susceptibility of Scots pine (*Pinus sylvestris* L.) and oak (*Quercus robur* L., *Quercus petraea* (Matt.) Liebl.) - Site water supply and fertility modify the mixing effect. *FOREST ECOLOGY AND MANAGEMENT* 461. doi:10.1016/j.foreco.2020.117908

- Trabucco A, Achten WMJ, Bowe C, Aerts R, van Orshoven J, Norgrove L, Muys B (2010) Global mapping of *Jatropha curcas* yield based on response of fitness to present and future climate. *Global Change Biology & Bioenergy*, 2, 139-151
- Tracy JL, Trabucco A, Lawing AM, Giermakowski JT, Tchakerian M, Drus GM, Coulson RN (2018) Random Subset Feature Selection for Ecological Niche Models of Wildfire Activity in Western North America. *Ecological Modelling*, 383, 52-68.
- Vacchiano G., Motta R. (2015) An improved species distribution model for Scots pine and Downy oak under future climate change in the NW Italian Alps. *Annals of Forest Science*, 72:321-334
- Van de Peer T, Mereu S, Verheyen K, Costa Saura JM, Morillas L, Roales J, Lo Cascio M, Spano D, Paquette A, Muys B (2018) Tree seedling vitality improves with functional diversity in a Mediterranean common garden experiment. *Forest Ecology and Management* 409, 614-633
- Vayreda, Jordi; Martinez-Vilalta, Jordi; Gracia, Marc; Canadell, Josep G; Retana, Javier; ,Anthropogenic-driven rapid shifts in tree distribution lead to increased dominance of broadleaf species, *Global change biology*, 22, 12, 3984-3995, 2016,
- Vergarechea, Marta; Calama, Rafael; Fortin, Mathieu; del Rio, Miren (2019). Climate-mediated regeneration occurrence in Mediterranean pine forests: A modeling approach. *FOREST ECOLOGY AND MANAGEMENT* 446. doi:10.1016/j.foreco.2019.05.023
- Vergarechea, Marta; del Rio, Miren; Gordo, Javier; Martin, Rebeca; Cubero, David; Calama, Rafael (2019). Spatio-temporal variation of natural regeneration in *Pinus pinea* and *Pinus pinaster* Mediterranean forests in Spain. *EUROPEAN JOURNAL OF FOREST RESEARCH* 138. doi:10.1007/s10342-019-01172-8 1 citas Vizcaino-Palomar, Natalia; Gonzalez-Munoz, Noelia; Gonzalez-Martinez, Santiago C.; Alia, Ricardo; Benito Garzon, Marta (2019). Most Southern Scots Pine Populations Are Locally Adapted to Drought for Tree Height Growth. *FORESTS* 10. doi:10.3390/f10070555
- Vilà-Cabrera, Albert; Coll, Lluís; Martínez-Vilalta, Jordi; Retana, Javier; ,Forest management for adaptation to climate change in the Mediterranean basin: A synthesis of evidence, *Forest Ecology and Management*, 407, , 16-22, 2018, Elsevier
- Wagner F, Rossi V, Aubry-Kientz M, Bonal D, Dalitz H, Gliniars R, Stahl C, Trabucco A, Hérault B (2014) Pan-tropical analysis of climate effects on seasonal tree growth. *PLoS ONE*, 9(3): e92337.
- Wu, I.; Pullinen, S.; Andres, Carriero, G.; Fares, S.; Goldbach, H.; Hacker, L.; Kiendler-Scharr, A.; Kasal, T.; Kleist, E.; Paoletti, E.; Wahner, E.; Wildt, J.; Mentel, T.F. 2015. Impacts of soil moisture on de-novo monoterpene emissions from European beech, Holm oak, Scots pine, and Norway spruce. *Biogeosciences* 12: 177-191. (IF=3.75).
- Yuan, X., Calatayud, V., Gao, F., Fares, S., Paoletti, E., Tian, Y., & Feng, Z. 2016. Interaction of drought and ozone exposure on isoprene emission from extensively cultivated poplar. *Plant, Cell & Environment* 39, 2276–2287. <http://doi.org/10.1111/pce.12798>. (IF=6.16).

Yücedağ E., Özel H.B., Ayan S., Ducci F., Isajev V. V., Šeho M., 2019. Growth characteristics of *Tilia tomentosa* Moench. from different districts in the regions of Marmara and western Black Sea in Turkey. *GENETIKA*, Vol. 51 No. 2: 731-742

Zamora-Ballesteros, C., Diez, J. J., Martín-García, J., Witzell, J., Solla, A., Ahumada, R., Capretti, P., Cleary, M., Drenkhan, R., Dvorák, M., Elvira-Recuenco, M., Fernández-Fernández, M., Ghelardini, L., Gonthier, P., Hernández-Escribano, L., Iosif, R., Markovskaja, S., Martínez-Álvarez, P., Muñoz-Adalia, E.J., Nowakowska, J. A., Oszako, T., Raposo, R., Santini, A., Hantula, J. (2019). Pine Pitch Canker (PPC): Pathways of Pathogen Spread and Preventive Measures.. *FORESTS* 10. doi:10.3390/f10121158

Zomer R, Neufeldt H, Xu J, Ahrends A, Bossio D, Trabucco A, van Noordwijk M, Wang M (2016) Global Tree Cover and Biomass Carbon on Agricultural Land: The contribution of agroforestry to global and national carbon budgets. *Scientific Reports*, 6:29987.

Zona, D., Gioli, B., Fares, S., De Groot, T., Pilegaard, K., Ibrom, A., Ceulemans, R., 2014. Environmental controls on ozone fluxes in a poplar plantation in Western Europe. *Environ. Pollut.* 184: 201–210. doi:10.1016/j.envpol.2013.08.032. (IF=4.09)

Reference of papers that your institute/university/department/research group has already published on one or more of these new research themes, including the ones we proposed and the ones you suggest.

Alberdi, Iciar; Cañellas, Isabel; Condes, Sonia (2014). A long-scale biodiversity monitoring methodology for Spanish national forest inventory. Application to Alava region. *FOREST SYSTEMS* 23. doi:10.5424/fs/2014231-04238

Alberdi, Iciar; Cañellas, Isabel; Hernandez, Laura; Condes, Sonia (2013). A new method for the identification of old-growth trees in National Forest Inventories: application to *Pinus halepensis* Mill. stands in Spain. *ANNALS OF FOREST SCIENCE* 70. doi:10.1007/s13595-012-0261-9

Alberdi, Iciar; Condes, Sonia; McRoberts, Ronald E.; Winter, Susanne (2018). Mean species cover: a harmonized indicator of shrub cover for forest inventories. *EUROPEAN JOURNAL OF FOREST RESEARCH* 137. doi:10.1007/s10342-018-1110-7

Alberdi, Iciar; Nunes, Leonia; Kovac, Marko; Bonheme, Ingrid; Cañellas, Isabel; Rego, Francisco Castro; Dias, Susana; Duarte, Ines; Notarangelo, Monica; Rizzo, Maria; Gasparini, Patrizia (2019). The conservation status assessment of Natura 2000 forest habitats in Europe: capabilities, potentials and challenges of national forest inventories data. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0820-4

Alberto, Florian J.; Aitken, Sally N.; Alia, Ricardo; Gonzalez-Martinez, Santiago C.; Hanninen, Heikki; Kremer, Antoine; Lefevre, Francois; Lenormand, Thomas; Yeaman, Sam; Whetten, Ross;

- Savolainen, Outi (2013). Potential for evolutionary responses to climate change evidence from tree populations. *GLOBAL CHANGE BIOLOGY* 19. doi:10.1111/gcb.12181
- Alia, Ricardo; Chambel, Regina; Notivol, Eduardo; Climent, Jose; Gonzalez-Martinez, Santiago C (2014). Environment-dependent microevolution in a Mediterranean pine (*Pinus pinaster* Aiton). *BMC EVOLUTIONARY BIOLOGY* 14. doi:10.1186/s12862-014-0200-5
- Aranda, Ismael; Alia, Ricardo; Ortega, Unai; Dantas, Angelo K.; Majada, Juan (2010). Intra-specific variability in biomass partitioning and carbon isotopic discrimination under moderate drought stress in seedlings from four *Pinus pinaster* populations. *TREE GENETICS & GENOMES* 6. doi:10.1007/s11295-009-0238-5
- Aranda, Ismael; Sanchez-Gomez, David; de Miguel, Marina; Antonio Mancha, Jose; Angeles Guevara, Maria; Cadahia, Estrella; Fernandez de Simon, Maria Brigida (2017). *Fagus sylvatica* L. provenances maintain different leaf metabolic profiles and functional response. *ACTA OECOLOGICA-INTERNATIONAL JOURNAL OF ECOLOGY* 82. doi:10.1016/j.actao.2017.05.003
- Arrillaga, I.; Guevara, M. A.; Munoz-Bertomeu, J.; Lazaro-Gimeno, D.; Saez-Laguna, E.; Diaz, L. M.; Torralba, L.; Mendoza-Poudereux, I.; Segura, J.; Cervera, M. T. (2014). Selection of haploid cell lines from megagametophyte cultures of maritime pine as a DNA source for massive sequencing of the species. *PLANT CELL TISSUE AND ORGAN CULTURE* 118. doi:10.1007/s11240-014-0470-z
- Barbeito, Ignacio; LeMay, Valerie; Calama, Rafael; Cañellas, Isabel (2011). Regeneration of Mediterranean *Pinus sylvestris* under two alternative shelterwood systems within a multiscale framework. *CANADIAN JOURNAL OF FOREST RESEARCH* 41. doi:10.1139/X10-214
- Benito Garzon, Marta; Alia, Ricardo; Robson, T. Matthew; Zavala, Miguel A. (2011). Intra-specific variability and plasticity influence potential tree species distributions under climate change. *GLOBAL ECOLOGY AND BIOGEOGRAPHY* 20. doi:10.1111/j.1466-8238.2010.00646.x
- Cabezas, Jose Antonio; Gonzalez-Martinez, Santiago C.; Collada, Carmen; Guevara, Maria Angeles; Boury, Christophe; de Maria, Nuria; Eveno, Emmanuelle; Aranda, Ismael; Garnier-Gere, Pauline H.; Brach, Jean; Alia, Ricardo; Plomion, Christophe; Cervera, Maria Teresa (2015). Nucleotide polymorphisms in a pine ortholog of the Arabidopsis degrading enzyme cellulase KORRIGAN are associated with early growth performance in *Pinus pinaster*. *TREE PHYSIOLOGY* 35. doi:10.1093/treephys/tpv050
- Cabezas, Jose Antonio; Morcillo, Marian; Velez, Maria Dolores; Diaz, Luis; Segura, Juan; Cervera, Maria Teresa; Arrillaga, Isabel (2016). Haploids in Conifer Species: Characterization and Chromosomal Integrity of a Maritime Pine Cell Line. *FORESTS* 7. doi:10.3390/f7110274
- Calama, R.; Manso, R.; Barbeito, I.; Madrigal, G.; Garriga, E.; Gordo, F. J.; Montero, G.; Cañellas, I.; Pardos, M. (2015). Do inter-specific differences in seed size determine natural regeneration traits in *Pinus pinea* and *Pinus sylvestris*? . *APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH* 13. doi:
- Calama, Rafael; Fortin, Mathieu; Pardos, Marta; Manso, Ruben (2017). Modelling spatiotemporal dynamics of *Pinus pinea* cone infestation by *Dioryctria mendacella*. *FOREST ECOLOGY AND MANAGEMENT* 389. doi:10.1016/j.foreco.2016.12.015

- Calama, Rafael; Manso, Ruben; Lucas-Borja, Manuel E.; Espelta, Josep M.; Pique, Miriam; Bravo, Felipe; del Peso, Carlos; Pardos, Marta (2017). Natural regeneration in Iberian pines: A review of dynamic processes and proposals for management. *FOREST SYSTEMS* 26. doi:10.5424/fs/2017262-11255
- Canales, Javier; Bautista, Rocio; Label, Philippe; Gomez-Maldonado, Josefa; Lesur, Isabelle; Fernandez-Pozo, Noe; Rueda-Lopez, Marina; Guerrero-Fernandez, Dario; Castro-Rodriguez, Vanessa; Benzekri, Hicham; Canas, Rafael A.; Guevara, Maria-Angeles; Rodrigues, Andreia; Seoane, Pedro; Teyssier, Caroline; Morel, Alexandre; Ehrenmann, Francois; Le Provost, Gregoire; Lalanne, Celine; Noirot, Celine; Klopp, Christophe; Reymond, Isabelle; Garcia-Gutierrez, Angel; Trontin, Jean-Francois; Lelu-Walter, Marie-Anne; Miguel, Celia; Teresa Cervera, Maria; Canton, Francisco R.; Plomion, Christophe; Harvengt, Luc; Avila, Concepcion; Gonzalo Claros, M.; Canovas, Francisco M. (2014). De novo assembly of maritime pine transcriptome: implications for forest breeding and biotechnology. *PLANT BIOTECHNOLOGY JOURNAL* 12. doi:10.1111/pbi.12136
- Chirici, Gherardo; McRoberts, Ronald E.; Winter, Susanne; Bertini, Roberta; Braendli, Urs-Beat; Asensio, Iciar Alberdi; Bastrup-Birk, Annemarie; Rondeux, Jacques; Barsoum, Nadia; Marchetti, Marco (2012). National Forest Inventory Contributions to Forest Biodiversity Monitoring. *FOREST SCIENCE* 58. doi:10.5849/forsci.12-003
- Climent, Jose; Kidelman Dantas, Angelo; Alia, Ricardo; Majada, Juan (2013). Clonal variation for shoot ontogenetic heteroblasty in maritime pine (*Pinus pinaster* Ait.). *TREES-STRUCTURE AND FUNCTION* 27. doi:10.1007/s00468-013-0901-1
- Climent, Jose; San-Martin, Roberto; Regina Chambel, Maria; Mutke, Sven (2011). Ontogenetic differentiation between Mediterranean and Eurasian pines (sect. *Pinus*) at the seedling stage. *TREES-STRUCTURE AND FUNCTION* 25. doi:10.1007/s00468-010-0496-8
- Correia, Isabel; Alia, Ricardo; Yan, Weikai; David, Teresa; Aguiar, Alexandre; Almeida, Maria Helena (2010). Genotype x Environment interactions in *Pinus pinaster* at age 10 in a multi-environment trial in Portugal: a maximum likelihood approach. *ANNALS OF FOREST SCIENCE* 67. doi:10.1051/forest/2010025
- De Carvalho, Dulcinea; Ingvarsson, Par K.; Joseph, Jeffrey; Suter, Leonie; Sedivy, Claudio; Macaya-Sanz, David; Cottrell, Joan; Heinze, Berthold; Schanzer, Ivan; Lexer, Christian (2010). Admixture facilitates adaptation from standing variation in the European aspen (*Populus tremula* L.), a widespread forest tree. *MOLECULAR ECOLOGY* 19. doi:10.1111/j.1365-294X.2010.04595.x
- de Miguel, Marina; Bartholome, Jerome; Ehrenmann, Francois; Murat, Florent; Moriguchi, Yoshinari; Uchiyama, Kentaro; Ueno, Saneyoshi; Tsumura, Yoshihiko; Lagraulet, Helene; de Maria, Nuria; Cabezas, Jose-Antonio; Cervera, Maria-Teresa; Marc Gion, Jean; Salse, Jerome; Plomion, Christophe (2015). Evidence of Intense Chromosomal Shuffling during Conifer Evolution. *GENOME BIOLOGY AND EVOLUTION* 7. doi:10.1093/gbe/evv185
- de Miguel, Marina; de Maria, Nuria; Angeles Guevara, M.; Diaz, Luis; Saez-Laguna, Enrique; Sanchez-Gomez, David; Chancerel, Emilie; Aranda, Ismael; Collada, Carmen; Plomion, Christophe; Cabezas, Jose-Antonio; Cervera, Maria-Teresa (2012). Annotated genetic linkage maps of *Pinus*

- pinaster Ait. from a Central Spain population using microsatellite and gene based markers. BMC GENOMICS 13. doi:10.1186/1471-2164-13-527
- Dubreuil, Marta; Riba, Miquel; Gonzalez-Martinez, Santiago C.; Vendramin, Giovanni G.; Sebastiani, Federico; Mayol, Maria (2010). GENETIC EFFECTS OF CHRONIC HABITAT FRAGMENTATION REVISITED: STRONG GENETIC STRUCTURE IN A TEMPERATE TREE, TAXUS BACCATA (TAXACEAE), WITH GREAT DISPERSAL CAPABILITY. AMERICAN JOURNAL OF BOTANY 97. doi:10.3732/ajb.0900148
- Elvira-Recuenco, Margarita; Iturrutxa, Eugenia; Majada, Juan; Alia, Ricardo; Raposo, Rosa (2014). Adaptive Potential of Maritime Pine (*Pinus pinaster*) Populations to the Emerging Pitch Canker Pathogen, *Fusarium circinatum*. PLOS ONE 9. doi:10.1371/journal.pone.0114971
- Estrany, J., Ruiz, M., Calsamiglia, A., Carriquí, M., García-Comendador, J., Nadal, M., ... & Gago, J. (2019). Sediment connectivity linked to vegetation using UAVs: High-resolution imagery for ecosystem management. Science of The Total Environment, 671, 1192-1205.
- Ezquerro, Marta; Pardos, Marta; Diaz-Balteiro, Luis (2016). Operational Research Techniques Used for Addressing Biodiversity Objectives into Forest Management: An Overview. FORESTS 7. doi:10.3390/f7100229
- Ezquerro, Marta; Pardos, Marta; Diaz-Balteiro, Luis (2019). Integrating variable retention systems into strategic forest management to deal with conservation biodiversity objectives. FOREST ECOLOGY AND MANAGEMENT 433. doi:10.1016/j.foreco.2018.11.003
- Fady, Bruno; Cottrell, Joan; Ackzell, Lennart; Alia, Ricardo; Muys, Bart; Prada, Arantxa; Gonzalez-Martinez, Santiago C. (2016). Forests and global change: what can genetics contribute to the major forest management and policy challenges of the twenty-first century?. REGIONAL ENVIRONMENTAL CHANGE 16. doi:10.1007/s10113-015-0843-9
- Fernandez-Pozo, Noe; Canales, Javier; Guerrero-Fernandez, Daro; Villalobos, David P.; Diaz-Moreno, Sara M.; Bautista, Rocio; Flores-Monterroso, Arantxa; Angeles Guevara, M.; Perdiguero, Pedro; Collada, Carmen; Teresa Cervera, M.; Soto, Alvaro; Ordas, Ricardo; Canton, Francisco R.; Avila, Concepcion; Canovas, Francisco M.; Gonzalo Claros, M. (2011). EuroPineDB: a high-coverage web database for maritime pine transcriptome. BMC GENOMICS 12. doi:10.1186/1471-2164-12-366
- Garcia del Barrio, Jose M.; Aunon, Francisco; Sanchez de Ron, David; Alia, Ricardo (2013). Assessing regional species pools for restoration programs in Spain. NEW FORESTS 44. doi:10.1007/s11056-013-9363-y
- Garcia, Cristina; Grivet, Delphine (2011). Molecular insights into seed dispersal mutualisms driving plant population recruitment. ACTA OECOLOGICA-INTERNATIONAL JOURNAL OF ECOLOGY 37. doi:10.1016/j.actao.2011.04.009
- Gaspar, Maria Joao; Velasco, Tania; Feito, Isabel; Alia, Ricardo; Majada, Juan (2013). Genetic Variation of Drought Tolerance in *Pinus pinaster* at Three Hierarchical Levels: A Comparison of Induced Osmotic Stress and Field Testing. PLOS ONE 8. doi:10.1371/journal.pone.0079094

