CURRICULUM VITAE ET STUDIORUM

NOME: Francesco Loreto

LUOGO E
DATA DI NASCITA: [redacted]

CITTADINANZA: I[redacted]

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INTERESSI E
ATTUALE CAMPO
DI LAVORO: **Biochimica, fisiologia ed ecologia vegetale**:

✓ **Fotosintesi**: stima delle resistenze alla diffusione della CO2 nel mesofillo fogliare; studio delle relazioni tra trasporto elettronico e fotosintesi; studio del riciclo della CO_2 respiratoria e fotorespiratoria nel mesofillo fogliare.

✓ **Fisiologia dello stress:** studio degli effetti degli stress biotici ed abiotici sulle limitazioni fotosintetiche e sulla produttivita' delle piante. Applicazioni di genomica, proteomica e metabolomica per lo studio dei meccanismi di adattamento e vulnerabilita' delle piante ai cambiamenti ambientali.

✓ **Biosintesi ed emissione di composti organici volatili di natura biogenica (VOC)**: studio delle relazioni tra: i) emissione di isoprenoidi, fotosintesi e respirazione; ii) metaboliti secondari e difesa da stress biotici ed abiotici; iii) emissioni biogeniche e chimica ambientale in relazione a fenomeni di inquinamento atmosferico. Studio dell'impatto dei cambiamenti ambientali sulla produzione ed emissione di VOC.

STUDI

1985 - Laurea in Scienze Agrarie, indirizzo Produzione Vegetale, orientamento Frutticolo, Universita' di Catania. Voto di laurea: 110/110 e lode

1987 - Borsa di studio del Consiglio Nazionale delle Ricerche (CNR) presso il CNR Centro Studi Olivicoltura di Perugia.

1988 - Borsa di studio e partecipazione all'Advanced Study Institute NATO-FEBS (Spetsai, Grecia) "Techniques and new developments in photosynthesis research".
- Borsa di studio CNR presso il Dept of Botany, University of Wisconsin, Madison,WI, USA.

1989 - Borsa di studio CNR presso il Dept of Botany, University of Wisconsin, Madison, WI, USA.

1990 - Research Associate presso il Dept of Botany, University of Wisconsin, Madison,WI, USA. Sponsor: NSF (National Science Foundation of US).

1991 - Borsa di studio NATO presso il Dept of Botany, University of Wisconsin, Madison, WI, USA.

1992 - Research Associate presso il Dept. of Botany, University of Wisconsin, Madison, WI, USA. Sponsor: Southern Oxidant Research Program on Effects of Plant Emissions (Tennessee Valley Authority).

1993 - Borsa di studio CNR presso l'Istituto di Biochimica ed Ecofisiologia Vegetali del CNR (CNR-IBEV)

CARRIERA PROFESSIONALE

1993-1996	- Ricercatore a contratto ex art.23 presso il CNR-IBEV, Area della ricerca del CNR, Monterotondo Scalo (Roma).
1996-1999	- Ricercatore III livello del CNR presso l'IBEV, Area della ricerca del CNR, Monterotondo Scalo (Roma).
1999-2001	- Ricercatore II livello (primo ricercatore) del CNR presso l'IBEV (ora IBAF), Area della ricerca del CNR, Monterotondo Scalo (Roma).
2002-2018	- Ricercatore I livello (dirigente di ricerca) del CNR presso l' Istituto di Biologia Agroambientale e Forestale (IBAF).
2009– 2012	Direttore, Istituto per la Protezione delle Piante (IPP) del CNR.
2012-2021	- Direttore, CNR – Dipartimento Bio-Agroalimentare (due mandati), coordina i nove Istituti del CNR che lavorano nel settore della Biologia e delle Scienze Agrarie (circa 1000 ricercatori, tecnologi, tecnici e amministrativi del CNR).
2018-	- Professore I fascia, settore 05/A2 Fisiologia Vegetale, Universita' Federico II, Napoli (in aspettativa dal 2018 a febbraio 2021).

