

## СПИСЪК НА ЦИТИРАНИТЕ ПУБЛИКАЦИИ

на гл. ас. д-р Николай Георгиев Зафиров

представени за участие в конкурса за заемане на академичната длъжност „доцент“ към катедра „Патология на растенията и химия“, област на висше образование 6. Аграрни науки и ветеринарна медицина, професионално направление 6.5. Горско стопанство, научна специалност „Лесомелиорации, защита на горите и специални ползвания в горите“, по дисциплината „Основи на растителната защита“, обявен в Държавен вестник, бр. 102 от 08.12.2023 г.

Код на процедурата: ELA-AsP-1123-118.

**Забележки:** 1. Номерацията на разделите и публикациите е в съответствие с Приложение 2 – Оценка на съответствието с МНИ

2. В настоящата справка са представени всички установени цитирания към момента. В справката на минималните национални изисквания са посочени като брой и съответните точки по-малък брой цитирания, покриващи и надвишаващи МНИ.

3. Цитатите могат да се видят в електронните бази данни **Web of Science** и **ResearchGate**.

### 1. В монография, издадена в чужбина

**B4.9.** Battipaglia G., F. Campelo, J. Vieira, M. Grabner, V. De Micco, C. Nabais, P. Cherubini, M. Carrer, A. Bräuning, K. Cufar, A. Di Filippo, I. García-González, M. Koprowski, M. Klisz, A. V. Kirilyanov, **N. Zafirov**, M. de Luis, 2016. Structure and Function of Intra–Annual Density Fluctuations: Mind the Gaps. *Frontiers in Plant Science*, vol. 7, ISSN: 1664-462X, article 595

#### цитирана в:

1. Andreu-Hayles L., M. Lévesque, R. Guerrieri, R.T.W. Siegwolf, C. Körner. 2022. Limits and Strengths of Tree-Ring Stable Isotopes [pp. 399-428]. In: Siegwolf R.T.W., J.R. Brooks, J. Roden, M. Saurer (eds.). *Stable Isotopes in Tree Rings*. *Tree Physiology*, 8. Springer, Cham, 773+ xxi pp. [https://doi.org/10.1007/978-3-030-92698-4\\_14](https://doi.org/10.1007/978-3-030-92698-4_14), ISBN: 978-3-030-92698-4 (Online), ISBN: 978-3-030-92697-7 (Print)
2. Frank D., K. Fang, P. Fonti. 2022. Dendrochronology: Fundamentals and Innovations [pp. 21-59]. In: Siegwolf R.T.W., J.R. Brooks, J. Roden, M. Saurer (eds.). *Stable Isotopes in Tree Rings*. *Tree Physiology*, 8. Springer, Cham, 773+ xxi pp. [https://doi.org/10.1007/978-3-030-92698-4\\_14](https://doi.org/10.1007/978-3-030-92698-4_14), ISBN: 978-3-030-92698-4 (Online), ISBN: 978-3-030-92697-7 (Print)

### 2. В монография, издадена в България

**B4.8.** Bräuning A., M. De Ridder, **N. Zafirov**, I. García-González, D. P. Dimitrov, H. Gärtner, 2016. Tree-ring features: Indicators of extreme event impacts.

**цитирана в:**

3. Панайотов, М., Н. Цветанов, А. Иванова, В. Шишкова, 2016. Дендрохронологични проучвания на растежа на основните иглолистни дървесни видове в Българските планински гори. В: М. Панайотов, П. Беби, С. Юруков (ред.). Планински иглолистни гори на България – структура и природна динамика. Лесотехнически университет, Геософт, София, с. 115–138.

**A1.1. Зафиров Н., 2008.** Основни фитопатологични стресори в култури от бял бор (*Pinus sylvestris* L.) за Югозападна България. Дисертация за присъждане на образователна и научна степен “доктор” по научна специалност “Лесомелиорация, защита на горите и специални ползвания в горите” (Горска фитопатология). Лесотехнически университет, Катедра „Патология на растенията и химия”, 146 с.

**цитирана в:**

4. Попов, Г., Г. Костов, И. Марков, Й. Додев, Д. Георгиева, 2018. Иглолистните култури в България създадени извън естествения ареал. Изд-во Авангард Прима, София, 122 с.

**3. В статия от списание с импакт фактор (IF – Web of Science) или импакт ранг (SJR – Scopus)**

**B4.5. Zafirov, N., G. Kostov, 2019.** Main stress factors in coppice oak forests in Western Bulgaria. *Silva Balcanica*, vol. 20 (1), ISSN: 1311-8706 (print), pp. 37–51

**цитирана в:**

5. Tsavkov E., N. Tsvetanov, V. Shishkova, M. Panayotov. 2022. First dendrochronological studies of *Quercus protoroburoides*. *Dendrochronologia*, 75, article 125984. <https://doi.org/10.1016/j.dendro.2022.125984>, ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online) (2021 IF 3.071, SJR 0.822, Q1 Plant Science)
6. Šimková, M., S. Vacek, V. Šimunek, Z. Vacek, J. Cukor, V. Hájek, L. Bílek, A. Prokúpková, I. Štefančík, Z. Sitková, I. Lukáčik, 2023. Turkey Oak (*Quercus cerris* L.) Resilience to Climate Change: Insights from Coppice Forests in Southern and Central Europe. *Forests*, 14, article 2403 (2022 IF 2.9, SJR 0.65, Q1 Forestry)

**B4.8. Bräuning A., M. De Ridder, N. Zafirov, I. García-González, D. P. Dimitrov, H. Gärtner, 2016.** Tree-ring features: Indicators of extreme event impacts. *IAWA Journal*, vol. 37 (2), ISSN: 0928-1541 (print), 2294-1932 (electronic), pp. 206–231

**цитирана в:**

7. Copini P, den Ouden J, Robert EMR, Tardif JC, Loesberg WA, Goudzwaard L, Sass-Klaassen U (2016) Flood-Ring Formation and Root Development in Response to Experimental Flooding of Young *Quercus robur* Trees. *Front. Plant Sci.* 7:775. doi: 10.3389/fpls.2016.00775
8. Baas, P., H. Beeckman, K. Čufar, V. De Micco, 2016. Functional Traits in Wood Anatomy. *IAWA Journal*, 37 (2), pp. 124–126.
9. Beeckman, H., 2016. Wood anatomy and trait-based ecology. *IWA Journal*, 37 (2), pp. 127–151.
10. Kitin, P., R. Funada, 2016. Earlywood vessels in ring-porous trees become functional for water transport after bud burst and before the maturation of the current-year leaves. *IAWA Journal*, 37 (2), pp. 315–331.
11. Novak, K., M. De Luis, J. Gričar, P. Prislan, M. Merela, K. T. Smith, K. Čufar, 2016. Missing and dark rings associated with drought in *Pinus halepensis*. *IAWA Journal* 37 (2), pp. 260–274.
12. Mason Ch. J., C. Villari, K. Keefover-Ring, S. Jagemann, J. Zhu, P. Bonello, K. F. Raffa. 2017. Spatial and temporal components of induced plant responses in the context of herbivore life history and impact on host. - *Functional Ecology*, 31 (11): 2034-2050.
13. Prendin A. L., G. Petit, M. Carrer, P. Fonti, J. Björklund, G. von Arx. 2017. New research perspectives from a novel approach to quantify tracheid wall thickness. - *Tree Physiology*, 37 (7): 976-983.
14. Príncipe A., E. van der Maaten, M. van der Maaten-Theunissen, Th. Struwe, M. Wilmking, J. Kreyling. 2017. Low resistance but high resilience in growth of a major deciduous forest tree (*Fagus sylvatica* L.) in response to late spring frost in southern Germany. – *Trees - Structure and Function*, 31 (2): 743-751.
15. Carlquist S. 2017. Conifer tracheids resolve conflicting structural requirements: Data, hypotheses, questions. - *Journal of the Botanical Research Institute of Texas*, 11: 123-141.
16. Appleton, SN; St George, S, 2018. High-elevation mountain hemlock growth as a surrogate for cool-season precipitation in Crater Lake National Park, USA. *Dendrochronologia*, Volume: 52, Pages: 20-28.
17. Palmer, JG; Turney, CSM; Fogwill, C; Fenwick, P; Thomas, Z; Lipson, M; Jones, RT; Beaven, B; Richardson, SJ; Wilmshurst, JM, 2018. Growth response of an invasive alien species to climate variations on subantarctic Campbell Island. *New Zealand Journal of Ecology*, Volume: 42, Issue: 1, Pages: 31-39.
18. Rahman, MH, WD Nugroho, S Nakaba, P Kitin, K Kudo, Y Yamagishi, S Begum, SN Marsoem, R Funada, 2019. Changes in cambial activity are related to precipitation patterns in four tropical hardwood species grown in Indonesia. *American journal of botany*, vol. 106 (6), pp 760–771.
19. Klisz, M, J Ukalska, M Koprowski, A Tereba, R Puchalka, P Przybylski, S Jastrzebowski, C Nabais, 2019. Effect of provenance and climate on intra-annual density fluctuations of Norway spruce *Picea abies* (L.) Karst. in Poland. *Agricultural and forest meteorology*, vol. 269, pp 145–156.
20. Zielonka, A, D Wronska-Walach, 2019. Can we distinguish meteorological conditions associated with rockfall activity using dendrochronological analysis? - An example from the Tatra Mountains (Southern Poland). *Science of the total environment*, vol. 662, pp 422–433.
21. Vezzola, LC, M Michelozzi, L Calamai, P Gonthier, L Giordano, P Cherubini, M Pelfini, 2019. Tree-ring volatile terpenes show potential to indicate fungal infection in asymptomatic mature Norway spruce trees in the Alps. *Forestry*, vol. 92 (2), pp 149–156.

22. Myskow, E, M Blas, M Sobik, M Godek, P Owczarek, 2019. The effect of pollutant fog deposition on the wood anatomy of subalpine Norway spruce. *European journal of forest research*, vol. 138 (2), pp 187–201.
23. Slupianek, A, B Wojtun, E Myskow, 2019. Origin, activity and environmental acclimation of stem secondary tissues of the polar willow (*Salix polaris*) in high-Arctic Spitsbergen. *Polar biology*, vol. 42 (4), pp 759–770.
24. Aragao, JRV, P Groenendijk, CS Lisi, 2019. Dendrochronological potential of four neotropical dry-forest tree species: Climate-growth correlations in northeast Brazil. *Dendrochronologia*, vol. 53, pp 5–16.
25. Helama, S, P Saranpaa, CL Pearson, L Arppe, J Holopainen, H Makinen, K Mielikainen, P Nojd, R Sutinen, JP Taavitsainen, M Timonen, J Uusitalo, M Oinonen, 2019. Frost rings in 1627 BC and AD 536 in subfossil pinewood from Finnish Lapland. *Quaternary science reviews*, vol. 204, pp 208–215.
26. Zhang H.L., H.M. Shang, F. Chen, Y.P. Chen, S.L. Yu, T.W. Zhang. 2020. A 422-Year Reconstruction of the Kaiken River Streamflow, Xinjiang, Northwest China. – *Atmosphere*, 11 (10), article 1100. DOI 10.3390/atmos11101100. ISSN: 2073-4433 (Online)
27. Tardif J.C., M.W. Salzer, F. Conciatori, A.G. Bunn, M.K. Hughes. 2020. Formation, structure and climatic significance of blue rings and frost rings in high elevation bristlecone pine (*Pinus longaeva* DK Bailey). – *Quaternary Science Reviews*, 244, article 106516. DOI 10.1016/j.quascirev.2020.106516. ISSN: 0277-3791 (Print), ISSN: 1873-457X (Online)
28. Hadad M., JC. Tardif, F. Conciatori, J. Waito, A. Westwood. 2020. Climate and atmospheric circulation related to frost-ring formation in *Picea mariana* trees from the Boreal Plains, interior North America. – *Weather and Climate Extremes*, 29, article 100264. DOI 10.1016/j.wace.2020.100264. ISSN: 2212-0947 (Online)
29. Pandey J., S.R. Sigdel, X.M. Lu, F. Salerno, B. Dawadi, E. Liang, J.J. Camarero. 2020. Early growing-season precipitation drives radial growth of alpine juniper shrubs in the central Himalayas. – *Geografiska Annaler: Series A, Physical Geography*, 102 (3): 317-330. DOI 10.1080/04353676.2020.1761097. ISSN: 0435-3676 (Print), ISSN: 1468-0459 (Online)
30. Raden M., A. Mattheis, H. Spiecker, R. Backofen, H.P. Kahle. 2020. The potential of intra-annual density information for crossdating of short tree-ring series. – *Dendrochronologia*, 60, article 125679. DOI 10.1016/j.dendro.2020.125679. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
31. Sebastian-Azcona J., U. Hacke, A. Hamann. 2020. Xylem Anomalies as Indicators of Maladaptation to Climate in Forest Trees: Implications for Assisted Migration. – *Frontiers in Plant Science*, 11, article 208. DOI 10.3389/fpls.2020.00208. ISSN: 1664-462X (Online)
32. Montagnoli A., B. Lasserre, G. Sferra, D. Chiatante, G.S. Scippa, M. Terzaghi, R.K. Dumroese. 2020. Formation of Annual Ring Eccentricity in Coarse Roots within the Root Cage of *Pinus ponderosa* Growing on Slopes. – *Plants*, 9 (2), article 181. DOI 10.3390/plants9020181. ISSN: 2223-7747 (Online)
33. Howard I.N., D.W. Stahle. 2020. Tree-Ring Reconstruction of Single-Day Precipitation Totals over Eastern Colorado. – *Monthly Weather Review*, 148 (2): 597-612. DOI 10.1175/MWR-D-19-0114.1. ISSN: 0027-0644 (Print), ISSN: 1520-0493 (Online)
34. Myskow E., K. Sokolowska, A. Slupianek, V. Gryc. 2021. Description of Intra-Annual Changes in Cambial Activity and Differentiation of Secondary Conductive Tissues of *Aesculus hippocastanum* Trees Affected by the Leaf Miner *Cameraria ohridella*. *Forests*, 12 (11), Article № 1537, DOI: 10.3390/f12111537, ISSN: 1999-4907 (Online)