- Gonzalez-Martinez, Santiago C.; Dubreuil, M.; Riba, M.; Vendramin, G. G.; Sebastiani, F.; Mayol, M. (2010). Spatial genetic structure of *Taxus baccata* L. in the western Mediterranean Basin: Past and present limits to gene movement over a broad geographic scale. *MOLECULAR PHYLOGENETICS AND EVOLUTION* 55. doi:10.1016/j.ympev.2010.03.001
- Grivet, Delphine; Avia, Komlan; Vaattovaara, Aleksia; Eckert, Andrew J.; Neale, David B.; Savolainen, Outi; Gonzalez-Martinez, Santiago C. (2017). High rate of adaptive evolution in two widespread European pines. *MOLECULAR ECOLOGY* 26. doi:10.1111/mec.14402
- Grivet, Delphine; Climent, Jose; Zabal-Aguirre, Mario; Neale, David B.; Vendramin, Giovanni G.; Gonzalez-Martinez, Santiago C. (2013). Adaptive evolution of Mediterranean pines. *MOLECULAR PHYLOGENETICS AND EVOLUTION* 68. doi:10.1016/j.ympev.2013.03.032
- Grivet, Delphine; Sebastiani, Federico; Alia, Ricardo; Bataillon, Thomas; Torre, Sara; Zabal-Aguirre, Mario; Vendramin, Giovanni G.; Gonzalez-Martinez, Santiago C. (2011). Molecular Footprints of Local Adaptation in Two Mediterranean Conifers. *MOLECULAR BIOLOGY AND EVOLUTION* 28. doi:10.1093/molbev/msq190
- Guevara, Maria Angeles ; de Maria, Nuria; Saez-Laguna, Enrique; Velez, Maria Dolores ; Cervera, Maria Teresa ; Cabezas, Jose Antonio (2017). Analysis of DNA Cytosine Methylation Patterns Using Methylation-Sensitive Amplification Polymorphism (MSAP). *PLANT EPIGENETICS: METHODS AND PROTOCOLS, 2ND EDITION* 1456. doi:10.1007/978-1-4899-7708-3_9
- Guil, F.; Fernandez-Olalla, M.; Martinez-Jauregui, M.; Moreno-Opo, R.; Agudin, S.; San Miguel-Ayanz, A. (2014). Grain sowing aimed at wild rabbit *Oryctolagus cuniculus* L. enhancement in Mediterranean environments. *JOURNAL FOR NATURE CONSERVATION* 22. doi:10.1016/j.jnc.2014.08.011
- Hernandez-Tecles, Enrique; de las Heras, Jorge; Lorenzo, Zaida; Navascues, Miguel; Alia, Ricardo (2017). Identification of gene pools used in restoration and conservation by chloroplast microsatellite markers in Iberian pine species. *FOREST SYSTEMS* 26. doi:10.5424/fs/2017262-9030
- Heuertz, Myriam; Teufel, Jennifer; Gonzalez-Martinez, Santiago C.; Soto, Alvaro; Fady, Bruno; Alia, Ricardo; Vendramin, Giovanni G. (2010). Geography determines genetic relationships between species of mountain pine (*Pinus mugo* complex) in western Europe. *JOURNAL OF BIOGEOGRAPHY* 37. doi:10.1111/j.1365-2699.2009.02223.x
- Iturrutxa, E.; Ganley, R. J.; Raposo, R.; Garcia-Serna, I.; Mesanza, N.; Kirkpatrick, S. C.; Gordon, T. R. (2013). Resistance levels of Spanish conifers against *Fusarium circinatum* and *Diplodia pinea*. *FOREST PATHOLOGY* 43. doi:10.1111/efp.12061
- Jaramillo-Correa, J. P.; Grivet, D.; Terrab, A.; Kurt, Y.; de-Lucas, A. I.; Wahid, N.; Vendramin, G. G.; Gonzalez-Martinez, S. C. (2011). Genetic diversity and structure of *Pinus pinaster* Aiton in the Iberian Peninsula. *PLANT SYSTEMATICS AND EVOLUTION* 293. doi:10.1007/s00435-011-0688-1
- Jaramillo-Correa, Juan-Pablo; Rodriguez-Quilon, Isabel; Grivet, Delphine; Lepoittevin, Camille; Sebastiani, Federico; Heuertz, Myriam; Garnier-Gere, Pauline H.; Alia, Ricardo; Plomion, Christophe; Vendramin, Giovanni G.; Gonzalez-Martinez, Santiago C. (2015). Molecular Proxies for Climate Maladaptation in a Long-Lived Tree (*Pinus pinaster* Aiton, Pinaceae). *GENETICS* 199. doi:10.1534/genetics.114.173252

- Kremer, Antoine; Ronce, Ophelie; Robledo-Arnuncio, Juan J.; Guillaume, Frederic; Bohrer, Gil; Nathan, Ran; Bridle, Jon R.; Gomulkiewicz, Richard; Klein, Etienne K.; Ritland, Kermit; Kuparinen, Anna; Gerber, Sophie; Schueler, Silvio (2012). Long-distance gene flow and adaptation of forest trees to rapid climate change. *ECOLOGY LETTERS* 15. doi:10.1111/j.1461-0248.2012.01746.x
- Kremer, Antoine; Vinceti, Barbara; Alia, Ricardo; Burczyk, Jaroslav; Cavers, Stephen; Degen, Bernd; Finkeldey, Reiner; Fluch, Silvia; Goemoery, Dusan; Gugerli, Felix; Koelewijn, Hans Peter; Koskela, Jarkko; Lefevre, Francois; Morgante, Michele; Mueller-Starck, Gerhard; Plomion, Christophe; Taylor, Gail; Turok, Jozef; Savolainen, Outi; Ziegenhagen, Birgit (2011). Forest ecosystem genomics and adaptation: EVOLTREE conference report. *TREE GENETICS & GENOMES* 7. doi:10.1007/s11295-011-0378-2
- Kurt, Yusuf; Gonzalez-Martinez, Santiago C.; Alia, Ricardo; Isik, Kani (2012). Genetic differentiation in *Pinus brutia* Ten. using molecular markers and quantitative traits: the role of altitude. *ANNALS OF FOREST SCIENCE* 69. doi:10.1007/s13595-011-0169-9
- Lamy, Jean-Baptiste; Delzon, Sylvain; Bouche, Pauline S.; Alia, Ricardo; Vendramin, Giovanni Giuseppe; Cochard, Herve; Plomion, Christophe (2014). Limited genetic variability and phenotypic plasticity detected for cavitation resistance in a Mediterranean pine. *NEW PHYTOLOGIST* 201. doi:10.1111/nph.12556
- Ledo, Alicia; Cañellas, Isabel; Barbeito, Ignacio; Javier Gordo, Francisco; Calama, Rafael A.; Gea-Izquierdo, Guillermo (2014). Species coexistence in a mixed Mediterranean pine forest: Spatio-temporal variability in trade-offs between facilitation and competition. *FOREST ECOLOGY AND MANAGEMENT* 322. doi:10.1016/j.foreco.2014.02.038
- Ledo, Alicia; Condes, Sonia; Alberdi, Iciar (2012). Forest biodiversity assessment in Peruvian Andean Montane cloud forest. *JOURNAL OF MOUNTAIN SCIENCE* 9. doi:10.1007/s11629-009-2172-2
- Li, Zhen; De La Torre, Amanda R.; Sterck, Lieven; Canovas, Francisco M.; Avila, Concepcion; Merino, Irene; Antonio Cabezas, Jose; Teresa Cervera, Maria; Ingvarsson, Par K.; Van de Peer, Yves (2017). Single-Copy Genes as Molecular Markers for Phylogenomic Studies in Seed Plants. *GENOME BIOLOGY AND EVOLUTION* 9. doi:10.1093/gbe/evx070
- Lopez-Goldar, Xose; Villari, Caterina; Bonello, Pierluigi; Borg-Karlson, Anna Karin; Grivet, Delphine; Sampedro, Luis; Zas, Rafael (2019). Genetic variation in the constitutive defensive metabolome and its inducibility are geographically structured and largely determined by demographic processes in maritime pine. *JOURNAL OF ECOLOGY* 107. doi:10.1111/1365-2745.13159
- Macaya-Sanz, D.; Heuertz, M.; Lopez-de-Heredia, U.; de-Lucas, A. I.; Hidalgo, E.; Maestro, C.; Prada, A.; Alia, R.; Gonzalez-Martinez, S. C. (2012). The Atlantic-Mediterranean watershed, river basins and glacial history shape the genetic structure of Iberian poplars. *MOLECULAR ECOLOGY* 21. doi:10.1111/j.1365-294X.2012.05619.x
- Mackay, John; Dean, Jeffrey F. D.; Plomion, Christophe; Peterson, Daniel G.; Canovas, Francisco M.; Pavy, Nathalie; Ingvarsson, Par K.; Savolainen, Outi; Angeles Guevara, M.; Fluch, Silvia; Vinceti, Barbara; Abarca, Dolores; Diaz-Sala, Carmen; Cervera, Maria-Teresa (2012). Towards decoding the conifer giga-genome. *PLANT MOLECULAR BIOLOGY* 80. doi:10.1007/s11103-012-9961-7

- Martin, Carmen; Teresa Cervera, Maria; Elena Gonzalez-Benito, Maria (2011). Genetic stability analysis of chrysanthemum (*Chrysanthemum x morifolium* Ramat) after different stages of an encapsulation-dehydration cryopreservation protocol. *JOURNAL OF PLANT PHYSIOLOGY* 168. doi:10.1016/j.jplph.2010.06.025
- Martinez-Jauregui, M.; Herruzo, A. C. (2014). A note on the effectiveness of incorporating management objectives with ecological variables when modeling red deer abundance. *EUROPEAN JOURNAL OF WILDLIFE RESEARCH* 60. doi:10.1007/s10344-014-0813-4
- Martinez-Jauregui, Maria; Diaz, Mario; Sanchez de Ron, David; Soliño, Mario (2016). Plantation or natural recovery? Relative contribution of planted and natural pine forests to the maintenance of regional bird diversity along ecological gradients in Southern Europe. *FOREST ECOLOGY AND MANAGEMENT* 376. doi:10.1016/j.foreco.2016.06.021
- Martinez-Jauregui, Maria; Jesus Serra-Varela, Maria; Diaz, Mario; Sollino, Mario (2018). Mitigation strategies for conserving bird diversity under climate change scenarios in Europe: The role of forest naturalization. *PLOS ONE* 13. doi:10.1371/journal.pone.0202009
- Martinez-Jauregui, Maria; Soliño, Mario; Diaz, Mario (2016). Geographical variation in the contribution of planted and natural pine forests to the conservation of bird diversity. *DIVERSITY AND DISTRIBUTIONS* 22. doi:10.1111/ddi.12488
- Martinez-Jauregui, Maria; Soliño, Mario; Martinez-Fernandez, Jesus; Touza, Julia (2018). Managing the Early Warning Systems of Invasive Species of Plants, Birds, and Mammals in Natural and Planted Pine Forests. *FORESTS* 9. doi:10.3390/f9040170
- Martinez-Jauregui, Maria; White, Piran C. L.; Touza, Julia; Soliño, Mario (2019). Untangling perceptions around indicators for biodiversity conservation and ecosystem services. *ECOSYSTEM SERVICES* 38. doi:10.1016/j.ecoser.2019.100952
- Martinez-Jauregui M.; Delibes-Mateos M.; Arroyo B.; Soliño M. (2020). Addressing social attitudes toward lethal control of wildlife in national parks. *CONSERVATION BIOLOGY* . doi:10.1111/cobi.13468
- Mayoral, Carolina; Strimbeck, Richard; Sanchez-Gonzalez, Mariola; Calama, Rafael; Pardos, Marta (2015). Dynamics of frost tolerance during regeneration in a mixed (pine-oak-juniper) Mediterranean forest. *TREES-STRUCTURE AND FUNCTION* 29. doi:10.1007/s00468-015-1270-8
- Mechergui, Taher; Pardos, Marta (2017). Impacts of mulching and tree shelters on cork oak (*Quercus suber* L.) seedling survival and growth after four growing seasons. *REVUE D ECOLOGIE-LA TERRE ET LA VIE* 72. doi:
- Moreno-Fernández, Daniel; Hernández, Laura; Cañellas, Isabel; Adame, Patricia; Alberdi, Iciar (2020). Analyzing the dynamics of the deadwood carbon pool in Spain through the European Level I Monitoring Programme. *FOREST ECOLOGY AND MANAGEMENT* 463. doi:10.1016/j.foreco.2020.118020 10.1016/j.foreco.2020.118020
- Mosca, Elena; Cruz, Fernando; Gomez-Garrido, Jessica; Bianco, Luca; Rellstab, Christian; Brodbeck, Sabine; Csillery, Katalin; Fady, Bruno; Fladung, Matthias; Fussi, Barbara; Gomory, Dusan;

- Gonzalez-Martinez, Santiago C.; Grivet, Delphine; Gut, Marta; Hansen, Ole Kim; Heer, Katrin; Kaya, Zeki; Krutovsky, Konstantin V.; Kersten, Birgit; Liepelt, Sascha; Opgenoorth, Lars; Sperisen, Christoph; Ullrich, Kristian K.; Vendramin, Giovanni G.; Westergren, Marjana; Ziegenhagen, Birgit; Alioto, Tyler; Gugerli, Felix; Heinze, Berthold; Hoehn, Maria; Troggio, Michela; Neale, David B. (2019). A Reference Genome Sequence for the European Silver Fir (*Abies alba* Mill.): A Community-Generated Genomic Resource. *G3-GENES GENOMES GENETICS* 9. doi:10.1534/g3.119.400083
- Nathan, Ran; Klein, Etienne; Robledo-Arnuncio, Juan J.; Revilla, Eloy (2012). Dispersal kernels: review. *DISPERSAL ECOLOGY AND EVOLUTION* . doi: 70 citas Perdiguero, Pedro; Collada, Carmen; del Carmen Barbero, Maria; Garcia Casado, Gloria; Teresa Cervera, Maria; Soto, Alvaro (2012). Identification of water stress genes in *Pinus pinaster* Ait. by controlled progressive stress and suppression-subtractive hybridization. *PLANT PHYSIOLOGY AND BIOCHEMISTRY* 50. doi:10.1016/j.plaphy.2011.09.022
- Olsson, Sanna; Grivet, Delphine; Cid Vian, Jeronimo (2018). Species-diagnostic markers in the genus *Pinus*: Evaluation of the chloroplast regions *matK* and *ycf1*. *FOREST SYSTEMS* 27. doi:10.5424/fs/2018273-13688
- Olsson, Sanna; Pinosio, Sara; Gonzalez-Martinez, Santiago C.; Abascal, Federico; Mayol, Maria; Grivet, Delphine; Vendramin, Giovanni G. (2018). De novo assembly of English yew (*Taxus baccata*) transcriptome and its applications for intra- and inter-specific analyses. *PLANT MOLECULAR BIOLOGY* 97. doi:10.1007/s11103-018-0742-9
- Patsiou, Theofania S.; Shestakova, Tatiana A.; Klein, Tamir; Matteo, Giovanni di; Sbay, Hassan; Chambel, M Regina; Zas, Rafael; Voltas, Jordi (2020). Intraspecific responses to climate reveal nonintuitive warming impacts on a widespread thermophilic conifer. *NEW PHYTOLOGIST* . doi:10.1111/nph.16656
- Pederson, N., Leland, C., Bishop, D. A., Pearl, J. K., Anchukaitis, K. J., Mandra, T., Hopton-Ahmed, Myvonwynn Martin-Benito, Dario (2020). A framework for determining population-level vulnerability to climate: evidence for growth hysteresis in *Chamaecyparis thyoides* along its contiguous latitudinal distribution. *Frontiers in Forests and Global Change* 3. doi:10.3389/ffgc.2020.00039
- Pinosio, S.; Gonzalez-Martinez, S. C.; Bagnoli, F.; Cattonaro, F.; Grivet, D.; Marroni, F.; Lorenzo, Z.; Pausas, J. G.; Verdu, M.; Vendramin, G. G. (2014). First insights into the transcriptome and development of new genomic tools of a widespread circum-Mediterranean tree species, *Pinus halepensis* Mill. *MOLECULAR ECOLOGY RESOURCES* 14. doi:10.1111/1755-0998.12232
- Plomion, C.; Bartholome, J.; Lesur, I.; Boury, C.; Rodriguez-Quilon, I.; Lagraulet, H.; Ehrenmann, F.; Bouffier, L.; Gion, J. M.; Grivet, D.; de Miguel, M.; de Maria, N.; Cervera, M. T.; Bagnoli, F.; Isik, F.; Vendramin, G. G.; Gonzalez-Martinez, S. C. (2016). High-density SNP assay development for genetic analysis in maritime pine (*Pinus pinaster*). *MOLECULAR ECOLOGY RESOURCES* 16. doi:10.1111/1755-0998.12464
- Plomion, Christophe; Bastien, Catherine; Bogeat-Triboulot, Marie-Beatrice; Bouffier, Laurent; Dejardin, Annabelle; Duplessis, Sebastien; Fady, Bruno; Heuertz, Myriam; Le Gac, Anne-Laure; Le Provost,

- Gregoire; Legue, Valerie; Lelu-Walter, Marie-Anne; Leple, Jean-Charles; Maury, Stephane; Morel, Alexandre; Oddou-Muratorio, Sylvie; Pilate, Gilles; Sanchez, Leopoldo; Scotti, Ivan; Scotti-Saintagne, Caroline; Segura, Vincent; Trontin, Jean-Francois; Vacher, Corinne (2016). Forest tree genomics: 10 achievements from the past 10 years and future prospects. *ANNALS OF FOREST SCIENCE* 73. doi:10.1007/s13595-015-0488-3
- Prada, Eva; Alia, Ricardo; Climent, Jose; Diaz, Raquel (2014). Seasonal cold hardiness in maritime pine assessed by different methods. *TREE GENETICS & GENOMES* 10. doi:10.1007/s11295-014-0714-4
- Prada, Eva; Climent, Jose; Alia, Ricardo; Diaz, Raquel (2016). Life-history correlations with seasonal cold hardiness in maritime pine. *AMERICAN JOURNAL OF BOTANY* 103. doi:10.3732/ajb.1600286
- Ramirez-Valiente, J. A.; Alia, R.; Aranda, I. (2014). Geographical variation in growth form traits in *Quercus suber* and its relation to population evolutionary history. *EVOLUTIONARY ECOLOGY* 28. doi:10.1007/s10682-013-9660-0
- Ramirez-Valiente, Jose A.; Deacon, Nicholas J.; Etterson, Julie; Center, Alyson; Sparks, Jed P.; Sparks, Kimberlee L.; Longwell, Timothy; Pilz, George; Cavender-Bares, Jeannine (2018). Natural selection and neutral evolutionary processes contribute to genetic divergence in leaf traits across a precipitation gradient in the tropical oak *Quercus oleoides*. *MOLECULAR ECOLOGY* 27. doi:10.1111/mec.14566
- Ramirez-Valiente, Jose Alberto; Lopez, Rosana; Hipp, Andrew L.; Aranda, Ismael (2020). Correlated evolution of morphology, gas exchange, growth rates and hydraulics as a response to precipitation and temperature regimes in oaks (*Quercus*). *NEW PHYTOLOGIST* . doi:10.1111/nph.16320
- Ramirez-Valiente, Jose Alberto; Valladares, Fernando; Delgado Huertas, Antonio; Granados, S.; Aranda, Ismael (2011). Factors affecting cork oak growth under dry conditions: local adaptation and contrasting additive genetic variance within populations. *TREE GENETICS & GENOMES* 7. doi:10.1007/s11295-010-0331-9
- Risio, Lucia; Calama, Rafael; Bogino, Stella M.; Bravo, Felipe (2016). Inter-annual variability in *Prosopis caldenia* pod production in the Argentinean semiarid pampas: A modelling approach. *JOURNAL OF ARID ENVIRONMENTS* 131. doi:10.1016/j.jaridenv.2016.03.007
- Robson, T. Matthew; Rasztovits, Erwin; Aphalo, Pedro J.; Alia, Ricardo; Aranda, Ismael (2013). Flushing phenology and fitness of European beech (*Fagus sylvatica* L.) provenances from a trial in La Rioja, Spain, segregate according to their climate of origin. *AGRICULTURAL AND FOREST METEOROLOGY* 180. doi:10.1016/j.agrformet.2013.05.008
- Robson, T. Matthew; Sanchez-Gomez, David; Javier Cano, F.; Aranda, Ismael (2012). Variation in functional leaf traits among beech provenances during a Spanish summer reflects the differences in their origin. *TREE GENETICS & GENOMES* 8. doi:10.1007/s11295-012-0496-5
- Rodriguez-Quilon, Isabel; Santos-del-Blanco, Luis; Grivet, Delphine; Pablo Jaramillo-Correa, Juan; Majada, Juan; Vendramin, Giovanni G.; Alia, Ricardo; Gonzalez-Martinez, Santiago C. (2015). Local effects drive heterozygosity-fitness correlations in an outcrossing long-lived tree.

