

## Personal

Cătălin-Constantin ROIBU

### Univ. Professor, PhD.

Faculty of Forestry

"Stefan cel Mare" University of Suceava, Universitatii street no.13  
720229, Suceava, Romania, [catalinroibu@usm.ro](mailto:catalinroibu@usm.ro),

### PhD Supervisor

Silviculture Domain, "Stefan cel Mare" University of Suceava,  
Universitatii street no.13, 720229, Suceava, Romania

### Head of Forest Biometric Laboratory

Faculty of Forestry

"Stefan cel Mare" University of Suceava, Universitatii street no.13  
720229, Suceava, Romania

Born August 6<sup>th</sup> 1980 in Falticeni, Romania. Married (1 children - Teodora)

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## Scientific statistics and scores

Publications = **72** of which **40** are **ISI** listed (37 papers in Q1 category) Citations = **924** (*Google Scholar*), *h*-index = **14** (*Google Scholar*) **12** (*Web of Science*), **12** (*Scopus*), **3 books** (2 as main author and 1 as co-author), **2 book chapters** (1 in international publishing house).

ResearchGate Interest score = 1,376

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## Career and responsibilities

1999-2004 – Faculty of Forestry, "Stefan cel Mare" University of Suceava, **bachelor diploma in Forestry** (in 2004) – as highest-ranking graduate

2004-2011 - Faculty of Forestry, "Stefan cel Mare" University of Suceava, **Ph.D. diploma in Forestry** (in 2011)

2004-2007 - teaching assistant – Faculty of Forestry, "Stefan cel Mare" University of Suceava (teaching Wood science, Forest Biometrics).

2007-2013 – assistant professor – Faculty of Forestry, "Stefan cel Mare" University of Suceava (teaching Wood science, Forest Biometrics).

2013-2022 – lecturer Ph.D. – Faculty of Forestry, "Stefan cel Mare" University of Suceava (teaching Wood science, Dendrochronology, Global Environmental Changes, Climatology).

2012 – present - technical expert – Law Court of Suceava (Silviculture and Forest Harvesting).

**2014 – present - head of Forest Biometrics Laboratory.**

2022- 2024 - Associate Professor, Ph.D. – Faculty of Forestry, "Stefan cel Mare" University of Suceava (teaching Wood science, Dendrochronology, Ecosystems Dynamics).

**2023 – PhD supervisor**, Silviculture domain, "Stefan cel Mare" University of Suceava, Universitatii street no.13, 720229, Suceava, Romania

2023 – member of European Forestry Academic Society

**2024 – Univ. Professor** - Faculty of Forestry, "Stefan cel Mare" University of Suceava (teaching Wood science, Dendrochronology, Ecosystems Dynamics).

2024 – Senate member - "Stefan cel Mare" University of Suceava

2024 – board member of Faculty of Forestry - "Stefan cel Mare" University of Suceava

2024 – Biodiversity Conservation and Ecosystems Management master program coordinator, Faculty of Forestry - "Stefan cel Mare" University of Suceava

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## Specializations and fellowships:

2017 - International Wood anatomy and tree-ring ecology – winter school, at Swiss Federal Institute for Forest, Snow and Landscape Research, in Klosters Dorf, Switzerland

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## Fundraising and project managing

### International projects:

WWF FY 14/2013 *Set up four trial markets in OGF for WWF demonstration areas, aiming to emphasize the unique values of OGF and importance of the dead trees in forest ecosystems*—**Project manager** - financed by WWF Austria –**3000 euro**.

*Forest response to climate change predicted from multientury climate proxy-records in the Carpathian region*” (CLIMFOR) - 18SEE/30.06.2014 – **Project manager** – financed by EEA grants (2014-2017) – **1.021.000,00 euro**

*Promote deadwood for resilient forests in the Romanian Ukrainian cross border region (RESFOR)* - 2SOFT/1.2/13 (European Union cross-border project) –**partner responsible (USV budget 95,074.1 euro)** – (2020-2022).