35. Zhao S., Y. Jiang, Y. Wen, L. Jiao, W. Li, H. Xu, M. Ding. 2021. Frequent locally absent rings indicate increased threats of extreme droughts to semi-arid *Pinus tabuliformis* forests in North China. *Agricultural and Forest Meteorology*, 308, article 108601, DOI: 10.1016/j.agrformet.2021.108601, ISSN: 0168-1923 (Print), ISSN: 1873-2240 (Online)
36. Housset J.M., E.G. Toth, M.P. Girardin, F. Tremblay, R. Motta, Y. Bergeron, C. Carcaillet. 2021. Tree-rings, genetics and the environment: Complex interactions at the rear edge of species distribution range. *Dendrochronologia*, 69, Article № 125863, DOI: 10.1016/j.dendro.2021.125863, ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
37. Upadhyay K.K., S.K. Shah, A. Roy, S.K. Tripathi. 2021. Dendroclimatology of teak indicates prevailing climatic conditions of tropical moist forests in India. *Ecological Indicators*, 129, Article № 107888, DOI: 10.1016/j.ecolind.2021.107888, ISSN: 1470-160X (Print), ISSN: 1872-7034 (Online)
38. Jeong J., J. Barichivich, P. Peylin, V. Haverd, M.J. McGrath, N. Vuichard, M.N. Evans, F. Babst, S. Luyssaert. 2021. Using the International Tree-Ring Data Bank (ITRDB) records as century-long benchmarks for global land-surface models. *Geoscientific Model Development*, 14 (9): 5891-5913, DOI: 10.5194/gmd-14-5891-2021, ISSN: 1991-959X (Print), ISSN: 1991-9603 (Online)
39. King D.J., G.L. Harley, J.T. Maxwell, K.J. Heeter, B.J. Vandermyde, R.J. Cosgriff. 2021. Floodplain forest structure and the recent decline of *Carya illinoensis* (Wangenh.) K. Koch (northern pecan) at its northern latitudinal range margin, Upper Mississippi River System, USA. *Forest Ecology and Management*, 496, Article № 119454, DOI: 10.1016/j.foreco.2021.119454, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
40. Rozas V., A.I. Garcia-Cervigon, M. Garcia-Hidalgo, E. Rodriguez-Garcia, J.M. Olano. 2021. Living on the edge: Legacy of water availability on *Tetraclinis articulata* secondary growth under semiarid conditions in Morocco. *Dendrochronologia*, 68, Article № 125853, DOI: 10.1016/j.dendro.2021.125853, ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
41. Arni D., J. Gricar, J. Jevsenak, G. Bozic, G. von Arx, P. Prislan. 2021. Different Wood Anatomical and Growth Responses in European Beech (*Fagus sylvatica* L.) at Three Forest Sites in Slovenia. *Frontiers in Plant Science*, 12, Article № 669229, DOI: 10.3389/fpls.2021.669229, ISSN: 1664-462X (Print)
42. Lombardero M.J., F. Castedo-Dorado, M.P. Ayres. 2021. Extreme climatic events affect populations of Asian chestnut gall wasps, *Dryocosmus kuriphilus*, but do not stop the spread. *Agricultural and Forest Entomology*, 23 (4): 473-418, DOI: 10.1111/afe.12448, ISSN: 1461-9555 (Print), ISSN: 1461-9563 (Online)
43. Montiel M., M.E. Gonzalez, D.A. Christie, A.A. Munoz, C.M. Crisafulli. 2022. Direct effects of tephra fallout from the Puyehue-Cordon Caulle Volcanic Complex on *Nothofagus pumilio* ring widths in northern Patagonia. *Dendrochronologia*, 75, article 125998. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online) (2021 IF 3.071, SJR 0.822, Q1 Plant Science)
44. Zhang Y., H. Wang, X. Shao, J. Li, G. Ren. 2022. Extreme drought events diagnosed along the Yellow River and the adjacent area. *Climatic Change*, 173 (3-4), article 22. ISSN: 0165-0009 (Print), ISSN: 1573-1480 (Online) (2021 IF 5.174, SJR 1.357, Q1 Global and Planetary Change)
45. Munoz-Salazar T., C. LeQuesne, V. Rozas, D.A. Christie, M. Rojas-Badilla. 2022. Examining the potential of *Austrocedrus chilensis* tree rings as indicators of past late-spring frost events in central Chile. *Dendrochronologia*, 74, article 125962. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online) (2021 IF 3.071, SJR 0.822, Q1 Plant Science)
46. Vieira J., C. Nabais, F. Campelo. 2022. Dry and hot years drive growth decline of *Pinus halepensis* at its southern range limit in the Moroccan High Atlas Mountains. *Trees-structure and function*, 36 (5): 1585-1595. ISSN: 0931-1890 (Print), ISSN: 1432-2285 (Online), (2021 IF 2.888, SJR 0.658, Q1 Forestry)

47. Dolezych M., D. Mantzouka, L. Kunzmann. 2022. Cedroxylon shakhtnaense (Blokhina 2010) Dolezych, Mantzouka et L.Kunzmann comb. nov.; A fossil Abies wood from the late early Miocene Mastixioideae flora of Wiesa (east Germany). IAWA Journal, 43 (1-2): 136-163. ISSN: 0928-1541 (Print), ISSN: 2294-1932 (Online) (2021 IF 2.987, SJR 0.670, Q1 Forestry)
48. Gminska-Nowak B., A. Tiwari, T. Wazny. 2022. Gonpa Gang-The First Application of Dendrochronological Dating to Study the Traditional Architecture of Upper Mustang (Nepal). Forests, 13 (1), article 95. ISSN: 1999-4907 (Online) (2021 IF 3.282, SJR 0.623, Q1 Forestry)
49. Zwiazek, T; Luców, D; Popek, J; Klisz, M; Obremska, M; Sobechowicz, L; Solon, J; Slowinski, M; Przybylski, P; Tyburski, L; Zin, E; Jastrzebowski, S; Placzkowska, E; Pilch, K; Szewczyk, K; Konczal, AA; Rutkowski, P; Glowka, D; Swoboda, P, 2023. Addressing multiple perspectives in studying environmental changes in forest landscapes during the modernization period (18th-19th centuries). Anthropocene Review, DOI: 10.1177/20530196231205485, ISSN: 2053-0196, eISSN: 2053-020X
50. Helama, S, 2023. Frost rings as time markers in Northern Hemisphere tree-ring chronologies, with special reference to the 1627 BC and AD 536 events. Dendrochronologia, Volume: 81, Article Number: 126125, DOI: 10.1016/j.dendro.2023.126125, ISSN: 1125-7865, eISSN: 1612-0051
51. Hantemirov, R; Gorlanova, L; Bessonova, V; Hamzin, I; Kukarskih, V, 2023. A 4500-Year Tree-Ring Record of Extreme Climatic Events on the Yamal Peninsula. Forests, Volume: 14, Issue: 3, Article Number: 574, DOI: 10.3390/f14030574, eISSN: 1999-4907
52. Vejpustková, M; Cihák, T; Fiser, P, 2023. The increasing drought sensitivity of silver fir (Abies alba Mill.) is evident in the last two decades. Journal of Forest Science, Volume: 69, Issue: 2, Pages: 67-79, DOI: 10.17221/172/2022-JFS, ISSN: 1212-4834, eISSN: 1805-935X

**B4.9.** Battipaglia G., F. Campelo, J. Vieira, M. Grabner, V. De Micco, C. Nabais, P. Cherubini, M. Carrer, A. Bräuning, K. Cufar, A. Di Filippo, I. García-González, M. Koprowski, M. Klisz, A. V. Kirdyanov, **N. Zafirov**, M. de Luis, 2016. Structure and Function of Intra–Annual Density Fluctuations: Mind the Gaps. *Frontiers in Plant Science*, vol. 7, ISSN: 1664-462X, article 595

**цитирана в:**

53. Kurz-Besson, C.B., J.L. Lousada, M.J. Gaspar, I.E. Correia, T.S. David, P.M.M. Soares, R.M. Cardoso, A. Russo, F. Varino, C. Meriaux, R.M. Trigo, and C.M. Gouveia, 2016. Effects of Recent Minimum Temperature and Water Deficit Increases on *Pinus pinaster* Radial Growth and Wood Density in Southern Portugal. *Frontiers in Plant Science*, Volume: 7, Article Number: 1170, DOI: 10.3389/fpls.2016.01170
54. Rzepecki A., F. M. Thomas. 2017. A new Fiji-plugin for visualizing intra-annual density fluctuations and analyzing intra-annual theoretical volumetric flow rate fluctuations along wood cross-sections. - *Dendrochronologia*, 44: 58-65.
55. Belmecheri, S; Wright, WE; Szejner, P; Morino, KA; Monson, RK, 2018. Carbon and oxygen isotope fractionations in tree rings reveal interactions between cambial phenology and seasonal climate. *Plant Cell And Environment*, Volume: 41, Issue: 12, Pages: 2758-2772.
56. Fukatsu, E; Nakada, R, 2018. The timing of latewood formation determines the genetic variation of wood density in *Larix kaempferi*. *Trees-Structure And Function*, Volume: 32, Issue: 5, Pages: 1233-1245.

57. Khasanov, BF; Sandlerky, RB, 2018. Does insect induced defoliation affect anatomical structure of oak wood? *Dendrochronologia*, Volume: 51, Pages: 66-75.
58. Ehrlich, Y; Regev, L; Boaretto, E, 2018. Radiocarbon analysis of modern olive wood raises doubts concerning a crucial piece of evidence in dating the Santorini eruption. *Scientific Reports*, Volume: 8, Article Number: 11841.
59. Arzac, A; Rozas, V; Rozenberg, P; Olano, JM, 2018. Water availability controls *Pinus pinaster* xylem growth and density: A multi-proxy approach along its environmental range. *Agricultural And Forest Meteorology*, Volume: 250, Pages: 171-180.
60. Buntgen, U; Krusic, PJ, 2018. Non-traditional data and innovative methods for autumn climate change ecology. *Climate Research*, Volume: 75, Issue: 3, Pages: 215-220.
61. Kilpatrick, M, J Roberts, F Biondi, 2019. Fire history of an old-growth Ponderosa pine stand in the Sheep range, Desert national wildlife refuge, Nevada, USA. *Tree-ring research*, vol. 75 (2), pp 127–138.
62. Mrak, T, I Straus, T Grebenc, J Gricar, Y Hoshika, G Carriero, E Paoletti, H Kraigher, 2019. Different belowground responses to elevated ozone and soil water deficit in three European oak species (*Quercus ilex*, *Q.-pubescens* and *Q.-robur*). *Science of the total environment*, vol. 651, pp 1310–1320.
63. Belokopytova, LV, EA Babushkina, DF Zhirnova, IP Panyushkina, EA Vaganov, 2019. Pine and larch tracheids capture seasonal variations of climatic signal at moisture-limited sites. *Trees-structure and function*, vol. 33 (1), pp 227–242.
64. Antonucci, S, S Rossi, F Lombardi, M Marchetti, R Tognetti, 2019. Influence of climatic factors on silver fir xylogenesis along the Italian Peninsula. *IAWA journal*, vol. 40 (2), pp 259–S3.
65. Zhang J.Z., M.R. Alexander, X.H. Gou, A. Deslauriers, P. Fonti, F. Zhang, N. Pederson. 2020. Extended xylogenesis and stem biomass production in *Juniperus przewalskii* Kom. during extreme late-season climatic events. – *Annals of Forest Science*, 77 (4), article 99. DOI 10.1007/s13595-020-01008-1. ISSN: 1286-4560 (Print), ISSN: 1297-966X (Online)
66. Baroni C., M. Brunetti, R. Cerrato, A. Coppola, G. Betti, M.C. Salvatore. 2020. A long-term chronology of *Pinus pinea* L. from Parco della Versiliana (Pietrasanta, Italy) derived from treefall induced by a windstorm on March 4th-5th, 2015. – *Dendrochronologia*, 62, article 125710. DOI 10.1016/j.dendro.2020.125710. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
67. Ziaco E. 2020. A phenology-based approach to the analysis of conifers intra-annual xylem anatomy in water-limited environments. – *Dendrochronologia*, 59, article 125662. DOI 10.1016/j.dendro.2019.125662. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
68. Wang L., X. Gou, J. Xia, F. Wang, F. Zhang, J. Zhang. 2021. Research progress on cambial activity of trees and the influencing factors. *Chinese Journal of Applied Ecology*, 32 (10): 3761-3770, DOI: 10.13287/j.1001-9332.202110.022, ISSN: 1001-9332 (Print), ISSN: 1001-9332 (Online)
69. Gao J., B. Yang, X. Peng, S. Rossi. 2021. Tracheid development under a drought event producing intra-annual density fluctuations in the semi-arid China. *Agricultural and Forest Meteorology*, 308, Article № 108572, DOI: 10.1016/j.agrformet.2021.108572, ISSN: 0168-1923 (Print), ISSN: 1873-2240 (Online)
70. Babushkina E.A., D.R. Dergunov, L.V. Belokopytova, D.F. Zhirnova, K.K. Upadhyay, Sh.K. Tripathi, M.S. Zharkov, E.A. Vaganov. 2021. Non-linear Response to Cell Number Revealed and Eliminated From Long-Term Tracheid Measurements of Scots Pine in Southern Siberia. *Frontiers in Plant Science*, 12, Article № 719796, DOI: 10.3389/fpls.2021.719796, ISSN: 1664-462X (Print)
71. Morino K., R.L. Minor, G.A. Barron-Gafford, P.M. Brown, M.K. Hughes, R. Tognetti. 2021. Bimodal cambial activity and false-ring formation in conifers under a monsoon