ALTRE ESPERIENZE PROFESSIONALI

1986	- Esami di Stato per l'esercizio della libera professione; qualifica di dottore agronomo. Sei mesi di pratica quale libero professionista.
1987	- Qualifica di "Associate Professional Officer" presso la FAO (Food and Agriculture Organization).
1995	- Selezionato dalla Unione Europea (UE) per la posizione di ricercatore (categoria A8/A5, funzione: botanist-biophysicist) presso i Joint Research Centres dell' UE.
1997-2002	- Componente del consiglio scientifico dell'Istituto per la protezione degli alberi forestali del CNR (CNR-IPAF, Firenze).
2001-	- NATO Science for Peace program consultant.
2003 - 2007	-Responsabile della sezione tematica del CNR-IBAF "Cambiamenti ambientali in territorio montano"
2005-2008	- Responsabile della commessa "Struttura e funzionamento degli ecosistemi terrestri" nell'ambito del progetto "Il sistema terra" del Dipartimento Terra e Ambiente del CNR (http://www.cnr.it/commesse/Scheda_Commessa_Descrizione.html?co=904)
2003 - 2010	- Membro del Consiglio Direttivo della Societa' Italiana di Selvicoltura ed Ecologia Forestale (SISEF).
2004 -2007	- Coordinatore del progetto EU - Marie Curie Research and Training Network "Ecological and physiological functions of biogenic isoprenoids and their impact on the environment" (ISONET)
2004 -2008	- Chair dell' ESF scientific programme "Volatile Organic Compounds in the Biosphere-Atmosphere System (VOCBAS)"
2004 - 2007	- Membro dell'azione COST-859 (Phytotechnologies).

2005 - 2008	- Membro del comitato tecnico-scientifico dell'Agenzia Regionale per lo Sviluppo e L'Innovazione dell'Agricoltura del Molise (ARSIAM).
2006 -2014	- Membro nominato dal Ministero della Ricerca (MIUR) nel "Bio-economy panel" del FP7 dell'European Commission.
2007- 2010	- Rappresentante per l'Italia nel Managing Committee dell'azione COST-FA0603 "Plant proteomics".
2009	Nomina nella terna di idonei per la direzione dell'Istituto di Biologia Agroambientale e Forestale (IBAF) del CNR e dell'Istituto per la Protezione delle Piante (IPP) del CNR.
2008-	- Membro della task force FP7 nella Forest Technology Platform (-2014) . - Componente della commissione esaminatrice di concorso pubblico per l'assunzione di ricercatori CNR III livello, Bando n. 364.13 (-2008). - Membro del consiglio scientifico del comitato Ev-K2-CNR (-2010). - CNR supporting scientist of the European Plant Science Organization (EPSO).
2010-2016	- Member of the Scientific Committee of the Integrated Land Ecosystem Atmosphere Process Study programme (IGBP-iLEAPS). - Membro del Managing Committee dell'azione COST-FA0903 "Climate Change and Forest Mitigation and Adaptation in a Polluted Environment" (-2013). - Coordinatore – European Science Foundation Eurocores programme "Ecology of Plant Volatiles: from the molecule to the globe" (EuroVOL).
2014-2022	-Membro del comitato d'indirizzo dell'accordo quadro tra CNR e Comitato Olimpico Italiano (CONI). -Membro del comitato d'indirizzo dell'accordo quadro tra CNR e Confartigianato. - Membro dello steering committee dell'accordo di collaborazione scientifica tra CNR e Regione Molise. - Membro dello steering committee dell'accordo di collaborazione scientifica tra CNR e la State of São Paulo (Brasile) Research Foundation (FAPESP).
2016-2022	- Membro del Consiglio Scientifico del Parco Tecnologico Padano (PTP).
2017-	- Abilitazione scientifica nazionale professore I fascia settore concorsuale 05/A2 Fisiologia Vegetale - Abilitazione scientifica nazionale professore I fascia settore concorsuale 07/B2 Sistemi Arborei e Forestali
2017- 2022	- Membro del Consiglio di Amministrazione del Distretto della Regione Siciliana "Agrobio e pesca ecocompatibile scarl" - Membro del Consiglio di Amministrazione della Fondazione Cluster Lombardo Tecnologie per gli Ambienti di Vita (TAV). -Membro della struttura di progetto scientifico della Fondazione Human Technopole di Milano
2018 -2022	- Membro del Comitato di Indirizzo Strategico e Monitoraggio CNR-Regione Lombardia per l'Accordo Quadro su ricerca e sviluppo tra Regione Lombardia e CNR -Componente dello Scientific Advisory Board della Start Up Materias (UNINA).