### Domestic projects:

*Compound extreme events from a long-term perspective and their impact on forest growth dynamics (CExForD)*, contract no. 760074/23.05.2023 PNRR investment 8, **Net Budget: 1,417,149.04 euro** – **Vice Project Manager** (Project under Implementation, 2023–2026).

*Exploring beech and oak forests adaptive capacity, and vulnerability to rapid climate change using advanced dendroecological techniques FaStClim*, TE 114/2022, **Budget: 449.842,00 lei (cc. 100.000 euro)** (2022-2024), **Project manager**

*The variation of dendroclimatological response of the beech (Fagus sylvatica) on the eastern border of the area ET43/2006* Budget: **22.000 RON (cc.7800 euro)** (2006-2008), **partner responsible**

*Servicii cercetare stiintifica pentru “Identificarea, cartarea și inventarierea specifică a celor mai reprezentative păduri virgine si cvasivirgine in zonele prioritare WWF”* FY 16/2016 – **Project manager** – WWF Romania – budget: **40500 RON**

*Servicii cercetare stiintifica pentru “Identificarea, cartarea și inventarierea specifică a celor mai reprezentative păduri virgine si cvasivirgine in zonele prioritare WWF”* FY 17/2017 – **Project manager** – WWF Romania – budget: **160875 RON**

*Servicii cercetare stiintifica pentru “Identificarea, cartarea și inventarierea specifică a celor mai reprezentative păduri virgine si cvasivirgine in zonele prioritare WWF”* 93/16.10.2017 – **Project manager** – WWF Romania – budget: **130739 RON**

*Servicii cercetare stiintifica pentru “Identificarea, cartarea și inventarierea specifică a celor mai reprezentative păduri virgine si cvasivirgine in zonele prioritare WWF”* 78/27.08.2018 – **Project manager** – WWF Romania – budget: **192986 RON**

*Servicii cercetare stiintifica pentru “Identificarea, cartarea și inventarierea specifică a celor mai reprezentative păduri virgine si cvasivirgine in zonele prioritare WWF”* 42/27.05.2019 – **Project manager** – WWF Romania – budget: **109734 RON**

*Reconstruction of paleoclimatic and environmental changes over the past 5 centuries on Calimani National Park, member in the research team*

*A rehabilitation technology on Norway Spruce stands functionality affected by biotic disturbing factors, member in the research team*

*Creating a georeferenced database in Suceava Plateau by monitoring the digital images of degraded lands, as a decisional support in environmental rehabilitation (DEGRATER), member in the research team*

*Modern methods of assessment, environmental risk analysis and forecast on wind throw made by catastrophic wind, member in the research team*

*Research on the quality of natural regeneration of beech stands in Suceava forestry Department, member in the research team*

*Possibility of characterization and mapping of structural biodiversity on Neamt Natural Park of Vanatori, member in the research team*

*Sustainability of short-term rotation cultures of trees on marginal lands, member in the research team*

*Holistics of the Renewable Energy Sources on Environment and Climate, member in the research team*

*Impact of heavy metal accumulation on the environment and productivity of forestry ecosystems: non-conventional remediation technologies of contaminated forests, member in the research team*

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## Teaching and talks

4-11 March 2018 - Erasmus + mobility on University of Padua - TESAF (teaching wood anatomy)

2019 - Lemnul sursa de investigatii multidisciplinara, Facultatea de Istorie si Filosofie si Facultatea de Biologie și Pedologie

a Universității de Stat din Moldova (Chisinău).

