

PERSONAL INFORMATION

Carlo Calfapietra



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Sex M | Date of birth 07-03-1973 | Nationality Italian

WORK EXPERIENCE

- 2020 – Director of CNR Institute of Research on Terrestrial Ecosystems (IRET)
- 2019 – Research Director at CNR Institute of Research on Terrestrial Ecosystems (IRET)
- 2018 – Acting Director at CNR Institute of Agroenvironmental and Forest Biology (IBAF) - Acting Director at CNR Institute of Research on Terrestrial Ecosystems (IRET)
- 2009 Researcher, Institute of Agro-Environmental and Forest Biology (IBAF), CNR, Porano (TR)
- 2007 – 2009 Temporary Researcher, Institute of Agro-Environmental and Forest Biology (IBAF), CNR, Montelibretti (Roma)
- 2005 – 2007 Honorary Fellow-Temporary Researcher. Marie Curie University of Wisconsin-Madison, Department of Botany, USA; Università della Tuscia, Dipartimento di Scienze Forestali e sue Risorse, Italy
- 2002 – 2005 Post-doc contracts Università della Tuscia, Dipartimento di Scienze Forestali e delle sue Risorse, Viterbo,
- 1999 – 2002 PhD student in Forest Ecology, Università di Padova

EDUCATION AND TRAINING

- 1999-2002
Doctoral Degree in Forest Ecology obtained on 14 February 2002 at Università di Padova, Italy 1991-1998
University degree in Forestry obtained on 23 April 1998 at Università degli Studi della Tuscia, Viterbo, Italy.
Evaluation score 110/110 cum laude.
- 1986-1993
Musical degree in Flute obtained on 01 October 1993 at the State Music Conservatorium of Perugia, Italy
- 1986-1991
Bachelor Degree “Maturità Scientifica”, Liceo Scientifico P. Ruffini Viterbo, Italy

PERSONAL SKILLS

MOTHER TONGUE(S) Italian

OTHER LANGUAGE(S)

English language

UNDERSTANDING		SPEAKING		WRITING
LISTENING	READING	SPOKEN INTERACTION	SPOKEN PRODUCTION	
ENTER LEVEL	ENTER LEVEL	ENTER LEVEL	ENTER LEVEL	ENTER LEVEL
C2	C2	C2	C2	C2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

10"TOP- ACHIEVEMENTS" of the career

- H-Index: 41 (Google-Scholar); 34 (Scopus); 34 (WoS); Citations: 4645 (Google-Scholar);
- Marie Curie OIF (Outgoing International Fellowship) 2005 – 2007 (USA-Italia)
- Chair of the COST Action FP1204 2013 – 2017
- 6 Invited Keynote Speech in International Conferences 2012 – now
- More than 4M€ funds obtained in the last 5 years
- Member of Science Europe LEGS Committee (European Selection based on Scientific Excellence) 2013 – 2016
- Co-Chair of the Expert Working Group on NBS selected by EKLIPSE EU Commission-DG Research 2016 – 2017
- Member of Czechglobe, Centre of Excellence for studies of Climate Change 2010 – now
- Responsible of the CNR Strategic Area "Resources and Ecosystems" 2014 – now
- Professor under contract in Italian Universities and in international curricula from 2008 until now

• SUPERVISION OF PhD AND POSTDOC AND THESIS

2002 – 2017 Supervised Postdocs: 5 (Gabriele Guidolotti, Emanuele Palozzi, Olga Gavrickova, Gregorio Sgrigna, Silvia Portarena)/ PhD: 7 (Arianna Morani, Gregorio Sgrigna, Ilaria Lusini, Mauro Medori, Enrica Nestola, Raffaella Esposito, Federica Revoltella)/ Master Thesis 20

• TEACHING DUTIES

2015 – now Professor in "Trees and plants to improve air quality of urban areas" within the dual degree "Management and design of urban green infrastructure" in collaboration between Università della Tuscia and RUDN Moscow University