2019 -	- Componente del Comitato Tecnico Scientifico della Fondazione IDIS Città della Scienza di Napoli
2019 – 2022	- Membro dello Steering Committee dei Centri di ricerca congiunti CNR-ENI e responsabile dei Centri Acqua (Metaponto) e Agricoltura (Portici).
2020 -	- Membro della Commissione per l'Integrità della Ricerca dell'Università degli Studi di Roma I – La Sapienza.
2021-2022	- Membro del Comitato di Indirizzo del Polo Agritech di Ricerca e Venture Capital del Ministero dell'Università e della Ricerca.
2021-	- Esperto del Ministero dell'Università e della Ricerca (MUR) per il panel European Commission – Horizon Europe Programme, area: Research Infrastructures.
2022 -	- Membro della commissione del Ministero dell'Università e della Ricerca (MUR) per rivedere la strategia italiana per il finanziamento della ricerca fondamentale.
2023 -	- Membro del Comitato Bioetico per la Veterinaria e l'Agroalimentare (CBV-A).

ESPERIENZA DIDATTICA

1995-1997	Insegnamento del corso di Agrometeorologia e Climatologia presso la Facolta' di Agraria dell'Universita' degli studi del Molise - Campobasso.
1996-1997	Professore invitato all'Universita' di Parigi XI.
2001-2004	Membro del Collegio dei Docenti dei corsi di dottorato, Universita' degli studi del Molise - Campobasso.
2001	Membro (opponent) del collegio di valutazione della dissertazione del Ph.D candidate H. Kollist, University of Tartu, Estonia.
2002	Membro del collegio di valutazione della dissertazione del Ph.D candidate C. Piel, University of Paris XI, Francia.
2001-2002	Insegnamento (un modulo) del corso di Fisiologia Vegetale presso la Facolta' di Scienze MM.FF.NN. corso di laurea in Biologia, dell'Universita' di Perugia.
2002-2004	Insegnamento del corso di Ecologia ed Agroclimatologia presso la Facolta' di Agraria dell' Universita' degli studi del Molise - Campobasso.
2004	Membro del collegio di valutazione della dissertazione del Ph.D candidate J. Bota, Universita' delle Isole Baleari, Maiorca, Spagna.
2005	Membro del collegio di valutazione della dissertazione del Ph.D candidate E. Pegoraro, University of Edinburgh, UK.
2005-2006	Membro del Collegio dei Docenti del corso di dottorato in Ecologia Forestale, Universita' della Tuscia - Viterbo. Insegnamento (18 ore/anno) al Master in Bioindicazione e Biomonitoraggio dell' Universita' Roma I.
1995-	Tutor/correlatore/relatore di 21 studenti di dottorato con tesi sperimentali effettuate presso il CNR e l'Università di Napoli Federico II.

2010-2019 Membro del Collegio dei Docenti del Dottorato di ricerca in Scienze Agrarie e Ambientali dell'Universita' degli studi di Firenze.

2010-2011 Guest professor – Institute for Ion Physics, University of Innsbruck, Austria

2012 Lecturer – Scandinavian Society of Plant Physiology (SPPS) Ph.D. school (Laulasmaa, Estonia, 12-15 September 2012).

2018- - Professore I fascia, settore 05/A2 Fisiologia Vegetale, Universita' Federico II, Napoli (in aspettativa fino al 2021). Dall'AA 2021-2022 corso "Adattamento delle piante al cambiamento climatico", Laurea Magistrale in Scienze Biologiche, indirizzo Biologia Ambientale.

2019-2021 - Membro del Collegio dei Docenti del Dottorato di ricerca in Science and Engineering for Humans and the Environment al Campus Bio-Medico University of Rome.

2020 - - Membro del Comitato di Indirizzo per il Dottorato Nazionale in Intelligenza Artificiale.

2021 - - Coordinatore del Dottorato Nazionale in Intelligenza Artificiale, area di specializzazione Agrifood and Environment (capofila: Università di Napoli Federico II).