- climate. *Tree Physiology*, 41 (10): 1893-1905, DOI: 10.1093/treephys/tpab045, ISSN: 0829-318X (Print), ISSN: 1758-4469 (Online)
72. Oberhuber W., A. Landlinger-Weilbold, D.M. Schroter. 2021. Triggering Bimodal Radial Stem Growth in *Pinus sylvestris* at a Drought-Prone Site by Manipulating Stem Carbon Availability. *Frontiers in Plant Science*, 12, Article № 674438, DOI: 10.3389/fpls.2021.674438, ISSN: 1664-462X (Print)
  73. Szejner P., S. Belmecheri, F. Babst, W.E. Wright, D.C. Frank, J. Hu, R.K. Monson. 2021. Stable isotopes of tree rings reveal seasonal-to-decadal patterns during the emergence of a megadrought in the Southwestern US. *Oecologia*, 197 (4): 1079-1094, DOI: 10.1007/s00442-021-04916-9, ISSN: 0029-8549 (Print), ISSN: 1432-1939 (Online)
  74. Binda G., A. Di Iorio, D. Monticelli. 2021. The what, how, why, and when of dendrochemistry: (paleo) environmental information from the chemical analysis of tree rings. *Science of the Total Environment*, 758, Article № 143672, DOI: 10.1016/j.scitotenv.2020.143672, ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online)
  75. Zhang Z., G. Jin, Z. Feng, L. Sun, Z. Zhou. 2021. Provenance-specific climate sensitivity of *Pinus massoniana* - a multi-environmental trial in subtropical China. *Dendrobiology*, 85: 3-18, DOI: 10.12657/denbio.085.002, ISSN: 1641-1307 (Print), ISSN: 2083-8387 (Online)
  76. Zhang J., X. Gou, M.R. Alexander, J. Xia, F. Wang, F. Zhang, Z. Man, N. Pederson. 2021. Drought limits wood production of *Juniperus przewalskii* even as growing seasons lengthens in a cold and arid environment. *Catena*, 196, Article № 104936, DOI: 10.1016/j.catena.2020.104936 ISSN: 0341-8162 (Print), ISSN: 1872-6887 (Online)
  77. Arnic D., L. Krajnc, J. Gricar, P. Prislan. 2022. Relationships Between Wood-Anatomical Features and Resistance Drilling Density in Norway Spruce and European Beech. *Frontiers in Plant Science*, 13, article 872950. ISSN: 1664-462X (Print) (2021 IF 6.627, SJR 1.359, Q1 Plant Science)
  78. Eckes-Shephard A.H., F.C. Ljungqvist, D.M. Drew, C.B.K. Rathgeber, A.D. Friend. 2022. Wood Formation Modeling - A Research Review and Future Perspectives. *Frontiers in Plant Science*, 13, article 837648. ISSN: 1664-462X (Print) (2021 IF 6.627, SJR 1.359, Q1 Plant Science)
  79. Edwards J., K.J. Anchukaitis, B.E. Gunnarson, C. Pearson, K. Seftigen, G. von Arx, H. W. Linderholm. 2022. The Origin of Tree-Ring Reconstructed Summer Cooling in Northern Europe During the 18th Century Eruption of Laki. *Paleoceanography and Paleoclimatology*, 37 (2), article e2021PA004386. ISSN: 2572-4517 (Print), ISSN: 2572-4525 (Online) (2021 IF 3.992, SJR 1.568, Q1 Atmospheric Science)
  80. Towner R.H. 2022. Dateless Dendroarchaeology. *Forests*, 13 (2), article 281. ISSN: 1999-4907 (Online) (2021 IF 3.282, SJR 0.623, Q1 Forestry)
  81. Miller E.W., T. Rademacher, P. Fonti, B. Seyednasrollah, A.D. Richardson. 2022. Assessing intra-annual density fluctuations across and along white pine stems. *Botany*, 100 (7): 583-591. ISSN: 1916-2790 (Print), ISSN: 1916-2804 (Online) (2021 IF 1.968, SJR 0.392, Q2 Plant Science)
  82. Wang, SJ; Deng, Y; Gao, LL; Zhang, YH; Shi, XY; Gou, XH, 2023. Influence of monsoon anomalies on intra-annual density fluctuations of Chinese pine in the Loess Plateau. *International Journal of Biometeorology*, DOI: 10.1007/s00484-023-02459-7, ISSN: 0020-7128, eISSN: 1432-1254
  83. Valeriano, C; Gutiérrez, E; Colangelo, M; Gazol, A; Sánchez-Salguero, R; Tumajer, J; Shishov, V; Bonet, JA; de Aragón, JM; Ibáñez, R; Valerio, M; Camarero, JJ, 2023. Seasonal precipitation and continentality drive bimodal growth in Mediterranean forests. *Dendrochronologia*, Volume: 78, Article Number: 126057, DOI: 10.1016/j.dendro.2023.126057, ISSN: 1125-7865, eISSN: 1612-0051



**B4.7.** Cailleret, M., S. Jansen, E.M.R. Robert, L. Desoto, T. Aakala, J.A. Antos, B. Beikircher, C. Bigler, H. Bugmann, M. Caccianiga, V. Čada, J.J. Camarero, P. Cherubini, H. Cochard, M.R. Coyea, K. Čufar, A.J. Das, H. Davi, S. Delzon, M. Dorman, G. Gea-Izquierdo, S. Gillner, L.J. Haavik, H. Hartmann, A.-M. Hereş, K.R. Hultine, P. Janda, J.M. Kane, V.I. Kharuk, T. Kitzberger, T. Klein, K. Kramer, F. Lens, T. Levanic, J.C. Linares Calderon, F. Lloret, R. Lobo-Do-Vale, F. Lombardi, R. López Rodríguez, H. Mäkinen, S. Mayr, I. Mészáros, J.M. Metsaranta, F. Minunno, W. Oberhuber, A. Papadopoulos, M. Peltoniemi, A.M. Petritan, B. Rohner, G. Sangüesa-Barreda, D. Sarris, J.M. Smith, A.B. Stan, F. Sterck, D.B. Stojanović, M.L. Suarez, M. Svoboda, R. Tognetti, J.M. Torres-Ruiz, V. Trotsiuk, R. Villalba, F. Vodde, A.R. Westwood, P.H. Wyckoff, **N. Zafirov**, J. Martínez-Vilalta, 2017. A synthesis of radial growth patterns preceding tree mortality. *Global Change Biology*, vol. 23 (4), ISSN: 1365-2486, pp. 1675–1690

**цитирана в:**

84. Barbeta A., J. Penuelas. 2017. Increasing carbon discrimination rates and depth of water uptake favor the growth of Mediterranean evergreen trees in the ecotone with temperate deciduous forests. - *Global Change Biology*, 23 (12): 5054-5068.
85. Locosselli, G. M., M. S. Buckeridge. 2017. Dendrobiochemistry, a missing link to further understand carbon allocation during growth and decline of trees. – *Trees - Structure and Function*, 31 (6): 1745-1758.
86. Zhu Yu, J. A. Hogan, H. Cai, Y. Xun, F. Jiang, G. Jin. 2017. Biotic and abiotic drivers of the tree growth and mortality trade-off in an old-growth temperate forest. - *Forest Ecology and Management*, 404: 354-360.
87. Li Yan, Qi-Bin Zhang. 2017. History of Tree Growth Declines Recorded in Old Trees at Two Sacred Sites in Northern China. - *Frontiers in Plant Science*, 8, Article Number: 1779.
88. Gleason, K. E., J. B. Bradford, A. Bottero, A. W. D'Amato, Sh. Fraver, B. J. Palik, M. A. Battaglia, L. Iverson, L. Kenefic, Ch. C. Kern. 2017. Competition amplifies drought stress in forests across broad climatic and compositional gradients. - *Ecosphere*, 8 (7), Article Number: e01849.
89. Bräuning A., A. Bolte, C. Nabais, S. Rossi, U. Sass-Klaassen. 2017. Editorial: Studying Tree Responses to Extreme Events. - *Frontiers in Plant Science*, 8, Article Number: 506.
90. Martínez-Sancho E., I. Dorado-Liñán, E. Gutiérrez Merino, M. Matiu, G. Helle, I. Heinrich, A. Menzel. 2017. Increased water-use efficiency translates into contrasting growth patterns of Scots pine and sessile oak at their southern distribution limits. - *Global Change Biology*, 10.1111/gcb.13937, 1-17.
91. Trugman A. T., D. Medvigy, W. R. L. Anderegg, S. W. Pacala. 2017. Differential declines in Alaskan boreal forest vitality related to climate and competition. - *Global Change Biology*, 10.1111/gcb.13952.
92. Fox H., A. Doron-Faigenboim, G. Kelly, R. Bourstein, Z. Attia, J. Zhou, Y. Moshe, M. Moshelion, R. David-Schwartz. 2017. Transcriptome analysis of *Pinus halepensis* under drought stress and during recovery. - *Tree Physiology*, 10.1093/treephys/tpx137, 1-19.
93. Searle, EB, Chen HYH, 2018. Temporal declines in tree longevity associated with faster lifetime growth rates in boreal forests. *Environmental Research Letters*, Volume: 13, Issue: 12, Article Number: 125003, DOI: 10.1088/1748-9326/aaea9e.

94. Maher, CT, Nelson CR, Larson AJ, Sala A, 2018. Ecological effects and effectiveness of silvicultural restoration treatments in whitebark pine forests. *Forest Ecology And Management*, Volume: 429, Pages: 534-548, DOI: 10.1016/j.foreco.2018.07.040.
95. Hood, SM; Varner, JM; van Mantgem, P; Cansler, CA, 2018. Fire and tree death: understanding and improving modeling of fire-induced tree mortality. *Environmental Research Letters*, Volume: 13, Issue: 11, Article Number: 113004.
96. Zuidema, PA; Poulter, B; Frank, DC, 2018. A Wood Biology Agenda to Support Global Vegetation Modelling. *Trends In Plant Science*, Volume: 23, Issue: 11, Pages: 1006-1015.
97. Klockow, PA; Vogel, JG; Edgar, CB; Moore, GW, 2018. Lagged mortality among tree species four years after an exceptional drought in east Texas. *Ecosphere*, Volume: 9, Issue: 10, Article Number: e02455.
98. Zhao, SD; Jiang, Y; Dong, MY; Xu, H; Manzanedo, RD; Pederson, N, 2018. Early monsoon failure and mid-summer dryness induces growth cessation of lower range margin *Picea crassifolia*. *Trees-Structure And Function*, Volume: 32, Issue: 5, Pages: 1401-1413.
99. Trugman, AT; Detto, M; Bartlett, MK; Medvigy, D; Anderegg, WRL; Schwalm, C; Schaffer, B; Pacala, SW, 2018. Tree carbon allocation explains forest drought-kill and recovery patterns. *Ecology Letters*, Volume: 21, Issue: 10, Pages: 1552-1560.
100. Sun, SJ; Qiu, LF; He, CX; Li, CY; Zhang, JS; Meng, P, 2018. Drought-Affected *Populus simonii* Carr. Show Lower Growth and Long-Term Increases in Intrinsic Water-Use Efficiency Prior to Tree Mortality. *Forests*, Volume: 9, Issue: 9, Article Number: 564.
101. Nalevankova, P; Jezik, M; Sitkova, Z; Vido, J; Lestianska, A; Strelcova, K, 2018. Drought and irrigation affect transpiration rate and morning tree water status of a mature European beech (*Fagus sylvatica* L.) forest in Central Europe, Conference: 4th Biohydrology International Conference Location: Almeria, SPAIN Date: SEP 13-16, 2016. *Ecohydrology*, Volume: 11, Issue: 6, Special Issue: SI, Article Number: UNSP e1958.
102. Romagnoli, M; Moroni, S; Recanatesi, F; Salvati, R; Mugnozza, GS, 2018. Climate factors and oak decline based on tree-ring analysis. A case study of peri-urban forest in the Mediterranean area. *Urban Forestry & Urban Greening*, Volume: 34, Pages: 17-28.
103. Buras, A; Spyt, B; Janecka, K; Kaczka, R, 2018. Divergent growth of Norway spruce on Babia Gora Mountain in the western Carpathians. *Dendrochronologia*, Volume: 50, Pages: 33-43.
104. Manrique-Alba, A; Sevanto, S; Adams, HD; Collins, AD; Dickman, LT; Chirino, E; Bellot, J; McDowell, NG, 2018. Stem radial growth and water storage responses to heat and drought vary between conifers with differing hydraulic strategies. *Plant Cell And Environment*, Volume: 41, Issue: 8, Pages: 1926-1934.
105. Love, DM; Sperry, JS, 2018. In situ embolism induction reveals vessel refilling in a natural aspen stand. *Tree Physiology*, Volume: 38, Issue: 7, Pages: 1006-1015.
106. Heres, AM; Kaye, MW; Granda, E; Benavides, R; Lazaro-Nogal, A; Rubio-Casal, AE; Valladares, F; Yuste, JC, 2018. Tree vigour influences secondary growth but not responsiveness to climatic variability in Holm oak. *Dendrochronologia*, Volume: 49, Pages: 68-76.
107. Mou, YM; Fang, O; Cheng, X; Qiu, H; 2018. Recent tree growth decline unprecedented over the last four centuries in a Tibetan juniper forest. *Journal of Forestry Research*, <https://doi.org/10.1007/s11676-018-0856-6>, pp 1-8.
108. Kunz, J; Loffler, G; Bauhus, J, 2018. Minor European broadleaved tree species are more drought-tolerant than *Fagus sylvatica* but not more tolerant than *Quercus petraea*. *Forest Ecology And Management*, Volume: 414, Pages: 15-27.

109. Fang, OY; Alfaro, RI; Zhang, QB, 2018. Tree rings reveal a major episode of forest mortality in the late 18th century on the Tibetan Plateau. *Global And Planetary Change*, Volume: 163, Pages: 44-50.
110. Flake, SW; Weisberg, PJ, 2018. Fine-scale stand structure mediates drought-induced tree mortality in pinyon–juniper woodlands. *Ecological Applications*, Ecological Society of America, <https://doi.org/10.1002/eap.1831>.
111. Fox, H; Doron-Faigenboim, A; Kelly, G; Bourstein, R; Attia, Z; Zhou, J; Moshe, Y; Moshelion, M; David-Schwartz, R, 2018. Transcriptome analysis of *Pinus halepensis* under drought stress and during recovery. *Tree Physiology*, Volume: 38, Issue: 3, Pages: 423-441.
112. Martinez-Sancho, E; Dorado-Linan, I; Merino, EG; Matiu, M; Helle, G; Heinrich, I; Menzel, A, 2018. Increased water-use efficiency translates into contrasting growth patterns of Scots pine and sessile oak at their southern distribution limits. *Global Change Biology*, Volume: 24, Issue: 3, Pages: 1012-1028.
113. Trugman, AT; Medvigy, D; Anderegg, WRL; Pacala, SW, 2018. Differential declines in Alaskan boreal forest vitality related to climate and competition. *Global Change Biology*, Volume: 24, Issue: 3, Pages: 1097-1107.
114. Buras, A; Schunk, C; Zeitrag, C; Herrmann, C; Kaiser, L; Lemme, H; Straub, C; Taeger, S; Gosswein, S; Klemmt, HJ; Menzel, A, 2018. Are Scots pine forest edges particularly prone to drought-induced mortality? *Environmental Research Letters*, Volume: 13, Issue: 2, Article Number: 025001.
115. Liu, YL, M Kumar, GG Katul, A Porporato, 2019. Reduced resilience as an early warning signal of forest mortality. *Nature climate change*, vol. 9 (11), pp 880–885.
116. Wang, WZ, NG McDowell, ND Ward, J Indivero, C Gunn, VL Bailey, 2019. Constrained tree growth and gas exchange of seawater-exposed forests in the Pacific Northwest, USA. *Journal of ecology*, vol. 107 (6), pp 2541–2552.
117. Jourdan, M, F Lebourgeois, X Morin, 2019. The effect of tree diversity on the resistance and recovery of forest stands in the French Alps may depend on species differences in hydraulic features. *Forest ecology and management*, vol. 450, article 117486.
118. Dannenberg, MP, EK Wise, WK Smith, 2019. Reduced tree growth in the semiarid United States due to asymmetric responses to intensifying precipitation extremes. *Science advances*, vol. 5 (10), article eaaw0667.
119. Jevsenak, J, 2019. Daily climate data reveal stronger climate-growth relationships for an extended European tree-ring network. *Quaternary science reviews*, vol. 221, article UNSP 105868.
120. Vilas, MP, MP Adams, MC Ball, JO Meynecke, NS Santini, A Swales, CE Lovelock, 2019. Night and day: Shrinking and swelling of stems of diverse mangrove species growing along environmental gradients. *Plos one*, vol. 14 (9), article e0221950.
121. Vila-Cabrera, A, AS Jump, 2019. Greater growth stability of trees in marginal habitats suggests a patchy pattern of population loss and retention in response to increased drought at the rear edge. *Ecology letters*, vol. 22 (9), pp 1439–1448.
122. Andrianantenaina, AN, CBK Rathgeber, G Perez-de-Lis, H Cuny, J Ruelle, 2019. Quantifying intra-annual dynamics of carbon sequestration in the forming wood: a novel histologic approach. *Annals of forest science*, vol. 76 (3), article 62.
123. Tei, S, A Sugimoto, H Yonenobu, A Kotani, TC Maximov, 2019. Effects of extreme drought and wet events for tree mortality: Insights from tree-ring width and carbon isotope ratio in a Siberian larch forest. *Ecohydrology*, article UNSP e2143.