- Rodriguez-Quilon, Isabel; Santos-del-Blanco, Luis; Jesus Serra-Varela, Maria; Koskela, Jarkko; Gonzalez-Martinez, Santiago C.; Alia, Ricardo (2016). Capturing neutral and adaptive genetic diversity for conservation in a highly structured tree species. *ECOLOGICAL APPLICATIONS* 26. doi:10.1002/eap.1361
- Ruiz Daniels, Rose; Taylor, Richard S.; Jesus Serra-Varela, Maria; Vendramin, Giovanni G.; Gonzalez-Martinez, Santiago C.; Grivet, Delphine (2018). Inferring selection in instances of long-range colonization: The Aleppo pine (*Pinus halepensis*) in the Mediterranean Basin. *MOLECULAR ECOLOGY* 27. doi:10.1111/mec.14786
- Saez-Laguna, Enrique; Guevara, Maria-Angeles; Diaz, Luis-Manuel; Sanchez-Gomez, David; Collada, Carmen; Aranda, Ismael; Cervera, Maria-Teresa (2014). Epigenetic Variability in the Genetically Uniform Forest Tree Species *Pinus pinea* L. *PLOS ONE* 9. doi:10.1371/journal.pone.0103145
- Sánchez de Dios, Rut; Gómez, Cristina; Aulló, Isabel; Cañellas, Isabel; Gea-Izquierdo, Guillermo; Montes, Fernando; Sainz Ollero, Helios; Velázquez, Juan Carlos; Hernández, Laura (2020). *Fagus sylvatica* L. Peripheral Populations in the Mediterranean Iberian Peninsula: Climatic or Anthropogenic Relicts? . *ECOSYSTEMS* . doi:
- Sanchez-Gomez, David; Cervera, M.Teresa; Escolano-Tercero, Miguel A.; Velez, M. Dolores; de Maria, Nuria; Diaz, Luis; Sanchez-Vioque, Raul; Aranda, Ismael; Guevara, M. Angeles (2019). Drought escape can provide high grain yields under early drought in lentils. *THEORETICAL AND EXPERIMENTAL PLANT PHYSIOLOGY* 31. doi:10.1007/s40626-018-0136-z
- Sanchez-Gomez, David; Robson, T. Matthew; Gasco, Antonio; Gil-Pelegrin, Eustaquio; Aranda, Ismael (2013). Differences in the leaf functional traits of six beech (*Fagus sylvatica* L.) populations are reflected in their response to water limitation. *ENVIRONMENTAL AND EXPERIMENTAL BOTANY* 87. doi:10.1016/j.envexpbot.2012.09.011
- Santos-del-Blanco, Luis; Alia, Ricardo; Gonzalez-Martinez, Santiago C.; Sampedro, Luis; Lario, Francisco; Climent, Jose (2015). Correlated genetic effects on reproduction define a domestication syndrome in a forest tree. *EVOLUTIONARY APPLICATIONS* 8. doi:10.1111/eva.12252
- Serra-Varela, M. J.; Grivet, D.; Vincenot, L.; Broennimann, O.; Gonzalo-Jimenez, J.; Zimmermann, N. E. (2015). Does phylogeographical structure relate to climatic niche divergence? A test using maritime pine (*Pinus pinaster* Ait.). *GLOBAL ECOLOGY AND BIOGEOGRAPHY* 24. doi:10.1111/geb.12369
- Serra-Varela, Maria Jesus; Alia, Ricardo; Ruiz Daniels, Rose; Zimmermann, Niklaus E.; Gonzalo-Jimenez, Julian; Grivet, Delphine (2017). Assessing vulnerability of two Mediterranean conifers to support genetic conservation management in the face of climate change. *DIVERSITY AND DISTRIBUTIONS* 23. doi:10.1111/ddi.12544
- Villaverde, Tamara; Pokorny, Lisa; Olsson, Sanna; Rincon-Barrado, Mario; Johnson, Matthew G.; Gardner, Elliot M.; Wickett, Norman J.; Molero, Julia; Riina, Ricarda; Sanmartin, Isabel (2018). Bridging the micro- and macroevolutionary levels in phylogenomics: Hyb-Seq solves

relationships from populations to species and above. *NEW PHYTOLOGIST* 220.
doi:10.1111/nph.15312

Vizcaino-Palomar, Natalia; Garzon, Marta Benito; Alia, Ricardo; Giovannelli, Guia; Huber, Gerhard; Mutke, Sven; Pastuszka, Patrick; Raffin, Annie; Sbay, Hassan; Seho, Muhidin; Vauthier, Denis; Fady, Bruno (2019). Geographic variation of tree height of three pine species (*Pinus nigra* Arn., *P. pinaster* Aiton, and *P. pinea* L.) gathered from common gardens in Europe and North-Africa. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0867-2

Vizcaino-Palomar, Natalia; Gonzalez-Munoz, Noelia; Gonzalez-Martinez, Santiago C.; Alia, Ricardo; Benito Garzon, Marta (2019). Most Southern Scots Pine Populations Are Locally Adapted to Drought for Tree Height Growth. *FORESTS* 10. doi:10.3390/f10070555

Vizcaino-Palomar, Natalia; Ibanez, Ines; Benito-Garzon, Marta; Gonzalez-Martinez, Santiago C.; Zavala, Miguel A.; Alia, Ricardo (2017). Climate and population origin shape pine tree height-diameter allometry. *NEW FORESTS* 48. doi:10.1007/s11056-016-9562-4

Vizcaino-Palomar, Natalia; Ibanez, Ines; Gonzalez-Martinez, Santiago C.; Zavala, Miguel A.; Alia, Ricardo (2016). Adaptation and plasticity in aboveground allometry variation of four pine species along environmental gradients. *ECOLOGY AND EVOLUTION* 6. doi:10.1002/ece3.2153

Vizcaino-Palomar, Natalia; Revuelta-Eugercios, Barbara; Zavala, Miguel A.; Alia, Ricardo; Gonzalez-Martinez, Santiago C. (2014). The Role of Population Origin and Microenvironment in Seedling Emergence and Early Survival in Mediterranean Maritime Pine (*Pinus pinaster* Aiton). *PLOS ONE* 9. doi:10.1371/journal.pone.0109132

Warren, Charles R.; Aranda, Ismael; Cano, F. Javier (2011). Responses to water stress of gas exchange and metabolites in *Eucalyptus* and *Acacia* spp.. *PLANT CELL AND ENVIRONMENT* 34. doi:10.1111/j.1365-3040.2011.02357.x

Wortemann, Remi; Herbette, Stephane; Barigah, Tete Severien; Fumanal, Boris; Alia, Ricardo; Ducouso, Alexis; Gomory, Dusan; Roeckel-Drevet, Patricia; Cochard, Herve (2011). Genotypic variability and phenotypic plasticity of cavitation resistance in *Fagus sylvatica* L. across Europe. *TREE PHYSIOLOGY* 31. doi:10.1093/treephys/tpr101

Thematic Area 2: Integration of the risk of forest fires in land-use and landscape planning and management

Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.

- Ascoli D., Hackett-Pain A., LaMontagne J., Cardil A., Conedera M., Maringer J., Motta R., Pearse I., Vacchiano G. (2019). Climate teleconnections synchronize *Picea glauca* masting and fire disturbance: evidence for a fire-related form of environmental prediction. *Journal of Ecology*, 108: 1186-1198.
- Ascoli D., Vacchiano G., Maringer J., Bovio G., Conedera M. (2015) The synchronicity of masting and intermediate severity fire effects favors beech recruitment. *Forest Ecology and Management*, 353:126-135
- Ascoli D., Vacchiano G., Motta R., Bovio G. (2015) Building Rothermel fire behaviour fuel models by Genetic Algorithm optimization. *International Journal of Wildland Fire*, 24:317-328
- Borges, J. G., L. Diaz-Balteiro, M. E. McDill and L. C. E. Rodriguez (Eds) 2014 The management of industrial forest plantations. Theoretical foundations and applications. Springer, *Managing Forest Ecosystems* Vol. 33, 543 p. DOI: <http://dx.doi.org/10.1007/978-94-017-8899-1>
- Borges, J. G., S. Marques, J. Garcia-Gonzalo, A. U. Rahman, V.A. Bushenkov, M. Sottomayor, P. O. Carvalho and E.-M. Nordström 2017 A multiple criteria approach for negotiating ecosystem services supply targets and forest owners' programs. *Forest Science* 63: 49–61
<http://dx.doi.org/10.5849/FS-2016-035>
- Botequim B., M. Arias-Rodil, J. Garcia-Gonzalo, A. Silva, S. Marques, J. G. Borges, M. M. Oliveira, and M. Tomé 2017 Modelling post-fire mortality in pure and mixed forest stands in Portugal - A forest planning-oriented model. *Sustainability* 2017, 9, 390 (<http://dx.doi.org/10.3390/su9030390>)
- Botequim, B., Ager, A., Pacheco, A., Oliveira, T., Claro, J., Fernandes, P. M., Borges, J. G. 2014. Addressing Trade-Offs among Fuel Management Scenarios through a dynamic and spatial integrated approach for enhanced decision—making in eucalyptus forests. In: D. X. Viegas (Ed.) *Advances in Forest Fire Research*, Coimbra University Press, Coimbra, Portugal, pp. 1623-1626. DOI: http://dx.doi.org/10.14195/978-989-26-0884-6_178
- Botequim, B., J. Garcia-Gonzalo, S. Marques, A. Ricardo, J. G. Borges, M. Tomé, and M. M. Oliveira 2013. Developing wildfire risk probability models for *Eucalyptus globulus* stands in Portugal. *iForest - Biogeosciences and Forestry* 6:217-227 DOI <http://dx.doi.org/10.3832/ifer0821-006>
- Botequim, B., P. M. Fernandes, J. G. Borges, E. González-Ferreiro J. Guerra-Fernandes 2019 Improving silvicultural practices for Mediterranean forests through fire behaviour modelling using LiDAR-derived canopy fuel characteristics. *International Journal of Wildland Fire* 28: 823-839.
<https://doi.org/10.1071/WF19001>

- Botequim, B., P. M. Fernandes, J. Garcia-Gonzalo, A. Silva and J. G. Borges 2017 Coupling fire behaviour modelling and stand characteristics to assess and mitigate fire hazard in a maritime pine landscape in Portugal. *European Journal of Forest Research* 136: 527-542
<http://dx.doi.org/10.1007/s10342-017-1050-7>
- de Torres Curth, M.I., L. Ghermandi y C. Biscayart. 2012. Shrubland advance propitiated by fire in northwestern Patagonian grasslands. *Journal of Arid Environments*. 83: 78-85.
- de Torres Curth, MI, C. Biscayart, L. Ghermandi and G. Pfister. 2012. Wildland urban interfase fires and socio-economical vulnerability in northwestern Patagonia: a case study of an Argentinean community. *Environmental Management*. 49(4): 876-891.
- Dehane, Belkheir; Hernando, Carmen; Guijarro, Mercedes; Madrigal, Javier (2017). Flammability of some companion species in cork oak (*Quercus suber* L.) forests. *ANNALS OF FOREST SCIENCE* 74.
doi:10.1007/s13595-017-0659-5
- Dehane, Belkheir; Madrigal, Javier; Hernando, Carmen; Bouhraoua, Rachid; Guijarro, Mercedes (2015). New bench-scale protocols for characterizing bark flammability and fire resistance in trees: Application to Algerian cork. *JOURNAL OF FIRE SCIENCES* 33. doi:10.1177/0734904114568858
- Della Rocca, G.; Hernando, C.; Madrigal, J.; Danti, R.; Moya, J.; Guijarro, M.; Pecchioli, A.; Moya, B. (2015). Possible land management uses of common cypress to reduce wildfire initiation risk: a laboratory study. *JOURNAL OF ENVIRONMENTAL MANAGEMENT* 159.
doi:10.1016/j.jenvman.2015.05.020
- Della Rocca, Gianni; Danti, Roberto; Hernando, Carmen; Guijarro, Mercedes; Madrigal, Javier (2018). Flammability of Two Mediterranean Mixed Forests: Study of the Non-additive Effect of Fuel Mixtures in Laboratory. *FRONTIERS IN PLANT SCIENCE* 9. doi:10.3389/fpls.2018.00825
- Dudinszky N. & Ghermandi L. 2013. Fire as a stimulant of shrub recruitment in northwestern Patagonian (Argentina) grasslands. *Ecological Research*. 28(6): 981-990.
- Dupuy, Jean-Luc; Fargeon, Hélène; Martin-StPaul, Nicolas; Pimont, François; Ruffault, Julien; Guijarro, Mercedes; Hernando, Carmen; Madrigal, Javier; Fernandes, Paulo (2020). Climate change impact on future wildfire danger and activity in southern Europe: a review. *ANNALS OF FOREST SCIENCE* 77. doi:10.1007/s13595-020-00933-5
- Espinosa, J., Palheiro, P., Loureiro, C., Ascoli, D., Esposito, A. Fernandes, P.M. 2019. Fire severity mitigation by prescribed burning assessed from fire-treatment encounters in maritime pine stands. *Canadian Journal of Forest Research* 49(2): 205-211. <https://doi.org/10.1139/cjfr-2018-0263>
- Espinosa, J.; Madrigal, J.; De la Cruz, A. C.; Guijarro, M.; Jimenez, E.; Hernando, C. (2018). Short-term effects of prescribed burning on litterfall biomass in mixed stands of *Pinus nigra* and *Pinus pinaster* and pure stands of *Pinus nigra* in the Cuenca Mountains (Central-Eastern Spain). *SCIENCE OF THE TOTAL ENVIRONMENT* 618. doi:10.1016/j.scitotenv.2017.08.291
- Fares, Silvano; Bajocco, Sofia; Salvati, Luca; Camarretta, Nicolo; Dupuy, Jean-Luc; Xanthopoulos, Gavriil; Guijarro, Mercedes; Madrigal, Javier; Hernando, Carmen; Corona, Piermaria (2017).

Characterizing potential wildland fire fuel in live vegetation in the Mediterranean region.
ANNALS OF FOREST SCIENCE 74. doi:10.1007/s13595-016-0599-5

- Fernandes, P. 2010. Scientific knowledge and operational tools to support prescribed burning: recent developments. Pp. 151-159 In Silva, J.S., Rego, F., Fernandes, P., Rigolot, E. (Eds.), Towards Integrated Fire Management – Outcomes of the European Project Fire Paradox. EFI Research Report 23. European Forest Institute, Joensuu, Finland.
- Fernandes, P.M. 2013. Fire-smart management of forest landscapes in the Mediterranean basin under global change. *Landscape and Urban Planning* 110: 175-182. doi: 10.1016/j.landurbplan.2012.10.014. [IF = 2,606].
- Fernandes, P.M. 2013. Forest fuel management for fire mitigation under climate change. Chapter 3, Pp. 31-41 In Lucas-Borja, M.E. (Ed.), *Forest Management of Mediterranean Forest Under the New Context of Climate Change: Building Alternatives for the Coming Future*. Nova Science Publishers.
- Fernandes, P.M. 2014. Upscaling the estimation of surface-fire rate of spread in maritime pine (*Pinus pinaster*) forest. *iForest – Biogeosciences and Forestry* 7: 123-215. doi: 10.3832/ifer0992-007.
- Fernandes, P.M. 2015. Empirical support for the use of prescribed burning as a fuel treatment. *Current Forestry Reports* 1(2): 118-127. doi: 10.1007/s40725-015-0010-z.
- Fernandes, P.M. 2016. On the socioeconomic drivers of municipal-level fire incidence in Portugal. *Forest Policy and Economics* 62: 187-188. doi:10.1016/j.forpol.2015.07.010.
- Fernandes, P.M. 2018. Scientific support to prescribed underburning in southern Europe: what do we know?. *Science of the Total Environment* 630: 340-348. doi:10.1016/j.scitotenv.2018.02.214
- Fernandes, P.M. 2019. Variation in the Canadian Fire Weather Index thresholds for increasingly larger fires in Portugal. *Forests* 10: 838. <https://doi.org/10.3390/f10100838>
- Fernandes, P.M., Barros, A.G., Pinto, A., Santos, J.A. 2016. Characteristics and controls of extremely large wildfires in the western Mediterranean Basin. *Journal of Geophysical Research: Biogeosciences* 121: 2141–2157. doi:10.1002/2016JG003389.
- Fernandes, P.M., Cruz, M.G. 2012. Plant flammability experiments offer limited insight into vegetation - fire dynamics interactions. *New Phytologist* 194: 606-609.
<http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2012.04065.x/full>
- Fernandes, P.M., Davies, G.M., Ascoli, D., Fernández, C., Moreira, F., Rigolot, E., Stoof, K., Vega, J.A., Molina, D. 2013. Prescribed burning in southern Europe: developing fire management in a dynamic landscape. *Frontiers in Ecology and the Environment* 11(s1): e4–e14.
doi:10.1890/120298
- Fernandes, P.M., Fernandes, M., Loureiro, C. 2012. Survival to prescribed fire of plantation-grown Corsican black pine in northern Portugal. *Annals of Forest Science* 69(7): 813-820. doi: 10.1007/s13595-012-0211-6

- Fernandes, P.M., Fernandes, M., Loureiro, C. 2015. Post-fire live residuals of maritime pine plantations in Portugal: structure, burn severity, and fire recurrence. *Forest Ecology and Management* 347: 170-179. doi:10.1016/j.foreco.2015.03.02350.
- Fernandes, P.M., Guiomar, N., Mateus, P., Oliveira, T. 2017. On the reactive nature of forest fire-related legislation in Portugal: A comment on Mourão and Martinho (2016). *Land Use Policy* 60: 12-15. doi:10.1016/j.landusepol.2016.10.008.
- Fernandes, P.M., Guiomar, N., Rossa, C.G. 2019. Analysing eucalypt expansion in Portugal as a fire-regime modifier. *Science of the Total Environment* 666: 79-88. <https://doi.org/10.1016/j.scitotenv.2019.02.237>
- Fernandes, P.M., Loureiro, C. 2013. Fine fuels consumption and CO₂ emissions from surface fire experiments in maritime pine stands in northern Portugal. *Forest Ecology and Management* 291: 344-356. doi: 10.1016/j.foreco.2012.11.037
- Fernandes, P.M., Loureiro, C., Botelho, H. 2012. PiroPinus: a spreadsheet application to guide prescribed burning operations in maritime pine forest. *Computers and Electronics in Agriculture* 81: 58-61. doi: 10.1016/j.compag.2011.11.005
- Fernandes, P.M., Loureiro, C., Guiomar, N., Pezzatti, G.B., Manso, F., Lopes, L. 2014. The dynamics and drivers of fuel and fire in the Portuguese public forest. *Journal of Environmental Management* 146: 373-382. doi: 10.1016/j.jenvman.2014.07.049.
- Fernandes, P.M., Loureiro, C., Magalhães, M., Ferreira, P., Fernandes, M. 2012. Fuel age, weather and burn probability in Portugal. *International Journal of Wildland Fire* 21: 380-384. doi: 10.1071/WF10063
- Fernandes, P.M., Luz, A., Loureiro, C. 2010. Changes in wildfire severity from maritime pine woodland to contiguous forest types in the mountains of northwestern Portugal. *Forest Ecology and Management* 260(5): 883-892. doi:10.1016/j.foreco.2010.06.008.
- Fernandes, P.M., Monteiro-Henriques, T., Guiomar, N., Loureiro, C., Barros, A. 2016. Bottom-up variables govern large-fire size in Portugal. *Ecosystems* 19: 1362-1375. doi:10.1007/s10021-016-0010-2.
- Fernandes, P.M., Pacheco, A.P., Almeida, R., Claro, J. 2016. The role of fire suppression force in limiting the spread of extremely large forest fires in Portugal. *European Journal of Forest Research* 135: 253-262. doi:10.1007/s10342-015-0933-8.
- Fernandes, P.M., Rego, F.C., Rigolot, E. 2011. The FIRE PARADOX project: towards science-based fire management in Europe. *Forest Ecology and Management* 261(12): 2177-2178. doi: 10.1016/j.foreco.2010.12.024
- Fernandez-Gomez, I.; de Castro, A. J.; Guijarro, M.; Madrigal, J.; Aranda, J. M.; Diez, C.; Hernando, C.; Lopez, F. (2011). Characterization of forest fuels in a Mass Loss Calorimeter by short open-path FTIR spectroscopy. *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER* 112. doi:10.1016/j.jqsrt.2010.10.004

- Fernandez-Gomez, I.; Madrigal, J.; de Castro, A. J.; Guijarro, M.; Aranda, J. M.; Diez, C.; Hemando, C.; Lopez, F. (2010). Correlations between heat release rate and gaseous by-product concentrations applied to the characterization of forest fuels. MODELLING, MONITORING AND MANAGEMENT OF FOREST FIRES II 137. doi:10.2495/FIVA100021
- Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo J. 2015 Addressing wildfire risk in a landscape-level scheduling model. An application in Portugal Forest Science 61: 266-277 DOI: <http://dx.doi.org/10.5849/forsci.13-104>
- Ferreira, L., M. Constantino and J. G. Borges. 2014. A stochastic approach to optimize Maritime pine (*Pinus pinaster* Ait) stand management scheduling under fire risk. An application in Portugal. Annals of Operations Research 219(1): 359-377 DOI: <http://dx.doi.org/10.1007/s10479-011-0845-z>
- Franzese J. & Ghermandi L. 2014. Seed longevity and fire: post-germination responses of *Rumex acetosella* L. in northwest Patagonian grasslands (Argentina). Plant Species Biology. 29: 202-206.
- Franzese J. & Ghermandi L. 2011. Seed longevity and fire: germination responses of an exotic perennial herb in NW Patagonia grasslands (Argentina). Plant Biology 13: 865-871.
- Franzese, J. & Ghermandi, L. 2012. Effect of fire on recruitment of two dominant perennial grasses with different palatability from semi-arid grasslands of NW Patagonia. Plant Ecology 213: 471-481.
- Ganteaume, Anne; Guijarro, Mercedes; Jappiot, Marielle; Hernando, Carmen; Lampin-Maillet, Corinne; Perez-Gorostiaga, Pedro; Vega, Jose A. (2011). Laboratory characterization of firebrands involved in spot fires. ANNALS OF FOREST SCIENCE 68. doi:10.1007/s13595-011-0056-4
- Ganteaume, Anne; Jappiot, Marielle; Lampin, Corinne; Guijarro, Mercedes; Hernando, Carmen (2013). Flammability of Some Ornamental Species in Wildland-Urban Interfaces in Southeastern France: Laboratory Assessment at Particle Level. ENVIRONMENTAL MANAGEMENT 52. doi:10.1007/s00267-013-0067-z
- Garcia-Gonzalo J., L. Ferreira and J. G. Borges. Addressing risk in forest management planning. In: Borges, J. G., L. Diaz-Balteiro, M. E. McDill and L. C. E. Rodriguez (Eds) 2014 The management of industrial forest plantations. Theoretical foundations and applications. Springer, Managing Forest Ecosystems Vol. 33: 319-344. DOI: http://dx.doi.org/10.1007/978-94-017-8899-1_10
- Garcia-Gonzalo J., Zubizarreta-Gerendiain A., Ricardo A., Marques S., Botequim B., Borges J. G., Oliveira M. M. , Tomé M. and Pereira, J.M.C. 2012 Modelling wildfire risk in pure and mixed forest stands in Portugal. Allgemeine Forst und Jagdzeitung (AFJZ) – German Journal of Forest Research 183 (11/12): 238-248 Marques, S., Botequim, B., Garcia-Gonzalo, J., Borges, J. G., Tomé, M., Oliveira M. M. 2012. Assessing wildfire risk probability in *Pinus pinaster* Ait. stands in Portugal. Forest Systems 21: 111-120. DOI: <http://dx.doi.org/10.5424/fs/2112211-11374>
- Garcia-Gonzalo, J., Pukkala, T., Borges, J. G. 2014. Integrating fire risk in stand management scheduling. An application to Maritime pine stands in Portugal. Annals of Operations Research 219(1). 379-395 DOI: <http://dx.doi.org/10.1007/s10479-011-0908-1>

- Garcia-Gonzalo, J., S. Marques S., J. G. Borges, B. Botequim, M. M. Oliveira, J. Tomé, and M. Tomé. 2011. A three-step approach to post-fire mortality modeling in Maritime pine (*Pinus pinaster* Ait.) stands for enhanced forest planning in Portugal. *Forestry* 84: 197-206 DOI: <http://dx.doi.org/10.1093/forestry/CPR006>
- Ghermandi L., Franzese J., Gonzalez S., de Torres Curth M. & Ruete A. 2013. Disentangling *Fabiana imbricata* (Solanaceae) regeneration: the importance of disturbance and rainfall. *Journal of Arid Environments*. 97: 9-13.
- Ghermandi L., Lanorte A., Oddi F., Lasaponara R. 2019. Comparative usefulness of dNBR and RdNBR indexes to detect fire severity in semiarid steppe. *Global Journal of Science Frontier Research* 19(1): 27-44.
- Ghermandi, L., Beletzky, N. & de Torres Curth M. 2016. From leaves to landscape: A multiscale approach to assess fire hazard in wildland-urban interface areas. *Journal of Environmental Management* 183: 925-937.
- Ghermandi, L., de Torres Curth M., Franzese J. & Gonzalez S. 2010. Non linear ecological processes, fires, environmental heterogeneity and shrub invasion in NW Patagonia. *Ecological Modelling* 221: 113-121.
- Ghermandi, L., R. Lasaponara & L. Telesca. 2010. Intra-annual time dynamical patterns of fire sequences observed in Patagonia (Argentina). *Ecological Modelling* 221: 94-97.
- Ghermandi, L., Gonzalez, S., Lescano, N. & Oddi, F. 2013. Effects of fire severity on early recovery of Patagonian steppes. *International Journal of Wildland Fire*. 22: 1055-1062.
- Gittins, C., L. Ghermandi & D. Bran. 2011. Post-fire performance of two co-dominant tussock grasses in semi-arid grasslands of north-western Patagonia. *Journal of Arid Environment* 75: 986-990.
- Gómez-González, S., Ojeda, F., Fernandes, P. 2018. Portugal and Chile: longing for sustainable forestry while rising from the ashes. *Environmental Science & Policy* 81: 104-107. doi:10.1016/j.envsci.2017.11.006
- Gonzalez S. & Ghermandi L. 2012. Fire cue effects on seed germination of six species of northwestern Patagonian grasslands. *Natural Hazard Earth System Sciences (NHEES)*. 12: 2753-2758.
- Gonzalez S., Ghermandi L. & Peláez D. 2015. Fire effect on two perennial grasses from northwestern Patagonian grasslands. *Ecological Research* 30: 67-74.
- Gonzalez, S., Ghermandi, L., Peláez D. 2015. Growth and reproductive post-fire responses of two shrubs in semi-arid Patagonian grasslands. *International Journal of Wildland Fire* 24: 809-818.
- Jimenez, E.; Vega, J. A.; Ruiz-Gonzalez, A. D.; Guijarro, M.; Alvarez-Gonzalez, J. G.; Madrigal, J.; Cuinas, P.; Hernando, C.; Fernandez-Alonso, J. M. (2013). Carbon emissions and vertical pattern of canopy fuel consumption in three *Pinus pinaster* Ait. active crown fires in Galicia (NW Spain). *ECOLOGICAL ENGINEERING* 54. doi:10.1016/j.ecoleng.2013.01.039
- Lasaponara R., Tucci B. & Ghermandi L. 2018. On the Use of Satellite Sentinel 2 Data for Automatic Mapping of Burnt Areas and Burn Severity. *Sustainability* 10:1-13.

