

**PAOLO CHERUBINI'S  
CURRICULUM VITAE**

**Senior Scientist**  
**WSL Swiss Federal Institute for Forest, Snow and Landscape Research**  
**CH-8903 Birmensdorf**  
**Switzerland**

**Adjunct Professor**  
**Department of Forest and Conservation Sciences**  
**University of British Columbia**  
**Vancouver BC**  
**Canada**

voice +41-44-739 2 278  
e-mail: paolo.cherubini@wsl.ch  
<https://www.wsl.ch/de/mitarbeitende/cherubin.html>  
<http://www.researcherid.com/rid/N-9702-2013>  
<https://orcid.org/0000-0002-9809-250X>

Birth	Pisa (Italy), 29 October 1964
Dual Citizenship	Italian and Swiss
Languages	Italian, English, French, German, Spanish
Education	Maturità Classica, Liceo Classico "Galileo Galilei", Pisa (Italy), 1983 Degree in Forest Sciences, Università di Firenze (Italy), 1989 Ph.D. in Botany, Universität Basel (Switzerland), 1996
Employment History	Post-Degree Fellow, Università di Firenze (Italy), 1989-1990 Post-Degree Fellow, Istituto Sperimentale per lo Studio e la Difesa del Suolo, Firenze (Italy), 1990-1992 Fellowship "Hörer in Fortbildung", ETH Zürich (Switzerland), 1992-1993 PhD student, Universität Basel (Switzerland), 1993-1996 Research Scientist (1996-2003), Senior Scientist (2003-present) WSL Swiss Federal Research Institute, Birmensdorf (Switzerland)
Institutional Responsibilities	Deputy Head of the Section <i>Forest ecosystems and ecological risks</i> (2004-2005), Head of the Research Group <i>Tree Physiology</i> (2006-2010), Deputy Head of the Research Unit <i>Dendrosciences</i> (2006-2009), Head (a.i.) of the Research Unit <i>Dendrosciences</i> (2010), Head of the Research Group <i>Dendroecology</i> (2011-2012), a.i. Head of the Research Group <i>Dendrosciences</i> (2017)
Appointments	Member of the Steering Committee Libraries Research Institutes ETH Domain (LIB4RI) (2016-present) Chairman of the Research Commission (FoKo) WSL (2016-2021)
	Adjunct Professor, Department of Forest and Conservation Sciences, University of British Columbia, Vancouver BC, Canada
	Adjunct Senior Research Scientist, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York, U.S.A., 2002-present
	Graduate Faculty Associate (2022-present), Adjunct Faculty (2009-2022), School of Natural Resources, University of Nebraska-Lincoln, Lincoln, Nebraska, U.S.A.