2019 - Lemnul – sursă multidisciplinară de informații. National autumn school in Alunu (Hunedoara)

2020 – Universitatea Agrară de Stat a Republicii Moldova – Departamentul de Silvicultură și Grădini Publice (teaching wood anatomy)

2021 - Climatul, lemnul și civilizația umană. Webinar. Conferințele DACICA 6/2021

24-28 October 2022 – Erasmus + mobility on Prague University of Life Science- (teaching wood anatomy)

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## Review & editorial work

Science of Total Environment, Dendrochronologia, iForest, Forests, Climate Dynamics, Forest Ecology and Management  
Regional Environmental Change, Member in the editorial board of SilvaWorld Journal

**BDI Journals:** Bucovina Forestieră

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## Supervision

Supervisor for more than 60 students on bachelor diploma

Supervisor for 10 students on master thesis

Co-supervisor with Marco Carrer (University of Padua) for the master thesis “*Contrasting climate sensitivity of ring width, maximum density, and xylem anatomical traits of Pinus cembra L. growing at treeline in South-Western Carpathian Mountains*”

Member in the supervising comity for 3 Ph.D. students

PhD supervisor for 6 students from Romania (4), Poland (1), and Republic of Moldova (2).

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## Publications

### WOS articles as main author:

1. Nagavciuc V, Mursa A, Ionita M, Sfeclă V, Popa I, **Roibu C-C<sup>1</sup>**, *An Overview of Extreme Years in Quercus sp. Tree Ring Records from the Northern Moldavian Plateau*. **Forests**. 2023; 14(5):894, category (Q1), IF: 2.90
2. **Roibu C-C**, Palaghianu C, Nagavciuc V, Ionita M, Sfeclă V, Mursa A, Crivellaro A, Stirbu M-I, Cotos M-G, Popa A, Sfeclă I, Popa I. *The Response of Beech (Fagus sylvatica L.) Populations to Climate in the Easternmost Sites of Its European Distribution*. **Plants**. 2022; 11(23):3310, category (Q1), SRI: 1.599, IF: 4.658
3. Stirbu M-I; **Roibu C-C<sup>1</sup>**; Carrer, M.; Mursa, A.; Unteholznier, L.; Predin, AL *Contrasting climate sensitivity of different Pinus cembra tree-ring traits in the Carpathian*, **Frontiers in Plant Science** (2022), category (Q1) -SRI: 2.851, IF: 6.627.
4. **Roibu C-C**; Nagavciuc V; Ionita M; Popa I; Horodnic SA; Mursa A; Büntgen U, *A new tree ring-based summer drought reconstruction for eastern Europe back to 1768 CE confirms historical documentary evidence and reveals large-scale teleconnection patterns*, **Climate Dynamics** (2022), category (Q1), SRI: 1.600, IF: 4.901
5. **Roibu, C-C**; Ważny, T; Crivellaro, A; Mursa, A; Chiriloaei, F; Știrbu, M-I; Popa, I, *The Suceava oak chronology: A new 804 years long tree-ring chronology bridging the gap between central and south Europe*, **Dendrochronologia**, 68 (2021), category (Q1) – SRI: 1.767, IF: 2.691
6. **Roibu, C-C**; Sfeclă, V; Mursa, A; Ionita, M; Nagavciuc, V; Chiriloaei, F; Lesan, I; Popa, I, *The Climatic Response of Tree Ring Width Components of Ash (Fraxinus excelsior L.) and Common Oak (Quercus robur L.) from Eastern Europe*, **Forests**, 11(5), (2020), category (Q1) – SRI: 1.430, IF: 2.633
7. Nagavciuc, V; **Roibu, C-C<sup>1</sup>**; Ionita, M; Mursa, A; Cotos, MG; Popa, I, *Different climate response of three tree ring proxies of Pinus sylvestris from the Eastern Carpathians, Romania*, **Dendrochronologia**, 54, 56-63 (2019), category (Q1) - SRI: 1.767, IF: 2.691
8. **Roibu, C-C**; Popa, I; Kirchhefer, AJ; Palaghianu, C, *Growth responses to climate in a tree-ring network of European beech (Fagus sylvatica L.) from the eastern limit of its natural distribution area*, **Dendrochronologia**, 42,104-116 (2017), category (Q1) – SRI: 1.667, IF: 2.20

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<sup>1</sup> Corresponding author