- Lonati M., Vacchiano G., Berretti R., Motta R. (2013). Effect of stand-replacing fires on Mediterranean plant species in their marginal alpine range. *Alpine Botany*, 123:123-133
- Lucas-Borja, Manuel E.; Madrigal, Javier; Candel-Perez, David; Jimenez, Enrique; Moya, Daniel; de las Heras, Jorge; Guijarro, Mercedes; Vega, Jose Antonio; Fernandez, Cristina; Hernando, Carmen (2016). Effects of prescribed burning, vegetation treatment and seed predation on natural regeneration of Spanish black pine (*Pinus nigra* Arn. ssp *salzmannii*) in pure and mixed forest stands. *FOREST ECOLOGY AND MANAGEMENT* 378. doi:10.1016/j.foreco.2016.07.019
- Madrigal, J.; Guijarro, M.; Hernando, C.; Diez, C.; Marino, E. (2011). Effective Heat of Combustion for Flaming Combustion of Mediterranean Forest Fuels. *FIRE TECHNOLOGY* 47. doi:10.1007/s10694-010-0165-x
- Madrigal, J.; Guijarro, M.; Hernando, C.; Diez, C.; Marino, E. (2011). Estimation of Peak Heat Release Rate of a Forest Fuel Bed in Outdoor Laboratory Conditions. *JOURNAL OF FIRE SCIENCES* 29. doi:10.1177/0734904110373890
- Madrigal, J.; Hernando, C.; Guijarro, M.; Vega, J. A.; Fonturbel, T.; Perez-Gorostiaga, P. (2010). Smouldering fire-induced changes in a Mediterranean soil (SE Spain): effects on germination, survival and morphological traits of 3-year-old *Pinus pinaster* Ait.. *PLANT ECOLOGY* 208. doi:10.1007/s11258-009-9705-1
- Madrigal, J.; Ruiz, J. A.; Planelles, R.; Hernando, C. (2013). Short communication. Characterization of wildland-urban interfaces for fire prevention in the province of Valencia (Spain). *FOREST SYSTEMS* 22. doi:10.5424/fs/2013222-03985
- Madrigal, Javier; Fernandez-Miguelanez, Irma; Hernando, Carmen; Guijarro, Mercedes; Vega-Nieva, Daniel J.; Tolosana, Eduardo (2017). Does forest biomass harvesting for energy reduce fire hazard in the Mediterranean basin? a case study in the Caroig Massif (Eastern Spain). *EUROPEAN JOURNAL OF FOREST RESEARCH* 136. doi:10.1007/s10342-016-1004-5
- Madrigal, Javier; Hernando, Carmen; Guijarro, Mercedes (2013). A new bench-scale methodology for evaluating the flammability of live forest fuels. *JOURNAL OF FIRE SCIENCES* 31. doi:10.1177/0734904112458244
- Madrigal, Javier; Marino, Eva; Guijarro, Mercedes; Hernando, Carmen; Diez, Carmen (2012). Evaluation of the flammability of gorse (*Ulex europaeus* L.) managed by prescribed burning. *ANNALS OF FOREST SCIENCE* 69. doi:10.1007/s13595-011-0165-0
- Madrigal, Javier; Souto-Garcia, Jennifer; Calama, Rafael; Guijarro, Mercedes; Picos, Juan; Hernando, Carmen (2019). Resistance of *Pinus pinea* L. bark to fire. *INTERNATIONAL JOURNAL OF WILDLAND FIRE* 28. doi:10.1071/WF18118
- Marino, Eva; Dupuy, Jean-Luc; Pimont, Francois; Guijarro, Mercedes; Hernando, Carmen; Linn, Rodman (2012). Fuel bulk density and fuel moisture content effects on fire rate of spread: a comparison between FIRETEC model predictions and experimental results in shrub fuels. *JOURNAL OF FIRE SCIENCES* 30. doi:10.1177/0734904111434286

- Marino, Eva; Guijarro, Mercedes; Hernando, Carmen; Madrigal, Javier; Diez, Carmen (2011). Fire hazard after prescribed burning in a gorse shrubland: Implications for fuel management. *JOURNAL OF ENVIRONMENTAL MANAGEMENT* 92. doi:10.1016/j.jenvman.2010.11.006
- Marino, Eva; Hernando, Carmen; Madrigal, Javier; Diez, Carmen; Guijarro, Mercedes (2012). Fuel management effectiveness in a mixed heathland: a comparison of the effect of different treatment types on fire initiation risk. *INTERNATIONAL JOURNAL OF WILDLAND FIRE* 21. doi:10.1071/WF11111
- Marino, Eva; Hernando, Carmen; Madrigal, Javier; Guijarro, Mercedes (2014). Short-term effect of fuel treatments on fire behaviour in a mixed heathland: a comparative assessment in an outdoor wind tunnel. *INTERNATIONAL JOURNAL OF WILDLAND FIRE* 23. doi:10.1071/WF13175
- Marino, Eva; Hernando, Carmen; Planelles, Rosa; Madrigal, Javier; Guijarro, Mercedes; Sebastian, Ana (2014). Forest fuel management for wildfire prevention in Spain: a quantitative SWOT analysis. *INTERNATIONAL JOURNAL OF WILDLAND FIRE* 23. doi:10.1071/WF12203
- Marino, Eva; Madrigal, Javier; Guijarro, Mercedes; Hernando, Carmen; Diez, Carmen; Fernandez, Cristina (2010). Flammability descriptors of fine dead fuels resulting from two mechanical treatments in shrubland: a comparative laboratory study. *INTERNATIONAL JOURNAL OF WILDLAND FIRE* 19. doi:10.1071/WF08123
- Marino, Eva; Montes, Fernando; Luis Tome, Jose; Antonio Navarro, Jose; Hernando, Carmen (2018). Vertical forest structure analysis for wildfire prevention: Comparing airborne laser scanning data and stereoscopic hemispherical images. *INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION* 73. doi:10.1016/j.jag.2018.07.015
- Marques, S, M. Marto, V.A. Bushenkov, M. E. McDill and J. G. Borges 2017 Addressing Wildfire Risk in Forest Management Planning with Multiple Criteria Decision Making Methods. *Sustainability*, 2017, 9, 298, (<http://dx.doi.org/10.3390/su9020298>)
- Marques, S., J. G. Borges, J. Garcia-Gonzalo, F. Moreira, J.M.B. Carreiras, JM. M. Oliveira, A. Cantarinha, B. Botequim and J. M. C. Pereira. 2011. Characterization of wildfires in Portugal. *European Journal of Forest Research* 130: 775-784 DOI: <http://dx.doi.org/10.1007/s10342-010-0470-4>
- Marques, S., J. Garcia-Gonzalo, J. G. Borges, B. Botequim, M. M. Oliveira, J. Tomé and M. Tomé. 2011. Developing post-fire *Eucalyptus globulus* Labill stand damage and tree mortality models for enhanced forest planning in Portugal. *Silva Fennica* 45: 69-83. <http://www.metla.fi/silvafennica/full/sf45/sf451069.pdf>
- Mateus, P., Fernandes, P.M. 2014. Forest fires in Portugal: dynamics, causes and policies. Chapter 4, Pp. 97-115 In Reboredo, F. (Ed.), *Forest Context and Policies in Portugal, Present and Future Challenges*. Series: World Forests, Vol. 19. Springer. doi:10.1007/978-3-319-08455-8_4
- Mirra, I., Oliveira, T., Barros, A.M., Fernandes, P.M. 2017. Fuel dynamics following fire hazard reduction treatments in blue gum (*Eucalyptus globulus*) plantations in Portugal. *Forest Ecology and Management* 398: 185-195. doi: 10.1016/j.foreco.2017.05.016.

- Moreira, F., Ascoli, D., Safford, H., Adams, M.A., Moreno, J.M., Pereira, J.M.C., Catry, F.X., Armesto, J., Bond, W., González, M.E., Curt, T., Koutsias, N., McCaw, L., Price, O., Pausas, J.G., Rigolot, E., Stephens, S., Tavsanoğlu, C., Vallejo, V.R., Van Wilgen, B.W., Xanthopoulos, G., Fernandes, P.M. 2020. Wildfire management in Mediterranean-type regions: paradigm change needed. *Environmental Research Letters* 15: 011001. <https://doi.org/10.1088/1748-9326/ab541e>
- Oddi F. & Ghermandi L. 2015. Dendroecological potential of shrubs for reconstructing fire history at landscape scale in Mediterranean-type climate grasslands: the case of *Fabiana imbricata*. *Dendrochronologia*. 33: 16-24.
- Oddi F. & L. Ghermandi. 2016. Current fire regime in northwestern Patagonia grasslands. *International Journal of Wildland Fire*. 25: 922-932.
- Oddi F., Dudinszky N. & Ghermandi L. 2010. Spatial dynamics of *Fabiana imbricata* shrublands in northwestern Patagonia in relation to natural fires. *Natural Hazard Earth System Sciences (NHEES)* 10: 957-966.
- Oddi, F., Miguez F, Ghermandi, L., Bianchi L., Garibaldi L. 2019. A nonlinear mixed-effects modelling approach for ecological data: Using temporal dynamics of vegetation moisture as an example. *Ecology and Evolution*: 1-16.
- Pacheco, A. P., J. Claro, P. M. Fernandes, R. de Neufville, T. M. Oliveira, J. G. Borges and J. C. Rodrigues 2015. Cohesive fire management within an uncertain environment: A review of risk handling and decision support systems. *Forest Ecology and Management* 347: 1-17 DOI: <http://dx.doi.org/10.1016/j.foreco.2015.02.033>
- Pasalodos-Tato M., A. Mäkinen, J. Garcia-Gonzalo, J. G. Borges, T. Lämås and LO Eriksson. 2013 Assessing uncertainty and risk in forest planning and decision support systems: review of classical methods and introduction of innovative approaches. *Forest Systems* 22: 282-303. DOI: <http://dx.doi.org/10.5424/fs/2013222-03063>
- Pinto, A., Fernandes, P.M. 2014. Microclimate and modelled fire behaviour differ between adjacent forest types in northern Portugal. *Forests* 5: 2490-2504. doi:10.3390/f5102490.
- Raftoyannis, Yannis; Nocentini, Susanna; Marchi, Enrico; Calama Sainz, Rafael; Garcia Guemes, Carlos; Pilas, Ivan; Peric, Sanja; Paulo, Joana Amaral; Moreira-Marcelino, Ana Cristina; Costa-Ferreira, Maria; Kakouris, Erodotos; Lindner, Marcus (2014). Perceptions of forest experts on climate change and fire management in European Mediterranean forests. *IFOREST-BIOGEOSCIENCES AND FORESTRY* 7. doi:10.3832/ifor0817-006
- Reyer, C. P. O., S. Bathgate, K. Blennow, J. G. Borges, H. Bugmann, S. Delzon, S. P. Faias, J. Garcia-Gonzalo, B. Gardiner, J. R. Gonzalez-Olabarria, C. Gracia, J. G. Hernández, S. Kellomäki, K. Kramer, M. J. Lexer, M. Lindner, E. M., M. Maroschek, B. Muys, B. Nicoll, M. Palahi, J. H. N. Palma, J. A. Paulo, H. Peltola, T. Pukkala, W. Rammer, D. Ray, S. Sabaté, M.-J. Schelhaas, R. Seidl, C. Temperli, M. Tomé, R. Yousefpour, N. E. Zimmermann, M. Hanewinkel 2017 Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests? *Environmental Research Letters* 12(3) <https://doi.org/10.1088/1748-9326/aa5ef1>

- Rodriguez y Silva, Francisco; Guijarro, Mercedes; Madrigal, Javier; Jimenez, Enrique; Molina, Juan R.; Hernando, Carmen; Velez, Ricardo; Vega, Jose A. (2017). Assessment of crown fire initiation and spread models in Mediterranean conifer forests by using data from field and laboratory experiments. *FOREST SYSTEMS* 26. doi:10.5424/fs/2017262-10652
- Rodriguez-Garcia, Aida; Madrigal, Javier; Gonzalez-Sancho, David; Gil, Luis; Guijarro, Mercedes; Hernando, Carmen (2018). Can prescribed burning improve resin yield in a tapped *Pinus pinaster* stand?. *INDUSTRIAL CROPS AND PRODUCTS* 124. doi:10.1016/j.indcrop.2018.07.049
- Rossa, C., Fernandes, P., Pinto, A. 2015. Measuring foliar moisture content with a moisture analyzer. *Canadian Journal of Forest Research* 45: 776–781. doi:10.1139/cjfr-2014-0545.
- Rossa, C., Fernandes, P.M. 2017. Fuel-related fire behaviour relationships for mixed live and dead fuels burned in the laboratory. *Canadian Journal of Forest Research* 47: 883–889. doi:10.1139/cjfr-2016-0457.
- Rossa, C., Fernandes, P.M. 2017. On the effect of live fuel moisture content on fire rate of spread. *Forest Systems* 26(3): eSC08. doi:10.5424/fs/2017263-12019.
- Rossa, C., Fernandes, P.M. 2018. A generic model for the effect of wind on fire spread rate. *Fire* 1(2): 31. doi:org/10.3390/fire1020031
- Rossa, C., Fernandes, P.M. 2018. Empirical modelling of fire spread rate in no-wind and no-slope conditions. *Forest Science* 64(4): 358–370. doi:org/10.1093/forsci/fxy002
- Rossa, C., Fernandes, P.M. 2018. Live fuel moisture content: the ‘pea under the mattress’ of fire spread rate modeling?. *Fire* 1(3), 43. <https://doi.org/10.3390/fire1030043>.
- Rossa, C., Fernandes, P.M. 2018. On the fire-spread rate influence of some fuel bed parameters derived from Rothermel’s model thermal energy balance. *Sumarski List CXLII(1-2)*: 77-80.
- Rossa, C., Veloso, R., Fernandes, P.M. 2016. A laboratory-based quantification of the effect of live fuel moisture content on fire-spread rate. *International Journal of Wildland Fire* 25: 569-573. doi:10.1071/WF15114.
- Silva, G. L., P. Soares, S. Marques, M. I. Dias, M. M. Oliveira and J. G. Borges 2015. A Bayesian Modelling of Wildfires in Portugal. In: Bourguignon, J.-P., Jeltsch, R., Pinto, A. A. and Viana, M. (Eds) *Dynamics, Games and Science*, Springer CIM Series in Mathematical Sciences 1: 723-733 <http://www.springer.com/gp/book/9783319161174>
- Soliño, Mario; Prada, Albino; Vazquez, Maria X. (2010). Designing a forest-energy policy to reduce forest fires in Galicia (Spain): A contingent valuation application. *JOURNAL OF FOREST ECONOMICS* 16. doi:10.1016/j.jfe.2009.11.006
- Torres-Manso, F., Fernandes, P.M., Pinto, R., Botelho, H., Monzon, A. 2014. Regional livestock grazing, human demography and fire incidence in the Portuguese landscape. *Forest Systems* 23(1): 15-21. doi: 10.5424/fs/2014231-02758.
- Vacchiano G., Ascoli D. (2014) An implementation of the Rothermel fire spread model in the R programming language. *Fire Technology*, 51:523-535

- Vacchiano G., Berretti R., Borgogno Mondino E., Meloni F., Motta R. (2016) Assessing the effect of disturbances on the functionality of direct protection forests. *Mountain Research and Development*, 36: 41-55
- Vacchiano G., Foderi C., Berretti R., Marchi E., Motta R. (2018) Modeling anthropogenic and natural fire ignitions in an inner-alpine valley. *Nat. Hazards Earth Syst. Sci.*, 18, 1–14.
- Vacchiano G., Motta R., Bovio G., Ascoli D. (2014). Calibrating and testing the Forest Vegetation Simulator to simulate tree encroachment and control measures for heathland restoration in Southern Europe. *Forest Science*, 60:241-252
- Vacchiano G., Stanchi S., Marinari G., Ascoli D., Zanini E., Motta R. (2014) Fire severity, residuals and soil legacies affect regeneration of Scots pine in the Southern Alps. *Science of the Total Environment*, 472:778-788
- Vazquez Moris J., Vacchiano G., Ravetto Enri S., Lonati M., Motta R., Ascoli D. (2017) Resilience of European larch (*Larix decidua* Mill.) forests to wildfires in the western Alps. *New Forests*, 48:663-683.
- Vilén, T., Fernandes, P.M. 2011. Forest fires in Mediterranean countries: CO2 emissions and mitigation possibilities through prescribed burning. *Environmental Management* 48: 558–567. doi: 10.1007/s00267-011-9681-9

Reference of papers that your institute/university/department/research group has already published on one or more of these new research themes, including the ones we proposed and the ones you suggest.