2013 – 2015 Professor at l'Università della Tuscia, Viterbo, for the course "Alberi e Foreste per il miglioramento dell'ambiente urbano"

2008 – 2010 Supervisor of thesis laboratory in "Planning and management of the Environment" in Bracciano (Rome) in collaboration between Università "La Sapienza" Roma and Università della Tuscia, Viterbo

2008 – 2009 Professor in Urban Forestry at the International Dual Degree "Environmental Science for Large Urban Areas" in collaboration between Università della Tuscia, Italy and PACE University, New York, USA

2005 – now Invited for lessons and seminars in a number of Universities/Institutions in Europe and USA

• ORGANIZATION OF SCIENTIFIC MEETINGS

2017 Organizer and Chair of the International Conference "Green Infrastructure: Nature Based Solutions for Sustainable and Resilient Cities" Orvieto 4-7 Aprile (+400 registered participants) www.greeninurbs.com/finalconference

2016 Organizer and Chair of the International Workshop and side event of the IFLA World Congress "Green Infrastructures and Urban Forests in the Urban Planning: New Approaches and Challenges" Torino, 18-19 Aprile (about 100 participants, <http://www.greeninurbs.com/green-infrastructure-urban-forest-in-the-urban-planning-new-approaches-and-challenges/>)

2014 Organizer of the International Workshop "Green Infrastructures and urban forests for improving the environment and the quality of life" Roma, 17 Novembre (about 100 participants)

2010 Organizer of the International Summer School on "Life in Extreme Environments" in Pieve Tesino, Italy (40 students, 13 Teachers)

2009 Organizer of the International Workshop on "Life In Extreme Environments" Viterbo, 25 Giugno (30 participants)

• INTERNATIONAL INSTITUTIONAL RESPONSABILITIES

- 2013 – 2016 Member of the Scientific Committee "Life, Environmental and Geosciences" of Science Europe
- 2010 – now Member of the Centre of Excellence "Czechglobe" for studies on Climate Changes of the AVCR, Brno, CZ
- 2015 – now Focal Point for Italy of the ICOS-Research Infrastructure Integrated Carbon Observation System
- 2015 – now Italian substitute delegate for EUROPARC
- 2015 Committee member of PhD thesis at University of Copenhagen (candidate: Michelle Schollert)
- 2015 Opponent of PhD thesis at the University of Helsinki (candidate: Juho Aalto)
- 2013 Committee member of PhD thesis at the University of Tartu, Estonia (candidate: Zhihong Sun)
- 2013 Committee member of PhD thesis at the Technical University of Denmark (candidate: Kristine Stove Boesgaard)
- 2013 Committee member of 2 PhD theses at the University of Antwerp, Belgium (candidates: Laura Broeckx e Melanie Verlinden)
- 2012 Opponent for PhD thesis at the University of Eastern Finland (candidate: Maarit Mäenpää)
- 2007 – 2011 Management Committee Member of the COST Action FP0701 "Post-fire Forest Management in Southern Europe"
- 2003 – 2006 Scientific Secretary of the FP6 project "EUROFACE"

• ROLES AND RESPONSABILITIES AT CNR OR FOR CNR

- 2016 – now Member of the Institute Council (IBAF)
- 2016 Member of the Committee for the competition BANDO N. 368.24 RIC – for the selection of 3 Permanent Researchers at CNR
- 2016 – now Member of the National Committee MAB-UNESCO at Ministry of Environment
- 2014 – now Scientific PI of the Capodimonte Station (ICOS site)
- 2014 – now Responsible of the CNR Strategic Area "Resources and Ecosystems"

• MEMBER OF THE EDITORIAL BOARD OF INTERNATIONAL JOURNALS

- 2016 – now Editorial Board of Forests (MDPI)
- 2014 – now Editorial Board of Journal of Ecosystem Health and Sustainability
- 2014 – now Editorial Board of AIMS Environmental Science
- 2012 – now Editorial Board of The Scientific World Journal
- 2011 – 2016 Editorial Board of the Journal of Environmental Quality
- 2010 – now Editorial Board of Open Forest Science Journal