1. Ionita, M., Antonescu, B., **Roibu, CC.**, Nagavciuc, V., 2025. *Drought's Grip on Romania: A Tale of Two Indices*. **Int. J. Clim.** <https://doi.org/10.1002/joc.8876>, IF= 3.5
2. Ionita, M., Vaideanu, P., Antonescu, B., **Roibu, CC.**, Ma, Q., Nagavciuc, V., 2024. *Examining the Eastern European extreme summer temperatures of 2023 from a long-term perspective: the role of natural variability vs. anthropogenic factors*. **Nat. Hazards Earth Syst. Sci.** 24, 4683–4706. <https://doi.org/10.5194/nhess-24-4683-2024>, IF=4.2
3. Klesse, S., Peters, R.L., Alfaro-Sánchez, R., Badeau, V., Baittinger, C., Battipaglia, G., Bert, D., Biondi, F., Bosela, M., Budeanu, M., Čada, V., Camarero, J.J., Cavin, L., Claessens, H., Cretan, A., Čufar, K., Luis, M. de, Dorado-Liñán, I., Dulamsuren, C., Espelta, J.M., Garamszegi, B., Grabner, M., Gricar, J., Hacket-Pain, A., Hansen, J.K., Hartl, C., Hevia, A., Hobi, M., Janda, P., Jump, A.S., Kašpar, J., Kazimirović, M., Keren, S., Kreyling, J., Land, A., Latte, N., Lebourgeois, F., Leuschner, C., Lévesque, M., Longares, L.A., Castillo, E.M. del, Menzel, A., Merela, M., Mikoláš, M., Motta, R., Muffler, L., Neycken, A., Nola, P., Panayotov, M., Petritan, A.M., Petritan, I.C., Popa, I., Prislan, P., Levanič, T., **Roibu, C.**, Rubio-Cuadrado, Á., Sánchez-Salguero, R., Šamonil, P., Stajić, B., Svoboda, M., Tognetti, R., Toromani, E., Trotsiuk, V., Maaten, E. van der, Maaten-Theunissen, M. van der, Vannoppen, A., Vašíčková, I., Arx, G. von, Wilmking, M., Weigel, R., Zlatanov, T., Zang, C., Buras, A., 2024. *No Future Growth Enhancement Expected at the Northern Edge for European Beech due to Continued Water Limitation*. **Glob. Chang. Biol.** 30, e17546. <https://doi.org/10.1111/gcb.17546>, IF=10.8
4. Nagavciuc, V., Helle, G., Rădoane, M., **Roibu, C.-C.**, Cotos, M.-G., Ionita, M., 2024. *A long-term drought reconstruction based on oxygen isotope tree ring data for central and eastern parts of Europe (Romania)*. **Biogeosciences** 22, 55–69. <https://doi.org/10.5194/bg-22-55-2025>, IF=3.9
5. Rodrigo, R.M., Pettit, J.L., Janda, P., Pavlin, J., Ralhan, D., Kozak, D., Matula, R., Marchand, W., Bače, R., Dušátko, M., Kníř, T., Frankovič, M., Mikoláš, M., Hofmeister, J., **Roibu, C.-C.**, Saulnier, M., Svoboda, M., 2024. *Past disturbances shape present tree size distribution in European temperate primary beech-dominated forests*. **For. Ecol. Manag.** 574, 122364. <https://doi.org/10.1016/j.foreco.2024.122364>, IF=3.7
6. Serrano-Notivol, R., Jevšenak, J., Castillo, E.M. del, Čufar, K., Škrk-Dolar, N., Battipaglia, G., Camarero, J.J., Pain, A.H., Jump, A., Motta, R., Nola, P., Panayotov, M., Petritan, I.C., Popa, A., Popa, I., Roibu, C.-C., Svoboda, M., Zang, C., Zlatanov, T., Balzano, A., Biondi, F., Čada, V., Dimitrov, D.P., Gričar, J., Janda, P., Keren, S., Lebourgeois, F., Li, G., Longares, L.A., Lukić, I., Merela, M., Mikac, S., Novak, K., Petritan, A.M., Prislan, P., Roibu, A.-M., Rubio-Cuadrado, A., Rydval, M., Saz, M.Á., Tejedor, E., Tegel, W., Tognetti, R., Toromani, E., Trotsiuk, V., Turcu, D., Luis, M. de, 2025. *A single-tree approach to determine climate-growth patterns of European beech and their seasonality in the species southern distribution area*. **Agric. For. Meteorol.** 371, 110644. <https://doi.org/10.1016/j.agrformet.2025.110644>, IF=5.6