	<p>Guest Professor, Institute of Earth Environment, Chinese Academy of Sciences (CAS), Xian, China, 2012-present</p> <p>Lecturer, Department of Geography, Universität Zürich, Zurich, Switzerland, 2006-present</p>
Supervision students	Main supervisor of 3 PhD-students, co-supervisor of over 35 PhD, 50 Master students and 5 Post-Docs
Teaching	<p>Lecturer at the Universität Zürich (2006-present):  GEO818 Class "Dendro-Ecology", Master course  GEO351.2 Class "Geochronologie I" Bachelor course  GEO399/599 "Toskana Exkursion"</p> <p>Visiting Professor, Università degli Studi di Milano, Milano, Italy (2010, 2015)  Guest Lecturer Albert-Ludwigs-Universität Freiburg, Freiburg i.B., Germany (2013, 2014, 2015)  Visiting Professor, Università di Sassari, Sassari, Italy (2012)  Member of Board, Doctorate School in Agriculture, Università degli Studi di Pisa (2015-2019)</p> <p>Over 200 lectures at graduate or undergraduate courses in many countries all over the word (e.g., Europe, Israel, Russia, China, Japan, Canada, U.S.A., Argentina).</p>
Memberships in Panels, Boards	<p>Honorary Editor, Editor in Chief, <i>Dendrochronologia</i>, 2022-...  Editor in Chief, <i>Dendrochronologia</i>, 2003-2022  Editor, <i>iForest</i>, 2004-present  Member Editorial Board of <i>Journal of Vegetation Science</i>, 2007-present  Member Editorial Review Board of <i>Tree Physiology</i>, 2014-2016, 2023-...  Member Editorial Board of <i>Journal of Forest Planning</i> 2018-present  Associate Editor, <i>Tree-Ring Research</i>, 2002-2011  Associate Editor, <i>Canadian Journal Forest Research</i>, 2011-2021  Member Editorial Board of <i>Geochronometria</i>, 2007-2018  Member Editorial Board of <i>Scientifica</i>, 2012-2012  Member Editorial Board of <i>Scientific Reports</i>, 2017-2017  Swiss national representative, International Long Term Ecological Research (ILTER) (1998-2002)</p>
Scientific Organizations	British Ecological Society (BES) (1999-...), Tree-Ring Society (1997-...), Società Italiana di Selvicoltura ed Ecologia Forestale (SISEF) (1997-...), Asian Dendrochronological Association ADA (2015-...)
Organization of Meetings	<p>Tree Rings and People (Davos, September 2001) (242 attendees from 43 countries)</p> <p>Several workshops, schools, seminars, conferences and sessions as main or co- organizer</p>
Awards	<p>"Premier's Award, Innovation 2005 / 06 Finalists" (Victoria, British Columbia, Canada).</p> <p>"2007 Peace Nobel Prize" recipient, as Invited Expert Reviewer, Intergovernmental Panel on Climate Change (IPCC)</p>
Publications	359, 246 of them published in peer reviewed; h-index = 50, 235 publications, sum of the times cited: 9,233 (according to Web of Science, March 14, 2024)

**Paolo Cherubini's PUBLICATIONS:** totally 359, 246 of them published in peer reviewed; h-index = 50, 235 publications, sum of the times cited: 9,233 (according to Web of Science, March 14, 2024).