124. Vieira, J, M Moura, C Nabais, H Freitas, F Campelo, 2019. Seasonal adjustment of primary and secondary growth in maritime pine under simulated climatic changes. *Annals of forest science*, vol. 76 (3), article 84.
125. Vincent-Barbaroux, C, D Berveiller, C Lelarge-Trouverie, R Maia, C Maguas, J Pereira, MM Chaves, C Damesin, 2019. Carbon-use strategies in stem radial growth of two oak species, one Temperate deciduous and one Mediterranean evergreen: what can be inferred from seasonal variations in the delta C-13 of the current year ring? *Tree physiology*, vol. 39 (8), pp 1329–1341.
126. Helcoski, R, AJ Tepley, N Pederson, JC McGarvey, V Meakem, V Herrmann, JR Thompson, KJ Anderson-Teixeira, 2019. Growing season moisture drives interannual variation in woody productivity of a temperate deciduous forest. *New phytologist*, vol. 223 (3), pp 1204–1216.
127. Copes-Gerbitz, K, W Fletcher, JGA Lageard, M Rhanem, SP Harrison, 2019. Multidecadal variability in Atlas cedar growth in Northwest Africa during the last 850 years: Implications for dieback and conservation of an endangered species. *Dendrochronologia*, vol. 56, article 125599.
128. Mou, YM, OY Fang, XH Cheng, HY Qiu, 2019. Recent tree growth decline unprecedented over the last four centuries in a Tibetan juniper forest. *Journal of forestry research*, vol. 30 (4), pp 1429–1436.
129. Lauder, JD, EV Moran, SC Hart, 2019. Fight or flight? Potential tradeoffs between drought defense and reproduction in conifers. *Tree physiology*, vol. 39 (7), pp 1071–1085.
130. Rodriguez-Vallejo, C, RM Navarro-Cerrillo, 2019. *Forests*, vol. 10 (7), article 603.
131. Gagen, M, N Matthews, S Denman, M Bridge, A Peace, R Pike, G Young, 2019. The tree ring growth histories of UK native oaks as a tool for investigating Chronic Oak Decline: An example from the Forest of Dean. *Dendrochronologia*, vol. 55, pp 50–59.
132. Michelot-Antalik, A, E Granda, C Fresneau, C Damesin, 2019. Evidence of a seasonal trade-off between growth and starch storage in declining beeches: assessment through stem radial increment, non-structural carbohydrates and intra-ring delta C-13. *Tree physiology*, vol. 39 (5), pp 831–844.
133. Cai, YZ, TY Liu, SW Huang, J Zhao, 2019. Tree Ring Detection of Pine Tree Based on Visible Spectrum Channel. *Spectroscopy and spectral analysis*, vol. 39 (5), pp 1530–1534.
134. Aleixo, I, D Norris, L Hemerik, A Barbosa, E Prata, F Costa, L Poorter, 2019. Amazonian rainforest tree mortality driven by climate and functional traits. *Nature climate change*, vol. 9 (5), pp 384–388.
135. Moreau, G, A Achim, D Pothier, 2019. A dendrochronological reconstruction of sugar maple growth and mortality dynamics in partially cut northern hardwood forests. *Forest ecology and management*, vol. 437 (17), pp 17–26.
136. Flake, SW, PJ Weisberg, 2019. Fine-scale stand structure mediates drought-induced tree mortality in pinyon-juniper woodlands. *Ecological applications*, vol. 29 (2), article e01831.
137. Fuchs, L, LE Stevens, PZ Fule, 2019. Dendrochronological assessment of springs effects on ponderosa pine growth, Arizona, USA. *Forest ecology and management*, vol. 435, pp 89–96.
138. Johnston, JD, CJ Dunn, MJ Vernon, 2019. Tree traits influence response to fire severity in the western Oregon Cascades, USA. *Forest ecology and management*, vol. 433, pp 690–698.
139. Kohyama, TS, TI Kohyama, D Sheil, 2019. Estimating net biomass production and loss from repeated measurements of trees in forests and woodlands: Formulae, biases and recommendations. *Forest ecology and management*, vol. 433, pp 729–740.

140. Walker, AP, MG De Kauwe, BE Medlyn, S Zaehle, CM Iversen, S Asao, B Guenet, A Harper, T Hickler, BA Hungate, AK Jain, YQ Luo, XJ Lu, M Lu, K Luus, JP Megonigal, R Oren, E Ryan, SJ Shu, A Talhelm, YP Wang, JM Warren, C Werner, JY Xia, B Yang, DR Zak, RJ Norby, 2019. Decadal biomass increment in early secondary succession woody ecosystems is increased by CO<sub>2</sub> enrichment. *Nature communications*, vol. 10, article 454.
141. Buras, A, A Menzel, 2019. Projecting Tree Species Composition Changes of European Forests for 2061-2090 Under RCP 4.5 and RCP 8.5 Scenarios. *Frontiers in plant science*, vol. 9, article 1986.
142. Caldeira, MC, 2019. The timing of drought coupled with pathogens may boost tree mortality. *Tree physiology*, vol. 39 (1), pp 1–5.
143. De Grandpre, L, DD Kneeshaw, S Perigon, D Boucher, M Marchand, D Pureswaran, MP Girardin, 2019. Adverse climatic periods precede and amplify defoliator-induced tree mortality in eastern boreal North America. *Journal of ecology*, vol. 107 (1), pp 452–467.
144. Peltier, DMP, K Ogle, 2019. Legacies of La Nina: North American monsoon can rescue trees from winter drought. *Global change biology*, vol. 25 (1), pp 121–133.
145. Arellano, G, NG Medina, S Tan, M Mohamad, SJ Davies, 2019. Crown damage and the mortality of tropical trees. *New phytologist*, vol. 221 (1), pp 169–179.
146. Preisler Y., F. Tatarinov, J.M. Grunzweig, D. Yakir. 2020. Seeking the "point of no return" in the sequence of events leading to mortality of mature trees. – *Plant Cell & Environment*, DOI 10.1111/pce.13942. ISSN: 0140-7791 (Print), ISSN: 1365-3040 (Online)
147. Bradford J.B., C.M. Andrews, M.D. Robles, L.A. McCauley, T.J. Woolley, R.M. Marshall. 2020. Landscape-scale restoration minimizes tree growth vulnerability to 21st century drought in a dry forest. – *Ecological Applications*, DOI 10.1002/eap.2238, article e02238. ISSN: 1051-0761 (Print), ISSN: 1939-5582 (Online)
148. Russo S.E., S.M. McMahon, M. Detto, G. Ledder, S.J. Wright, R.S. Condit, S.J. Davies, P.S. Ashton, S. Bunyavejchewin, C.H. Chang-Yang, S. Ediriweera, C.E.N. Ewango, C. Fletcher, R.B. Foster, C.V.S. Gunatilleke, I.A.U.N. Gunatilleke, T. Hart, C.F. Hsieh, S.P. Hubbell, A. Itoh, A.R. Kassim, Y.T. Leong, Y.C. Lin, J.R. Makana, M.B. Mohamad, P. Ong, A. Sugiyama, I.F. Sun, S.S. Tan, J. Thompson, T. Yamakura, S.L. Yap, J.K. Zimmerman. 2020. The interspecific growth-mortality trade-off is not a general framework for tropical forest community structure. – *Nature Ecology and Evolution*, DOI 10.1038/s41559-020-01340-9. ISSN: 2397-334X (Online)
149. Reed K., J. Forster, S. Denman, N. Brown, S.R. Leather, D.J.G. Inward. 2020. Novel dendrochronological modelling demonstrates that decades of reduced stem growth predispose trees to Acute Oak Decline. – *Forest Ecology and Management*, 476, Article 118441. DOI 10.1016/j.foreco.2020.118441. ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
150. Eckes-Shephard A.H., E. Tiavlovsky, Y.Z. Chen, P. Fonti, A.D. Friend. 2020. Direct response of tree growth to soil water and its implications for terrestrial carbon cycle modelling. – *Global Change Biology*, 27 (1): 121-135. DOI 10.1111/gcb.15397. ISSN: 1354-1013 (Print), ISSN: 1365-2486 (Online)
151. Esquivel-Muelbert A., O.L. Phillips, R.J.W. Brienen, S. Fauset, M.J.P. Sullivan, T.R. Baker, K.J. Chao, T.R. Feldpausch, E. Gloor, N. Higuchi, J. Houwing-Duistermaat, J. Lloyd, H.Y. Liu, Y. Malhi, B. Marimon, B. Marimon, A. Monteagudo-Mendoza, L. Poorter, M. Silveira, E.V. Torre, E.A. Davila, J.D. Pasquel, E. Almeida, P.A. Loayza, A. Andrade, L.E.O.C. Aragao, A. Araujo-Murakami, E. Arets, L. Arroyo, G.A. Aymard, M. Baisie, C. Baraloto, P.B. Camargo, J. Barroso, L. Blanc, D. Bonal, F. Bongers, R. Boot, F. Brown, B. Burban, J.L. Camargo, W. Castro, V.C. Moscoso, J. Chave, J. Comiskey, F.C. Valverde, A.L. da Costa, N.D. Cardozo, A. Di Fiore, A. Dourdain, T. Erwin, G.F. Llampazo, I.C.G. Vieira, R. Herrera, E. Honorio Coronado, I. Huamantupa-Chuquimaco,

- E. Jimenez-Rojas, T. Killeen, S. Laurance, W. Laurance, A. Levesley, S.L. Lewis, K.L.L.M. Ladvoat, G. Lopez-Gonzalez, T. Lovejoy, P. Meir, C. Mendoza, P. Morandi, D. Neill, A.J. Nogueira Lima, P.N. Vargas, E.A. de Oliveira, N.P. Camacho, G. Pardo, J. Peacock, M. Pena-Claros, M.C. Penuela-Mora, G. Pickavance, J. Pipoly, N. Pitman, A. Prieto, T.A.M. Pugh, C. Quesada, H. Ramirez-Angulo, S.M. de Almeida Reis, M. Rejou-Machain, Z.R. Correa, L.R. Bayona, A. Rudas, R. Salomao, J. Serrano, J.S. Espejo, N. Silva, J. Singh, C. Stahl, J. Stropp, V. Swamy, J. Talbot, H. ter Steege, J. Terborgh, R. Thomas, M. Toledo, A. Torres-Lezama, L.V. Gamarra, G. van der Heijden, P. van der Meer, P. van der Hout, R.V. Martinez, S.A. Vieira, J.V. Cayo, V. Vos, R. Zagt, P. Zuidema, D. Galbraith. 2020. Tree mode of death and mortality risk factors across Amazon forests. – *Nature Communications*, 11 (1), article 5515. DOI 10.1038/s41467-020-18996-3. ISSN: 2041-1723 (Online)
152. Tadesse T., D.Y. Hollinger, Y.A. Bayissa, M. Svoboda, B. Fuchs, B.C. Zhang, G. Demissie, B.D. Wardlow, G. Bohrer, K.L. Clark, A.R. Desai, L.H. Gu, A. Noormets, K.A. Novick, A.D. Richardson. 2020. Forest Drought Response Index (ForDRI): A New Combined Model to Monitor Forest Drought in the Eastern United States. – *Remote Sensing*, 12 (21), article 3605. DOI 10.3390/rs12213605. ISSN: 2072-4292 (Online)
153. Salas-Eljatib C., A.R. Weiskittel. 2020. On studying the patterns of individual-based tree mortality in natural forests: A modelling analysis. – *Forest Ecology and Management*, 475, article 118369. DOI 10.1016/j.foreco.2020.118369. ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
154. Buras A., A. Rammig, C.S. Zang. 2020. A novel approach for the identification of pointer years. – *Dendrochronologia*, 63, article 125746. DOI 10.1016/j.dendro.2020.125746. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
155. Anderegg W.R.L., A.T. Trugman, G. Badgley, A.G. Konings, J. Shaw. 2020. Divergent forest sensitivity to repeated extreme droughts. – *Nature Climate Change*, 10: 1091-1095. DOI 10.1038/s41558-020-00919-1. ISSN: 1758-678X (Print), ISSN: 1758-6798 (Online)
156. Schook D.M., J.M. Friedman, C.A. Stricker, A.Z. Csank, D.J. Cooper. 2020. Short- and long-term responses of riparian cottonwoods (*Populus* spp.) to flow diversion: Analysis of tree -ring radial growth and stable carbon isotopes. – *Science of the Total Environment*, 735, article 139523. DOI 10.1016/j.scitotenv.2020.139523. ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online)
157. Han J., V.P. Singh. 2020. Forecasting of droughts and tree mortality under global warming: a review of causative mechanisms and modeling methods. – *Journal of Water and Climate Change*, 11 (3): 600-632. DOI 10.2166/wcc.2020.239. ISSN: 2040-2244 (Print)
158. Peltier D.M.P., K. Ogle. 2020. Tree growth sensitivity to climate is temporally variable. – *Ecology Letters*, 23 (11): 1561-1572. DOI 10.1111/ele.13575. ISSN: 1461-023X (Print), ISSN: 1461-0248 (Online)
159. Resende A.F., M.T.F. Piedade, Y.O. Feitosa, V.H.F. Andrade, S.E. Trumbore, F.M. Durgante, M.O. Macedo, J. Schongart. 2020. Flood-pulse disturbances as a threat for long-living Amazonian trees. – *New Phytologist*, 227 (6): 1790-1803. DOI 10.1111/nph.16665. ISSN: 0028-646X (Print), ISSN: 1469-8137 (Online)
160. Pappas C., R.L. Peters, P. Fonti. 2020. Linking variability of tree water use and growth with species resilience to environmental changes. – *Ecography*, 43 (9): 1386-1399. DOI 10.1111/ecog.04968. ISSN: 0906-7590 (Print), ISSN: 1600-0587 (Online)
161. Rozenberg P., T. Chauvin, M. Escobar-Sandoval, F. Huard, V.V. Shishov, JP. Charpentier, A.S. Sergent, J.J. Vargas-Hernandez, A. Martinez-Meier, L. Paques. 2020. Climate warming differently affects *Larix* deciduating formation at each end of a French Alps elevational gradient. – *Annals of Forest Science*, 77 (2), article 54. DOI 10.1007/s13595-020-00958-w. ISSN: 1286-4560 (Print), ISSN: 1297-966X (Online)