• EDITOR OF BOOKS OR SPECIAL ISSUES

- 2017 Co-Editor of the Book "The Urban Forest Cultivating Green Infrastructure for People and the Environment Editors: Pearlmutter, D., Calfapietra, C., Samson, R., O'Brien, L., Krajter Ostoić, S., Sanesi, G., Alonso del Amo, R. (Eds.) Springer, 2017
<https://www.springer.com/gp/book/9783319502793>
- 2017 Guest Editor Special Issue titled "Green Infrastructures: Nature Based Solutions for Sustainable and Resilient Cities" in press on Urban Forestry Urban Greening (IF: 2,0)
<https://www.journals.elsevier.com/urban-forestry-and-urban-greening/news/special-issue-in-preparation-green-infrastructure-nature-bas>
- 2016 Guest co-Editor Special Issue: "The Urban Forest and Ecosystem Services: Tree, Street and City Scale" Journal of Environmental Quality (IF: 2,65)

• ACTIVITY AS REVIEWER AND EVALUATOR

- 2018 Evaluation Panel Member for Academy of Finland
- 2017 Evaluator for European Science Foundation
- 2017 Evaluator for Sardegna Ricerche
- 2015 – 2016 Reviewer for Austrian Science Fund
- 2016 Evaluator for Belmont Forum initiative
- 2015 Evaluator for MISE
- 2011 – 2017 Evaluator for Ministry of Education and Research of Romania
- 2012 Evaluator for MIUR
- 2012 Evaluator for Ministry of Education and Research of Estonia

2012 & 2016 Evaluator for FWO, Belgium
2011 – 2016 Evaluator for NSF, USA
2010 Evaluator for Academy of Sciences of Czech Republic
2009 Evaluation Panel Member for ANR Call "La 6ème Extinction", France
2003 – now Reviewer for the Journals: Nature Geoscience, Plant Physiology, New Phytologist, Global Change Biology, Oecologia, Environmental Science & Technology, Plant Cell & Environment, Tree Physiology, Environmental Pollution, Atmospheric Environment, Functional Plant Biology, Plant Pathology, Annals of Forest Science, Journal of Environmental Management and others