- Bachmatiuk, J., J. Garcia-Gonzalo and J. G. Borges 2015 Analysis of the performance of different implementations of a heuristic method to optimise forest harvest scheduling. *Silva Fennica* 49 (4): article id 1326 DOI: <http://dx.doi.org/10.14214/sf.1326>
- Biber, P., J. G. Borges, R. Moshammer, S. Barreiro, B. Botequim, Y. Brodrechtová, V. Brukas, G. Chirici, R. Cordero-Debets, E. Corrigan, L. O. Eriksson, M. Favero, E. Galev, J. Garcia-Gonzalo, G. Hengeveld, M. Kavaliauskas, M. Marchetti, S. Marques, G. Mozgeris, R. Navrátil, M. Nieuwenhuis, C. Orazio, I. Paligorov,
- Borges J. G., A. C. Oliveira and M. A. Costa. 1997. A quantitative approach to cork oak forest management. *Forest Ecology and Management* 97:223-229. DOI: [http://dx.doi.org/10.1016/S0378-1127\(97\)00064-9](http://dx.doi.org/10.1016/S0378-1127(97)00064-9)
- Borges P.J., R. Fragoso, J. Garcia-Gonzalo, J. G. Borges, S. Marques and M. R. Lucas. 2010. Assessing impacts of Common Agricultural Policy changes on regional land use patterns with a decision support system. An application in Southern Portugal. *Forest Policy and Economics* 12: 111-120. DOI: <http://dx.doi.org/10.1016/j.forpol.2009.09.002>

- Borges, J. G. (Ed), L.-O. Eriksson, L. C. E. Rodriguez and J. Garcia-Gonzalo (Ass. Eds.) 2013. Innovative Approaches to Forest Management Planning. Preface Forest Systems (Preface to FORSYS special section) 22: 261
- Borges, J. G. and H. M. Hoganson. 2000. Structuring a landscape by forestland classification and harvest scheduling spatial constraints. *Forest Ecology and Management* 130: 269-275. DOI: [http://dx.doi.org/10.1016/S0378-1127\(99\)00180-2](http://dx.doi.org/10.1016/S0378-1127(99)00180-2)
- Borges, J. G. and L.-O. Eriksson (Eds.) 2014 Decision support systems for sustainable forest management. *Scandinavian Journal of Forest Research* 29, Suppl. No. 1: 1 (Foreword to special issue with 20 papers) DOI: <http://dx.doi.org/10.1080/02827581.2014.951513>
- Borges, J. G., and H. M. Hoganson. 1999. Assessing the impact of management unit design and adjacency constraints on forest wide spatial conditions and timber revenues. *Canadian Journal of Forest Research* 29: 1764-1774. <http://dx.doi.org/10.1139/cjfr-29-11-1764>
- Borges, J. G., H. M. Hoganson and D.W. Rose. 1999. Combining a decomposition strategy with dynamic programming to solve spatially constrained forest management scheduling problems. *Forest Science* 45: 201-212.
- Borges, J. G., J. Garcia-Gonzalo, V.A. Bushenkov, M. E. McDill, S. Marques and M.M. Oliveira 2014 Addressing multi-criteria forest management with Pareto Frontier methods: an application in Portugal *Forest Science* 60: 63-72. DOI: <http://dx.doi.org/10.5849/forsci.12-100>
- Borges, J. G., M. A. Costa and A. C. Oliveira. 1992. Analysis of alternative land uses in the Char-neca Pliocénica do Ribatejo. *Scientia Gerundensis* 18: 143-148.
- Borges, J. G., S. Marques, J. Garcia-Gonzalo, A. U. Rahman, V.A. Bushenkov, M. Sottomayor, P. O. Carvalho and E.-M. Nordström 2017 A multiple criteria approach for negotiating ecosystem services supply targets and forest owners' programs. *Forest Science* 63: 49-61 <http://dx.doi.org/10.5849/FS-2016-035>
- Botequim B., M. Arias-Rodil, J. Garcia-Gonzalo, A. Silva, S. Marques, J. G. Borges, M. M. Oliveira, and M. Tomé 2017 Modelling post-fire mortality in pure and mixed forest stands in Portugal - A forest planning-oriented model. *Sustainability* 2017, 9, 390 (<http://dx.doi.org/10.3390/su9030390>)
- Botequim, B., J. Garcia-Gonzalo, S. Marques, A. Ricardo, J. G. Borges, M. Tomé, and M. M. Oliveira 2013. Developing wildfire risk probability models for Eucalyptus globulus stands in Portugal. *iForest - Biogeosciences and Forestry* 6:217-227 DOI <http://dx.doi.org/10.3832/ifer0821-006>
- Botequim, B., P. M. Fernandes, J. G. Borges, E. González-Ferreiro J. Guerra-Fernandes 2019 Improving silvicultural practices for Mediterranean forests through fire behaviour modelling using LiDAR-derived canopy fuel characteristics. *International Journal of Wildland Fire* 28: 823-839. <https://doi.org/10.1071/WF19001>
- Botequim, B., P. M. Fernandes, J. Garcia-Gonzalo, A. Silva and J. G. Borges 2017 Coupling fire behaviour modelling and stand characteristics to assess and mitigate fire hazard in a maritime pine landscape in Portugal. *European Journal of Forest Research* 136: 527-542 <http://dx.doi.org/10.1007/s10342-017-1050-7>

- Bouriaud, L., M. Marzano, M. Lexer, L. Nichiforel, C. Reyer, C. Temperli, H. Peltola, C. Elkin, G. Duduman, P. Taylor, S. Bathgate, J. G. Borges, S. Clerckx, J. Garcia-Gonzalo, C. Gracia, G. Hengeveld, S. Kellomäki, G. Kostov, M. Maroschek, B. Muys, G.-J. Nabuurs, B. Nicoll, M. Palahí, W. Rammer, D. Ray, M.-J. Schelhaas, L. Sing, M. Tomé, J. Zell and M. Hanewinkel 2015 Institutional factors and opportunities for adapting European forest management to climate change. *Regional Environmental Change* 15:1595-1609 <http://dx.doi.org/10.1007/s10113-015-0852-8>
- Constantino, M., I. Martins and J. G. Borges. 2008. A new mixed integer programming model for harvest scheduling subject to maximum area restrictions. *Operations Research* 56: 542-551. DOI: <http://dx.doi.org/10.1287/opre.1070.0472>
- Cosovic, M., M. N. Bugalho, D. Thom and J. G. Borges. 2020. Stand Structural Characteristics Are the Most Practical Biodiversity Indicators for Forest Management Planning in Europe". *Forests* 11 (3): 343-343. <https://doi.org/10.3390/f11030343>.
- Costa, A., Oliveira, A. C., Vidas., F. and J. G. Borges. 2010. An approach to cork oak forest management planning in Southwestern Portugal. *European Journal of Forest Research* 129: 233-241. DOI: <http://dx.doi.org/10.1007/s10342-009-0326-y>
- D. Pettenella, R. Sedmák, R. Smreček, A. Stanislovaitis, M. Tomé, R. Trubins, J. Tuček, M. Vizzarri, I. Wallin, H. Pretzsch and O. Sallnäs 2015. How Sensitive are Ecosystem Services in European Forest Landscapes to Silvicultural Treatment? *Forests* 6: 1666-1695. DOI: <http://dx.doi.org/10.3390/f6051666>
- Falcão, A. and J. G. Borges. 2005. Designing decision support tools for Mediterranean forest ecosystems management: a case study in Portugal. *Annals of Forest Science* 62: 751-760. DOI: <http://dx.doi.org/10.1051/forest:2005061>
- Falcão, A. O. and J. G. Borges. 2001. Designing an evolution program for solving integer forest management scheduling models: an application in Portugal. *Forest Science* 47:158-168.
- Falcão, A. O. and J. G. Borges. 2002. Combining random and systematic search heuristic procedures for solving spatially constrained forest management scheduling problems. *Forest Science* 48:608-621.
- Falcão, A. O. and J. G. Borges. 2003. Heurísticas para a integração de níveis estratégico e operacional da gestão florestal em problemas de grande dimensão. *Scientia Forestalis* 63: 94-102.
- Falcão, A. O., M. Próspero dos Santos and J. G. Borges. 2006. A real-time visualization tool for forest ecosystem management decision support. *Computer and Electronics in Agriculture* 53: 3-12. DOI: <http://dx.doi.org/10.1016/j.compag.2006.03.003>
- Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo J. 2015 Addressing wildfire risk in a landscape-level scheduling model. An application in Portugal *Forest Science* 61: 266-277 DOI: <http://dx.doi.org/10.5849/forsci.13-104>
- Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo J., Barreiro, S. 2016 A climate change adaptive dynamic programming approach to optimize eucalypt stand management scheduling. A

- Portuguese application. *Canadian Journal of Forest Research* 46(8): 1000-1008.
(<http://dx.doi.org/10.1139/cjfr-2015-0329>)
- Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo, J. 2012. A stochastic dynamic programming approach to optimize short-rotation coppice systems management scheduling. An application to eucalypt plantations under wildfire risk in Portugal. *Forest Science* 58: 353-365. DOI: <http://dx.doi.org/10.5849/forsci.10-084>
- Ferreira, L., M. Constantino and J. G. Borges. 2014. A stochastic approach to optimize Maritime pine (*Pinus pinaster* Ait) stand management scheduling under fire risk. An application in Portugal. *Annals of Operations Research* 219(1): 359-377 DOI: <http://dx.doi.org/10.1007/s10479-011-0845-z>
- Garcia-Gonzalo J., J. G. Borges, J. H.N. Palma and A. Zubizarreta-Gerendiain 2014 A decision support system for management planning of Eucalyptus plantations facing climate change *Annals of Forest Science* 71: 187-199, DOI: <http://dx.doi.org/10.1007/s13595-013-0337-1>
- Garcia-Gonzalo J., Zubizarreta-Gerendiain A., Ricardo A., Marques S., Botequim B., Borges J. G., Oliveira M. M. , Tomé M. and Pereira, J.M.C. 2012 Modelling wildfire risk in pure and mixed forest stands in Portugal. *Allgemeine Forst und Jagdzeitung (AFJZ) – German Journal of Forest Research* 183 (11/12): 238-248
- Garcia-Gonzalo, J. and J. G. Borges 2019 Models and tools for integrated forest management and forest policy analysis: An Editorial *Forest Policy and Economics* 103: 1-3
<https://doi.org/10.1016/j.forpol.2019.04.006>
- Garcia-Gonzalo, J., Borges, J.G., Hilebrand, W., Palma, J.H.N. 2012. Comparison of effectiveness of different implementations of heuristic forest harvest scheduling search procedures with different number of decision choices simultaneously changed per move. In: Luangpaiboo, P., Moz, M., and Dedoussis, V (eds). *Lecture Notes in Management Science* 4: 179 – 183. ISSN 2008-0050. <http://www.tadbir.ca/lnms/archive/v4/lnmsv4p179.pdf>
- Garcia-Gonzalo, J., Palma, J., Freire, J., Tomé, M., Mateus, R., Rodriguez, L.C.E., Bushenkov, V. and Borges, J.G. 2013. A decision support system for a multi stakeholder's decision process in a Portuguese National Forest. *Forest Systems* 22: 359-373. DOI <http://dx.doi.org/10.5424/fs/2013222-03793>
- Garcia-Gonzalo, J., Pukkala, T., Borges, J. G. 2014. Integrating fire risk in stand management scheduling. An application to Maritime pine stands in Portugal. *Annals of Operations Research* 219(1). 379-395 DOI: <http://dx.doi.org/10.1007/s10479-011-0908-1>
- Garcia-Gonzalo, J., S. Marques S., J. G. Borges, B. Botequim, M. M. Oliveira, J. Tomé, and M. Tomé. 2011. A three-step approach to post-fire mortality modeling in Maritime pine (*Pinus pinaster* Ait.) stands for enhanced forest planning in Portugal. *Forestry* 84: 197-206 DOI: <http://dx.doi.org/10.1093/forestry/CPR006>
- Garcia-Gonzalo, J., V.A. Bushenkov, M. E. McDill and Borges, J. G. 2015 A decision support system for assessing trade-offs between ecosystem management goals. An application in Portugal. *Forests* 6: 65-87 DOI: <http://dx.doi.org/10.3390/f6010065>

- Hoganson, H. M. and J. G. Borges. 1998. Using dynamic programming and overlapping subproblems to address adjacency in large harvest scheduling problems. *Forest Science* 44: 526-538.
- Hoganson, H. M. and J. G. Borges. 2000. Impacts of the time horizon for adjacency constraints in harvest scheduling. *Forest Science* 46: 176-187.
- Linkevičius, E., J. G. Borges, M. Doyle, H. Pülzl, E.-M. Nordström, H. Vacik, V. Brukas, P. Biber, M. Teder, P. Kaimre, M. Synek, J. Garcia-Gonzalo 2019 Linking forest policy issues and decision support tools in Europe *Forest Policy and Economics* 103: 4-16
<https://doi.org/10.1016/j.forpol.2018.05.014>
- Madureira, L., L. C. Nunes, J. G. Borges and A. O. Falcão. 2011. Assessing forest management strategies using a contingent valuation approach and advanced visualisation techniques: A Portuguese case study. *Journal of Forest Economics* 17: 335-432. DOI:
<http://dx.doi.org/10.1016/j.jfe.2011.04.001>
- Marques M., N. Juerges, J. G. Borges 2020 Appraisal framework for actor interest and power analysis in forest management - Insights from Northern Portugal *Forest Policy and Economics* 111
<https://doi.org/10.1016/j.forpol.2019.102049>
- Marques, A. F., Borges, J. G., Garcia-Gonzalo, J., Lucas, B. and Melo, I. 2013. A participatory approach to design a toolbox to support forest management planning at regional level. *Forest Systems* 22: 340-358. DOI <http://dx.doi.org/10.5424/fs/2013222-03120>
- Marques, A., J. G. Borges, P. Sousa and A. M. Pinho 2011. An enterprise architecture approach to forest management decision support design. An application to pulpwood supply management in Portugal. *European Journal of Forest Research* 30: 935-948. DOI:
<http://dx.doi.org/10.1007/s10342-011-0482-8>
- Marques, S, M. Marto, V.A. Bushenkov, M. E. McDill and J. G. Borges 2017 Addressing Wildfire Risk in Forest Management Planning with Multiple Criteria Decision Making Methods. *Sustainability*, 2017, 9, 298, (<http://dx.doi.org/10.3390/su9020298>)
- Marques, S., Botequim, B., Garcia-Gonzalo, J., Borges, J. G., Tomé, M., Oliveira M. M. 2012. Assessing wildfire risk probability in *Pinus pinaster* Ait. stands in Portugal. *Forest Systems* 21: 111-120. DOI: <http://dx.doi.org/10.5424/fs/2112211-11374>
- Marques, S., J. G. Borges, J. Garcia-Gonzalo, F. Moreira, J.M.B. Carreiras, JM. M. Oliveira, A. Cantarinha, B. Botequim and J. M. C. Pereira. 2011. Characterization of wildfires in Portugal. *European Journal of Forest Research* 130: 775-784 DOI: <http://dx.doi.org/10.1007/s10342-010-0470-4>
- Marques, S., J. Garcia-Gonzalo, J. G. Borges, B. Botequim, M. M. Oliveira, J. Tomé and M. Tomé. 2011. Developing post-fire *Eucalyptus globulus* Labill stand damage and tree mortality models for enhanced forest planning in Portugal. *Silva Fennica* 45: 69-83.
<http://www.metla.fi/silvafennica/full/sf45/sf451069.pdf>
- Marques, S., V. A. Bushenkov, A. V. Lotov, M. Marto and J. G. Borges 2020 Bi-level participatory forest management planning supported by Pareto frontier visualization *Forest Science*
<https://doi.org/10.1093/forsci/fxz014>

- Martins, H. and J. G. Borges. 2007. Addressing collaborative planning methods and tools in forest management. *Forest Ecology and Management* 248: 107-118). DOI: <http://dx.doi.org/10.1016/j.foreco.2007.02.039>
- Martins, I., M. Constantino and J. G. Borges. 2005. A column generation approach for solving a non-temporal forest harvest model with spatial structure constraints. *European Journal of Operational Research* 16: 478-498. DOI: <http://dx.doi.org/10.1016/j.ejor.2003.07.021>
- Marto, M., K. M. Reynolds, J. G. Borges, V. A. Bushenkov and S. Marques 2018 Combining Decision Support Approaches for Optimizing the Selection of Bundles of Ecosystem Services. *Forests* 2018, 9, 438; <http://doi.org/10.3390/f9070438>
- Marto, M., K. M. Reynolds, J. G. Borges, V. A. Bushenkov, S. Marques, M. Marques, S. Barreiro, B. Botequim and M. Tomé 2019. Web-Based Forest Resources Management Decision Support System. *Forests* 10, 1079, <https://doi.org/10.3390/f10121079>
- Nobre, S. R., J. G. Borges, L. Diaz-Balteiro, L. C. E. Rodriguez, H. C. von Glehn and M. J. Zakia 2019 A generalizable monitoring model to implement policies to promote forest restoration – A case study in São Paulo – Brazil. *Forest Policy and Economics* 103: 123-135 <https://doi.org/10.1016/j.forpol.2018.03.001>
- Nordström, E.-M., M. Nieuwenhuis, E. Z. Başkent, P. Biber, K. Black, J. G. Borges, M. N. Bugalho, G. Corradini, E. Corrigan, L.-O. Eriksson, A. Felton, N. Forsell, G. Hengeveld, M. Hoogstra-Klein, U. Karahalil, I. Lodin, A. Korosuo, M. Lindbladh, A. Lundholm, M. Marto, M. Masiero, G. Mozgeris, D. Pettenella, W. Poschenrieder, R. Sedmak, J. Tucek and D. Zoccatelli 2019 Forest decision support systems for analysis of ecosystem services provisioning at landscape scale under global climate and market change scenarios *European Journal of Forest Research* 138: 561-581 <https://doi.org/10.1007/s10342-019-01189-z>
- Oliveira, A. C. and J. G. Borges. 1992. Multiple use forestry in Portugal. A case study. *Norwegian Journal of Agricultural Sciences*, supplement no. 8, pp. 31-38.
- Orazio, C., R. C. Montoya, M. Régolini, J. G. Borges, J. Garcia-Gonzalo, S. Barreiro, B. Botequim, S. Marques, R. Sedmák, R. Smrecek, Y. Brodrechtová, V. Brukas, G. Chirici, M. Marchetti, R. Moshammer, P. Biber, E. Corrigan, L-O Eriksson, M. Favero, E. Galev, G. M. Hengeveld, M. Kavaliauskas, G. Mozgeris, R. Navrátil, M. Nieuwenhuis, I. Paligorov, D. Pettenella, A. Stanislovaitis, M. Tomé, R. Trubins, J. Tucek, M. Vizzarri, I. Wallin, H. Pretzsch and O. Sallnäs 2017 Decision Support Tools and Strategies to Simulate Forest Landscape Evolutions Integrating Forest Owner Behaviour: A Review from the Case Studies of the European Project, INTEGRAL Sustainability 2017, 9, 599 <https://doi.org/10.3390/su9040599>
- Pacheco, A. P., J. Claro, P. M. Fernandes, R. de Neufville, T. M. Oliveira, J. G. Borges and J. C. Rodrigues 2015. Cohesive fire management within an uncertain environment: A review of risk handling and decision support systems. *Forest Ecology and Management* 347: 1-17 DOI: <http://dx.doi.org/10.1016/j.foreco.2015.02.033>
- Palma, J. H. N., J. A. Paulo, S. P. Faias, J. Garcia-Gonzalo, J. G. Borges, and M. Tomé 2015 Adaptive management and debarking schedule optimization of *Quercus suber* L. stands under climate

- change. Case study in Chamusca, Portugal. *Regional Environmental Change* 15: 1569-1580
<http://dx.doi.org/10.1007/s10113-015-0818-x>
- Pasalodos-Tato M., A. Mäkinen, J. Garcia-Gonzalo, J. G. Borges, T. Lämås and LO Eriksson. 2013 Assessing uncertainty and risk in forest planning and decision support systems: review of classical methods and introduction of innovative approaches. *Forest Systems* 22: 282-303. DOI:
<http://dx.doi.org/10.5424/fs/2013222-03063>
- Pastorella F., Borges, J. G., De Meo I. 2016 Usefulness and Perceived Usefulness of Decision Support Systems (DSSs) in participatory forest planning: the final users' point of view. *iForest - Biogeosciences and Forestry* 9: 422-429 <http://dx.doi.org/10.3832/ifor1356-008>
- Rammer W, C. Schauflinger, H. Vacik, J. H.N. Palma, J. Garcia-Gonzalo, J. G. Borges and M. J. Lexer 2014 A web-based ToolBox approach to support adaptive forest management under climate change *Scandinavian Journal of Forest Research* 29, Suppl. No. 1: 96-107. DOI:
<http://dx.doi.org/10.1080/02827581.2013.851277>
- Reyer, C. P. O., S. Bathgate, K. Blennow, J. G. Borges, H. Bugmann, S. Delzon, S. P. Faias, J. Garcia-Gonzalo, B. Gardiner, J. R. Gonzalez-Olabarria, C. Gracia, J. G. Hernández, S. Kellomäki, K. Kramer, M. J. Lexer, M. Lindner, E. M., M. Maroschek, B. Muys, B. Nicoll, M. Palahi, J. H. N. Palma, J. A. Paulo, H. Peltola, T. Pukkala, W. Rammer, D. Ray, S. Sabaté, M.-J. Schelhaas, R. Seidl, C. Temperli, M. Tomé, R. Yousefpour, N. E. Zimmermann, M. Hanewinkel 2017 Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests? *Environmental Research Letters* 12(3) <https://doi.org/10.1088/1748-9326/aa5ef1>
- Ribeiro, R. P., J. G. Borges and V. Oliveira. 2004. A framework for data quality for Mediterranean sustainable ecosystem management. *Annals of Forest Science* 61: 557-568. DOI:
<http://dx.doi.org/10.1051/forest:2004051>
- Rodrigues, A. R. M., B. Botequim, C. Tavares, P. Pécurto, J. G. Borges 2020 Addressing soil protection concerns in forest ecosystem management under climate change *Forest Ecosystems* (in press)
- Rose, D. W., J. G. Borges and M. H. Pelkki. 1995. Forest management planning based on stand level decisions. *Northern Journal of Applied Forestry* 12(3): 133-142.
- Sil, A., Fernandes, P., Rodrigues, A., Alonso, J., Honrado, J., Perera, J., Azevedo, J.C. 2019. Farmland abandonment decreases the fire regulation capacity and the fire protection ecosystem service in mountain landscapes. *Ecosystem Services* 36: 100908.
<https://doi.org/10.1016/j.ecoser.2019.100908>
- Vacik, H., J. G. Borges, J. Garcia-Gonzalo and L-O. Eriksson. 2015. Decision Support for the Provision of Ecosystem Services under Climate Change: An Editorial. *Forests* 6: 3212-3217;
<http://dx.doi.org/10.3390/f6093212>
- Yousefpour, R., C. Temperli, J. B. Jacobsen, B. J. Thorsen, H. Meilby, M. J. Lexer, M. Lindner, H. Bugmann, J. G. Borges, J. H. N. Palma, D. Ray, N. E. Zimmermann, S. Delzon, A. Kremer, K. Kramer, C. P. O. Reyher, P. Lasch-Born, J. Garcia-Gonzalo, and M. Hanewinkel. 2017. A framework for modeling

adaptive forest management and decision making under climate change. *Ecology and Society*
22(4):40. <https://doi.org/10.5751/ES-09614-220440>

Thematic Area 3: Policy, economic and institutional aspects for sustainable provision of forest goods and services

Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.