2023 - Member (opponent) of the panel evaluating the Ph.D. dissertation, candidate Hao Yu, University of Eastern Finland, Kuopio, Finland.

ATTIVITA' EDITORIALE E DI VALUTAZIONE

1995- - Revisore per le principali riviste internazionali a carattere generale (Nature, Science, PNAS) e nel settore della fisiologia vegetale (Trends in Plant Science, Plant Journal, Plant Physiology, Physiologia Plantarum, New Phytologist, Tree Physiology, Plant Cell and Environment, Global Change Biology, Functional Plant Biology).
- Valutatore di progetti per Enti e Ministeri italiani e stranieri, tra cui: Ministero dell'Universita' e della Ricerca Scientifica, Israel Science Foundation, US Department of Agricolture, National Science Foundation of US, National Environmental Research Council (NERC-UK), European Research Council e European Science Foundation (ESF).

2002- -Componente dell' Editorial Review Board della rivista internazionale "Tree Physiology".
-Componente dell' Editorial Review Board della rivista internazionale "Plant Cell and Environment".
-Monitoring Editor per la rivista internazionale "Plant Physiology" (2002-2007).

2004, 2008 - Guest Editor delle special issue "Photosynthesis in a changing world" e "Volatile Organic in the Biosphere-Atmosphere Interactions" della rivista internazionale "Plant Biology".

2004- - Componente dell'Editorial Board della rivista internazionale "Journal of Plant Interactions"
- Editore delle riviste on-line "Forest@" e "i-Forest"

2008- - Editore della rivista internazionale "Plant Biology"
- Editore del libro: Terrestrial photosynthesis in a changing environment. Cambridge University, Cambridge UK (2009).

2009- - Membro del panel di valutazione ESF-ALLEA degli Istituti di Biologia e Medicina della Bulgarian Academy of Sciences
- Membro del panel internazionale dell'Academy of Finland per la valutazione dei progetti di ricerca 2009
- Membro del panel internazionale del Ministry of Education, Youth and Sports della Czech Republic per la valutazione dei progetti dell' Operational Programme Research and Development for Innovation – axis 2 "Regional R&D centers" (2009) e axis 1 – Centers of excellence (2010)

- Guest editor della special issue “The ACCENT-VOCBAS field campaign on biosphere-atmosphere interactions in a Mediterranean ecosystem” per la rivista Biogeosciences

2014 - Editore, Plant Cell Environment Yearly Review of Environmental Plant Physiology su “Plant Volatiles and the Environment”.

2014 - Membro del panel di valutazione dei progetti AXA – Environmental and Biological Risks.

-Membro del panel di valutazione della ricerca biologica, ambientale e agroalimentare portoghese per la Fundação para a Ciência e a Tecnologia (FCT).

2015- - Capo-panel del panel di valutazione dell’area agroalimentare del Fondo per la Crescita Sostenibile del Ministero delle Sviluppo Economico (MISE).

2019 - Chair del panel ESF di valutazione dei progetti per Junior Chair e Post-Doc all’Università di Bordeaux
- Chair del panel ESF di valutazione dei progetti della Rustaveli Foundation (Georgia)

2021 - Chair del panel ESF di valutazione dei progetti della Rustaveli Foundation (Georgia)

- Presidente del search committee per la selezione dei direttori dei centri di ricerca del Consiglio per la Ricerca in Agricoltura e l’analisi dell’Economia Agraria (CREA)

2022 - Chair del panel ESF di valutazione dei progetti della Rustaveli Foundation (Georgia)

2023 - Membro del panel di valutazione della Palacký University Olomuc (Czech Republic)

RELAZIONI PARLAMENTARI

- EXPO: Relazione alla Commissione Agricoltura del Senato della Repubblica del 21 Maggio 2014.

-OGM: Relazione alla Commissione Agricoltura del Senato della Repubblica del 2 Febbraio 2016. https://www.senato.it/application/xmanager/projects/leg17/attachments/documento_evento_procedura_commissione/files/000/003/438/CNR_2_febbraio_2016.pdf

- Primo report della commissione del Ministero dell’Università e della Ricerca (MUR) per la revisione della strategia italiana per il finanziamento della ricerca fondamentale (19 Luglio 2022). https://www.mur.gov.it/sites/default/files/2022-07/Documento_Tavolo_Ricerca_Fondamentale_trasmesso.pdf

ORGANIZZAZIONE CONVEGNI-MANIFESTAZIONI

1996 Settimana della cultura scientifica e tecnologica. Seminario su “Intercettazione della luce da parte dei sistemi vegetali”. Dipartimento SAVA, Universita’ del Molise - Campobasso.