• PARTECIPATION AS PI IN PROJECTS AND ROLE

2003 – 2005 EU Programme "EUROFACE", An integrated european scientific infrastructure for global change studies on forest and agroforest ecosystems utilising FACE technology. (Scientific Secretary)
2005 – 2007 European Marie-Curie OIF Fellowship "GLOBALVOC", Understanding global change effects on VOC emission in Populus from eco-physiological to molecular level (Coordinator)
2007 – 2012 COST Action FP0701 "Post-fire Forest Management in Southern Europe" (MC member)
2008 – 2011 EC Programme "CAREX", A European platform for research on life in extreme environments (OU Responsible, SC member)
2008 – 2012 EC Programme "HEREPLUS", HHealth Risk from Environmental Pollution Levels in Urban Systems (OU Responsible)
2010 – 2015 EC-CZECHGLOBE – Global Change Research Centre of Excellence (member)
2011 – 2012 CNR-CSIC bilateral project on Carbon Losses from semiarid ecosystems (OU Responsible)
2011-2015 RIFORTER Studio di Riqualificazione della FOresta urbana per il miglioramento della qualità dell'aria della conca ternana (Coordinator)
2012 – 2015 PON I-AMICA "Infrastruttura di Alta tecnologia per il Monitoraggio Integrato Climatico-Ambientale" (WP and OU Responsible, SC member)
2012 – 2016 Progetto "RITMARE -Ricerca italiana per il mare" (OU Responsible)
2013 – 2015 CNR – AVCR Bilateral project on BVOC emission under extreme climatic conditions (OU Responsible)
2013 – 2016 CZ-MSMT Assessing interactions between Volatile Organic Compounds (VOC) and ozone in forests under extreme climatic events (Coordinator)
2013 – 2015 Commessa CNR TA.P02.002 Cambiamento globale e vegetazione terrestre – Scambi atmosfera-biosfera (Coordinator)
2013 – 2017 COST Action FP1204 GreenInUrbs "Green Infrastructure approach: linking environmental with social aspects in studying and managing urban forests" (Coordinator, Chair)
2014 – 2017 MIUR-PRIN project "Modelli innovativi di analisi dei servizi ecosistemici nell'ambito di formazioni boschive urbane e periurbane (NEUFOR)" (OU Responsible)
2014 – 2018 Nextdata related project "Carbon and water fluxes in mountain forest and grassland ecosystems from leaf to eco system level: effects of climate variability and management" (Coordinator)
2015-2016 ARCA-Artico: cambiamento climatico attuale ed eventi estremi del passato (OU Responsible)
2015-2018 PALMO Piani di Adattamento Locale in ambito Montano Mediterraneo (Coordinator)
2015-2019 EU (H2020) ECOPOTENTIAL: improving future ecosystem benefits through earth observations (OU Member)
2016-undefinite ICOS-Reseach Infrastructure Integrated Carbon Observation System (Italian Focal Point)
2016 – 2019 Smart-Cities project SWaRM – Smart Water Resource Management (WP Responsible)
2016 H2020-EKLIPSE Knowledge and Learning mechanisms on Biodiversity and Ecosystem Services (Co-chair of the Expert WG on Nature Based Soluions requested by DG Research)
2017 – 2019 Era4CS Serv_ForFIRE Integrated services and approaches for assessing effects of climate change and extreme events for fire and post fire risk prevention (Member of Coordination team)
2018 – 2023 H2020-NBS-ProGIReg Productive Green Infrastructure for post-industrial urban regeneration (WP Leader, Coordination Team)

• INVITATION IN INTERNATIONAL CONFERENCES

Keynote Speaker

2016 Monitoring and assessing air quality in urban park, Megacities 2050 Conference, 12-14 September (Moscow)
2016 Valuation of Green Infrastructure's and urban forests' environmental benefits for improved governance, European Symposium of Albi Hortis-WUP, 5-7 October (Albi, France)
2014 Actual State of Work COST Action FP1204, European Forum of Urban Forestry, 3-7 June (Lausanne)
2013 Role of biogenic volatile compounds emitted by urban trees on ozone formation cities, Urban Environmental Pollution Conference, 17-20 November (Beijing)
2012 Role of biogenic volatile compounds emitted by urban trees on ozone formation cities, Urban Environmental Pollution Conference, 17-20 June (Amsterdam)