7. Bakhtiyorov, Z., Chen, Y., Wang, S., Zhang, H., Hu, Mn., Yue, W., Habibulloev, S., Kavtaradze, G., Gurskaya, M., Agafonov, L., Rahmonov, O., **Roibu, C.-C.**, Köse, U., Akkemik, U., Norman, C., 2024. *Historical Drivers and Future Streamflow Variations of the Kura River in the Western Transcaucasia Region*, **Palaeogeography, Palaeoclimatology, Palaeoecology**, IF= 2.6
8. Jevšenak, J., Klisz, M., Mašek, J., Čada, V., Janda, P., Svoboda, M., Vostarek, O., Treml, V., van der Maaten, E., Popa, A., Popa, I., van der Maaten-Theunissen, M., Zlatanov, T., Scharnweber, T., Ahlgrimm, S., Stolz, J., Sochová, I., **Roibu, C. C.**, Pretzsch, H., ... Buras, A. (2024). Incorporating high-resolution climate, remote sensing and topographic data to map annual forest growth in central and eastern Europe. **Science of The Total Environment**, 913, 169692. <https://doi.org/10.1016/J.SCITOTENV.2023.169692>, IF=9.8, WOS:001158139800001, category Q1.
9. Sochová, I., Kolář, T., Árvai, M., Bošela, M., Čufar, K., Kern, Z., Kyncl, J., Marčíš, P., Mészáros, I., Morgós, A., Mursa, A., Popa, A., **Roibu, C. C.**, Sopushynskyy, I., & Rybniček, M. (2024). The palaeoclimatic potential of recent oak tree-ring width chronologies from Southwest Ukraine. **Dendrochronologia**, 84, 126168. <https://doi.org/10.1016/J.DENDRO.2024.126168>, IF= 3.0, WOS:001176338900001, category Q1.
10. Keith, H., Kun, Z., Hugh, S., Svoboda, M., Mikoláš, M., Adam, D., Bernatski, D., Blujdea, V., Bohn, F., Camarero, J. J., Demeter, L., Di Filippo, A., Dutcă, I., Garbarino, M., Horváth, F., Ivkovich, V., Jansons, Ā., Kēpina, L., Kral, K., ....**Roibu, C-C.**... Mackey, B. (2024). Carbon carrying capacity in primary forests shows potential for mitigation achieving the European Green Deal 2030 target. **Communications Earth & Environment** 2024 5:1, 5(1), 1–13. <https://doi.org/10.1038/s43247-024-01416-5>, IF= 7.9, WOS:001222601000001, category Q1
11. Leifsson, C., Buras, A., Klesse, S., Baittinger, C., Bat-enerel, B., Battipaglia, G., Biondi, F., Staji, B., Budeanu, M., Cavin, L., Claessens, H., Cufar, K., Dulamsuren, C., Luis, M. De, Dorado-li, I., Grabner, M., Hacket-pain, A., Kehlet, J., Hartl, C., ...,Roibu C-C.,..., Zang, S. (2024). Identifying drivers of non-stationary climate-growth relationships of European beech. **Science of The Total Environment**, 937(May), 173321. <https://doi.org/10.1016/J.SCITOTENV.2024.173321>, IF=9.8, category Q1
12. Unterholzner, L., Castagneri, D., Cerrato, R., Știrbu, M. I., **Roibu, C. C.**, & Carrer, M. *Climate response of a glacial relict conifer across its distribution range is invariant in space but not in time*. **Science of The Total Environment** (2024), 906, 167512, category Q1, IF=9.8
13. Ralhan, D., Keith, H., Pavlin, J., Irene Stegehuis, A., Marchand, W., Fruleux, A., Poláček, M., Svitok, M., Nagel, T. A., Mikoláš, M., Kozák, D., Buechling, A., Dušátko, M., Janda, P., Chaskovsky, O., **Roibu, C-C.**, & Svoboda, M. *Temperate Primary Forest Biomass Accumulates over Centuries-Long Time Frames*, **Ecosystems** (2023) 26: 1685–1702,category Q1, IF=3.7