162. Buras A., U. Sass-Klaassen, I. Verbeek, P. Copini. 2020. Provenance selection and site conditions determine growth performance of pedunculate oak. – *Dendrochronologia*, 61, article 125705. DOI 10.1016/j.dendro.2020.125705. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online)
163. Schmitt A., R. Trouve, I. Seynave, F. Lebourgeois. 2020. Decreasing stand density favors resistance, resilience, and recovery of *Quercus petraea* trees to a severe drought, particularly on dry sites. – *Annals of Forest Science*, 77 (2), article 52. DOI 10.1007/s13595-020-00959-9. ISSN: 1286-4560 (Print), ISSN: 1297-966X (Online)
164. Buras A., F. Hirsch, A. Schneider, T. Scharnweber, E. van der Maaten, R. Cruz-Garcia, T. Raab, M. Wilmking. 2020. Reduced above-ground growth and wood density but increased wood chemical concentrations of Scots pine on relict charcoal hearths. – *Science of the Total Environment*, 717, article 137189. DOI 10.1016/j.scitotenv.2020.137189. ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online)
165. Gomez-Gallego M., N. Williams, S. Leuzinger, P.M. Scott, M.K.F. Bader. 2020. No carbon limitation after lower crown loss in *Pinus radiata*. – *Annals of Botany*, 125 (6): 955-967. DOI 10.1093/aob/mcaa013. ISSN: 0305-7364 (Print), ISSN: 1095-8290 (Online)
166. Kannenberg S.A., C.R. Schwalm, W.R.L. Anderegg. 2020. Ghosts of the past: how drought legacy effects shape forest functioning and carbon cycling. – *Ecology Letters*, 23(5): 891-901. DOI 10.1111/ele.13485. ISSN: 1461-023X (Print), ISSN: 1461-0248 (Online)
167. Wilmking M., M. van der Maaten-Theunissen, E. van der Maaten, T. Scharnweber, A. Buras, C. Biermann, M. Gurskaya, M. Hallinger, J. Lange, R. Shetti, M. Smiljanic, M. Trouillier. 2020. Global assessment of relationships between climate and tree growth. – *Global Change Biology*, 26 (6): 3212-3220. DOI 10.1111/gcb.15057. ISSN: 1354-1013 (Print), ISSN: 1365-2486 (Online)
168. Jiao L., X.P. Liu, S.J. Wang, K. Chen. 2020. Radial Growth Adaptability to Drought in Different Age Groups of *Picea schrenkiana* Fisch. & CA Mey in the Tianshan Mountains of Northwestern China. – *Forests*, 11 (4), article 455. DOI 10.3390/f11040455. ISSN: 1999-4907 (Online)
169. Coyle D.R., B.F. Barnes, K.D. Klepzig, F.H. Koch, L.A. Morris, J.T. Nowak, W.J. Orosina, W.D. Smith, K.J.K. Gandhi. 2020. Abiotic and Biotic Factors Affecting Loblolly Pine Health in the Southeastern United States. – *Forest Science*, 66 (2): 145-156. DOI 10.1093/forsci/fxz054. ISSN: 0015-749X (Print), ISSN: 1938-3738 (Online)
170. Losseau J., M. Jonard, C. Vincke. 2020. Pedunculate oak decline in southern Belgium: a long-term process highlighting the complex interplay among drought, winter frost, biotic attacks, and masting. – *Canadian Journal of Forest Research*, 50 (4): 380-389. DOI 10.1139/cjfr-2019-0341. ISSN: 0045-5067 (Print), ISSN: 1208-6037 (Online)
171. Kulmatiski A., K.L. Yu, D.S. Mackay, M.C. Holdrege, A.C. Staver, A.J. Parolari, Y.L. Liu, S. Majumder, A.T. Trugman. 2020. Forecasting semi-arid biome shifts in the Anthropocene. – *New Phytologist*, 226 (2): 351-361. DOI 10.1111/nph.16381. ISSN: 0028-646X (Print), ISSN: 1469-8137 (Online)
172. Buras A., A. Rammig, C.S. Zang. 2020. Quantifying impacts of the 2018 drought on European ecosystems in comparison to 2003. – *Biogeosciences*, 17 (6): 1655-1672. DOI 10.5194/bg-17-1655-2020. ISSN: 1726-4170 (Print), ISSN: 1726-4189 (Online)
173. Tubbesing C.L., R.A. York, S.L. Stephens, J.J. Battles. 2020. Rethinking fire-adapted species in an altered fire regime. – *Ecosphere*, 11 (3), article e03091. DOI 10.1002/ecs2.3091. ISSN: 2150-8925 (Online)
174. Zhirnova D.F., E.A. Babushkina, L.V. Belokopytova, E.A. Vaganov. 2020. To which side are the scales swinging? Growth stability of Siberian larch under permanent moisture deficit with periodic droughts. – *Forest Ecology and Management*, 459, article 117841. DOI 10.1016/j.foreco.2019.117841. ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)

175. Ollivier C., N. Mazzilli, A. Oliosio, K. Chalikakis, S.D. Carriere, C. Danquigny, C. Emblanch. 2020. Karst recharge-discharge semi distributed model to assess spatial variability of flows. – *Science of the Total Environment*, 703, article 134368. DOI 10.1016/j.scitotenv.2019.134368. ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online)
176. Wang L., J.W. Cui, B. Jin, J.G. Zhao, H.M. Xu, Z.G. Lu, W.X. Li, X.X. Li, L.L. Li, E.Y. Liang, X.L. Rao, S.F. Wang, C.X. Fu, F.L. Cao, R.A. Dixon, J.X. Lin. 2020. Multifeature analyses of vascular cambial cells reveal longevity mechanisms in old *Ginkgo biloba* trees. – *Proceedings of the National Academy of Sciences of the United States of America*, 117 (4): 2201-2210. DOI 10.1073/pnas.1916548117. ISSN: 0027-8424 (Print), ISSN: 1091-6490 (Online)
177. Archambeau J., P. Ruiz-Benito, S. Ratcliffe, T. Frejaville, A. Changenet, J.M.M. Castaneda, A. Lehtonen, J. Dahlgren, M.A. Zavala, M.B. Garzon. 2020. Similar patterns of background mortality across Europe are mostly driven by drought in European beech and a combination of drought and competition in Scots pine. – *Agricultural and Forest Meteorology*, 280, article 107772. DOI 10.1016/j.agrformet.2019.107772. ISSN: 0168-1923 (Print), ISSN: 1873-2240 (Online)
178. Martinez-Sancho E., L. Slamova, S. Morganti, C. Grefen, B. Carvalho, B. Dauphin, C. Rellstab, F. Gugerli, L. Opgenoorth, K. Heer, F. Knutzen, G. von Arx, F. Valladares, S. Cavers, B. Fady, R. Alia, F. Aravanopoulos, C. Avanzi, F. Bagnoli, E. Barbas, C. Bastien, R. Benavides, F. Bernier, G. Bodineau, C.C. Bastias, J.P. Charpentier, J.M. Climent, M. Correard, F. Courdier, D. Danusevicius, A.M. Farsakoglou, J.M.G. del Barrio, O. Gilg, S.C. Gonzalez-Martinez, A. Gray, C. Hartleitner, A. Hurel, A. Jouineau, K. Karkkainen, S.T. Kujala, M. Labriola, M. Lascoux, M. Lefebvre, V. Lejeune, M. Liesebach, E. Malliarou, N. Mariotte, S. Matesanz, T. Myking, E. Notivol, B. Pakull, A. Piotti, M. Pringarbe, T. Pyhajarvi, A. Raffin, J.A. Ramirez-Valiente, K. Ramskogler, J.J. Robledo-Arnuncio, O. Savolainen, S. Schueler, V. Semerikov, I. Spanu, J. Thevenet, M. Mette Tollefsrud, N. Turion, D. Veisse, G.G. Vendramin, M. Villar, J. Westin, P. Fonti. 2020. The GenTree Dendroecological Collection, tree-ring and wood density data from seven tree species across Europe. – *Scientific Data*, 7 (1), article 1. DOI 10.1038/s41597-019-0340-y. ISSN: 2052-4463 (Online)
179. Hassegawa M., M. Savard, P.R.N. Lenz, E. Duchateau, N. Gelinias, J. Bousquet, A. Achim. 2020. White spruce wood quality for lumber products: priority traits and their enhancement through tree improvement. – *Forestry*, 93 (1): 16-37. DOI 10.1093/forestry/cpz050. ISSN: 0015-752X (Print), ISSN: 1464-3626 (Online)
180. Han Y.-G., X.-R. Gai, S.-Y. Qiu, Y. Zhang, S.-L. Wang, L. Zhou, D.-P. Yu. 2021. Spatial and temporal variations of the responses of radial growth of *Larix gmelinii* to climate in the Daxing'anling Mountains of Northeast China. *Chinese Journal of Applied Ecology*, 32 (10): 3397-3404, DOI: 10.13287/j.1001-9332.202110.021, ISSN: 1001-9332 (Print), ISSN: 1001-9332 (Online)
181. Tyminska-Czabanska L., J. Socha, P. Hawrylo, R. Balazy, M. Ciesielski, E. Grabska-Szwagrzyk, P. Netzel. 2021. Weather-sensitive height growth modelling of Norway spruce using repeated airborne laser scanning data. *Agricultural and Forest Meteorology*, 308, Article № 108568, DOI: 10.1016/j.agrformet.2021.108568, ISSN: 0168-1923 (Print), ISSN: 1873-2240 (Online)
182. Looney C.E., A.W. D'Amato, S. Jovan. 2021. Investigating linkages between the size-growth relationship and drought, nitrogen deposition, and structural complexity in western US Forests. *Forest Ecology and Management*, 497, Article № 119494, DOI: 10.1016/j.foreco.2021.119494, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
183. Li Y., Q.B. Zhang, O. Fang, Y.M. Mu, H. Jia, L. Lyu. 2021. Recovery time of juniper trees is longer in wet than dry conditions on the Tibetan Plateau in the past two centuries. *Forest Ecology and Management*, 497, Article № 119514, DOI: 10.1016/j.foreco.2021.119514, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)



184. Umana M.N., G. Arellano. 2021. Legacy effects of drought on tree growth responses to hurricanes. *Ecography*, 44 (11): 1686-1697, DOI: 10.1111/ecog.05803, ISSN: 0906-7590 (Print), ISSN: 1600-0587 (Online)
185. Yiou P., N. Viovy, 2021. Modelling forest ruin due to climate hazards. *Earth System Dynamics*, 12 (3): 997-1013, DOI: 10.5194/esd-12-997-2021, ISSN: 2190-4979 (Print), ISSN: 2190-4987 (Online)
186. Pervaiz T., S.W. Liu, S. Uddin, M.W. Amjid, S.H. Niu, H.X. Wu. 2021. The Transcriptional Landscape and Hub Genes Associated with Physiological Responses to Drought Stress in *Pinus tabuliformis*. *International Journal of Molecular Sciences*, 22 (17), Article № 9604, DOI: 10.3390/ijms22179604, ISSN: 1422-0067 (Online)
187. Fuchs S., B. Schuldt, Ch. Leuschner. 2021. Identification of drought-tolerant tree species through climate sensitivity analysis of radial growth in Central European mixed broadleaf forests. *Forest Ecology and Management*, 494, Article № 119287, DOI: 10.1016/j.foreco.2021.119287, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
188. Zapata R., J.V. Oliver-Villanueva, L.G. Lemus-Zuniga, D. Fuente, M.A.M. Pla, J.E. Luzuriaga, J.C. Moreno Esteve. 2021. Seasonal variations of electrical signals of *Pinus halepensis* Mill. in Mediterranean forests in dependence on climatic conditions. *Plant Signaling and Behavior*, 16 (10), Article № 194874, DOI: 10.1080/15592324.2021.1948744, ISSN: 1559-2316 (Print), ISSN: 1559-2324 (Online)
189. Bandh S.A., S. Shafi, M. Peerzada, T. Rehman, Sh. Bashir, Sh.A. Wani, R. Dar. 2021. Multidimensional analysis of global climate change: a review. *Environmental Science and Pollution Research*, 28 (20): 24872-24888, DOI: 10.1007/s11356-021-13139-7, ISSN: 0944-1344 (Print), ISSN: 1614-7499 (Online)
190. Galia T., R. Tichavsky, A. Fabianova, V. Spalovsky. 2021. Effects of multiple disturbances on large wood recruitment and distribution in mid-mountain headwater streams. *Catena*, 202, Article № 105279, DOI: 10.1016/j.catena.2021.105279, ISSN: 0341-8162 (Print), ISSN: 1872-6887 (Online)
191. Mood B.J., B. Bonsal, B. Howat, C.P. Laroque. 2021. Multi-year white spruce drought legacies in southern Saskatchewan. *Forest Ecology and Management*, 491, Article № 119144, DOI: 10.1016/j.foreco.2021.119144, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
192. Looney Ch.E., W.J. Previat, J.B. Bradford, L.M. Nagel. 2021. Species mixture effects and climate influence growth, recruitment and mortality in Interior West USA *Populus tremuloides*-conifer communities. *Journal of Ecology*, 109 (8): 2934-2949, DOI: 10.1111/1365-2745.13709, ISSN: 0022-0477 (Print), ISSN: 1365-2745 (Online)
193. Boyd M.A., L.T. Berner, A.C. Foster, S.J. Goetz, B.M. Rogers, X.J. Walker, M.C. Mack. 2021. Historic declines in growth portend trembling aspen death during a contemporary leaf miner outbreak in Alaska. *Ecosphere*, 12 (6), Article № e03569, DOI: 10.1002/ecs2.3569, ISSN: 2150-8925 (Print)
194. Yi R., X. Xu, S. Zhu, Y. Zhang, F. Zhong, X. Zeng, C. Xu. 2021. Difference in hydraulic resistance between planted forest and naturally regenerated forest and its implications for ecosystem restoration in subtropical karst landscapes. *Journal of Hydrology*, 596, Article № 126093, DOI: 10.1016/j.jhydrol.2021.126093, ISSN: 0022-1694 (Print), ISSN: 1879-2707 (Online)
195. Urrutia-Jalabert R., J. Barichivich, V. Rozas, A. Lara, Y. Rojas, C. Bahamondez, M. Rojas-Badilla, T. Gipoulou-Zuniga, E. Cuq, 2021. Climate response and drought resilience of *Nothofagus obliqua* secondary forests across a latitudinal gradient in south-central Chile. *Forest Ecology and Management*, 485, Article № 118962, DOI: 10.1016/j.foreco.2021.118962, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
196. Sviderskaya I.V., E.A. Vaganov, M.V. Fonti, P. Fonti. 2021. Isometric scaling to model water transport in conifer tree rings across time and environments. *Journal of Experimental*