invited speaker

2017 Lungs of the Earth, Forest Policies for Climate and Health, EU Parliament, (Brussels)
2017 UN Science-Policy-Business Forum, (Nairobi)
2017 Final HYPI Conference 'New Perspectives in Modeling and Measurement of Biogenic Volatile Organic Compounds Emissions by Remote Sensing', 15-16 June, (Antwerp)
2017 GreenInUrbs and Nature Based Solutions-State of the Art. EUSALP Action Group Forum, 14-16 February (Garmisch).
2014 GreenInUrbs: Green Infrastructure approach, linking environmental with social aspects in studying and managing urban forests, European Congress of Arboriculture (ISA), 26- 28 May (Turin)
2013 Role of biogenic volatile organic compounds (BVOC) emitted by urban trees on ozone formation in urban and rural environments, Global Change and Resilience, (Brno)
2013 GreenInUrbs: Green Infrastructure approach, linking environmental with social aspects in studying and managing urban forests, European Forum on Urban Forestry, 7-11 May (Milan)
2013 Perspectives from Science Europe on future research on forest and climate change, Priorities for forest adaptation to climate change and air pollution, 29 October (Brussels)
2013 Research priorities in biosphere-atmosphere exchanges in urban environment and in forest fires Joint workshop CNR-Max Planck "Integration and partnership in Science and Technology: state of the art and future Perspectives", 15-16 Giugno (Villa Vigoni)
2009 Elevated CO₂ and interactions with nitrogen in forest plantations. Workshop "The impact of nitrogen on the forest carbon cycle", 26-27 February (Stockholm)
Chair
2015 Chair della Sessione "Impacts of air pollution and climate change on forests in the wildland-urban interface" at the IUFRO International Congress Global Challenges of Air Pollution and Climate Change to Forests, 1-5 June (Nice)
2014 Chair della sessione "Good Practices examples" alla EU-EaP STI Policy Stakeholders Conference, 15-16 May (Yerevan, Armenia)
2011 Chair della sessione "Contributions of life in extreme environments to biogeochemical cycles and responses to environmental change" alla International CAREX Conference on Life in Extreme Environments, 18-20 October (Dublin)

•PRIZES AND PRESTIGIOUS ROLES

2016 – 2017 Co-Chair of the Expert Working Group Nature Based Solutions (NBS) selected by H2020EKLIPSE-EU Commission/DG Research (http://www.eclipse-mechanism.eu/nbs_report)
2013 – 2015 Member of the Scientific Committee "Life, Environmental and Geosciences" di Science Europe
2018 – 2024 Enabled Full Professor (Professore I fascia) sector 07/B2
2010 – now Member of the EU-Funded (40 M€) Center of Excellence "Czechglobe" for studies of climate change
2005 – 2007 Marie Curie OIF Fellowship: University of Wisconsin-Madison, Department of Botany, USA; Università della Tuscia, Department of Forest Resources, Italy
2005 Expert in Ecofisiologia Forestale, Università della Tuscia
2003 Winner of the Prize "Idea-Impresa" Bic-Lazio, Italia

INTERVIEW ON MASS MEDIA

Interview on Repubblica Repubblica.it il 3 Novembre 2016

http://www.repubblica.it/scienze/2016/11/03/news/una_citta_salvata_dagli_alberi-151236781/?ref=HREC1-15

Interview on RAI programme RAI Memex and RAI 2 on 12 Dicembre 2015
<http://www.raiscuola.rai.it/articoli/memex-il-futuro-degli-ecosistemi/31924/default.aspx>

*corresponding author

PUBLICATIONS

2018

NOGUES I, MEDORI M, FORTUNATI A, LELLEI-KOVÁCS E, KRÖEL-DULAY G, CALFAPIETRA C. 2018. Leaf gas exchange and isoprene emission in poplar in response to long-term experimental night-time warming and summer drought in a forest-steppe ecosystem. *Environmental and Experimental Botany*, in press.

PALLOZZI E, LUSINI I, CHERUBINI L, HAJIAGHAYEVA RA, CICCIOLO P, CALFAPIETRA C* 2017. Differences between a deciduous and a conifer tree species in gaseous and particulate emissions from biomass burning. *Environmental Pollution*, in press.

NESTOLA E, SCARTAZZA A, DI BACCIO D, CASTAGNA A, RANIERI A, CAMMARANO M, MAZZENGA F, MATTEUCCI G, CALFAPIETRA C. 2017. Are optical indices good proxies of seasonal changes in carbon fluxes and stress-related physiological status in a beech forest? *Science of the total environment*, in press.

2017

GAVRICHKOVA O, LIBERATI D, GUNINA A, GUIDOLOTTI G, DE DATO G, CALFAPIETRA C, DE ANGELIS P, BRUGNOLI E, KUZYAKOV C. 2017. Does long-term warming affect C and N allocation in a Mediterranean shrubland ecosystem? Evidence from a 13C and 15N labeling field study. *Environmental and Experimental Botany* 141: 170-180.