**2019**

- 167) TIWARI A., CHERUBINI P. , (2019). The unexplored potential of tree rings from Himalayan pristine forests to understand their history and provide answers to water and forest management in Bhutan. *Dendrochronologia*, 53, 37-39.
- 168) LYU L., ZHANG Q.-B., PELLATT M.G., BÜNTGEN U., LI M.-H., CHERUBINI P. , (2019). Drought limitation on tree growth at the Northern Hemisphere's highest tree line. *Dendrochronologia*, 53, 40-47.
- 169) CAILLERET M., DAKOS V., JANSEN S., ROBERT E.M.R., AAKALA T., AMOROSO M.M., ANTOS J.A., BIGLER C., BUGMANN H., CACCIANIGA M., CAMARERO J.J., CHERUBINI P., COYEÀ M.R., CUFAR K., DAS A.J., DAVI H., GEA-IZQUIERDO G., GILLNER S., HAAVIK L.J., HARTMANN H., HERES A.-M., HULTINE K.R., JANDA P., KANE J.M., KHARUK V.I., KITZBERGER T., KLEIN T., LEVANIČ T., LINARES J.C., LOMBARDI F., MÄKINEN H., MÉSZÁROS I., METSARANTA J.M., OBERHUBER W., PAPADOPoulos A., PETRITAN A.M., ROHNER B., SANGÜESA-BARREDA G., SMITH J.M., STAN A., STOJANOVIC D.B., SUAREZ M.L., SVOBODA M., TROTSIUK V., VILLALBA R., WESTWOOD A., WYCKOFF P., MARTÍNEZ-VILALTA J. , (2019). Early-warning signals of individual tree mortality based on annual radial growth. *Frontiers in Plant Science*, 9, 1964.
- 170) CHENG X., LYU L., BÜNTGEN U., CHERUBINI P., QIU H., ZHANG Q.-B. , (2019). Increased El Niño-Southern Oscillation sensitivity of tree growth on the southern Tibetan Plateau since the 1970s. *International Journal of Climatology*, 39, 3465-3475.
- 171) MENDES M.P., CHERUBINI P., PLIENINGER T., RIBEIRO L., COSTA A. , (2019). Climate effects on stem radial growth of *Quercus suber* L.: does tree size matter? *Forestry*, 92, 73-84.
- 172) VEZZOLA L.C., MICHELOZZI M., CALAMAI L., GONTHIER P., GIORDANO L., CHERUBINI P., PELFINI M. , (2019). Tree-ring volatile terpenes show potential to indicate fungal infection in asymptomatic mature Norway spruce trees in the Alps. *Forestry*, 92, 2, 149-156.
- 173) BUMANN E., AWADA T., WARDLOW B., HAYES M., OKALEBO J., HELZER C., MAZIS A., HILLER J., CHERUBINI P. , (2019). Assessing responses of *Betula papyrifera* to climate variability in a remnant population along the Niobrara River Valley in Nebraska U.S. through dendroecological and remote sensing techniques. *Canadian Journal Forest Research*, 49, 423-433.
- 174) ZALLONI E., BATTIPAGLIA G., CHERUBINI P., SAURER M., DE MICCO V. (2019). Wood growth in pure and mixed *Quercus ilex* L. forests: drought influence depends on site conditions. *Frontiers in Plant Science*, 10, 397.
- 175) CERRATO R., CHERUBINI P., BÜNTGEN U., COPPOLA A., SALVATORE M.C., BARONI C. , (2019). Tree-ring-based reconstruction of larch budmoth outbreaks in the Central Italian Alps since 1774 CE. *iForest*, 12, 289-296.
- 176) LIU Y., CAI W., SUN C., SONG H., COBB K.M., LI J., LEAVITT S.W., WU L., CAI Q., LIU R., NG B., CHERUBINI P., BÜNTGEN U., SONG Y., WANG G., LEI Y., YAN L., LI Q., MA Y., FANG C., SUN J., LI X., CHEN D., LINDERHOLM H.W. (2019). Anthropogenic aerosols cause recent pronounced weakening of Asian Summer Monsoon relative to last four centuries. *Geophysical Research Letters*, 46, 5469-5479, 10.1029/2019GL082497.
- 177) DE MICCO V., CARRER M., RATHGEBER C.B.K., CAMARERO J.J., VOLTAS J., CHERUBINI P., BATTIPAGLIA G. , (2019). From xylogenesis to tree rings: wood traits to investigate tree response to environmental changes. *IAWA Journal*, 40, 155-182.
- 178) LEONELLI G., BATTIPAGLIA G., CHERUBINI P., SAURER M., SIEGWOLF R.T.W., MAUGERI M., STENNI B., FUMAGALLI M.L., PELFINI M., MAGGI V. , (2019). Tree-ring  $\delta^{18}\text{O}$  from an Alpine catchment reveals changes in glacier stream water inputs between 1980 and 2010. *Arctic, Antarctic, and Alpine Research*, 51, 250-264.
- 179) COCOZZA C., PERONE A., GIORDANO C., SALVATICI M.C., PIGNATELLI S., RAIO A., SCHaub M., SEVER K., INNES J.L., TOGNETTI R., CHERUBINI P. , (2019). Silver nanoparticles enter into the tree stem faster through leaves than through roots. *Tree Physiology*, 39, 1251-1261.
- 180) CHERUBINI P. , (2019). *Dendrochronologia* in the scholarly publishing world: How can a small fish survive in a pool of sharks? *Dendrochronologia*, 58, 125647.
- 181) VUARIDEL M., CHERUBINI P., METTRA F., VENNEMANN T., LANE S.N. , (2019). Climate-driven change in the water sourced by trees in a de-glaciating proglacial fore-field, Torres del Paine, Chile. *Ecohydrology*, 12, e2133.
- 182) VITALI F., RAIO A., SEBASTIANI F., CHERUBINI P., CAVALIERI D., COCOZZA C. , (2019). Environmental pollution effects on plant microbiota: the case study of poplar bacterial-fungal response to silver nanoparticles. *Applied Microbiology and Biotechnology*, 103: 8215-8227.
- 183) AWADA T., SKOLAUT K., BATTIPAGLIA G., SAURER M., RIVEROS-IREGUI D., SCHAPAUGH A., HUDDLE J., ZHOU X., DERREL M., CHERUBINI P. , (2019). Tree-ring stable isotopes show different ecophysiological strategies in native and invasive woody species of a semi-arid riparian ecosystem in the Great Plains of the USA. *Ecohydrology*, 12, e2074.