- Alberdi, I.; Bender, S.; Riedel, T.; Avitable, V.; Boriaud, o.; Bosela, M.; Camia, A.; Cañellas, I.; Castro Rego, F.; Fischer, C.; Freudenschuß, A.; Fridman, J.; Gasparini, P., Gschwantnej, T.; Guerrero, S.; Kjartansson, B.T.; Kucera, M.; Lanz, A.; Marin, G.; Mubareka, S.; Notarangelo, M.; Nunes, L.; Pesty, B.; Pikula, T.; Redmond, J.; Rizzl, M.; Seben, V.; Snorrason, A.; Tomter, S.; Hernández L. (2019). Assessing forest availability for wood supply in Europe. *Forest Policy and Economics* . doi:10.1016/j.forpol.2019.102032
- Alberdi, I.; Sandoval, V.; Condes, S.; Cañellas, I.; Vallejo, R. (2016). The Spanish National Forest Inventory, a tool for the knowledge, management and conservation of forest ecosystems. *ECOSISTEMAS* 25. doi:10.7818/ECOS.2016.25-3.10
- Alberdi, Iciar; Cañellas, Isabel; Condes, Sonia (2014). A long-scale biodiversity monitoring methodology for Spanish national forest inventory. Application to Alava region. *FOREST SYSTEMS* 23. doi:10.5424/fs/2014231-04238
- Alberdi, Iciar; Cañellas, Isabel; Hernandez, Laura; Condes, Sonia (2013). A new method for the identification of old-growth trees in National Forest Inventories: application to *Pinus halepensis* Mill. stands in Spain. *ANNALS OF FOREST SCIENCE* 70. doi:10.1007/s13595-012-0261-9
- Alberdi, Iciar; Condes, Sonia; Mcroberts, Ronald E.; Winter, Susanne (2018). Mean species cover: a harmonized indicator of shrub cover for forest inventories. *EUROPEAN JOURNAL OF FOREST RESEARCH* 137. doi:10.1007/s10342-018-1110-7
- Alberdi, Iciar; Michalak, Roman; Fischer, Christoph; Gasparini, Patrizia; Brandli, Urs-Beat; Tomter, Stein Michael; Kuliesis, Andrius; Snorrason, Arnor; Redmond, John; Hernandez, Laura; Lanz, Adrian; Vidondo, Beatriz; Stoyanov, Nickola; Stoyanova, Maria; Vestman, Martin; Barreiro, Susana; Marin, Gheorghe; Cañellas, Isabel; Vidal, Claude (2016). Towards harmonized assessment of European forest availability for wood supply in Europe. *FOREST POLICY AND ECONOMICS* 70. doi:10.1016/j.forpol.2016.05.014
- Alberdi, Iciar; Nunes, Leonia; Kovac, Marko; Bonheme, Ingrid; Cañellas, Isabel; Rego, Francisco Castro; Dias, Susana; Duarte, Ines; Notarangelo, Monica; Rizzo, Maria; Gasparini, Patrizia (2019). The conservation status assessment of Natura 2000 forest habitats in Europe: capabilities, potentials and challenges of national forest inventories data. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0820-4
- Alvarez-Gonzalez, J. G.; Cañellas, I.; Alberdi, I.; Gadow, K. V.; Ruiz-Gonzalez, A. D. (2014). National Forest, Inventory and forest observational studies in Spain: Applications to forest modeling. *FOREST ECOLOGY AND MANAGEMENT* 316. doi:10.1016/j.foreco.2013.09.007

- Barreiro, Susana; Schelhaas, Mart-Jan; Kaendler, Gerald; Anton-Fernandez, Clara; Colin, Antoine; Bontemps, Jean-Daniel; Alberdi, Iciar; Condes, Sonia; Dumitru, Marius; Ferezliev, Angel; Fischer, Christoph; Gasparini, Patrizia; Gschwantner, Thomas; Kindermann, Georg; Kjartansson, Bjarki; Kovacsevics, Pal; Kucera, Milos; Lundstrom, Anders; Marin, Gheorghe; Mozgeris, Gintautas; Nord-Larsen, Thomas; Packalen, Tuula; Redmond, John; Sacchelli, Sandro; Sims, Allan; Snorrason, Arnor; Stoyanov, Nickola; Thurig, Esther; Wikberg, Per-Erik (2016). Overview of methods and tools for evaluating future woody biomass availability in European countries. *ANNALS OF FOREST SCIENCE* 73. doi:10.1007/s13595-016-0564-3
- Campos, Pablo; Caparros, Alejandro; Cerda, Emilio; Diaz-Balteiro, Luis; Casimiro Herruzo, A.; Huntsinger, Lynn; Martin-Barroso, David; Martinez-Jauregui, Maria; Ovando, Paola; Oviedo, Jose L.; Pasalodos-Tato, Maria; Romero, Carlos; Soliño, Mario; Standiford, Richard B. (2017). Multifunctional natural forest silviculture economics revised: Challenges in meeting landowners' and society's wants: A review. *FOREST SYSTEMS* 26. doi:10.5424/fs/2017262-10505
- Campos, Pablo; Caparros, Alejandro; Oviedo, Jose L.; Ovando, Paola; Alvarez-Farizo, Begona; Diaz-Balteiro, Luis; Carranza, Juan; Begueria, Santiago; Diaz, Mario; Casimiro Herruzo, A.; Martinez-Pena, Fernando; Soliño, Mario; Alvarez, Alejandro; Martinez-Jauregui, Maria; Pasalodos-Tato, Maria; de Frutos, Pablo; Aldea, Jorge; Almazan, Eloy; Concepcion, Elena D.; Mesa, Bruno; Romero, Carlos; Serrano-Notivoli, Roberto; Fernandez, Cristina; Torres-Porras, Jeronimo; Montero, Gregorio (2019). Bridging the gap between national and ecosystem accounting application in Andalusian forests, Spain. *ECOLOGICAL ECONOMICS* 157. doi:10.1016/j.ecolecon.2018.11.017
- Chirici, Gherardo; McRoberts, Ronald E.; Winter, Susanne; Bertini, Roberta; Braendli, Urs-Beat; Asensio, Iciar Alberdi; Bastrup-Birk, Annemarie; Rondeux, Jacques; Barsoum, Nadia; Marchetti, Marco (2012). National Forest Inventory Contributions to Forest Biodiversity Monitoring. *FOREST SCIENCE* 58. doi:10.5849/forsci.12-003
- Crecente-Campo, F.; Pasalodos-Tato, M.; Alberdi, I.; Hernandez, L.; Ibanez, J. J.; Cañellas, I. (2016). Assessing and modelling the status and dynamics of deadwood through national forest inventory data in Spain. *FOREST ECOLOGY AND MANAGEMENT* 360. doi:10.1016/j.foreco.2015.10.029
- del Rio, Miren; Pretzsch, Hans; Alberdi, Iciar; Bielak, Kamil; Bravo, Felipe; Brunner, Andreas; Condes, Sonia; Ducey, Mark J.; Fonseca, Teresa; von Lupke, Nikolas; Pach, Maciej; Peric, Sanja; Perot, Thomas; Souidi, Zahera; Spathelf, Peter; Sterba, Hubert; Tijardovic, Martina; Tome, Margarida; Vallet, Patrick; Bravo-Oviedo, Andres (2016). Characterization of the structure, dynamics, and productivity of mixed-species stands: review and perspectives. *EUROPEAN JOURNAL OF FOREST RESEARCH* 135. doi:10.1007/s10342-015-0927-6
- Ezquerro, Marta; Pardos, Marta; Diaz-Balteiro, Luis (2019). Integrating variable retention systems into strategic forest management to deal with conservation biodiversity objectives. *FOREST ECOLOGY AND MANAGEMENT* 433. doi:10.1016/j.foreco.2018.11.003
- Fischer, Christoph; Gasparini, Patrizia; Nylander, Martin; Redmond, John; Hernandez, Laura; Brandli, Urs-Beat; Pastor, Alejandro; Rizzo, Maria; Alberdi, Iciar (2016). Joining Criteria for Harmonizing

European Forest Available for Wood Supply Estimates. Case Studies from National Forest Inventories. *FORESTS* 7. doi:10.3390/f7050104

Gschwantner, Thomas; Alberdi, Iciar; Balazs, Andras; Bauwens, Sebastien; Bender, Susann; Borota, Dragan; Bosela, Michal; Bouriaud, Olivier; Cañellas, Isabel; Donis, Janis; Freudenschuss, Alexandra; Herve, Jean-Christophe; Hladnik, David; Jansons, Jurgis; Kolozs, Laszlo; Korhonen, Kari T.; Kucera, Milos; Kulbokas, Gintaras; Kuliesis, Andrius; Lanz, Adrian; Lejeune, Philippe; Lind, Torgny; Marin, Gheorghe; Morneau, Francois; Nagy, Dora; Nord-Larsen, Thomas; Nunes, Leonia; Pantic, Damjan; Paulo, Joana A.; Pikula, Tomas; Redmond, John; Rego, Francisco C.; Riedel, Thomas; Saint-Andre, Laurent; Seben, Vladimir; Sims, Allan; Skudnik, Mitja; Solti, Gyorgy; Tomter, Stein M.; Twomey, Mark; Westerlund, Bertil; Zell, Juergen (2019). Harmonisation of stem volume estimates in European National Forest Inventories. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0800-8

Hernandez, Laura; Jandl, Robert; Blujdea, Viorel N. B.; Lehtonen, Aleksii; Kriiska, Kaie; Alberdi, Iciar; Adermann, Veiko; Cañellas, Isabel; Marin, Gheorghe; Moreno-Fernandez, Daniel; Ostonen, Ivika; Varik, Mats; Didion, Markus (2017). Towards complete and harmonized assessment of soil carbon stocks and balance in forests: The ability of the Yasso07 model across a wide gradient of climatic and forest conditions in Europe. *SCIENCE OF THE TOTAL ENVIRONMENT* 599. doi:10.1016/j.scitotenv.2017.03.298

Herruzo, A. C.; Martinez-Jauregui, M. (2013). Trends in hunters, hunting grounds and big game harvest in Spain. *FOREST SYSTEMS* 22. doi:10.5424/fs/2013221-03371

Herruzo, A. C.; Martinez-Jauregui, M.; Carranza, J.; Campos, P. (2016). Commercial income and capital of hunting: an application to forest estates in Andalucia. *FOREST POLICY AND ECONOMICS* 69. doi:10.1016/j.forpol.2016.05.004

Kovac, Marko; Gasparini, Patrizia; Notarangelo, Monica; Rizzo, Maria; Canellas, Isabel; Fernandez-de-Una, Laura; Alberdi, Iciar (2020). Towards a set of national forest inventory indicators to be used for assessing the conservation status of the habitats directive forest habitat types. *Journal for Nature Conservation* 53. doi:10.1016/j.jnc.2019.125747

Ledo, Alicia; Condes, Sonia; Alberdi, Iciar (2012). Forest biodiversity assessment in Peruvian Andean Montane cloud forest. *JOURNAL OF MOUNTAIN SCIENCE* 9. doi:10.1007/s11629-009-2172-2

Martínez-Jauregui M.; Delibes-Mateos M.; Arroyo B.; Soliño M. (2020). Addressing social attitudes toward lethal control of wildlife in national parks. *CONSERVATION BIOLOGY* . doi:10.1111/cobi.13468

Martinez-Jauregui, M.; Arenas, C.; Herruzo, A. C. (2011). Understanding long-term hunting statistics: the case of Spain (1972-2007). *FOREST SYSTEMS* 20. doi:10.5424/fs/2011201-10394

Martinez-Jauregui, M.; Herruzo, A. C. (2014). A note on the effectiveness of incorporating management objectives with ecological variables when modeling red deer abundance. *EUROPEAN JOURNAL OF WILDLIFE RESEARCH* 60. doi:10.1007/s10344-014-0813-4

Martinez-Jauregui, M.; Herruzo, A. C.; Campos, P. (2015). What does hunting market price reflect? The role of species, landscape and management. *WILDLIFE RESEARCH* 42. doi:10.1071/WR14206

- Martinez-Jauregui, M.; Linares, O.; Carranza, J.; Soliño, M. (2017). Dealing with conflicts between people and colonizing native predator species. *BIOLOGICAL CONSERVATION* 209. doi:10.1016/j.biocon.2017.02.034
- Martinez-Jauregui, M.; Pardos, M.; Balogh, P.; Chauvin, C.; Klopčič, M.; Wilhelmsson, E.; Herruzo, A. C. (2014). Hunting in European mountain systems: an economic assessment of game gross margins in nine case study areas. *EUROPEAN JOURNAL OF WILDLIFE RESEARCH* 60. doi:10.1007/s10344-014-0860-x
- Martinez-Jauregui, Maria; Herruzo, A. Casimiro; Campos, Pablo; Soliño, Mario (2016). Shedding light on the self-consumption value of recreational hunting in European Mediterranean forests. *FOREST POLICY AND ECONOMICS* 69. doi:10.1016/j.forpol.2016.05.002
- Martinez-Jauregui, Maria; Herruzo, A. Casimiro; Carranza, Juan; Torres-Porras, Jeronimo; Campos, Pablo (2016). Environmental Price of Game Animal Stocks. *HUMAN DIMENSIONS OF WILDLIFE* 21. doi:10.1080/10871209.2016.1082682
- Martinez-Jauregui, Maria; White, Piran C. L.; Touza, Julia; Soliño, Mario (2019). Untangling perceptions around indicators for biodiversity conservation and ecosystem services. *ECOSYSTEM SERVICES* 38. doi:10.1016/j.ecoser.2019.100952
- Moreno-Fernández, Daniel; Cañellas, Isabel; Rubio-Cuadrado, Álvaro; Alberdi, Iciar (2020). National scale variability in forest stand variables among regions of provenances in Spain. *Annals of Forest Science* . doi:10.1007/s13595-020-00943-3
- Moreno-Fernández, Daniel; Hernández, Laura; Cañellas, Isabel; Adame, Patricia; Alberdi, Iciar (2020). Analyzing the dynamics of the deadwood carbon pool in Spain through the European Level I Monitoring Programme. *FOREST ECOLOGY AND MANAGEMENT* 463. doi:10.1016/j.foreco.2020.118020 10.1016/j.foreco.2020.118020
- Neumann, Mathias; Moreno, Adam; Mues, Volker; Harkonen, Sanna; Mura, Matteo; Bouriaud, Olivier; Lang, Mait; Achten, Wouter M. J.; Thivolle-Cazat, Alain; Bronisz, Karol; Merganic, Jan; Decuyper, Mathieu; Alberdi, Iciar; Astrup, Rasmus; Mohren, Frits; Hasenauer, Hubert (2016). Comparison of carbon estimation methods for European forests. *FOREST ECOLOGY AND MANAGEMENT* 361. doi:10.1016/j.foreco.2015.11.016
- Neumann, Mathias; Moreno, Adam; Thurnher, Christopher; Mues, Volker; Harkonen, Sanna; Mura, Matteo; Bouriaud, Olivier; Lang, Mait; Cardellini, Giuseppe; Thivolle-Cazat, Alain; Bronisz, Karol; Merganic, Jan; Alberdi, Iciar; Astrup, Rasmus; Mohren, Frits; Zhao, Maosheng; Hasenauer, Hubert (2016). Creating a Regional MODIS Satellite-Driven Net Primary Production Dataset for European Forests. *REMOTE SENSING* 8. doi:10.3390/rs8070554
- Pardos, Marta; Calama, Rafael; Maroschek, Michael; Rammer, Werner; Lexer, Manfred J. (2015). A model-based analysis of climate change vulnerability of *Pinus pinea* stands under multiobjective management in the Northern Plateau of Spain. *ANNALS OF FOREST SCIENCE* 72. doi:10.1007/s13595-015-0520-7

- Pardos, Marta; Perez, Susana; Calama, Rafael; Alonso, Rafael; Lexer, Manfred J. (2017). Ecosystem service provision, management systems and climate change in Valsain forest, central Spain. REGIONAL ENVIRONMENTAL CHANGE 17. doi:10.1007/s10113-016-0985-4
- Pasalodos-Tato, Maria; Alberdi, Iciar; Cañellas, Isabel; Sanchez-Gonzalez, Mariola (2018). Towards assessment of cork production through National Forest Inventories. FORESTRY 91. doi:10.1093/forestry/cpx036
- Ruiz Benito, P.; Cuevas, J. A.; Bravo de la Parra, R.; Prieto, F.; Garcia del Barrio, J. M.; Zavala, M. A. (2010). Land use change in a Mediterranean metropolitan region and its periphery: assessment of conservation policies through CORINE Land Cover data and Markov models. FOREST SYSTEMS 19. doi:10.5424/fs/2010193-8604
- Sheppard, J.P.; Chamberlain, J.; Agúndez, D.; Bhattacharya, P.; Chirwa, P.W.; Gontcharov, A.; Sagona, W.C.J.; Shen, H.L.; Tadesse, W.; Mutke, S. (2020). Sustainable Forest Management Beyond the Timber-Oriented Status Quo: Transitioning to Co-production of Timber and Non-wood Forest Products—a Global Perspec. Current Forestry Report 6. doi:10.1007/s40725-019-00107-1
- Soliño, Mario; Yu, Tianqi; Alia, Ricardo; Aunon, Francisco; Bravo-Oviedo, Andres; Regina Chambel, Maria; de Miguel, Jesus; del Rio, Miren; Justes, Anton; Martinez-Jauregui, Maria; Montero, Gregorio; Mutke, Sven; Ruiz-Peinado, Ricardo; Garcia del Barrio, Jose M. (2018). Resin-tapped pine forests in Spain: Ecological diversity and economic valuation. SCIENCE OF THE TOTAL ENVIRONMENT 625. doi:10.1016/j.scitotenv.2018.01.027
- Vauhkonen, Jari; Berger, Ambros; Gschwantner, Thomas; Schadauer, Klemens; Lejeune, Philippe; Perin, Jerome; Pitchugin, Mikhail; Adolt, Radim; Zeman, Miroslav; Johannsen, Vivian Kvist; Kepfer-Rojas, Sebastian; Sims, Allan; Bastick, Claire; Morneau, Francois; Colin, Antoine; Bender, Susann; Kovacsevics, Pal; Solti, Gyorgy; Kolozs, Laszlo; Nagy, Dora; Nagy, Kinga; Twomey, Mark; Redmond, John; Gasparini, Patrizia; Notarangelo, Monica; Rizzo, Maria; Makovskis, Kristaps; Lazdins, Andis; Lupikis, Ainars; Kulbokas, Gintaras; Anton-Fernandez, Clara; Rego, Francisco Castro; Nunes, Leonia; Marin, Gheorghe; Calota, Catalin; Pantic, Damjan; Borota, Dragan; Roessiger, Joerg; Bosela, Michal; Seben, Vladimir; Skudnik, Mitja; Adame, Patricia; Alberdi, Iciar; Cañellas, Isabel; Lind, Torgny; Trubins, Renats; Thurig, Esther; Stadelmann, Golo; Ditchburn, Ben; Ross, David; Gilbert, Justin; Halsall, Lesley; Lier, Markus; Packalen, Tuula (2019). Harmonised projections of future forest resources in Europe. ANNALS OF FOREST SCIENCE 76. doi:10.1007/s13595-019-0863-6
- Vettraino, Anna Maria; Potting, Roel; Raposo, Rosa (2018). EU Legislation on Forest Plant Health: An Overview with a Focus on Fusarium circinatum. FORESTS 9. doi:10.3390/f9090568 7 citas
- Alberdi, Iciar; Vallejo, Roberto; Alvarez-Gonzalez, Juan G.; Condes, Sonia; Gonzalez-Ferreiro, Eduardo; Guerrero, Silvia; Hernandez, Laura; Martinez-Jauregui, Maria; Montes, Fernando; Oliveira, Nerea; Pasalodos-Tato, Maria; Robla, Elena; Ruiz-Gonzalez, Ana D.; Sanchez-Gonzalez, Mariola; Sandoval, Vicente; San Miguel, Alfonso; Sixto, Hortensia; Cañellas, Isabel (2017). The multi-objective Spanish National Forest Inventory. FOREST SYSTEMS 26. doi:10.5424/fs/2017262-10577

Vidal, Claude; Alberdi, Iciar; Redmond, John; Vestman, Martin; Lanz, Adrian; Schadauer, Klemens (2016).
The role of European National Forest Inventories for international forestry reporting. ANNALS
OF FOREST SCIENCE 73. doi:10.1007/s13595-016-0545-6

Thematic Area 4: Forest and woodlands in the context of integrated management of land resources: models and decision systems for optimising multi-objective and multi-actor problems

Reference of papers that your institute/university/department/research group has published on this thematic area in 2010-2020.