RAYMOND CM, FRANTZESKAKI N, KABISCH N, BREIL M, BERRY P, RAZVAN NITA M, GENELETTI D, CALFAPIETRA C. 2017. A framework for assessing and implementing the co-benefits of nature-based solutions in urban areas. *Environmental Science and Policy*, 77: 15-24.

SCARTAZZA A, MOSCATELLO S, GAVRICHKOVA O, BUIA MC, LAUTERI M, BATTISTELLI A, LORENTI M, GARRARD SL, CALFAPIETRA C, BRUGNOLI E. 2017. Carbon and nitrogen allocation strategy in *Posidonia oceanica* is altered by seawater acidification. *Science of the total environment*, 607: 954-964.

SAMSON R, GROTE R, CALFAPIETRA C, CARINANOS P, FARES S, PAOLETTI E, TIWARY A. 2017. Urban Trees and Their Relation to Air Pollution. In: Pearlmutter D., Calfapietra C, Samson R, O'Brien L, Krajter Ostoic S, Sanesi G, Alonso del Amo R eds. "The Urban Forest – Cultivating Green Infrastructure for People and the Environment", Springer, pp. 21-30.

CARINANOS P, CALAZA-MARTINEZ P, O'BRIEN L, CALFAPIETRA C. 2017. The Cost of Greening: Disservices of Urban Trees. In: Pearlmutter D., Calfapietra C, Samson R, O'Brien L, Krajter Ostoic S, Sanesi G, Alonso del Amo R eds. "The Urban Forest – Cultivating Green Infrastructure for People and the Environment", Springer, pp. 79-88.

BALDACCHINI C, CASTANHEIRO A, MAGHAKYAN N, SGRIGNA G, VERHELST J, ALONSO R, AMORIM JH, BELLAN P, ĐUNISIJEVIĆ BOJOVIĆ P, BREUSTE J, BUHLER O, CANTAR IC, CARIÑANOS P, CARRIERO G, CHURKINA G, DINCA L., ESPOSITO R, GAWROŃSKI SW, KERN M, LE THIEC D, MORETTI M, NINGAL T, RANTZOU DI EC, SINJUR I, STOJANOVA B, ANIČIĆ UROSEVIĆ M, VELIKOVA V, ŽIVOJINOVIĆ AI, SAHAKYAN L, CALFAPIETRA C*, SAMSON R. 2017. How Does the Amount and Composition of PM Deposited on *Platanus acerifolia* Leaves Change Across Different Cities in Europe?. *Environmental Science and Technology* 51: 1147-1156.

NESTOLA E, SÁNCHEZ-ZAPERO J, LATORRE C, MAZZENGA F, MATTEUCCI G, CALFAPIETRA C, CAMACHO F. 2017. Validation of PROBA-V GEOV1 and MODIS C5 & C6 fAPAR Products in a Deciduous Beech Forest Site in Italy. *Remote Sensing* 9, 156-174.

GUIDOLOTTI G, CALFAPIETRA C*, PALLOZZI E, DE SIMONI G, ESPOSITO R, MATTIONI M, NICOLINI G, MATTEUCCI G, BRUGNOLI. 2017. Promoting the potential of flux-measuring stations in urban parks: An innovative case study in Naples, Italy. *Agricultural and Forest Meteorology*, 233: 153-162.

CALFAPIETRA C*, GUIDOLOTTI G, CHURKINA G, GROTE R. 2017. Urban Tree Physiology: Methods and Tools. In: Ed. Ferrini F, Konijnendijk van den Bosch CC and Fini A, Routledge Handbook of Urban Forestry, Chapter 16.