1997 Settimana della cultura scientifica e tecnologica. Seminario su “Effetti degli stress abiotici sulla fisiologia delle piante coltivate”. Dipartimento SAVA, Universita’ del Molise - Campobasso.

1998-2000 Organizzazione meeting annuali del Gruppo di Studio della Societa' Italiana di Selvicoltura ed Ecologia Forestale (SISEF) "Terpeni ed Ecologia"

2000 Organizzazione del joint-meeting dei progetti EU-Environment ECOVOC-VOCAMOD-FUTUREVOC.

2002	- Vice-chair della Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere" Oxford, UK, 1-6 Settembre 2002
2003	- Organizzatore della EU-HLSC (High Level Scientific Conferences dell' Unione Europea) "Photosynthesis in a changing world" Chania, Creta, Grecia, 15-16 maggio 2003
2004	- Organizzatore della Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Il Ciocco (Lu), Italy 2-7 maggio 2004
	- Organizzatore della Summer School "Biogenic Volatile Organic Compounds in the Plant-Environment Interaction" Pieve Tesino-Trento 20-24 Settembre 2004
2005	- Organizzatore del Simposio "Plant Terpenoids and the Environment" al XVII International Botanical Congress, Vienna 18-23 Luglio 2005
2006	- Organizzatore del Simposio "Land-atmosphere biogeochemical cycles" al Congresso IGAC/CACGP/WMO "Atmospheric Chemistry at the Interfaces " (Cape Town, South Africa, 17-23 September 2006).
2007	Membro del comitato organizzatore del convegno: "Ecosistemi, Biorisorse e Cambiamenti Climatici: Opportunità di Cooperazione Scientifica tra Italia e America Latina" Roma, Italy 22-23 Marzo 2007.
2009	Co-organizzatore della Training School COST "Forest and water stress in a changing environment: from cell to ecosystems". Orvieto, Italy 20-23 Maggio 2009
2009	Organizzatore della scientific session B26: "Effects of High Tropospheric Ozone on Plant Ecosystems and Mechanisms of Ozone Uptake" at the American Geophysical Union (AGU) 2009 meeting, San Francisco, USA 14-18 December 2009.
2010	Organizzatore del simposio "Photosynthesis and new environmental challenges" al the 15th International Congress on Photosynthesis - Beijing Agosto 22-27, 2010.
	Membro dello scientific committee del IUFRO's Fifth International Poplar Symposium (IPS-V) e organizzatore del simposio: "Tree-pest interactions and signalling: lessons to improve pest resistance" Orvieto 20-25 Settembre 2010
2012	Organizzatore della sessione "Life in extreme environments: from knowledge to sustainable exploitation of new resources under growing pressures" at the International Congress "Planet under Pressure: toward Rio + 20" London, Marzo 26-29, 2012 (http://www.planetunderpressure2012.net/session_loreto.asp).
2014-2015	- Coordinatore: Progetto CNR x EXPO: gli eventi CNR presso il padiglione Italia dell'Esposizione Universale di Milano (EXPO 2015)
	- Coordinatore del comitato scientifico del progetto Regione Lombardia – CNR "Spazi espositivi per la ricerca della Regione Lombardia a EXPO 2015".
2020-2021	- Membro del Comitato Scientifico delle XIII Giornate Scientifiche della Società Orticola Italiana (Catania, 22-25 giugno 2020, rimandata al 2021 causa COVID-19).
	- Chair del Comitato Scientifico della Conferenza EPSO-FESPB (European Plant Science Organization – Federation of the European Societies of Plant Biology) "Plant Biology Europe 2020" (Torino, rimandata al 2021 causa COVID-19).
2022	-Organizer of the symposium on Plant adaptation and resilience to climate change. Conference of the Federation of Italian Societies of Life Science (FISV). Portici (Naples), Italy 15 Sept 2022.