**2020**

- 184) VERGINE M., MEYER J.B., CARDINALE M., SABELLA E., HARTMANN M., CHERUBINI P., DE BELLIS L., LUVISI A., (2020). The *Xylella fastidiosa*-resistant olive cultivar "Leccino" has stable endophytic microbiota during the Olive Quick Decline Syndrome (OQDS). *Pathogens*, 9, 35, doi:10.3390/pathogens9010035
- 185) KATTGE J., BÖNISCH G., DIAZ S., ... CHERUBINI P., ..., WIRTH C., (2020). TRY plant trait database - enhanced coverage and open access. *Global Change Biology*, 26, 119-188.
- 186) REINIG F., CHERUBINI P., ENGELS S., ESPER J., GUIDOBALDI G., JÖRIS O., LANE C., NIEVERGELT D., OPPENHEIMER C., PARK C., PFANZ H., RIEDE F., SCHMINCKE H.-U., STREET M., WACKER L., BÜNTGEN U., (2020). Towards a dendrochronologically refined date of the Laacher See eruption around 13,000 years ago. *Quaternary Science Reviews*, 229, 106128.
- 187) BALZANO A., BATTIPAGLIA G., CHERUBINI P., DE MICCO V., (2020). Xylem plasticity in *Pinus pinaster* and *Quercus ilex* growing at sites with different water availability in the Mediterranean region: relations between intra-annual density fluctuations and environmental conditions. *Forests*, 11, 379; doi:10.3390/f11040379.
- 188) BÜNTGEN U., LIEBOLD A., NIEVERGELT D., WERMELINGER B., ROQUES A., REINIG F., KRUSIC P.J., PIERMATTEI A., EGLI S., CHERUBINI P., ESPER J., (2020). Return of the moth: rethinking the effect of climate on insect outbreaks. *Oecologia*, 192, 543-552.
- 189) SONG H., MEI R., LIU Y., NIEVERGELT D., VERSTEGE A., CHERUBINI P., LIU R., SUN C., LI Q., CHEN L., ZENG X., GUO J., (2020). Maximum July–September temperatures derived from tree-ring densities on the western Loess Plateau, China. *International Journal of Climatology*, DOI: 10.1002/joc.6650
- 190) PANDEY S., CHERUBINI P., SAURER M., CARRER M., PETIT G., (2020). Effects of climate change on treeline trees in Sagarmatha (Mt. Everest, Central Himalaya). *Journal Vegetation Science*, <https://doi.org/10.1111/jvs.12921>
- 191) BATTIPAGLIA G., AWADA T., AUS DER AU R., INNANGI M., SAURER M., CHERUBINI P., (2020). Increasing atmospheric CO<sub>2</sub> concentrations outweighs effects of stand density in determining growth and water use efficiency in *Pinus ponderosa* of the semi-arid grasslands of Nebraska (U.S.A.). *Global Ecology and Conservation*, 24, e01274.
- 192) CHERUBINI P., GARGANO A., GROB M., NIEVERGELT D., PASSARDI S., (2020). Dendrochronologia's tutoring recipes: How to take samples for small basic dendroecological studies. *Dendrochronologia*, 64, 125774.
- 193) SABELLA E., MORETTI S., GÄRTNER H., LUVISI A., DE BELLIS L., VERGINE M., SAURER M., CHERUBINI P., (2020). Increase in ring width, vessel number, and d<sub>18</sub>O in olive trees infected with *Xylella fastidiosa*. *Tree Physiology*, 44, 1583-1594.
- 2021**
- 194) MU Y.-M., ZHANG Q.-B., FANG O., LYU L., CHERUBINI P., (2021). Pervasive tree-growth reduction in Tibetan juniper forests. *Forest Ecology and Management*, 480, 118642.
- 195) YANG Y., WANG A., CHERUBINI P., KRÄUCHI N., NI Y., WU Z., HE H.S., LI M.-H., SCHAUB M., (2021). Physiological and growth responses to defoliation of older needles in *Abies alba* trees grown under two light regimes. *Forest Ecology Management*, 484, 118947.
- 196) SONG H., MEI R., LIU Y., NIEVERGELT D., VERSTEGE A., CHERUBINI P., LIU R., SUN C., LI Q., CHEN L., ZENG X., GUO J., (2021). Maximum July–September temperatures derived from tree-ring densities on the western Loess Plateau, China. *International Journal of Climatology*, DOI: 10.1002/joc.6650, 41, 779-790.
- 197) PALANDRANI C., MOTTA R., CHERUBINI P., CUROVIC M., DUKIC V., TONON G., CECCON C., PERESSOTTI A., ALBERTI G., (2021). Role of photosynthesis and stomatal conductance on the long-term rising of intrinsic water use efficiency in dominant trees in three old-growth forests in Bosnia-Herzegovina and Montenegro. *iForest*, 14, 53-60.
- 198) FANG O., ZHANG Q.-B., VITASSE Y., ZWEIFEL R., CHERUBINI P., (2021). The frequency and severity of past droughts shape the drought sensitivity of juniper trees on the Tibetan Plateau. *Forest Ecology Management*, 486, 118968.
- 199) CHERUBINI P., BATTIPAGLIA G., INNES J.L., (2021). Tree vitality and forest health: can tree-ring stable isotopes be used as indicators? *Current Forestry Reports*, 7, 69-80. <https://doi.org/10.1007/s40725-021-00137-8>.
- 200) BÜNTGEN U., URBAN O., KRUSIC P.J., RYBNICEK M., KOLAR T., KYNCL T., AC A., KONASOVA E., CASLAVSKY J., ESPER J., WAGNER S., SAURER M., TEGLÉ W., DOBROVOLNY P., CHERUBINI P., REINIG F., TRNKA M., (2021). Recent European drought extremes beyond Common Era background variability. *Nature Geoscience*, <https://doi.org/10.1038/s41561-021-00698-0>
- 201) HADAD M.A., GONZALEZ-REYES A., ROIG F.A., MATSKOVSKY V., CHERUBINI P. (2021). Tree-ring-based hydroclimatic reconstruction for the northwest Argentine Patagonia since 1055 CE and its teleconnection to large-scale atmospheric circulation. *Global and Planetary Change*, 202, 103496.
- 202) COCOZZA C., ALTERIO E., BACHMANN O., GUILLONG M., SITZIA T., CHERUBINI P., (2021). Monitoring air pollution close to a cement plant and in a multi-source industrial area through tree-ring analysis. *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-021-14446-9>
- 203) BÜNTGEN U., ALLEN K., ANCHUKAITIS K., ARSENEAULT D., BOUCHER E., BRÄUNING A., CHATTERJEE S., CHERUBINI P., CHURAKOVA O., CORONA C., GENNARETTI F., GRIEBINGER J., GUILLET S., GUIOT J., GUNNARSON B.,