JURÁŇ S, PALLOZZI E, GUIDOLOTTI G, FARES S, ŠIGUT L, CALFAPIETRA C, ALIVERNINI A, SAVI F, VEČEŘOVÁ K, KRŮMAL K, VEČEŘA Z, URBAN O 2017. Fluxes of biogenic volatile organic compounds above temperate Norway spruce forest of the Czech Republic, *Agricultural and Forest Meteorology* 232, 500-513

2016

ESPOSITO R, LUSINI I, VEČEŘOVÁ K, HOLIŠOVÁ P, PALLOZZI E, GUIDOLOTTI G, URBAN O, CALFAPIETRA C.* 2016. Shoot-level terpenoids emission in Norway spruce (*Picea abies*) under natural field and manipulated laboratory conditions. *Plant Physiology and Biochemistry* 108, 530-538.

GROTE R, SAMSON R, ALONSO R, AMORIM JH, CARIÑANOS P, CHURKINA G, FARES S, LE THIEC D, LO NIINEMETS Ü, MIKKELSEN TN, PAOLETTI E, TIWARY A, CALFAPIETRA C. 2016. Functional traits of urban trees in relation to their air pollution mitigation potential: A holistic discussion. *Frontiers in Ecology and the Environment*, 14: 543-550.

GUIDOLOTTI G, SALVIATO M, CALFAPIETRA C*. 2016. Comparing estimates of EMEP MSC-W and UFORE models in air pollutant reduction by urban trees. *Environmental Science and Pollution Research*, 23 (19), 19541-19550.

NESTOLA E, CALFAPIETRA C, EMMERTON CA, WONG CYS, THAYER DR, GAMON JA. 2016. Monitoring Grassland Seasonal Carbon Dynamics, by Integrating MODIS NDVI, Proximal Optical Sampling, and Eddy Covariance Measurements. *Remote Sensing*, 8: 260-266.

SGRIGNA G, BALDACCHINI C, ESPOSITO R, CALANDRELLI R, TIWARY A, CALFAPIETRA C.* 2016. Characterization of leaf-level particulate matter for an industrial city using electron microscopy and X-ray microanalysis. *Science of the Total Environment*, 548: 91-99.

LIVESLEY SJ, MCPHERSON EG, CALFAPIETRA C. 2016. The urban forest and ecosystem services: impacts on urban water, heat and pollution cycles at the tree, street and city scale. *Journal of Environmental Quality*, 45: 119-124.

SICARD P, AUGUSTAITIS A, BELYAZID S, CALFAPIETRA C, DE MARCO A, FENN M, BYTNEROWICZ A, GRULKE N, HE S, MATYSSEK R, SERENGIL Y, WIESER G, PAOLETTI E. 2016. New emergencies and novel approaches in the study of air pollution, climate change and forest ecosystems. *Environmental Pollution*, 213, 977-987.

PALLOZZI E, GUIDOLOTTI G, CICCIOLO P, BRILLI F, FEIL S, CALFAPIETRA C 2016. Does the novel fast-GC coupled with PTR-TOF-MS allow a significant advancement in detecting VOC emissions from plants? *Agricultural and Forest Meteorology*, 216: 232-240.

GUIDOLOTTI G, REY A, MEDORI M, CALFAPIETRA C 2016. Isoprenoids emission in *Stipa tenacissima* L.: photosynthetic control and the effect of the UV light. *Environmental Pollution*, 208: 336-344.

TIWARY A, WILLIAMS ID, HEIDRICH O, NAMDEO A, BANDARU V, CALFAPIETRA C 2016. Development of multi-functional streetscape green infrastructure using a performance index approach. *Environmental Pollution*, 208: 209-220.

CALFAPIETRA C*, MORANI A, SGRIGNA G, DI GIOVANNI S, MUZZINI V, PALLOZZI E, GUIDOLOTTI G, NOWAK D, FARES S. 2016. Uptake of O₃ by urban and peri-urban forests: evidences from laboratory, field and modeling approaches. *Journal of Environmental Quality*, 45: 224-233.