- Adame, Patricia; del Rio, Miren; Cañellas, Isabel (2010). Ingrowth model for pyrenean oak stands in north-western Spain using continuous forest inventory data. *EUROPEAN JOURNAL OF FOREST RESEARCH* 129. doi:10.1007/s10342-010-0368-1
- Adame, Patricia; del Rio, Miren; Cañellas, Isabel (2010). Modeling individual-tree mortality in Pyrenean oak (*Quercus pyrenaica* Willd.) stands. *ANNALS OF FOREST SCIENCE* 67. doi:10.1051/forest/2010046
- Aguirre, Ana; del Rio, Miren; Condes, Sonia (2018). Intra- and inter-specific variation of the maximum size-density relationship along an aridity gradient in Iberian pinewoods. *FOREST ECOLOGY AND MANAGEMENT* 411. doi:10.1016/j.foreco.2018.01.017
- Aguirre, Ana; del Rio, Miren; Condes, Sonia (2019). Productivity Estimations for Monospecific and Mixed Pine Forests along the Iberian Peninsula Aridity Gradient. *FORESTS* 10. doi:10.3390/f10050430
- Aldea, J.; Bravo, F.; Bravo-Oviedo, A.; Ruiz-Peinado, R.; Rodriguez, F.; del Rio, M. (2017). Thinning enhances the species-specific radial increment response to drought in Mediterranean pine-oak stands. *AGRICULTURAL AND FOREST METEOROLOGY* 237. doi:10.1016/j.agrformet.2017.02.009
- Bachmatiuk, J., J. Garcia-Gonzalo and J. G. Borges 2015 Analysis of the performance of different implementations of a heuristic method to optimise forest harvest scheduling. *Silva Fennica* 49 (4): article id 1326 DOI: <http://dx.doi.org/10.14214/sf.1326>
- Barbeito, Ignacio; LeMay, Valerie; Calama, Rafael; Cañellas, Isabel (2011). Regeneration of Mediterranean *Pinus sylvestris* under two alternative shelterwood systems within a multiscale framework. *CANADIAN JOURNAL OF FOREST RESEARCH* 41. doi:10.1139/X10-214
- Biber, P., J. G. Borges, R. Moshhammer, S. Barreiro, B. Botequim, Y. Brodrechtová, V. Brukas, G. Chirici, R. Cordero-Debets, E. Corrigan, L. O. Eriksson, M. Favero, E. Galev, J. Garcia-Gonzalo, G. Hengeveld, M. Kavaliauskas, M. Marchetti, S. Marques, G. Mozgeris, R. Navrátil, M. Nieuwenhuis, C. Orazio, I. Paligorov, D. Pettenella, R. Sedmák, R. Smreček, A. Stanislovaitis, M. Tomé, R. Trubins, J. Tuček, M. Vizzarri, I. Wallin, H. Pretzsch and O. Sallnäs 2015. How Sensitive are Ecosystem Services in European Forest Landscapes to Silvicultural Treatment? *Forests* 6: 1666-1695. DOI: <http://dx.doi.org/10.3390/f6051666>
- Blazquez-Casado, Angela; Calama, Rafael; Valbuena, Manuel; Vergarechea, Marta; Rodriguez, Francisco (2019). Combining low-density LiDAR and satellite images to discriminate species in mixed Mediterranean forest. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0835-x

- Borges P.J., R. Fragoso, J. Garcia-Gonzalo, J. G. Borges, S. Marques and M. R. Lucas. 2010. Assessing impacts of Common Agricultural Policy changes on regional land use patterns with a decision support system. An application in Southern Portugal. *Forest Policy and Economics* 12: 111-120. DOI: <http://dx.doi.org/10.1016/j.forpol.2009.09.002>
- Borges, J. G. (Ed), L.-O. Eriksson, L. C. E. Rodriguez and J. Garcia-Gonzalo (Ass. Eds.) 2013. Innovative Approaches to Forest Management Planning. Preface *Forest Systems* (Preface to FORSYS special section) 22: 261
- Borges, J. G. and L.-O. Eriksson (Eds.) 2014 Decision support systems for sustainable forest management. *Scandinavian Journal of Forest Research* 29, Suppl. No. 1: 1 (Foreword to special issue with 20 papers) DOI: <http://dx.doi.org/10.1080/02827581.2014.951513>
- Borges, J. G., J. Garcia-Gonzalo, V.A. Bushenkov, M. E. McDill, S. Marques and M.M. Oliveira 2014 Addressing multi-criteria forest management with Pareto Frontier methods: an application in Portugal *Forest Science* 60: 63-72. DOI: <http://dx.doi.org/10.5849/forsci.12-100>
- Borges, J. G., L. Diaz-Balteiro, M. E. McDill and L. C. E. Rodriguez (Eds) 2014 The management of industrial forest plantations. Theoretical foundations and applications. Springer, *Managing Forest Ecosystems* Vol. 33, 543 p. DOI: <http://dx.doi.org/10.1007/978-94-017-8899-1>
- Borges, J. G., Nordström E.M., Garcia-Gonzalo, J., Hujala T. and Trasobares, A. (Eds.) 2014. Computer-based tools for supporting forest management. The experience and the expertise world-wide. Dept of Forest Resource Management, Swedish University of Agricultural Sciences. Umeå. Sweden, 503 p
- Borges, J. G., S. Marques, J. Garcia-Gonzalo, A. U. Rahman, V.A. Bushenkov, M. Sottomayor, P. O. Carvalho and E.-M. Nordström 2017 A multiple criteria approach for negotiating ecosystem services supply targets and forest owners' programs. *Forest Science* 63: 49–61 <http://dx.doi.org/10.5849/FS-2016-035>
- Botequim B., M. Arias-Rodil, J. Garcia-Gonzalo, A. Silva, S. Marques, J. G. Borges, M. M. Oliveira, and M. Tomé 2017 Modelling post-fire mortality in pure and mixed forest stands in Portugal - A forest planning-oriented model. *Sustainability* 2017, 9, 390 (<http://dx.doi.org/10.3390/su9030390>)
- Botequim, B., J. Garcia-Gonzalo, S. Marques, A. Ricardo, J. G. Borges, M. Tomé, and M. M. Oliveira 2013. Developing wildfire risk probability models for *Eucalyptus globulus* stands in Portugal. *iForest - Biogeosciences and Forestry* 6:217-227 DOI <http://dx.doi.org/10.3832/ifer0821-006>
- Botequim, B., P. M. Fernandes, J. G. Borges, E. González-Ferreiro J. Guerra-Fernandes 2019 Improving silvicultural practices for Mediterranean forests through fire behaviour modelling using LiDAR-derived canopy fuel characteristics. *International Journal of Wildland Fire* 28: 823-839. <https://doi.org/10.1071/WF19001>
- Botequim, B., P. M. Fernandes, J. Garcia-Gonzalo, A. Silva and J. G. Borges 2017 Coupling fire behaviour modelling and stand characteristics to assess and mitigate fire hazard in a maritime pine landscape in Portugal. *European Journal of Forest Research* 136: 527-542 <http://dx.doi.org/10.1007/s10342-017-1050-7>

- Bouriaud, L., M. Marzano, M. Lexer, L. Nichiforel, C. Reyer, C. Temperli, H. Peltola, C. Elkin, G. Duduman, P. Taylor, S. Bathgate, J. G. Borges, S. Clerckx, J. Garcia-Gonzalo, C. Gracia, G. Hengeveld, S. Kellomäki, G. Kostov, M. Maroschek, B. Muys, G.-J. Nabuurs, B. Nicoll, M. Palahí, W. Rammer, D. Ray, M.-J. Schelhaas, L. Sing, M. Tomé, J. Zell and M. Hanewinkel 2015 Institutional factors and opportunities for adapting European forest management to climate change. *Regional Environmental Change* 15:1595-1609 <http://dx.doi.org/10.1007/s10113-015-0852-8>
- Bravo, F.; Alvarez-Gonzalez, J. G.; del Rio, M.; Barrio, M.; Bonet, J. A.; Bravo-Oviedo, A.; Calama, R.; Castedo-Dorado, F.; Crecente-Campo, F.; Condes, S.; Dieguez-Aranda, U.; Gonzalez-Martinez, S. C.; Lizarralde, I.; Nanos, N.; Madrigal, A.; Martinez-Millan, F. J.; Montero, G.; Ordonez, C.; Palahi, M.; Pique, M.; Rodriguez, F.; Rodriguez-Soalleiro, R.; Rojo, A.; Ruiz-Peinado, R.; Sanchez-Gonzalez, M.; Trasobares, A.; Vazquez-Pique, J. (2011). Growth and yield models in Spain: historical overview, contemporary examples and perspectives. *FOREST SYSTEMS* 20. doi:10.5424/fs/2011202-11512
- Bravo, Felipe; Fabrika, Marek; Ammer, Christian; Barreiro, Susana; Bielak, Kamil; Coll, Lluís; Fonseca, Teresa; Kangur, Ahto; Lof, Magnus; Merganicova, Katarina; Pach, Maciej; Pretzsch, Hans; Stojanovic, Dejan; Schuler, Laura; Peric, Sanja; Roetzer, Thomas; del Rio, Miren; Dodan, Martina; Bravo-Oviedo, Andres (2019). Modelling approaches for mixed forests dynamics prognosis. Research gaps and opportunities. *FOREST SYSTEMS* 28. doi:10.5424/fs/2019281-14342
- Bravo-Oviedo, Andres; del Rio, Miren; Calama, Rafael; Valentine, Harry T. (2014). New approaches to modelling cross-sectional area to height allometry in four Mediterranean pine species. *FORESTRY* 87. doi:10.1093/forestry/cpt058
- Bugmann H., Seidl R., Hartig F., Bohn F., Bruna J., Francois L., Heinke J., Henrot A.J., Hickler T., Hulsmann L., Huth A., Jacquemin I., Kollas C., Lasch-Born P., Lexer M., Merganic J., Merganicova K., Mette T., Miranda B., Nadal-Sala D., Rammer W., Rammig A., Reineking, B., Rodig E., Sabate S., Suckow F., Vacchiano G., Wild J., Xu C., Reyer C. (2019) Tree mortality submodels drive simulated long-term forest dynamics: assessing 15 models from the stand to global scale. *Ecosphere*, 10:e02616.
- Calama, R.; Sanchez-Gonzalez, M.; Garchi, S.; Ammari, Y.; Cañellas, I.; Tahar, S. (2012). Towards the sustainable management of thuya (*Tetraclinis articulata* (Vahl.) Mast.) forests in Tunisia: models for main tree attributes. *FOREST SYSTEMS* 21. doi:10.5424/fs/2012212-02532
- Calama, R.; Tome, M.; Sanchez-Gonzalez, M.; Miina, J.; Spanos, K.; Palahi, M. (2010). Modelling non-wood forest products in Europe: a review. *FOREST SYSTEMS* 19. doi:10.5424/fs/201019S-9324
- Calama, Rafael; Conde, Mar; de-Dios-Garcia, Javier; Madrigal, Guillermo; Vazquez-Pique, Javier; Javier Gordo, Francisco; Pardos, Marta (2019). Linking climate, annual growth and competition in a Mediterranean forest: *Pinus pinea* in the Spanish Northern Plateau. *AGRICULTURAL AND FOREST METEOROLOGY* 264. doi:10.1016/j.agrformet.2018.10.017
- Calama, Rafael; Fortin, Mathieu; Pardos, Marta; Manso, Ruben (2017). Modelling spatiotemporal dynamics of *Pinus pinea* cone infestation by *Dioryctria mendacella*. *FOREST ECOLOGY AND MANAGEMENT* 389. doi:10.1016/j.foreco.2016.12.015

- Calama, Rafael; Gordo, Javier; Madrigal, Guillermo; Mutke, Sven; Conde, Mar; Montero, Gregorio; Pardos, Marta (2016). Enhanced tools for predicting annual stone pine (*Pinus pinea* L.) cone production at tree and forest scale in Inner Spain. *FOREST SYSTEMS* 25. doi:10.5424/fs/2016253-09671
- Calama, Rafael; Mutke, Sven; Tome, Jose; Gordo, Javier; Montero, Gregorio; Tome, Margarida (2011). Modelling spatial and temporal variability in a zero-inflated variable: The case of stone pine (*Pinus pinea* L.) cone production. *ECOLOGICAL MODELLING* 222. doi:10.1016/j.ecolmodel.2010.09.020
- Calama, Rafael; Puertolas, Jaime; Manso, Ruben; Pardos, Marta (2015). Defining the optimal regeneration niche for *Pinus pinea* L. through physiology-based models for seedling survival and carbon assimilation. *TREES-STRUCTURE AND FUNCTION* 29. doi:10.1007/s00468-015-1257-5
- Castaldi C., Vacchiano G., Marchi M., Corona P. (2017) Projecting non-native Douglas fir plantations in Southern Europe with the Forest Vegetation Simulator. *Forest Science*, 63:101-110.
- Condes, Sonia; Sterba, Hubert; Aguirre, Ana; Bielak, Kamil; Bravo-Oviedo, Andres; Coll, Lluís; Pach, Maciej; Pretzsch, Hans; Vallet, Patrick; del Rio, Miren (2018). Estimation and Uncertainty of the Mixing Effects on Scots Pine-European Beech Productivity from National Forest Inventories Data. *FORESTS* 9. doi:10.3390/f9090518
- Cosovic, M., M. N. Bugalho, D. Thom and J. G. Borges. 2020. Stand Structural Characteristics Are the Most Practical Biodiversity Indicators for Forest Management Planning in Europe". *Forests* 11 (3): 343-343. <https://doi.org/10.3390/f11030343>.
- Costa, A., Oliveira, A. C., Vidas., F. and J. G. Borges. 2010. An approach to cork oak forest management planning in Southwestern Portugal. *European Journal of Forest Research* 129: 233-241. DOI: <http://dx.doi.org/10.1007/s10342-009-0326-y>
- del Rio, Miren; Rodriguez-Alonso, Javier; Bravo-Oviedo, Andres; Ruiz-Peinado, Ricardo; Cañellas, Isabel; Gutierrez, Emilia (2014). Aleppo pine vulnerability to climate stress is independent of site productivity of forest stands in southeastern Spain. *TREES-STRUCTURE AND FUNCTION* 28. doi:10.1007/s00468-014-1031-0
- Diaz-Balteiro, Luis; Alonso, Rafael; Martinez-Jauregui, Maria; Pardos, Marta (2017). Selecting the best forest management alternative by aggregating ecosystem services indicators over time: A case study in central Spain. *ECOLOGICAL INDICATORS* 72. doi:10.1016/j.ecolind.2016.06.025
- Ezquerro, Marta; Pardos, Marta; Diaz-Balteiro, Luis (2016). Operational Research Techniques Used for Addressing Biodiversity Objectives into Forest Management: An Overview. *FORESTS* 7. doi:10.3390/f7100229
- Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo J. 2015 Addressing wildfire risk in a landscape-level scheduling model. An application in Portugal *Forest Science* 61: 266-277 DOI: <http://dx.doi.org/10.5849/forsci.13-104>
- Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo J., Barreiro, S. 2016 A climate change adaptive dynamic programming approach to optimize eucalypt stand management scheduling. A

Portuguese application. Canadian Journal of Forest Research 46(8): 1000-1008.
(<http://dx.doi.org/10.1139/cjfr-2015-0329>)

Ferreira, L., Constantino, M., Borges, J. G., Garcia-Gonzalo, J. 2012. A stochastic dynamic programming approach to optimize short-rotation coppice systems management scheduling. An application to eucalypt plantations under wildfire risk in Portugal. Forest Science 58: 353-365. DOI: <http://dx.doi.org/10.5849/forsci.10-084>

Ferreira, L., M. Constantino and J. G. Borges. 2014. A stochastic approach to optimize Maritime pine (*Pinus pinaster* Ait) stand management scheduling under fire risk. An application in Portugal. Annals of Operations Research 219(1): 359-377 DOI: <http://dx.doi.org/10.1007/s10479-011-0845-z>

Forrester D.I., Ammer C., Annighoefer P., Avdagic A., Barbeito I., Bielak K., Brazaitis G., Coll L., Del Rio M., Droessler L., Heym M., Hurt V., Lof M., Matovic B., Meloni F., den Ouden J., Pach M., Pereira M.G., Ponette Q., Pretzsch H., Skrzyszewski J., Stojanovic D., Svoboda M., Ruiz-Peinado R., Vacchiano G., Verheyen K., Zlatanov T., Bravo-Oviedo A. (2017) Predicting the spatial and temporal dynamics of species interactions in *Fagus sylvatica* and *Pinus sylvestris* forests across Europe. Forest Ecology and Management, 405:112-133.

Forrester D.I., Tachauer I.H.H., Annighoefer P., Barbeito I., Pretzsch H., Ruiz-Peinado R., Stark H., Vacchiano G., Zlatanov T., Chakraborty T., Saha S., Sileshi G.W. (2017) Biomass and leaf area allometric equations for European tree species incorporating stand structure and tree age. Forest Ecology and Management, 396:160-175.

Forrester, D. I.; Ammer, Ch.; Annighofer, P. J.; Avdagic, A.; Barbeito, I.; Bielak, K.; Brazaitis, G.; Coll, L.; del Rio, M.; Drossler, L.; Heym, M.; Hurt, V.; Lof, M.; Matovic, B.; Meloni, F.; den Ouden, J.; Pach, M.; Pereira, M. G.; Ponette, Q.; Pretzsch, H.; Skrzyszewski, J.; Stojanovic, D.; Svoboda, M.; Ruiz-Peinado, R.; Vacchiano, G.; Verheyen, K.; Zlatanov, T.; Bravo-Oviedo, A. (2017). Predicting the spatial and temporal dynamics of species interactions in *Fagus sylvatica* and *Pinus sylvestris* forests across Europe. FOREST ECOLOGY AND MANAGEMENT 405. doi:10.1016/j.foreco.2017.09.029

Forrester, David I.; Tachauer, I. H. H.; Annighoefer, Peter; Barbeito, Ignacio; Pretzsch, Hans; Ruiz-Peinado, Ricardo; Stark, Hendrik; Vacchiano, Giorgio; Zlatanov, Tzvetan; Chakraborty, Tamalika; Saha, Somidh; Sileshi, Gudeta W. (2017). Generalized biomass and leaf area allometric equations for European tree species incorporating stand structure, tree age and climate. FOREST ECOLOGY AND MANAGEMENT 396. doi:10.1016/j.foreco.2017.04.011

Forrester, David Ian; Ammer, Christian; Annighoefer, Peter J.; Barbeito, Ignacio; Bielak, Kamil; Bravo-Oviedo, Andres; Coll, Lluís; del Rio, Miren; Drossler, Lars; Heym, Michael; Hurt, Vaclav; Lof, Magnus; den Ouden, Jan; Pach, Maciej; Pereira, Mario Gonzalez; Plaga, Benjamin N. E.; Ponette, Quentin; Skrzyszewski, Jerzy; Sterba, Hubert; Svoboda, Miroslav; Zlatanov, Tzvetan M.; Pretzsch, Hans (2018). Effects of crown architecture and stand structure on light absorption in mixed and monospecific *Fagus sylvatica* and *Pinus sylvestris* forests along a productivity and climate gradient through Europe. JOURNAL OF ECOLOGY 106. doi:10.1111/1365-2745.12803

- Fortin, Mathieu; Manso, Ruben; Calama, Rafael (2016). Hybrid estimation based on mixed-effects models in forest inventories. *CANADIAN JOURNAL OF FOREST RESEARCH* 46. doi:10.1139/cjfr-2016-0298
- Garcia-Gonzalo J., J. G. Borges, J. H.N. Palma and A. Zubizarreta-Gerendiain 2014 A decision support system for management planning of Eucalyptus plantations facing climate change *Annals of Forest Science* 71: 187-199, DOI: <http://dx.doi.org/10.1007/s13595-013-0337-1>
- Garcia-Gonzalo J., Zubizarreta-Gerendiain A., Ricardo A., Marques S., Botequim B., Borges J. G., Oliveira M. M. , Tomé M. and Pereira, J.M.C. 2012 Modelling wildfire risk in pure and mixed forest stands in Portugal. *Allgemeine Forst und Jagdzeitung (AFJZ) – German Journal of Forest Research* 183 (11/12): 238-248
- Garcia-Gonzalo, J. and J. G. Borges 2019 Models and tools for integrated forest management and forest policy analysis: An Editorial *Forest Policy and Economics* 103: 1-3
<https://doi.org/10.1016/j.forpol.2019.04.006>
- Garcia-Gonzalo, J., Borges, J.G., Hilebrand, W., Palma, J.H.N. 2012. Comparison of effectiveness of different implementations of heuristic forest harvest scheduling search procedures with different number of decision choices simultaneously changed per move. In: Luangpaiboo, P., Moz, M., and Dedoussis, V (eds). *Lecture Notes in Management Science* 4: 179 – 183. ISSN 2008-0050. <http://www.tadbir.ca/lnms/archive/v4/lnmsv4p179.pdf>
- Garcia-Gonzalo, J., Palma, J., Freire, J., Tomé, M., Mateus, R., Rodriguez, L.C.E., Bushenkov, V. and Borges, J.G. 2013. A decision support system for a multi stakeholder’s decision process in a Portuguese National Forest. *Forest Systems* 22: 359-373. DOI <http://dx.doi.org/10.5424/fs/2013222-03793>
- Garcia-Gonzalo, J., Pukkala, T., Borges, J. G. 2014. Integrating fire risk in stand management scheduling. An application to Maritime pine stands in Portugal. *Annals of Operations Research* 219(1). 379-395 DOI: <http://dx.doi.org/10.1007/s10479-011-0908-1>
- Garcia-Gonzalo, J., S. Marques S., J. G. Borges, B. Botequim, M. M. Oliveira, J. Tomé, and M. Tomé. 2011. A three-step approach to post-fire mortality modeling in Maritime pine (*Pinus pinaster* Ait.) stands for enhanced forest planning in Portugal. *Forestry* 84: 197-206 DOI: <http://dx.doi.org/10.1093/forestry/CPR006>
- Garcia-Gonzalo, J., V.A. Bushenkov, M. E. McDill and Borges, J. G. 2015 A decision support system for assessing trade-offs between ecosystem management goals. An application in Portugal. *Forests* 6: 65-87 DOI: <http://dx.doi.org/10.3390/f6010065>
- Gonzalez-Gonzalez, Borja D.; Sixto, Hortensia; Alberdi, Iciar; Esteban, Luis; Guerrero, Silvia; Pasalodos, Maria; Vazquez, Antonio; Cañellas, Isabel (2017). Estimation of shrub biomass availability along two geographical transects in the Iberian Peninsula for energy purposes. *BIOMASS & BIOENERGY* 105. doi:10.1016/j.biombioe.2017.07.011
- Lines, Emily R.; Zavala, Miguel A.; Purves, Drew W.; Coomes, David A. (2012). Predictable changes in aboveground allometry of trees along gradients of temperature, aridity and competition. *GLOBAL ECOLOGY AND BIOGEOGRAPHY* 21. doi:10.1111/j.1466-8238.2011.00746.x