14. Zemlerová, V., Kozák, D., Mikoláš, M. ..., **Roibu, C-C**, ... et al. *Natural Disturbances are Essential Determinants of Tree-Related Microhabitat Availability in Temperate Forests*. **Ecosystems (2023)**, category (Q1), IF: 4.345
15. Kameniar, O., Vostarek, O., Mikoláš, M., Svitok, M., Frankovič, M., Morrissey, R. C., Kozák, D., Nagel, T. A., Dušátko, M., Pavlin, J., Ferencík, M., Keeton, W. S., Spínu, A. P., Petritan, I. C., Majdanová, L., Markuljaková, K., **Roibu, C.-C.**, Gloor, R., Bače, R., ... Svoboda, M. *Synchronised disturbances in spruce- and beech-dominated forests across the largest primary mountain forest landscape in temperate Europe*. **Forest Ecology and Management 537 (2023)**, category (Q1), IF: 4.384
16. Kozák, D., Svitok, M., Zemlerová, V., Mikoláš, M., Lachat, T., Larrieu, L., Paillet, Y., Buechling, A., Bače, R., Keeton, W. S., Vítková, L., Begovič, K., Čada, V., Dušátko, M., Ferencík, M., Frankovič, M., Gloor, R., Hofmeister, J., Janda, P., ... **Roibu C-C**, ... Svoboda, M. (2023). *Importance of conserving large and old trees to continuity of tree-related microhabitats*. **Conservation Biology, 37(3) (2023)**, category (Q1), IF: 7.563
17. Ralhan, D., Keith, H., Pavlin, J., Stegehuis, A. I., Marchand, W., Fruleux, A., Poláček, M., Svitok, M., Nagel, T. A., Mikoláš, M., Kozák, D., Buechling, A., Dušátko, M., Janda, P., Chaskovsky, O., **Roibu, C.-C.**, Svoboda, M. *Temperate Primary Forest Biomass Accumulates over Centuries-Long Time Frames*. **Ecosystems (2023)**, category (Q1), IF: 4.345.
18. Nagavciuc V., **Roibu C-C**, Mursa A., Știrbu M-I., Popa I., Ionita M., 2023, *The first tree-ring reconstruction of streamflow variability over the last ~250 years in the Lower Danube*, *Journal of Hydrology*, Volume 617, Part C, 129150, category Q1, IF= 6.708
19. Marchand, W; Buechling, A; Rydval, M; Čada, V; Stegehuis, A.I.; Fruleux, A; Poláček, M.; Hofmeister, J; Pavlin, J; Ralhan, D; Dušátko, M; Janda, P; Mikoláš, M; Vostarek, O; Bače, R; Frankovič, M; Kozák, D; **Roibu, C-C**; Chaskovsky, O; Mikac, S; Zlatanov, T; Panayotov, M; Diku, A; Toromani, E; Svoboda, M, *Accelerated growth rates of Norway spruce and European beech saplings from Europe's temperate primary forests are related to warmer conditions*, **Agricultural and Forest Meteorology, (2023), 329, 109280, category (Q1), IF=6. 424**
20. Popa A, Popa I, **Roibu C-C**, Badea ON. *Do Different Tree-Ring Proxies Contain Different Temperature Signals? A Case Study of Norway Spruce (Picea abies (L.) Karst) in the Eastern Carpathians*. **Plants. 2022; 11(18):2428, IF: 4.658.**