HELAMA S., HOCHREUTHER P., HUGHES M., HUYBERS P., KIRDYANOV A., KRUSIC P., LUDESCHER J., MEIER W., MYGLAN V., NICOLUSSI K., OPPENHEIMER C., REINIG F., SALZER M., SEFTIGEN K., STINE A., STOFFEL M., ST. GEORGE S., TEJEDOR E., TREVINO A., TROUET V., WANG J., WILSON R., YANG B., XU G., ESPER J. , (2021). The influence of decision-making in tree ring-based climate reconstructions. *Nature Communications*, 12 3411, <https://doi.org/10.1038/s41467-021-23627-6>.

204) VERSACE S., BATTIPAGLIA G., GARFI V., GIANELLE D. TOGNETTI R., CHERUBINI P. , (2021). Intra-annual density fluctuations in silver fir are triggered by drier climate conditions. *Trees*, 35, 1945-1959.

205) REINIG F., WACKER L., JÖRIS O., OPPENHEIMER C., GUIDOBALDI G., NIEVERGELT D., ADOLPHI F., CHERUBINI P., ENGELS S., ESPER J., LAND A., LANE C., PFANZ H., REMMELA S., SIGL M., SOOKDEO A., BÜNTGEN U. , (2021). Precise date of the Laacher See eruption synchronizes the Younger Dryas. *Nature*, 595, 66-69.