2023 -Organizer of the International training school on Affordable Phenotyping. Matera-Metaponto, Italy 18-21 April 2023.

ORGANIZZAZIONE DI SPEDIZIONI E CAMPAGNE DI RICERCA

ACCENT-VOCBAS field campaign on biosphere-interactions in urban and peri-urban areas (Castelporziano Presidential Estate, Roma, Italy, May-June 2007)

PTR-TOF field campaign on biosphere-interactions in urban and peri-urban areas (Castelporziano Presidential Estate, Roma, Italy, September-November 2011)

PROGETTI FINANZIATI

- 1996-1997. Progetto bilaterale CNR-CNRS (Centre National de la Recherche Scientifique,France) per lo studio delle resistenze diffusive all'interno delle foglie e delle relative limitazioni fotosintetiche (Responsabile scientifico).

- 1996-1998. CNR- progetto strategico "Foreste e produzioni forestali nel territorio montano" (Responsabile di unita' operativa).

- 1998-1999. EU-Environment project "Parameterisation of environmental and physiological controls of volatile organic compound emissions from european forests, (ECOVOC)". (Coordinatore)

- 1998-2000. EU INCO-Copernicus project: "Growth of silver birch at elevated levels of carbon dioxide and ozone: acclimation in photosynthesis, injuries and protection by ascorbate and terpenes (BETULA)" (Responsabile di unita' operativa).

- 1998-2001. CNR - progetto strategico "Assimilazione dell'azoto e sequestro del carbonio dai sistemi agricoli (NITCAR)".

- 2000-2002. EU-Environment project: " Biogenic volatile organic compound (BVOC) emission of European forests under future CO_2 levels: influence on compound composition and source strength. (FUTUREVOC)" (Responsabile di unita' operativa).

- 2000-2002. CNR-MOSA (Israel Ministry of Science and Arts) common theme project to study isoprenoid emissions by Mediterranean vegetation and the relationship with resistance to aridity (Responsabile scientifico).

- 2001-2002. CNR-progetto coordinato "Meccanismi di protezione da stress da ozono in piante forestali: studio dell'uptake di ozono da parte delle foglie e dell'azione antiossidante degli isoprenoidi" (Responsabile di unita' operativa).

- 2001-2002. CNR-Progetto Mediterraneo "Influenza dei parametri climatici e delle tecniche agronomiche sulla qualita' e quantita' delle produzioni di olii essenziali da parte delle specie mediterranee" (Responsabile scientifico).

- 2002-2003. NATO Collaborative Linkage Grant "Physiological role of endogenous isoprene under different environmental stresses". (Coordinatore)

- 2002-2003. Collaborazione scientifica CNR-IPLA "Emissione di isoprene da pioppeti della regione Piemonte e loro impatto sulla chimica della troposfera" (Responsabile scientifico).

- 2003-2004 Contratto IBAF-UNIRM 1 nell'ambito di progetto finanziato dal Min. Ambiente. "Effetti degli stress ambientali con particolare riguardo all'ozono troposferico sulla vegetazione naturale ed in area Mediterranea" (OZONIT) (Responsabile di unita' operativa)

- 2003-2004. COFIN 2003 Contratto con UNIMOL-CB. “Orchidee micoeterotrofiche dell'area mediterranea: un approccio integrato nello studio delle relazioni pianta-fungo per la conservazione in situ ed ex situ di specie a rischio”.

- 2003-2007 Network of Excellence EC VI PQ Global Change and Ecosystems “Atmospheric Composition Change: an European network” (ACCENT)

- 2004-2005 Fondo per gli Investimenti della Ricerca di Base (FIRB): "Attivita’ antiossidante degli isoprenoidi volatili e loro ruolo nella protezione delle piante dagli stress abiotici." (Coordinatore)

- 2004-2007 EC - Marie Curie Research and Training Network “Ecological and physiological functions of biogenic isoprenoids and their impact on the environment” (ISONET), Contract MRTN-CT-2003-504720. (Coordinatore)

- 2004-2008 European Science Foundation – Life and Environment Committee Programme “Volatile Organic Compounds in the Biosphere-Atmosphere System (VOCBAS)”. (Coordinatore e Chair)

- 2004-2006 Progetto bilaterale CNR-BAN (Bulgarian Academy of Science) per lo studio dell’ attivita’ antiossidante degli isoprenoidi emessi dalle piante anche in risposta ai cambiamenti globali. (Responsabile scientifico).