- Botany, 72 (7): 2672-2685, DOI: 10.1093/jxb/eraa595, ISSN: 0022-0957 (Print), ISSN: 1460-2431 (Online)
197. Skiadaresis G., J. Schwarz, K. Stahl, J. Bauhus. 2021. Groundwater extraction reduces tree vitality, growth and xylem hydraulic capacity in *Quercus robur* during and after drought events. *Scientific Reports*, 11 (1), Article № 5149, DOI: 10.1038/s41598-021-84322-6, ISSN: 2045-2322 (Print)
  198. Comeau V.M., L.D. Daniels, S. Zeglen. 2021. Climate-induced yellow-cedar decline on the island archipelago of Haida Gwaii. *Ecosphere*, 12 (3), Article № e03427, DOI: 10.1002/ecs2.3427, ISSN: 2150-8925 (Print)
  199. Li M., H. Wang, X. Zhao, Z. Lu, X. Sun, G. Ding. 2021. Role of *Suillus placidus* in Improving the Drought Tolerance of Masson Pine (*Pinus massoniana* Lamb.) Seedlings. *Forests*, 12 (3), Article № 332, DOI: 10.3390/f12030332, ISSN: 1999-4907 (Online)
  200. Canelles Q., N. Aquilue, P.M.A. James, J. Lawler, L. Brotons. 2021. Global review on interactions between insect pests and other forest disturbances. *Landscape Ecology*, 36 (4): 945-972, DOI: 10.1007/s10980-021-01209-7, ISSN: 0921-2973 (Print), ISSN: 1572-9761 (Online)
  201. Zimmermann J., R.M. Link, M. Hauck, C. Leuschner, B. Schuldt. 2021. 60-year record of stem xylem anatomy and related hydraulic modification under increased summer drought in ring- and diffuse-porous temperate broad-leaved tree species. *Trees – Structure and Function*, 35 (3): 919-937, DOI: 10.1007/s00468-021-02090-2, ISSN: 0931-1890 (Print), ISSN: 1432-2285 (Online)
  202. Schongart J., F. Wittmann, A. F. de Resende, C. Assahira, G.D. Lobo, J.R. Duarte Neves, M. da Rocha, G.B. Mori, A.C. Quaresma, L.O. Demarchi, B.W. Albuquerque, Y.O. Feitosa, G.S. Costa, G.V. Feitoza, F.M. Durgante, A. Lopes, S.E. Trumbore, T.S. Freire Silva, H. ter Steege, A.L. Val, W.J. Junk, M.T. Fernandez Piedade. 2021. The shadow of the Balbina dam: A synthesis of over 35 years of downstream impacts on floodplain forests in Central Amazonia. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 31 (5): 1117-1135, DOI: 10.1002/aqc.3526, ISSN: 1052-7613 (Print), ISSN: 1099-0755 (Online)
  203. Forrester D.I. 2021. Does individual-tree biomass growth increase continuously with tree size? *Forest Ecology and Management*, 481, Article № 118717, DOI: 10.1016/j.foreco.2020.118717, ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online)
  204. Piovesan G., F. Biondi. 2021. On tree longevity. *New Phytologist*, 231 (4): 1318-1337, DOI: 10.1111/nph.17148, ISSN: 0028-646X (Print), ISSN: 1469-8137 (Online)
  205. Zhang X., X. Li, R.D. Manzanedo, L. D'Orangeville, P. Lv, C. Wang, C. Xu, M. Hou, X. Huang, T. Rademacher. 2021. High risk of growth cessation of planted larch under extreme drought. *Environmental Research Letters*, 16 (1), Article № 14040, DOI: 10.1088/1748-9326/abd214, ISSN: 1748-9326 (Print)
  206. Reed C.C., S.M. Hood. 2021. Few generalizable patterns of tree-level mortality during extreme drought and concurrent bark beetle outbreaks. *Science of the Total Environment*, 750, Article № 141306, DOI: 10.1016/j.scitotenv.2020.141306, ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online)
  207. Klesse S., T. Wohlgemuth, K. Meusburger, Y. Vitasse, G. von Arx, M. Levesque, A. Neycken, S. Braun, V. Dubach, A. Gessler, C. Ginzler, M.M. Gossner, F. Hagedorn, V. Queloz, E. Samblas Vives, A. Rigling, E.R. Frei. 2022. Long-term soil water limitation and previous tree vigor drive local variability of drought-induced crown dieback in *Fagus sylvatica*. *Science of the total environment*, 851, article 157926. ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online) (2021 IF 10.753, SJR 1.806, Q1 Environmental Engineering)
  208. Tyminska-Czabanska L., P. Hawrylo, P. Janiec, J. Socha. 2022. Tree height, growth rate and stand density determined by ALS drive probability of Scots pine mortality. *Ecological indicators*, 145, article 109643. ISSN: 1470-160X (Print), ISSN: 1872-7034 (Online) (2021 IF 9.304, SJR 1.284, Q1 Ecology)

209. Denisa S., S. Robert, K. Patrik, D. Pavel, S. Milan, J. Peter, K. Stanislav. 2022. Divergent growth responses of healthy and declining spruce trees to climatic stress: A case study from the Western Carpathians. *Dendrochronologia*, 76, article 126023. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online) (2021 IF 3.071, SJR 0.822, Q1 Plant Science)
210. Jimenez-Castillo M., A. Fajardo, P. Lobos-Catalan, P. Torres-Morales, F.I. Piper. 2022. No carbon shortage in declining trees of the isohydric species *Araucaria araucana* (Molina) K. Koch under drought. *Annals of Forest Science*, 79 (1), article 10. ISSN:1286-4560 (Print), ISSN: 1297-966X (Online) (2021 IF 3.775, SJR 0.802, Q1 Forestry)
211. Illes G., N. Moricz. 2022. Climate envelope analyses suggests significant rearrangements in the distribution ranges of Central European tree species. *Annals of Forest Science*, 79 (1), article 35. ISSN:1286-4560 (Print), ISSN: 1297-966X (Online) (2021 IF 3.775, SJR 0.802, Q1 Forestry)
212. Peltier D.M.P., W.R.L. Anderegg, J.S. Guo, K. Ogle. 2022. Contemporary tree growth shows altered climate memory. *Ecology letters*, 25 (12): 2663-2674. ISSN: 1461-0248 (Online) (2021 IF 11.274, SJR 5.673, Q1 Ecology, Evolution, Behavior and Systematics)
213. Frei E.R., M.M. Gossner, Y. Vitasse, V. Queloz, V. Dubach, A. Gessler, C. Ginzler, F. Hagedorn, K. Meusburger, M. Moor, E. Samblas Vives, A. Rigling, I. Uitentuis, G. von Arx, T. Wohlgemuth. 2022. European beech dieback after premature leaf senescence during the 2018 drought in northern Switzerland. *Plant Biology*, 24 (7): 1132-1145. ISSN: 1435-8603 (Print), ISSN: 1438-8677 (Online) (2021 IF 3.877, SJR 0.807, Q1 Plant Science)
214. Levin D.A., N.E. Grulke, C. Bienz, K. Hrinkevich, A. Merschel, K.A. Uyeda. 2022. Forest treatment effects on wood production in ponderosa pine. *Forest Ecology and Management*, 519, article 120295. ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online) (2021 IF 4.384, SJR 1.107, Q1 Forestry)
215. Williams J., J.C. Stella, S.L. Voelker, A.M. Lambert, L.M. Pelletier, J.E. Drake, J.M. Friedman, D.A. Roberts, M.B. Singer. 2022. Local groundwater decline exacerbates response of dryland riparian woodlands to climatic drought. *Global Change Biology*, 28 (22): 6771-6788. ISSN: 1354-1013 (Print), ISSN: 1365-2486 (Online) (2021 IF 13.211, SJR 3.685, Q1 Ecology)
216. Zacharias M., T. Pampuch, B. Dauphin, L. Opgenoorth, C. Roland, M. Schnittler, M. Wilmking, M. Bog, K. Heer. 2022. Genetic basis of growth reaction to drought stress differs in contrasting high-latitude treeline ecotones of a widespread conifer. *Molecular ecology*, 31 (20): 5165-5181. ISSN: 0962-1083 (Print), ISSN: 1365-294X (Online), (2021 IF 6.622, SJR 1.960, Q1 Ecology, Evolution, Behavior and Systematics)
217. Wu M., S. Manzoni, G. Vico, A. Bastos, F.T. de Vries, G. Messori. 2022. Drought Legacy in Sub-Seasonal Vegetation State and Sensitivity to Climate Over the Northern Hemisphere. *Geophysical research letters*, 49 (15), article e2022GL098700. ISSN: 0094-8276 (Print) (2021 IF 5.576, SJR 1.857, Q1 Earth and Planetary Sciences)
218. Buras A., T. Oviden, A. Rammig, C.S. Zang. 2022. Refining the standardized growth change method for pointer year detection: Accounting for statistical bias and estimating the deflection period. *Dendrochronologia*, 74, article 125964. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online) (2021 IF 3.071, SJR 0.822, Q1 Plant Science)
219. Zlobin I.E. 2022. Linking the growth patterns of coniferous species with their performance under climate aridization. *Science of the total environment*, 831, article 154971. ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online) (2021 IF 10.753, SJR 1.806, Q1 Environmental Engineering)
220. Zhang X., Z. Fan, Z. Shi, L. Pan, S. Kwon, X. Yang, Y. Liu. 2022. Tree characteristics and drought severity modulate the growth resilience of natural Mongolian pine to extreme drought episodes. *Science of the total environment*, 830, article 154742. (2021 IF 10.753, SJR 1.806, Q1 Environmental Engineering)

221. Vieira J., C. Nabais, F. Campelo. 2022. Dry and hot years drive growth decline of *Pinus halepensis* at its southern range limit in the Moroccan High Atlas Mountains. *Trees-structure and function*, 36 (5): 1585-1595. ISSN: 0931-1890 (Print), ISSN: 1432-2285 (Online), (2021 IF 2.888, SJR 0.658, Q1 Forestry)
222. Filizzola C., M.A. Carlucci, N. Genzano, E. Ciancia, M. Lisi, N. Pergola, F. Ripullone, V. Tramutoli. 2022. Robust Satellite-Based Identification and Monitoring of Forests Having Undergone Climate-Change-Related Stress. *Land*, 11 (6), article 825. ISSN: 2073-445X (Online), (2021 IF 3.905, SJR 0.685, Q2 Ecology)
223. Dulamsuren C., B. Bat-Enerel, P. Meyer, C. Leuschner. 2022. Did stand opening 60 years ago predispose a European beech population to death? *Trees, forests and people*, 8, article 100265. ISSN: 2666-7193 (Online) (2021 SJR 0.389, Q2 Forestry)
224. Zuidema P.A., P. van der Sleen. 2022. Seeing the forest through the trees: how tree-level measurements can help understand forest dynamics. *New phytologist*, 234 (5): 1544-1546. ISSN: 1469-8137 (Online), (2021 IF 10.323, SJR 3.009, Q1 Plant Science)
225. Petit G., D. Zambonini, B.D. Hesse, K.-H. Haeberle. 2022. No xylem phenotypic plasticity in mature *Picea abies* and *Fagus sylvatica* trees after 5 years of throughfall precipitation exclusion. *Global change biology*, 28 (15): 4668-4683. ISSN: 1354-1013 (Print), ISSN: 1365-2486 (Online) (2021 IF 13.211, SJR 3.685, Q1 Ecology)
226. Searle E.B., H.Y.H. Chen, A. Paquette. 2022. Higher tree diversity is linked to higher tree mortality. *Proceedings of the National Academy of Sciences of the United States of America*, 119 (19), article e2013171119. ISSN: 0027-8424 (Print), ISSN: 1091-6490 (Online), (2021 IF 12.779, SJR 4.184, Q1 Multidisciplinary)
227. Bert D., F. Lebourgeois, A. Ouayjan, A. Ducouso, J. Ogee, A. Hampe. 2022. Past and future radial growth and water-use efficiency of *Fagus sylvatica* and *Quercus robur* in a long-term climate refugium. *Dendrochronologia*, 72, article 125939. ISSN: 1125-7865 (Print), ISSN: 1612-0051 (Online) (2021 IF 3.071, SJR 0.822, Q1 Plant Science)
228. Eckes-Shephard A.H., F.C. Ljungqvist, D.M. Drew, C.B.K. Rathgeber, A.D. Friend. 2022. Wood Formation Modeling - A Research Review and Future Perspectives. *Frontiers in Plant Science*, 13, article 837648. ISSN: 1664-462X (Print) (2021 IF 6.627, SJR 1.359, Q1 Plant Science)
229. Christopoulou A., C.I. Sazeides, N.M. Fyllas. 2022. Size-mediated effects of climate on tree growth and mortality in Mediterranean *Brutia* pine forests. *Science of the total environment*, 812, article 151463. ISSN: 0048-9697 (Print), ISSN: 1879-1026 (Online) (2021 IF 10.753, SJR 1.806, Q1 Environmental Engineering)
230. Sturm J., M.J. Santos, B. Schmid, A. Damm. 2022. Satellite data reveal differential responses of Swiss forests to unprecedented 2018 drought. *Global Change Biology*, 28 (9): 2956-2978. ISSN: 1354-1013 (Print), ISSN: 1365-2486 (Online) (2021 IF 13.211, SJR 3.685, Q1 Ecology)
231. Duan H., G. Zhang. 2022. Nonlinear Mixed Effect Model Used in a Simulation of the Impact of Climate Change on Height Growth of *Cyclobalanopsis glauca*. *Forests*, 13 (3), article 463. ISSN: 1999-4907 (Online) (2021 IF 3.282, SJR 0.623, Q1 Forestry)
232. North M.P., R.E. Tompkins, A.A. Bernal, B. M. Collins, S.L. Stephens, R.A. York. 2022. Operational resilience in western US frequent-fire forests. *Forest Ecology and Management*, 507, article 120004. ISSN: 0378-1127 (Print), ISSN: 1872-7042 (Online) (2021 IF 4.384, SJR 1.107, Q1 Forestry)
233. Schook D.M., J.M. Friedman, J.D. Hoover, S.E. Rice, R.D. Thaxton, D.J. Cooper. 2022. Riparian forest productivity decline initiated by streamflow diversion then amplified by atmospheric drought 40 years later. *Ecohydrology*, 15 (3), article e2408. ISSN: 1936-0584 (Print), ISSN: 1936-0592 (Online), (2021 IF 3.166, SJR 0.853, Q1 Ecology)
234. Meyer P., A.P. Spinu, A. Molder, J. Bauhus. 2022. Management alters drought-induced mortality patterns in European beech (*Fagus sylvatica* L.) forests. *Plant Biology*, 24 (7):