206) NIKOLOVA P.S., GEYER J., BRANG P., CHERUBINI P., ZIMMERMANN S., GÄRTNER H. , (2021). Changes in root-shoot allometric relations in Alpine Norway spruce trees after strip cutting. *Frontiers in Plant Science*, doi: 10.3389/fpls.2021.703674

207) SEILER R., HAJDAS I., SAURER M., HOULIE N., D'ARRIGO R., KIRCHNER J.W., CHERUBINI P. , (2021). Tree-ring stable isotopes and radiocarbon reveal pre- and post-eruption effects of volcanic processes on trees on Mt. Etna (Sicily, Italy). *Ecohydrology*, DOI: 10.1002/eco.2340

208) YUAN D., ZHU L., CHERUBINI P., LI Z., ZHANG Y., WANG X. , (2021). Species-specific indication of 13 tree species growth on climate warming in temperate forest community of northeast China. *Ecological Indicators* 133, 108389.

209) COSTA A., CHERUBINI P. , (2021). Is cork growth a reliable proxy for stem diameter growth in cork oak (*Quercus suber* L.)? Implications for forest management under climate change in Mediterranean regions. *Applied Sciences*, 11, 11998. <https://doi.org/10.3390/app112411998>

210) CHERUBINI P. , (2021). Tree-ring dating of musical instruments. *Science*, 373, (6562), 1434-1436.

## 2022

211) FARAHAT E., CHERUBINI P., SAURER M., GÄRTNER H., (2022). Wood anatomy and tree-ring stable isotopes indicate a recent decline in water-use efficiency in the desert tree *Moringa peregrina*. *International Journal of Biometeorology*, 66, 127-137.

212) SAURER M., CHERUBINI P. , (2021). Tree physiological responses after biotic and abiotic disturbances revealed by a dual isotope approach. *Tree Physiology*, 42, 1-4. doi:10.1093/treephys/tpab036

213) BALLIKAYA P., MARSHALL J.D., CHERUBINI P. , (2022). Can tree-ring chemistry be used to monitor atmospheric nanoparticle contamination over time? *Atmospheric Environment*, 268, 118781.

214) ANDERSON-TEIXEIRA K.J., HERRMANN V., ROLLINSON C.R., GONZALEZ B., GONZALEZ-AKRE E.B., N. PEDERSON, M.R. ALEXANDER, ALLEN C.D., ALFARO-SANCHEZ R., AWADA T., BALTZER J.L., BAKER P.J., BIRCH J.D., BUNYAVEJCHEWIN S., CHERUBINI P., DAVIES S.J., DOW C., HELCOSKI R., KASPAR J., LUTZ J.A., MARGOLIS E.Q., MAXWELL J.T., MCMAHON S.M., PIPONIOT C., RUSSO S.E., SAMONIL P., SNIDERHAN A.E., TEPLEY A.J., VASICKOVA I., VLAM M., ZUIDEMA P.A. , (2022). Joint effects of climate, tree size, and year on annual tree growth derived from tree-ring records of ten globally distributed forests. *Global Change Biology*, 28, 245-266. DOI: 10.1111/gcb.15934

215) LEONELLI G., BOLLATI I.M., CHERUBINI P., SAURER M., VERGARI F., DEL MONTE M., PELFINI M. , (2022). Tree-ring stable isotopes indicate mass wasting processes at Radicofani in the upper Orcia Valley (Tuscany, Italy). *Science of Total Environment*, 812, 152428.

216) CHERUBINI P., CARLSON B., TALIRZ W., WIENER M.H. , (2022). Musical string instruments: Potential and limitations of tree-ring dating and provenancing to verify their authenticity. *Dendrochronologia*, 72, 125942.

217) MURAZZI M.E., CHERUBINI P., BRUNNER I., KÄGI R., SAURER M., BALLIKAYA P., HAGEDORN F., AL SID CHEIKH M., ONANDIA G., GESSLER A. , (2022). Can forest trees take up and transport nanoplastics? *iForest*, 15, 128-132.