2015

CANNONE N, AUGUSTI A, MALFASI F, PALLOZZI E, CALFAPIETRA C, BRUGNOLI E 2015. The interaction of biotic and abiotic factors at multiple spatial scales affects the variability of CO₂ fluxes in polar environments. *Polar Biology*, doi:10.1007/s00300-015-1883-9.

TALLIS MJ, FREER-SMITH PH, AMORIM JH, CALFAPIETRA C, GRIMMOND S, KOTTHAUS S, LEMES DE OLIVEIRA F, MIRANDO AI AND TOSCANO P 2015. The impacts of green infrastructure on air quality and temperature. In the Handbook on Green Infrastructure: Planning, design and implementation Ed. Sinnett D, Burgess S and Smith N. Edward Elgar Publishing Ltd. P. 30-60.

CALFAPIETRA C*, A. Barbatì, L. Perugini, B. Ferrari, G. Guidolotti, A. Quatrini, and P. Corona. 2015 Carbon mitigation potential of different forest ecosystems under climate change and various managements in Italy. *Ecosystem Health and Sustainability*, 1: 1-9.

- NOGUÉS I, MEDORI M, CALFAPIETRA C. 2015. Limitations of monoterpene emissions and their antioxidant role in *Cistus* sp. under mild and severe treatments of drought and warming. *Environmental and Experimental Botany*, 119: 76-86.
- ŠIGUT L., HOLIŠOVÁ P., KLEM K., ŠPRTOVÁ M., CALFAPIETRA C., MAREK M.V., ŠPUNDA V., URBAN O. 2015. Does long-term cultivation of saplings under elevated CO₂ concentration influence their photosynthetic response to temperature? *Annals of Botany*, 116: 929-939.
- SGRIGNA G, SÆBØ A, GAWRONSKI S, POPEK R, CALFAPIETRA C*. 2015. Particulate matter deposition on *Quercus ilex* leaves in an industrial city of central Italy. *Environmental Pollution*, 197: 187-194.
- CALFAPIETRA C.*, NIINEMETS Ü., PEÑUELAS J. 2015. Urban Plant Physiology: adaptation-mitigation strategies under permanent stress. *Trends in Plant Science*, 20: 72-75.
- 2014
- LORETO F, BAGNOLI F, CALFAPIETRA C, CAFASSO D, DE LILLIS M, FILIBECK G, FINESCHI S, GUIDOLOTTI G, SRAMKÓ G, TÖKÖLYI J, RICOTTA C. 2014. Isoprenoid emission in hygrophyte and xerophyte European woody flora: ecological and evolutionary implications. *Global Ecology and Biogeography* 23: 334-345.
- BRILLI F, GIOLI B, ZONA D, PALLOZZI E, ZENONE T, FRATINI G, CALFAPIETRA C, LORETO F, JANSSENS IA, CEULEMANS R. 2014. Simultaneous leaf- and ecosystem-level fluxes of volatile organic compounds from a poplar-based SRC plantation. *Agricultural and Forest Meteorology* 187: 22– 35.
- LUSINI I, PALLOZZI E, CORONA P, CICCIOLO P, CALFAPIETRA C*. 2014. Novel application of a combustion chamber for experimental assessment of biomass burning emission. *Atmospheric Environment* 94: 117-125.
- MORANI A, NOWAK D, HIRABAYASHI S, GUIDOLOTTI G, MEDORI M, MUZZINI V, FARES S, SCARASCIA MUGNOZZA G, CALFAPIETRA C.* 2014. Comparing i-Tree modeled ozone deposition with field measurements in a periurban Mediterranean forest. *Environmental Pollution* 195: 202-209.
- 2013
- Battipaglia G, Saurer M, Cherubini P, CALFAPIETRA C, McCarthy H, Norby RJ, Cotrufo MF. 2013. Elevated CO₂ increases tree-level intrinsic water use efficiency: insights from carbon and oxygen isotope analyses across three forest FACE sites. *New Phytologist*, 197: 534-544.
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