- 1157-1170. ISSN: 1435-8603 (Print), ISSN: 1438-8677 (Online) (2021 IF 3.877, SJR 0.807, Q1 Plant Science)
235. Comeau V.M., L.D. Daniels. 2022. Multiple divergent patterns in yellow-cedar growth driven by anthropogenic climate change. *Climatic Change*, 170 (3-4), article 22. ISSN: 0165-0009 (Print), ISSN: 1573-1480 (Online) (2021 IF 5.174, SJR 1.357, Q1 Global and Planetary Change)
  236. Mercer C., V.M. Comeau, L.D. Daniels, M. Carrer. 2022. Contrasting Impacts of Climate Warming on Coastal Old-Growth Tree Species Reveal an Early Warning of Forest Decline. *Frontiers in Forests and Global Change*, 4, article 775301. ISSN: 2624-893X (Online) (2021 IF 4.332, SJR 1.041, Q1 Forestry)
  237. Heilman K.A., M.C. Dietze, A.A. Arizpe, J. Aragon, A. Gray, J.D. Shaw, A.O. Finley, S. Klesse, R.J. DeRose, M.E.K. Evans. 2022. Ecological forecasting of tree growth: Regional fusion of tree-ring and forest inventory data to quantify drivers and characterize uncertainty. *Global Change Biology*, 28 (7): 2442-60. ISSN: 1354-1013 (Print), ISSN: 1365-2486 (Online) (2021 IF 13.211, SJR 3.685, Q1 Ecology)
  238. Garcia-Garcia I., B. Mendez-Cea, D. Martin-Galvez, J. I. Seco, F.J. Gallego, J.C. Linares. 2022. Challenges and Perspectives in the Epigenetics of Climate Change-Induced Forests Decline. *Frontiers in Plant Science*, 12, article 797958. ISSN: 1664-462X (Print) (2021 IF 6.627, SJR 1.359, Q1 Plant Science)
  239. Jiang H., L. Song, Y. Li, M. Ma, L. Fan. 2022. Monitoring the Reduced Resilience of Forests in Southwest China Using Long-Term Remote Sensing Data. *Remote Sensing*, 14 (1), article 32. ISSN: 2072-4292 (Online) (2021 IF 5.349, SJR 1.283, Q1 Earth and Planetary Sciences)
  240. Zald H.S.J., C.C. Callahan, M.D. Hurteau, M.J. Goodwin, M.P. North. 2022. Tree growth responses to extreme drought after mechanical thinning and prescribed fire in a Sierra Nevada mixed-conifer forest, USA. *Forest Ecology and Management*, 510 (3), article 120107. <https://doi.org/10.1016/j.foreco.2022.120107> (2021 IF 4.384, SJR 1.107, Q1 Forestry)
  241. Ravn, J; Taylor, AR; Lavigne, MB; D'Orangeville, L, 2023. Local adaptation of balsam fir seedlings improves growth resilience to heat stress. *Canadian Journal of Forest Research*, DOI: 10.1139/cjfr-2023-0128, ISSN: 0045-5067, eISSN: 1208-6037.
  242. Plaga, BNE; Bauhus, J; Smith, AR; Pereira, MG; Forrester, D, 2023. Drought-related mortality modifies mixing effects on light absorption and growth in mono-specific and mixed stands of *Fagus sylvatica*, *Alnus glutinosa*, and *Betula pendula*. *Forestry*, DOI: 10.1093/forestry/cpad051, ISSN: 0015-752X, eISSN: 1464-3626.
  243. Buras, A; Rehschuh, R; Fonti, M; Lange, J; Fonti, P; Menzel, A; Gessler, A; Rigling, A; Treydte, K; von Arx, G, 2023. Quantitative wood anatomy and stable carbon isotopes indicate pronounced drought exposure of Scots pine when growing at the forest edge. *Frontiers in Forests and Global Change*, Volume: 6, Article Number: 1233052, DOI: 10.3389/ffgc.2023.1233052, eISSN: 2624-893X
  244. Vernon, MJ; Johnston, JD; Stokely, TD; Miller, BA; Woodruff, DR, 2023. Mechanical thinning restores ecological functions in a seasonally dry ponderosa pine forest in the inland Pacific Northwest, USA. *Forest Ecology and Management*, Volume: 546, Article Number: 121371, DOI: 10.1016/j.foreco.2023.121371, ISSN: 0378-1127, eISSN: 1872-7042
  245. Andrus, RA; Peach, LR; Cinquini, AR; Mills, B; Yusi, JT; Buhl, C; Fischer, M; Goodrich, BA; Hulbert, JM; Holz, A; Meddens, AJH; Moffett, KB; Ramirez, A; Adams, HD, 2023. Canary in the forest?-Tree mortality and canopy dieback of western redcedar linked to drier and warmer summers. *Journal of Biogeography*, DOI: 10.1111/jbi.14732, ISSN: 0305-0270, eISSN: 1365-2699
  246. Kane, V; Bartl-Geller, BN; Cova, GR; Chamberlain, CP; van Wagendonk, L; North, MP, 2023. Where are the large trees? A census of Sierra Nevada large trees to determine their

- frequency and spatial distribution across three large landscapes. *Forest Ecology and Management*, Volume: 546, Article Number: 121351, DOI: 10.1016/j.foreco.2023.121351, ISSN: 0378-1127, eISSN: 1872-7042
247. Thompson, RA; Landhäuser, SM; Adams, HD, 2023. Dynamical systems for plant carbon storage: describing complex reserve dynamics from simple fluctuations in photosynthesis and carbon allocation. *Tree Physiology*, DOI: 10.1093/treephys/tpad104, ISSN: 0829-318X, eISSN: 1758-4469
  248. Verschuren, L; De Mil, T; De Frenne, P; Haneca, K; Van Acker, J; Vandekerckhove, K; van den Bulcke, J, 2023. Heading for a fall: The fate of old wind-thrown beech trees (*Fagus sylvatica*) is detectable in their growth pattern. *Science of the Total Environment*, Volume: 903, Article Number: 166148, DOI: 10.1016/j.scitotenv.2023.166148, ISSN: 0048-9697, eISSN: 1879-1026
  249. Spiecker, H; Kahle, HP, 2023. Climate-driven tree growth and mortality in the Black Forest, Germany-Long-term observations. *Global Change Biology*, Volume: 29, Issue: 20, Pages: 5908-5923, DOI: 10.1111/gcb.16897, ISSN: 1354-1013, eISSN: 1365-2486
  250. Goke, A; Martin, PH, 2023. Drought-induced photosynthetic decline and recruitment losses are mediated by light microenvironment in Rocky Mountain subalpine forest tree seedlings. *Forest Ecology and Management*, Volume: 546, Article Number: 121295, DOI: 10.1016/j.foreco.2023.121295, ISSN: 0378-1127, eISSN: 1872-7042
  251. Schmied, G; Pretzsch, H; Ambs, D; Uhl, E; Schmucker, J; Fäth, J; Biber, P; Hoffmann, YD; Seho, M; Mellert, KH; Hilmers, T, 2023. Rapid beech decline under recurrent drought stress: Individual neighborhood structure and soil properties matter. *Forest Ecology and Management*, Volume: 545, Article Number: 121305, DOI: 10.1016/j.foreco.2023.121305, ISSN: 0378-1127, eISSN: 1872-7042
  252. Leuschner, C; Weithmann, G; Bat-Enerel, B; Weigel, R, 2023. The Future of European Beech in Northern Germany-Climate Change Vulnerability and Adaptation Potential. *Forests*, Volume: 14, Issue: 7, Article Number: 1448, DOI: 10.3390/f14071448, ISSN: 1999-4907
  253. Zeng, SB; Jiang, YJ; Wu, Z; Zhang, CY; Lv, TR, 2023. Declining trees growth and vegetation productivity resulting from decreasing soil water contents induced by tunnels excavation in karst mountain areas. *Ecological Indicators*, Volume: 154, Article Number: 110555, DOI: 10.1016/j.ecolind.2023.110555, ISSN: 1470-160X, eISSN: 1872-7034
  254. Cabon, A; DeRose, RJ; Shaw, JD; Anderegg, WRL, 2023. Declining tree growth resilience mediates subsequent forest mortality in the US Mountain West. *Global Change Biology*, DOI: 10.1111/gcb.16826, ISSN: 1354-1013, eISSN: 1365-2486
  255. Montoya, RC; D'Amato, AW; Messier, C; Nolet, P, 2023. Mapping temperate forest stands using mobile terrestrial LiDAR shows the influence of forest management regimes on tree mortality. *Forest Ecology and Management*, Volume: 544, Article Number: 121194, DOI: 10.1016/j.foreco.2023.121194, ISSN: 0378-1127, eISSN: 1872-7042
  256. Martínez, D; Chadwick, C; Plaza-Aguilar, A, 2023. The Time of Emergence (ToE) of the Andean Mediterranean sclerophyllous forest of *Quillaja saponaria* (Mol.) and *Lithraea caustica* (mol.) Hox. & Arn. *Forest Ecology and Management*, Volume: 544, Article Number: 121169, DOI: 10.1016/j.foreco.2023.121169, ISSN: 0378-1127, eISSN: 1872-7042
  257. Zhang, HX; McDowell, NG; Li, XR; Huo, JQ; Li, YF; Wang, ZJ, 2023. Hydraulic safety and growth rather than climate of origin influence survival in desert shrubs and trees. *Forest Ecology and Management*, Volume: 543, Article Number: 121130, DOI: 10.1016/j.foreco.2023.121130, ISSN: 0378-1127, eISSN: 1872-7042
  258. Young, DJN; Estes, BL; Gross, S; Wuenschel, A; Restaino, C; Meyer, MD, 2023. Effectiveness of forest density reduction treatments for increasing drought resistance of ponderosa pine growth. *Ecological Applications*, Volume: 33, Issue: 4, DOI: 10.1002/eap.2854, ISSN: 1051-0761, eISSN: 1939-5582

259. Zamora-Pereira, JC; Hanewinkel, M; Yousefpour, R, 2023. Robust management strategies promoting ecological resilience and economic efficiency of a mixed conifer-broadleaf forest in Southwest Germany under the risk of severe drought. *Ecological Economics*, Volume: 209, Article Number: 107825, DOI: 10.1016/j.ecolecon.2023.107825, ISSN: 0921-8009, eISSN: 1873-6106
260. Yang, J; Zhao, BW; Zheng, JC; Zhang, Q; Li, Y; Ma, FH; Fang, OY, 2023. Linkage between spruce forest decline and cloud cover increase in the Qilian Mountains of the northeastern Tibetan Plateau. *Trees-Structure and Function*, Volume: 37, Issue: 4, Pages: 1097-1106, DOI: 10.1007/s00468-023-02409-1, ISSN: 0931-1890, eISSN: 1432-2285
261. Urrutia-Jalabert, R; Barichivich, J; Szejner, P; Rozas, V; Lara, A, 2023. Ecophysiological Responses of *Nothofagus obliqua* Forests to Recent Climate Drying Across the Mediterranean-Temperate Biome Transition in South-Central Chile. *Journal of Geophysical Research-Biogeosciences*, Volume: 128, Issue: 4, Article Number: e2022JG007293, DOI: 10.1029/2022JG007293, ISSN: 2169-8953, eISSN: 2169-8961
262. Venegas-González, A; Muñoz, AA; Carpintero-Gibson, S; González-Reyes, A; Schneider, I; Gipolou-Zuñiga, T; Aguilera-Betti, I; Roig, FA, 2023. Sclerophyllous Forest Tree Growth Under the Influence of a Historic Megadrought in the Mediterranean Ecoregion of Chile. *Ecosystems*, Volume: 26, Issue: 2, Pages: 344-361, DOI: 10.1007/s10021-022-00760-x, ISSN: 1432-9840, eISSN: 1435-0629
263. Ma, TX; Liang, Y; Li, ZY; Liu, ZH; Liu, B; Wu, MM; Lau, MK; Fang, YT, 2023. Age-related patterns and climatic driving factors of drought-induced forest mortality in Northeast China. *Agricultural and Forest Meteorology*, Volume: 332, Article Number: 109360, DOI: 10.1016/j.agrformet.2023.109360, ISSN: 0168-1923, eISSN: 1873-2240
264. Canning, CM; Mood, BJ; Bonsal, B; Howat, B; Laroque, CP, 2023. Comparison of tree-growth drought legacies of three shelterbelt species in the Canadian Prairies. *Agricultural and Forest Meteorology*, Volume: 330, Article Number: 109317, DOI: 10.1016/j.agrformet.2023.109317, ISSN: 0168-1923, eISSN: 1873-2240
265. Vitasse, Y; Wohlgemuth, T; Rigling, A, 2023. Forests in the face of droughts and heatwaves: causes of decline, contributing factors and differences in species sensitivity. *Revue Forestiere Francaise (Nancy)*, Volume: 74, Issue: 2, Pages: 121-132, DOI: 10.20870/revforfr.2023.7586, ISSN: 0035-2829, eISSN: 1951-6827
266. Leifsson, C; Buras, A; Rammig, A; Zang, C, 2023. Changing climate sensitivity of secondary growth following extreme drought events in forest ecosystems: a global analysis. *Environmental Research Letters*, Volume: 18, Issue: 1, Article Number: 014021, DOI: 10.1088/1748-9326/aca9e5, ISSN: 1748-9326
267. Schmitt, Anna; Trouve, Raphael; Perret, Sandrine; Calas, Aurore; Seynave, Ingrid; Lebourgeois, Francois, 2023. Dynamic silviculture of sessile oak stands favours tree resilience following severe drought. *Revue Forestiere Francaise (Nancy)*, Volume: 74, Issue: 1, Pages: 29-44, DOI: 10.20870/revforfr.2023.7411, ISSN: 0035-2829, eISSN: 1951-6827
268. Ferrenberg, S; Vázquez-Gonzalez, C; Lee, SR; Kristupaitis, M, 2023. Divergent growth-differentiation balance strategies and resource competition shape mortality patterns in ponderosa pine. *Ecosphere*, Volume: 14, Issue: 1, Article Number: e4349, DOI: 10.1002/ecs2.4349, ISSN: 2150-8925