218) PERULLI G.D., PETERS R.L., VON ARX G., GRAPPADELLI L.C., MANFRINI L., CHERUBINI P. , (2022). Learning from the past to improve in the future: tree-ring wood anatomy as retrospective tool to help orchard irrigation management. *Acta Horticulturae*, 1335. DOI 10.17660/ActaHortic.2022.1335.21.

219) VERSACE S., BRÄUNING A., CHERUBINI P., DI FEBBRARO M., HÄUSSER M., LOMBARDI F., MARCHETTI M., MARZILIANO P.A., SALBITANO F., SZYMCZAK S., TOGNETTI R., (2022). New evidence for population-specific responses to drought events from tree ring chronologies of *Pinus nigra* ssp. *laricio* across the entire distribution range. *Agricultural and Forest Meteorology*, 323, 109076.

220) CHERUBINI P. , (2022). Timbre in the timber: how I date ancient violins. *Nature*, 605, 7911, 782.

221) COSTA A., CHERUBINI P., GRACA J., SPIEKER H., BARBOSA I., MAGUAS C. , (2022). Beyond width and density: stable carbon and oxygen isotopes in cork-rings provide insights of physiological responses to water stress in *Quercus suber* L. *PeerJ*, 10:e14270.

222) SONG W., ZHAO B., MU C., BALLIKAYA P., CHERUBINI P., WANG X. , (2022). Moisture availability influences the formation and characteristics of earlywood of *Pinus tabuliformis* more than latewood in northern China. *Agricultural and Forest Meteorology*, 327, 109219.

223) JING M., ZHU L., CHERUBINI P., YUAN D., LI Z., WANG X., LIU S. , (2022). Responses of radial growth of *Pinus massoniana* and *Castanopsis eyrei* to climate change at different elevations in south China. *Ecological Indicators*, 145, 109602.

224) GUO W., CHERUBINI P., ZHANG J., HU X., LI M.-H., QI L. , (2022). Soil physicochemical properties determine leaf traits but not size traits of moso bamboo (*Phyllostachys edulis*). *Environmental Research Letters*, 17, 114061.

225) KHAN N., NGUYEN H.T.T., GALELLI S., CHERUBINI P. , (2022). Increasing drought risks over the past four centuries amidst projected flood intensification in the Kabul River basin (Afghanistan and Pakistan)-Evidence from tree rings. *Geophysical Research Letters*, 49, e2022GL100703.

## 2023

226) BALLIKAYA P., MATEOS J.M., BRUNNER I., KAECH A., CHERUBINI P. , (2023). Detection of silver nanoparticles inside leaf of European beech (*Fagus sylvatica* L.). *Frontiers in Environmental Science*, 10:1107005. doi: 10.3389/fenvs.2022.1107005.

227) BALLIKAYA P., SONG W., BACHMANN O., GUILLONG M., WANG X., CHERUBINI P. , (2023). Chemical elements recorded by *Quercus mongolica* tree rings reveal trends of pollution history in Harbin, China. *Forests*, 14, 187.

228) BALLIKAYA P., BRUNNER I., COCOZZA C., GROLIMUND D., KAEGI R., MURAZZI M.E., SCHaub M., SCHÖNBECK L., SINNET B., CHERUBINI P. , (2023). First evidence of nanoparticle uptake through leaves and roots in beech (*Fagus sylvatica* L.) and pine (*Pinus sylvestris* L.). *Tree Physiology*, 43, 262-276.

229) GÄRTNER H., SCHNEIDER L., LUCCHINETTI S., CHERUBINI P. , (2023). Advanced workflow for taking high-quality increment cores - new techniques and devices. *Journal of Visualized Experiments*, (193), e64747, doi:10.3791/64747, <https://www.jove.com/v/64747>.

230) NI Y., XIAO W., LIU J., JIAN Z., LI M., XU J., LEI L., ZHU J., LI Q., ZENG L., CHERUBINI P. , (2023). Radial growth-climate correlations of *Pinus massoniana* in natural and planted forest stands along a latitudinal gradient in subtropical central China. *Agricultural Forest Meteorology*, 334, 109422.