- Linkevičius, E., J. G. Borges, M. Doyle, H. Pülzl, E.-M. Nordström, H. Vacik, V. Brukas, P. Biber, M. Teder, P. Kaimre, M. Synek, J. Garcia-Gonzalo 2019 Linking forest policy issues and decision support tools in Europe *Forest Policy and Economics* 103: 4-16
<https://doi.org/10.1016/j.forpol.2018.05.014>
- Madrigal, Javier; Hernando, Carmen; Guijarro, Mercedes (2013). A new bench-scale methodology for evaluating the flammability of live forest fuels. *JOURNAL OF FIRE SCIENCES* 31.
doi:10.1177/0734904112458244
- Madureira, L., L. C. Nunes, J. G. Borges and A. O. Falcão. 2011. Assessing forest management strategies using a contingent valuation approach and advanced visualisation techniques: A Portuguese case study. *Journal of Forest Economics* 17: 335-432. DOI:
<http://dx.doi.org/10.1016/j.jfe.2011.04.001>
- Makela, Annikki; del Rio, Miren; Hynynen, Jari; Hawkins, Michael J.; Reyer, Christopher; Soares, Paula; van Oijen, Marcel; Tome, Margarida (2012). Using stand-scale forest models for estimating indicators of sustainable forest management. *FOREST ECOLOGY AND MANAGEMENT* 285.
doi:10.1016/j.foreco.2012.07.041
- Manso, Ruben; Calama, Rafael; Madrigal, Guillermo; Pardos, Marta (2013). A silviculture-oriented spatio-temporal model for germination in *Pinus pinea* L. in the Spanish Northern Plateau based on a direct seeding experiment. *EUROPEAN JOURNAL OF FOREST RESEARCH* 132.
doi:10.1007/s10342-013-0724-z
- Manso, Ruben; Calama, Rafael; Pardos, Marta; Fortin, Mathieu (2018). A maximum likelihood estimator for left-truncated lifetimes based on probabilistic prior information about time of occurrence. *JOURNAL OF APPLIED STATISTICS* 45. doi:10.1080/02664763.2017.1410527
- Manso, Ruben; Fortin, Mathieu; Calama, Rafael; Pardos, Marta (2013). Modelling seed germination in forest tree species through survival analysis. The *Pinus pinea* L. case study. *FOREST ECOLOGY AND MANAGEMENT* 289. doi:10.1016/j.foreco.2012.10.028
- Manso, Ruben; Pardos, Marta; Calama, Rafael (2014). 'Climatic factors control rodent seed predation in *Pinus pinea* L. stands in Central Spain'. *ANNALS OF FOREST SCIENCE* 71. doi:10.1007/s13595-014-0396-y
- Manso, Ruben; Pardos, Marta; Keyes, Christopher R.; Calama, Rafael (2012). Modelling the spatio-temporal pattern of primary dispersal in stone pine (*Pinus pinea* L.) stands in the Northern Plateau (Spain). *ECOLOGICAL MODELLING* 226. doi:10.1016/j.ecolmodel.2011.11.028
- Manso, Ruben; Pukkala, Timo; Pardos, Marta; Miina, Jari; Calama, Rafael (2014). Modelling *Pinus pinea* forest management to attain natural regeneration under present and future climatic scenarios. *CANADIAN JOURNAL OF FOREST RESEARCH* 44. doi:10.1139/cjfr-2013-0179
- Marques M., N. Juerges, J. G. Borges 2020 Appraisal framework for actor interest and power analysis in forest management - Insights from Northern Portugal *Forest Policy and Economics* 111
<https://doi.org/10.1016/j.forpol.2019.102049>

- Marques, A. F., Borges, J. G., Garcia-Gonzalo, J., Lucas, B. and Melo, I. 2013. A participatory approach to design a toolbox to support forest management planning at regional level. *Forest Systems* 22: 340-358. DOI <http://dx.doi.org/10.5424/fs/2013222-03120>
- Marques, A., J. G. Borges, P. Sousa and A. M. Pinho 2011. An enterprise architecture approach to forest management decision support design. An application to pulpwood supply management in Portugal. *European Journal of Forest Research* 30: 935-948. DOI: <http://dx.doi.org/10.1007/s10342-011-0482-8>
- Marques, S, M. Marto, V.A. Bushenkov, M. E. McDill and J. G. Borges 2017 Addressing Wildfire Risk in Forest Management Planning with Multiple Criteria Decision Making Methods. *Sustainability*, 2017, 9, 298, (<http://dx.doi.org/10.3390/su9020298>)
- Marques, S., Botequim, B., Garcia-Gonzalo, J., Borges, J. G., Tomé, M., Oliveira M. M. 2012. Assessing wildfire risk probability in *Pinus pinaster* Ait. stands in Portugal. *Forest Systems* 21: 111-120. DOI: <http://dx.doi.org/10.5424/fs/2112211-11374>
- Marques, S., J. G. Borges, J. Garcia-Gonzalo, F. Moreira, J.M.B. Carreiras, JM. M. Oliveira, A. Cantarinha, B. Botequim and J. M. C. Pereira. 2011. Characterization of wildfires in Portugal. *European Journal of Forest Research* 130: 775-784 DOI: <http://dx.doi.org/10.1007/s10342-010-0470-4>
- Marques, S., J. Garcia-Gonzalo, J. G. Borges, B. Botequim, M. M. Oliveira, J. Tomé and M. Tomé. 2011. Developing post-fire *Eucalyptus globulus* Labill stand damage and tree mortality models for enhanced forest planning in Portugal. *Silva Fennica* 45: 69-83. <http://www.metla.fi/silvafennica/full/sf45/sf451069.pdf>
- Marques, S., V. A. Bushenkov, A. V. Lotov, M. Marto and J. G. Borges 2020 Bi-level participatory forest management planning supported by Pareto frontier visualization *Forest Science* <https://doi.org/10.1093/forsci/fxz014>
- Marto, M., K. M. Reynolds, J. G. Borges, V. A. Bushenkov and S. Marques 2018 Combining Decision Support Approaches for Optimizing the Selection of Bundles of Ecosystem Services. *Forests* 2018, 9, 438; <http://doi.org/10.3390/f9070438>
- Marto, M., K. M. Reynolds, J. G. Borges, V. A. Bushenkov, S. Marques, M. Marques, S. Barreiro, B. Botequim and M. Tomé 2019. Web-Based Forest Resources Management Decision Support System. *Forests* 10, 1079, <https://doi.org/10.3390/f10121079>
- Mayoral, Carolina; Calama, Rafael; Sanchez-Gonzalez, Mariola; Pardos, Marta (2015). Modelling the influence of light, water and temperature on photosynthesis in young trees of mixed Mediterranean forests. *NEW FORESTS* 46. doi:10.1007/s11056-015-9471-y
- Merganicova K., Merganic J., Lehtonen A., Vacchiano G., Ostrogovic Sever M., Augustynczyk A., Grote R., Kyselova I., Makela A., Yousefpour R., Krejza J., Collalti A., Reyer C. (2019) Forest carbon allocation modelling under climate change. *Tree Physiology*, 39:1937–1960.
- Mina, Marco; Bugmann, Harald; Cordonnier, Thomas; Irauschek, Florian; Klopčič, Matija; Pardos, Marta; Cailleret, Maxime (2017). Future ecosystem services from European mountain forests under climate change. *JOURNAL OF APPLIED ECOLOGY* 54. doi:10.1111/1365-2664.12772

- Mora, J. V.; del Rio, M.; Bravo-Oviedo, A. (2012). Dynamic growth and yield model for Black pine stands in Spain. *FOREST SYSTEMS* 21. doi:10.5424/fs/2012213-02722
- Moreno-Fernandez, Daniel; Cañellas, Isabel; Calama, Rafael; Gordo, Javier; Sanchez-Gonzalez, Mariola (2013). Thinning increases cone production of stone pine (*Pinus pinea* L.) stands in the Northern Plateau (Spain). *ANNALS OF FOREST SCIENCE* 70. doi:10.1007/s13595-013-0319-3
- Nobre, S. R., J. G. Borges, L. Diaz-Balteiro, L. C. E. Rodriguez, H. C. von Glehn and M. J. Zakia 2019 A generalizable monitoring model to implement policies to promote forest restoration – A case study in São Paulo – Brazil. *Forest Policy and Economics* 103: 123-135
<https://doi.org/10.1016/j.forpol.2018.03.001>
- Nordström, E.-M., M. Nieuwenhuis, E. Z. Başkent, P. Biber, K. Black, J. G. Borges, M. N. Bugalho, G. Corradini, E. Corrigan, L.-O. Eriksson, A. Felton, N. Forsell, G. Hengeveld, M. Hoogstra-Klein, U. Karahalil, I. Lodin, A. Korosuo, M. Lindbladh, A. Lundholm, M. Marto, M. Masiero, G. Mozgeris, D. Pettenella, W. Poschenrieder, R. Sedmak, J. Tucek and D. Zoccatelli 2019 Forest decision support systems for analysis of ecosystem services provisioning at landscape scale under global climate and market change scenarios *European Journal of Forest Research* 138: 561-581
<https://doi.org/10.1007/s10342-019-01189-z>
- Orazio, C., R. C. Montoya, M. Régolini, J. G. Borges, J. Garcia-Gonzalo, S. Barreiro, B. Botequim, S. Marques, R. Sedmák, R. Smrecek, Y. Brodrechtová, V. Brukas, G. Chirici, M. Marchetti, R. Moshammer, P. Biber, E. Corrigan, L-O Eriksson, M. Favero, E. Galev, G. M. Hengeveld, M. Kavaliauskas, G. Mozgeris, R. Navrátil, M. Nieuwenhuis, I. Paligorov, D. Pettenella, A. Stanislovaitytis, M. Tomé, R. Trubins, J. Tucek, M. Vizzarri, I. Wallin, H. Pretzsch and O. Sallnäs 2017 Decision Support Tools and Strategies to Simulate Forest Landscape Evolutions Integrating Forest Owner Behaviour: A Review from the Case Studies of the European Project, *INTEGRAL Sustainability* 2017, 9, 599 <https://doi.org/10.3390/su9040599>
- Ovando, Paola; Campos, Pablo; Calama, Rafael; Montero, Gregorio (2010). Landowner net benefit from Stone pine (*Pinus pinea* L.) afforestation of dry-land cereal fields in Valladolid, Spain. *JOURNAL OF FOREST ECONOMICS* 16. doi:10.1016/j.jfe.2009.07.001
- Pacheco, A. P., J. Claro, P. M. Fernandes, R. de Neufville, T. M. Oliveira, J. G. Borges and J. C. Rodrigues 2015. Cohesive fire management within an uncertain environment: A review of risk handling and decision support systems. *Forest Ecology and Management* 347: 1-17 DOI:
<http://dx.doi.org/10.1016/j.foreco.2015.02.033>
- Palma, J. H. N., J. A. Paulo, S. P. Faias, J. Garcia-Gonzalo, J. G. Borges, and M. Tomé 2015 Adaptive management and debarking schedule optimization of *Quercus suber* L. stands under climate change. Case study in Chamusca, Portugal. *Regional Environmental Change* 15: 1569-1580
<http://dx.doi.org/10.1007/s10113-015-0818-x>
- Pardos, Marta; Calama, Rafael; Maroschek, Michael; Rammer, Werner; Lexer, Manfred J. (2015). A model-based analysis of climate change vulnerability of *Pinus pinea* stands under multiobjective management in the Northern Plateau of Spain. *ANNALS OF FOREST SCIENCE* 72. doi:10.1007/s13595-015-0520-7

- Pardos, Marta; Perez, Susana; Calama, Rafael; Alonso, Rafael; Lexer, Manfred J. (2017). Ecosystem service provision, management systems and climate change in Valsain forest, central Spain. REGIONAL ENVIRONMENTAL CHANGE 17. doi:10.1007/s10113-016-0985-4
- Pasalodos-Tato M., A. Mäkinen, J. Garcia-Gonzalo, J. G. Borges, T. Lämås and LO Eriksson. 2013 Assessing uncertainty and risk in forest planning and decision support systems: review of classical methods and introduction of innovative approaches. Forest Systems 22: 282-303. DOI: <http://dx.doi.org/10.5424/fs/2013222-03063>
- Pasalodos-Tato, M.; Pukkala, T.; Calama, R.; Cañellas, I.; Sanchez-Gonzalez, M. (2016). Optimal management of Pinus pinea stands when cone and timber production are considered. EUROPEAN JOURNAL OF FOREST RESEARCH 135. doi:10.1007/s10342-016-0958-7
- Pastorella F., Borges, J. G., De Meo I. 2016 Usefulness and Perceived Usefulness of Decision Support Systems (DSSs) in participatory forest planning: the final users' point of view. iForest - Biogeosciences and Forestry 9: 422-429 <http://dx.doi.org/10.3832/ifor1356-008>
- Pereira, Santiago; Prieto, Antonio; Calama, Rafael; Diaz-Balteiro, Luis (2015). Optimal management in Pinus pinea L. stands combining silvicultural schedules for timber and cone production. SILVA FENNICA 49. doi:
- Petter G., Mairota P., Albrich K., Bebi P., Brūna J., Bugmann H., Haffenden A., Scheller R., Schmatz D., Seidl R., Speich M., Vacchiano G., Lischke H. (2020). How robust are future projections of forest landscape dynamics? Insights from a systematic comparison of four forest landscape models. Environmental Modeling and Software, accepted for publication.
- Pique-Nicolau, M.; del-Rio, M.; Calama, R.; Montero, G. (2011). Modelling silviculture alternatives for managing Pinus pinea L. forest in North-East Spain. FOREST SYSTEMS 20. doi:10.5424/fs/2011201-8464
- Pretzsch, Hans; del Rio, Miren (2020). Density regulation of mixed and mono-specific forest stands as a continuum: a new concept based on species-specific coefficients for density equivalence and density modification. FORESTRY 93. doi:10.1093/forestry/cpz069
- Rammer W, C. Schauflinger, H. Vacik, J. H.N. Palma, J. Garcia-Gonzalo, J. G. Borges and M. J. Lexer 2014 A web-based ToolBox approach to support adaptive forest management under climate change Scandinavian Journal of Forest Research 29, Suppl. No. 1: 96-107. DOI: <http://dx.doi.org/10.1080/02827581.2013.851277>
- Reyer, C. P. O., S. Bathgate, K. Blennow, J. G. Borges, H. Bugmann, S. Delzon, S. P. Faias, J. Garcia-Gonzalo, B. Gardiner, J. R. Gonzalez-Olabarria, C. Gracia, J. G. Hernández, S. Kellomäki, K. Kramer, M. J. Lexer, M. Lindner, E. M., M. Maroschek, B. Muys, B. Nicoll, M. Palahi, J. H. N. Palma, J. A. Paulo, H. Peltola, T. Pukkala, W. Rammer, D. Ray, S. Sabaté, M.-J. Schelhaas, R. Seidl, C. Temperli, M. Tomé, R. Yousefpour, N. E. Zimmermann, M. Hanewinkel 2017 Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests? Environmental Research Letters 12(3) <https://doi.org/10.1088/1748-9326/aa5ef1>

- Riofrio, Jose; del Rio, Miren; Maguire, Douglas A.; Bravo, Felipe (2019). Species Mixing Effects on Height-Diameter and Basal Area Increment Models for Scots Pine and Maritime Pine. *FORESTS* 10. doi:10.3390/f10030249
- Rodrigues, A. R. M., B. Botequim, C. Tavares, P. Pécurto, J. G. Borges 2020 Addressing soil protection concerns in forest ecosystem management under climate change *Forest Ecosystems* (in press)
- Rodriguez-Garcia, Aida; Antonio Martin, Juan; Lopez, Rosana; Mutke, Sven; Pinillos, Felix; Gil, Luis (2015). Influence of climate variables on resin yield and secretory structures in tapped *Pinus pinaster* Ait. in central Spain. *AGRICULTURAL AND FOREST METEOROLOGY* 202. doi:10.1016/j.agrformet.2014.11.023
- Rojo-Alboreca, Alberto; Garcia-Villabrille, Juan D.; Corral-Rivas, Jose J.; Alia, Ricardo; Montero, Gregorio (2017). A new approach to defining rotation ages on the basis of productive and technological aspects. Application to natural *Pinus sylvestris* L. stands in Central Spain. *FOREST SYSTEMS* 26. doi:10.5424/fs/2017262-10628
- Rubio-Cuadrado, Alvaro; Bravo-Oviedo, Andres; Mutke, Sven; Del Rio, Miren (2018). Climate effects on growth differ according to height and diameter along the stem in *Pinus pinaster* Ait.. *IFOREST-BIOGEOSCIENCES AND FORESTRY* 11. doi:10.3832/ifor2318-011
- Ruiz-Benito P., Vacchiano G., Lines E.R., Reyer C.P.O., Ratcliffe S., Morin X., Hartig F., Makela A., Yousefpour R., Chaves J., Palacios A., Benito-Garzón M., Morales-Molino C., Camarero J.J., Jump A.S., Kattge J., Lehtonen A., Ibrom A., Owen H.J.F., Zavala M.A. (2019) Available and missing data to model impact of climate change on European forests. *Ecological Modelling*, 416: 108870.
- Ruiz-Peinado, R.; del Rio, M.; Montero, G. (2011). New models for estimating the carbon sink capacity of Spanish softwood species. *FOREST SYSTEMS* 20. doi:10.5424/fs/2011201-11643
- Ruiz-Peinado, R.; Montero, G.; del Rio, M. (2012). Biomass models to estimate carbon stocks for hardwood tree species. *FOREST SYSTEMS* 21. doi:10.5424/fs/2112211-02193
- Schelhaas M.J., Hengeveld G.M., Heidema N., Thürig E., Rohner B., Vacchiano G., Vayreda J., Redmond J., Socha J., Fridman J., Tomter S., Polley H. Barreiro S., Nabuurs G.J. (2018) Species-specific, pan-European diameter increment models based on data of 2.3 million trees. *Forest Ecosystems*, 5: 21.
- Schneider, Robert; Calama, Rafael; Martin-Ducup, Olivier (2020). Understanding Tree-to-Tree Variations in Stone Pine (*Pinus pinea* L.) Cone Production Using Terrestrial Laser Scanner. *Remote Sensing* . doi:10.3390/rs12010173
- Serra-Varela, Maria Jesus; Alia, Ricardo; Portoles, Javier; Gonzalo, Julian; Soliño, Mario; Grivet, Delphine; Raposo, Rosa (2017). Incorporating exposure to pitch canker disease to support management decisions of *Pinus pinaster* Ait. in the face of climate change. *PLOS ONE* 12. doi:10.1371/journal.pone.0171549

- Sghaier, T.; Tome, M.; Tome, J.; Sanchez-Gonzalez, M.; Cañellas, I.; Calama, R. (2013). Distance-independent individual tree diameter-increment model for Thuya [Tetraclinis articulata (VAHL.) MAST.] stands in Tunisia. *FOREST SYSTEMS* 22. doi:10.5424/fs/2013223-03511
- Sghaier, Tahar; Cañellas, Isabel; Calama, Rafael; Sanchez-Gonzalez, Mariola (2016). Modelling diameter distribution of Tetraclinis articulata in Tunisia using normal and Weibull distributions with parameters depending on stand variables. *IFOREST-BIOGEOSCIENCES AND FORESTRY* 9. doi:10.3832/ifor1688-008
- Sghaier, Tahar; Sanchez-Gonzalez, Mariola; Garchi, Salah; Ammari, Youssef; Cañellas, Isabel; Calama, Rafael (2016). Developing a stand-based growth and yield model for Thuya (Tetraclinis articulata (Vahl) Mast) in Tunisia. *IFOREST-BIOGEOSCIENCES AND FORESTRY* 9. doi:10.3832/ifor1389-008
- Vacchiano G., Magnani F., Collalti A. (2012). Modeling Italian forests: state of the art and future challenges. *iForest* 5:113-120
- Vacchiano G., Motta R., Bovio G., Ascoli D. (2014). Calibrating and testing the Forest Vegetation Simulator to simulate tree encroachment and control measures for heathland restoration in Southern Europe. *Forest Science*, 60:241-252
- Vacik, H., J. G. Borges, J. Garcia-Gonzalo and L-O. Eriksson. 2015. Decision Support for the Provision of Ecosystem Services under Climate Change: An Editorial. *Forests* 6: 3212-3217; <http://dx.doi.org/10.3390/f6093212>
- Vergarechea, Marta; Calama, Rafael; Fortin, Mathieu; del Rio, Miren (2019). Climate-mediated regeneration occurrence in Mediterranean pine forests: A modeling approach. *FOREST ECOLOGY AND MANAGEMENT* 446. doi:10.1016/j.foreco.2019.05.023
- Vizcaino-Palomar, Natalia; Garzon, Marta Benito; Alia, Ricardo; Giovannelli, Guia; Huber, Gerhard; Mutke, Sven; Pastuszka, Patrick; Raffin, Annie; Sbay, Hassan; Seho, Muhidin; Vauthier, Denis; Fady, Bruno (2019). Geographic variation of tree height of three pine species (*Pinus nigra* Arn., *P. pinaster* Aiton, and *P. pinea* L.) gathered from common gardens in Europe and North-Africa. *ANNALS OF FOREST SCIENCE* 76. doi:10.1007/s13595-019-0867-2
- Vizcaino-Palomar, Natalia; Gomez-Aparicio, Lorena; Pavon-Garcia, Javier; Bartolome-Esteban, Carmen; Alvarez-Jimenez, Julio; Zavala, Miguel A. (2014). Main biotic drivers of tree growth in a developing *Juniperus thurifera* stand in central Spain. *EUROPEAN JOURNAL OF FOREST RESEARCH* 133. doi:10.1007/s10342-014-0826-2
- Yousefpour, R., C. Temperli, J. B. Jacobsen, B. J. Thorsen, H. Meilby, M. J. Lexer, M. Lindner, H. Bugmann, J. G. Borges, J. H. N. Palma, D. Ray, N. E. Zimmermann, S. Delzon, A. Kremer, K. Kramer, C. P. O. Reyer, P. Lasch-Born, J. Garcia-Gonzalo, and M. Hanewinkel. 2017. A framework for modeling adaptive forest management and decision making under climate change. *Ecology and Society* 22(4):40. <https://doi.org/10.5751/ES-09614-220440>