**Г7.1.** Dimitrov S., G. Georgiev, P. Mirchev, M. Georgieva, M. Iliev, D. Doychev, S. Bencheva, G. Zaemdzhikova, N. **Zaphirov**. 2019. Integrated model of application of remote sensing and field investigations for sanitary status assessment of forest stands in two reserves in West Balkan Range, Bulgaria. – In: Proceedings of SPIE 11174, Seventh International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2019), 18-

21 March 2019, Paphos, Cyprus, 1117404, Published: 27 June 2019, 13 pp., doi: 10.1117/12.2532313, ISSN: 0277-786X (print), ISSN: 1996-756X (electronic); ISBN: 9781510630611 (print), ISBN: 9781510630628 (electronic)

**цитирана в:**

269. Seier G., C. Hödl, J. Abermann, S. Schöttl, A. Maringer, D. N. Hofstadler, U. Pröbstl-Haider, G. K. Lieb. 2021. Unmanned aircraft systems for protected areas: Gadgetry or necessity? – *Journal for Nature Conservation*, 64 (42), Article № 126078, 14 pp, Available online 1 October 2021, ISSN: 1617-1381 (Print), ISSN: 1618-1093 (Online)
270. Torres P., M. Rodes-Blanco, A. Viana-Soto, H. Nieto, M. García. 2021. The Role of Remote Sensing for the Assessment and Monitoring of Forest Health: A Systematic Evidence Synthesis. – *Forests*, 12, Article № 1134, 35 pp, <https://doi.org/10.3390/f12081134>, Published: 23 August 2021, ISSN: 1999-4907 (Online)
271. Ecke S., J. Dempewolf, J. Frey, A. Schwaller, E. Endres, H.-J. Klemmt, D. Tiede, T. Seifert. 2022. UAV-Based Forest Health Monitoring: A Systematic Review. *Remote Sensing*, 14, article 3205. <https://doi.org/10.3390/rs14133205>. ISSN: 2072-4292 (Online) (2021 IF 5.349, SJR 1.283, Q1 Earth and Planetary Sciences)
272. Oszako, T; Kukina, O; Dyshko, V; Moser, WK; Slusarski, S; Okorski, A; Borowik, P, 2023. Afforestation of Land Abandoned by Farmers Poses Threat to Forest Sustainability Due to *Heterobasidion* spp. *Forests*, Volume: 14, Issue: 5, Article Number: 954, DOI: 10.3390/f14050954, eISSN: 1999-4907

**4. В статия от специализирано реферирано списание в Web of Science без IF или в Scopus без SJR**

**B4.5. Zafirov, N., G. Kostov, 2019. Main stress factors in coppice oak forests in Western Bulgaria. *Silva Balcanica*, vol. 20 (1), ISSN: 1311-8706 (print), pp. 37–51**

**цитирана в:**

273. Панайотов М., Н. Цветанов, И. Рачев. 2022. Проучване на необичайно ниско находище на бяла мура (*Pinus peuce Griseb.*) в Североизточна Рила. *Наука за гората*, 1: 69-88. ISSN: 0861-007X (Print) (Web of Science)
274. Тончев Т., Н. Александров, Е. Молле. 2022. Оптимални турнуси на сеч за издънкови дъбови насаждения в България. *Наука за гората*, 2: 41-57. ISSN: 0861-007X (Print) (Web of Science)

**B4.6. Tsvetkov I., N. Zafirov, St. Mirtchev, 2017. Dendrochronological analysis of Cork oak (*Q. suber* L.) adaptation in Southwestern Bulgaria. *Silva Balcanica*, vol. 18 (2), ISSN: 1311-8706 (print), pp. 5–14**

**цитирана в:**

275. Панайотов М., Н. Цветанов, И. Рачев. 2022. Проучване на необичайно ниско находище на бяла мура (*Pinus peuce Griseb.*) в Североизточна Рила. *Наука за гората*, 1: 69-88. ISSN: 0861-007X (Print) (Web of Science)



**B4.8.** Bräuning A., M. De Ridder, **N. Zafirov**, I. García-González, D. P. Dimitrov, H. Gärtner, 2016. Tree-ring features: Indicators of extreme event impacts. *IAWA Journal*, vol. 37 (2), ISSN: 0928-1541 (print), 2294-1932 (electronic), pp. 206–231

**цитирана в:**

276. Samson,R., T. F. Ningal, A. Tiwary, R. Grote, S. Fares, H. Saaroni, J. A. Hiemstra, M. Zhiyanski, V. Urša, P. Cariñanos, L. Järvi, A. Przybysz, M. Moretti, N. Zürcher. 2017. Species-Specific Information for Enhancing Ecosystem Services. *The Urban Forest: Cultivating Green Infrastructure for People and the Environment*, Book Series: Future City, 7: 111-144.
277. Gričar J. 2017. Characteristics of wood structure of pine (*Pinus sylvestris*) and beech (*Fagus sylvatica*) seedlings exposed to different environmental regimes. - *Folia Biologica et Geologica*, 58 (1): 47-57.

**B4.7.** Cailleret, M., S. Jansen, E.M.R. Robert, L. Desoto, T. Aakala, J.A. Antos, B. Beikircher, C. Bigler, H. Bugmann, M. Caccianiga, V. Čada, J.J. Camarero, P. Cherubini, H. Cochard, M.R. Coyea, K. Čufar, A.J. Das, H. Davi, S. Delzon, M. Dorman, G. Gea-Izquierdo, S. Gillner, L.J. Haavik, H. Hartmann, A.-M. Hereş, K.R. Hultine, P. Janda, J.M. Kane, V.I. Kharuk, T. Kitzberger, T. Klein, K. Kramer, F. Lens, T. Levanic, J.C. Linares Calderon, F. Lloret, R. Lobo-Do-Vale, F. Lombardi, R. López Rodríguez, H. Mäkinen, S. Mayr, I. Mészáros, J.M. Metsaranta, F. Minunno, W. Oberhuber, A. Papadopoulos, M. Peltoniemi, A.M. Petritan, B. Rohner, G. Sangüesa-Barreda, D. Sarris, J.M. Smith, A.B. Stan, F. Sterck, D.B. Stojanović, M.L. Suarez, M. Svoboda, R. Tognetti, J.M. Torres-Ruiz, V. Trotsiuk, R. Villalba, F. Vodde, A.R. Westwood, P.H. Wyckoff, **N. Zafirov**, J. Martínez-Vilalta, 2017. A synthesis of radial growth patterns preceding tree mortality. *Global Change Biology*, vol. 23 (4), ISSN: 1365-2486, pp. 1675–1690

**цитирана в:**

278. Pederson N., C. Leland, D.A. Bishop, J.K. Pearl, K.J. Anchukaitis, T. Mandra, M. Hopton-Ahmed, D. Martin-Benito. 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, article 39. DOI 10.3389/ffgc.2020.00039. ISSN: 2624-893X (Online)
279. Corona C., M. Stoffel, J.L. Saez, 2021. Contrasted effects of climate change on low-altitude relict *Pinus uncinata* stands in the Northern French Alps. *Euro-Mediterranean Journal for Environmental Integration*, 6 (3), Article № 72, DOI: 10.1007/s41207-021-00280-5, ISSN: 2365-6433 (Print), ISSN: 2365-7448 (Online)

**5. В статия от специализирано нереферирано списание**

**B4.4.** **Zafirov N.**, M. Panayotov, N. Tsvetanov, I. Nikolchova, V. Trouet, 2020. Dendroclimatic analysis of *Pinus peuce* Griseb. at subalpine and treeline locations in Pirin Mountains, Bulgaria. *Dendrochronologia*, vol. 61, ISSN: 1125-7865 (print), 1612-0051 (online), article 125703

**цитирана в:**

280. Tanovski V., B. Matovic, L. Kesic, D.B. Stojanovic. 2022. A review of the influence of climate change on coniferous forests in the Balkan peninsula. *Topola/Poplar*, 210: 41-64. DOI: 10.5937/topola2210041T, ISSN: 2620-1593 (Online)
281. Tzvetkov, J., 2022. Vitosha mountain (SW Bulgaria) during the little ice age in the context of past climate changes in the Balkans. *Researches Reviews of the Department of Geography, Tourism and Hotel Management* 51–2, pp. 86–97

**B4.5. Zafirov, N., G. Kostov, 2019. Main stress factors in coppice oak forests in Western Bulgaria. *Silva Balcanica*, vol. 20 (1), ISSN: 1311-8706 (print), pp. 37–51**

**цитирана в:**

282. Tongo A., H. Jalilvand, M. Hosseiniasr, H. Naji, 2020. Conductivity of Persian Oak (*Quercus brantii* Lindl.) Trees Affected by Dieback. *Ecopersia*, 8 (2), pp. 117–124.
283. Tongo A., H. Jalilvand, M. Hosseiniasr, H.R. Naji. 2022. Gas Exchanges and Accumulation of Osmolites in Declined Persian Oak Stands in Ilam Province (Case study: Gchan and Sheshdar Forest Area). *Ecology of Iranian Forests*, 10 (1 9): 22-31. (In Persian, English abstract)

**B4.7. Cailleret, M., S. Jansen, E.M.R. Robert, L. Desoto, T. Aakala, J.A. Antos, B. Beikircher, C. Bigler, H. Bugmann, M. Caccianiga, V. Čada, J.J. Camarero, P. Cherubini, H. Cochard, M.R. Coyea, K. Čufar, A.J. Das, H. Davi, S. Delzon, M. Dorman, G. Gea-Izquierdo, S. Gillner, L.J. Haavik, H. Hartmann, A.-M. Hereş, K.R. Hultine, P. Janda, J.M. Kane, V.I. Kharuk, T. Kitzberger, T. Klein, K. Kramer, F. Lens, T. Levanic, J.C. Linares Calderon, F. Lloret, R. Lobo-Do-Vale, F. Lombardi, R. López Rodríguez, H. Mäkinen, S. Mayr, I. Mészáros, J.M. Metsaranta, F. Minunno, W. Oberhuber, A. Papadopoulos, M. Peltoniemi, A.M. Petritan, B. Rohner, G. Sangüesa-Barreda, D. Sarris, J.M. Smith, A.B. Stan, F. Sterck, D.B. Stojanović, M.L. Suarez, M. Svoboda, R. Tognetti, J.M. Torres-Ruiz, V. Trotsiuk, R. Villalba, F. Vodde, A.R. Westwood, P.H. Wyckoff, **N. Zafirov**, J. Martínez-Vilalta, 2017. A synthesis of radial growth patterns preceding tree mortality. *Global Change Biology*, vol. 23 (4), ISSN: 1365-2486, pp. 1675–1690**

**цитирана в:**

284. Nardini A., T. Savi, P. Trifilò, M. A. Lo Gullo. 2017. Drought Stress and the Recovery from Xylem Embolism in Woody Plants. - *Progress in Botany*, 79: 197-231.

**4. В дисертационен труд**

**B4.7. Cailleret, M., S. Jansen, E.M.R. Robert, L. Desoto, T. Aakala, J.A. Antos, B. Beikircher, C. Bigler, H. Bugmann, M. Caccianiga, V. Čada, J.J. Camarero, P. Cherubini, H. Cochard, M.R. Coyea, K. Čufar, A.J. Das, H. Davi, S. Delzon, M. Dorman, G. Gea-Izquierdo, S. Gillner, L.J. Haavik, H. Hartmann, A.-M. Hereş, K.R. Hultine, P. Janda, J.M. Kane, V.I. Kharuk, T.**

Kitzberger, T. Klein, K. Kramer, F. Lens, T. Levanic, J.C. Linares Calderon, F. Lloret, R. Lobo-Do-Vale, F. Lombardi, R. López Rodríguez, H. Mäkinen, S. Mayr, I. Mészáros, J.M. Metsaranta, F. Minunno, W. Oberhuber, A. Papadopoulos, M. Peltoniemi, A.M. Petritan, B. Rohner, G. Sangüesa-Barreda, D. Sarris, J.M. Smith, A.B. Stan, F. Sterck, D.B. Stojanović, M.L. Suarez, M. Svoboda, R. Tognetti, J.M. Torres-Ruiz, V. Trotsiuk, R. Villalba, F. Vodde, A.R. Westwood, P.H. Wyckoff, **N. Zafirov**, J. Martínez-Vilalta, 2017. A synthesis of radial growth patterns preceding tree mortality. *Global Change Biology*, vol. 23 (4), ISSN: 1365-2486, pp. 1675–1690

**цитирана в:**

285. Lalemand, LB, 2018. Restoration and Tree Drought Resistance in Coast Redwood-Douglas-Fir forests at Redwood National Park, California. A Thesis Presented to the Faculty of Humboldt State University, May 2918, 49 p.

**B4.8.** Bräuning A., M. De Ridder, **N. Zafirov**, I. García-González, D. P. Dimitrov, H. Gärtner, 2016. Tree-ring features: Indicators of extreme event impacts. *IAWA Journal*, vol. 37 (2), ISSN: 0928-1541 (print), 2294-1932 (electronic), pp. 206–231

**цитирана в:**

286. Novak K. 2017. Growth characteristics of tree rings in *Pinus halepensis* in the Mediterranean. - Doctoral Thesis, University of Alicante, Spain, 93 p.

Общо: **286 цитирания**. От тях **275** в научни издания, реферирани и индексирани в световноизвестни бази данни с научна информация, **4** в монографии и колективни токове с научно рецензиране, **5** в нереперирани списания с научно рецензиране и **2** цитирания в дисертации.

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Изготвил:  .....

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