231) GUO W., CHERUBINI P., ZHANG J., LI M.-H., QI L. , (2023). Leaf stomatal traits rather than anatomical traits regulate gross primary productivity of moso bamboo (*Phyllostachys edulis*) stands. *Frontiers in Plant Science*, 14:1117564. doi: 10.3389/fpls.2023.1117564

232) BALLIKAYA P., BRUNNER I., COCOZZA C., GROLIMUND D., KAEGI R., MURAZZI M.E., SCHaub M., SCHÖNBECK L., SINNET B., CHERUBINI P. , (2023). Nanoparticles are everywhere, even inside trees. *Chimia*, 77, 4, 256.

233) ALLEN R., MAZIS A., WARDLOW B., CHERUBINI P., HILLER J., WEDIN D., AWADA T. , (2023). Coupling dendroecological and remote sensing techniques to assess the biophysical traits of *Juniperus virginiana* and *Pinus ponderosa* within the semi-arid grasslands of the Nebraska Sandhills. *Forest Ecology and Management*, 544, 121184.

234) REINIG F., WACKER L., JÖRIS O., OPPENHEIMER C., GUIDOBALDI G., NIEVERGELT D., ADOLPHI F., CHERUBINI P., ENGELS S., ESPER J., KEPPLER F., LAND A., LANE C., PFANZ H., REMMELE S., SIGL M., SOOKDEO A., BÜNTGEN U. , (2023). Reply to: Possible magmatic CO<sub>2</sub> influence on the Laacher See eruption date. *Nature*, 619, E3-E8.

235) BATKHUYAG E.-U., LEHMANN M.M., CHERUBINI P., ULZIBAT B., SOYOL-ERDENE T.-O., SCHaub M., SAURER M. , (2023). Combination of multiple stable isotope and elemental analyses in urban trees reveals air pollution and climate change effects in Central Mongolia. *Ecological Indicators*, 154, 110719.

236) ZHANG R., HU Z., CHERUBINI P., COOPER D.J., ZHU L., LEI P. , (2023). Tree-ring data reveal trees are suffering from severe drought stress in the humid subtropical forest. *Forest Ecology Management*, 546, 121330.

237) BATTIPAGLIA G., KABALA J.P., PACHECO-SOLANA A., NICCOLI F., BRÄUNING A., CAMPELO F., CUFAR K., DE LUIS M., DE MICCO V., KLISZ M., KOPROWSKI M., GARCIA-GONZALEZ I., NABAIS C., VIEIRA J., WRZESIŃSKI P., ZAFIROV N., CHERUBINI P. , (2023). Intra-annual density fluctuations in tree rings are proxies of air temperature across Europe. *Scientific Reports*, 13, 12294.

238) ALDEROTTI F., SILLO F., BRILLI L., BUSSOTTI F., CENTRITTO M., FERRINI F., GORI A., INGHES R., PASQUINI D., POLLASTRINI M., SAURER M., CHERUBINI P., BALESTRINI R., BRUNETTI C. , (2023). *Quercus ilex* L. dieback is genetically determined: Evidence provided by dendrochronology, δ<sup>13</sup>C and SSR genotyping. *Science of Total Environment*, 904, 166809.

239) ZHU L., ZHANG J., CAMARERO J.J., COOPER D.J., CHERUBINI P., YUAN D., WANG X. , (2023). Drivers and spatiotemporal patterns of post-drought growth resilience of four temperate broad-leaved trees. *Agriculture and Forest Meteorology*, 342, 109741.

240) QI X., CHERUBINI P., TREYDTE K., LI M.-H., WU Z., HE H.S., DU H., FANG K., SAURER M. , (2023). Growth responses to climate warming and their physiological mechanisms differ between mature and young larch trees in a boreal permafrost region. *Agriculture and Forest Meteorology*, 343, 109765.

241) ESPER J., CHERUBINI P., KALTENBACH D., BÜNTGEN U. , (2023). London plane bark exfoliation and tree-ring growth in urban environments. *Arboriculture & Urban Forestry*, 49, 6, 299-312.

A handwritten signature in black ink, appearing to read "Paolo J".