21. Dorado-Liñán, I; Ayarzagüena, B; Babst, F; Xu, G; Gil, L; Battipaglia, G; Cada, Vojach; Camarero, JJ; Cavin, L; Claessens, H; Drobyshev, I; Garamszegi, B; Grabner, Vojach; Pain, AH; Hartl, C; Hevia, A; Janda, P; Jump, A; Kazimirovic, M; Keren, S; Kreyling, J; Land, A; Latte, N; Levanic, T; van der Maaten, E; van der Maaten-Theunissen, M; Menzel, A; Mikolas, M; Motta, R; Muffler, L; Nola, P; Payanatov, M; Petritan, A-M; Petritan, I-C; Popa, I; Prislan, P; **Roibu, CC**; Rydval, M; Sanchez-Salguero, R; Scharnweber, T; Staji, B; Svoboda, M; Tegel, W; Theodosiu, M; Toromani, E; Trotsiuk, V; Turcu, D; Weigel, R; Wilmking, M; Zang, C; Zlatanov, T; Trouet, V; *Jet stream position explains regional anomalies in European forest productivity*, , **Nature Communications (2022)**, category (Q1), IF: 17.694
22. Mikoláš, M., Svitok, M., Bače, R., Meigs, G., Keeton, W., Keith, H., Buechling, A., Trotsiuk, V., Bollmann, K., Begovič, K., Čada, V., Chaskovsky, O., Ralhan, D., Dušátko, M., Ferencík, M., Frankovič, M., Gloor, R., Hofmeister, J., Janda, P., Kameniar, O., Kozák, D., Lábusová, J., Majdanová, L., Nagel, T., Pavlin, J., Pettit, J., Rodrigo, R., **Roibu, CC.**, Rydval, M., Sabatini, F., Schurman, J., Synek, M., Vostarek, O., Zemlerová, V., Svoboda, M., (under review) *Natural disturbance impacts on trade-offs and co-benefits of forest biodiversity and carbon*, **2021, Proceedings Of Royal Society B (Q1), IF= 5.349.**
23. Hacket-Pain, AJ; Ascoli, D; Vacchiano, G; Biondi, F; Cavin, L; Conedera, M; Drobyshev, I; Linan, ID; Friend, AD; Grabner, M; Hartl, C; Kreyling, J; Lebourgeois, F; Levanic, T; Menzel, A; van der Maaten, E; van der Maaten-Theunissen, M; Muffler, L; Motta, R; **Roibu, CC**; Popa, I; Scharnweber, T; Weigel, R; Wilmking, M; Zang, CS, *Climatically controlled reproduction drives interannual growth variability in a temperate tree species*, **ECOLOGY LETTERS, 21 (12), 1833-1844 (2018)**, category (Q1), IF: 8.665
24. Bosela, M; Lukac, M; Castagneri, D; Sedmak, R; Biber, P; Carrer, M; Konopka, B; Nola, P; Nagel, TA; Popa, I; **Roibu, C-C**; Svoboda, M; Trotsiuk, V; Buntgen, U, *Contrasting effects of environmental change on the radial growth of co-occurring beech and fir trees across Europe*, **Science of the Total Environment, 615, 1460-1469 (2018)**, category (Q1). IF: 7.963
25. Radoane, M; Nechita, C; Chiriloaei, F; Radoane, N; Popa, I; **Roibu, C**; Robu, D, *Late Holocene fluvial activity and correlations with dendrochronology of subfossil trunks: Case studies of northeastern Romania*, **GEOMORPHOLOGY, 239, 142-159 (2015)**, category (Q1), IF: 4.139
26. Horodnic, SA; **Roibu, CC**; *A Gaussian multi-component model for the tree diameter distribution in old-growth forests*, **European Journal of Forest Research, 2018, 137 (2), 185-196, category (Q1), IF: 2.617**
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