- 2005-2006. COFIN 2003 Contratto con UNIMOL-CB. “Orchidee micoeterotrofiche dell'area mediterranea: un approccio integrato nello studio delle relazioni pianta-fungo per la conservazione in situ ed ex situ di specie a rischio” (rinnovo).

- 2005-2008 Progetto bilaterale Italia-Estonia (Ministry of Foreign Affairs) "Antioxidant activity of volatile isoprenoids and the role of isoprenoids in plant protection against abiotic stresses" (Responsabile scientifico)

- 2007-2009 Progetto bilaterale CNR-MTA (Hungarian Academy of Science) “The impact of severe drought and heat stress on oxygenated biogenic volatile organic compound (OVOC) emission of isoprene emitting and non emitting species”. (Responsabile scientifico).

- 2008-2010 EC- Environment Coordination Action “Coordination Action for Research on Life in Extreme Environments” (CAREX) - (FP7-ENV-2007-1, Project No. 211700). (Core partner)

- 2008-2011 EC - Industry-Academia Partnerships and Pathways programme. “PTR-TOF – Application of innovative PTR-TOF mass spectrometry in plant biology, environmental science and food/food packaging” (Partner)

- 2008-2011 EC-Environment Coordination Action HEREPLUS—HEalth Risk from Environmental Pollution Levels in Urban Systems. (FP7-ENV-2007-1, Project No. 212854) (Partner)

- 2008-2009 Progetti COFIN 2007: “Il potenziamento del comportamento di foraggiamento degli insetti parassitoidi oofagi: il ruolo dei composti volatili organici e degli strati epicuticolari delle piante” (Partner)

- 2010-2013 European Science Foundation programme Ecology of Plant Volatiles (EuroVOL). Programme coordinator

- 2011-2015 European Commission – 7 FP Environment Programme: Effects of Climate Change on Air Pollution Impacts and Response Strategies for European Ecosystems (ECLAIRE) (Partner and Member of the Steering Committee)

- 2012-2016 European Commission – 7 FP KBBE Programme: " 3to4: Converting C3 to C4 photosynthesis for sustainable agriculture " (3to4) (Partner)

- 2012-2016 European Commission – 7 FP KBBE Programme: WATBIO—Development of improved perennial non-food biomass and bioproduct crops for water stressed environments (Partner)

- 2013-2015 Progetti PRIN - COFIN 2011: “Going to the root of plant productivity: how the rhizosphere interact with the aboveground armament for indirect and direct defense against abiotic and biotic stressors (PRO-ROOT)” (Partner).

- 2014 – Progetti Premiali MIUR – “Sustainable water management in agriculture” (Coordinatore).

- 2014 – Progetti Premiali MIUR – “AnaEE - Italia ESFRI - Analysis and Experimentation on Ecosystems” (Coordinatore).

- 2015 – 2017 European Commission – Horizon 2020 Programme, MSCA-IF-2014_GF (post doc recipient: Luca Cappellin): Leveraging the antioxidant role of volatile isoprenoids for improving grapevine resistance to ozone and temperature stress: OVOC (Coordinatore) vedi anche: https://cordis.europa.eu/project/rcn/195768/brief/en

- 2016 – Progetti Premiali MIUR 2014 – “Cibo & Salute” (Coordinatore).

- 2017-2020 - European Commission – Horizon 2020 Programme H2020-INFRADEV-2016-2017 (Project no: 739514): Preparation for EMPHASIS: European Infrastructure for multi-scale Plant Phenomics and Simulation for food security in a changing climate: EMPHASIS-PREP (Partner).

- 2017 – 2019 European Commission – Horizon 2020 Programme, MSCA-IF-2016 (post doc recipient: Srikanta Dani, project no: 746821): Photosynthetic energy balance, chloroplast integrity, carbon flow and epigenetic regulation of isoprenoid biosynthesis during leaf development and senescence: LEAF of LIFE (Coordinatore).

- 2017 – Progetti Premiali MIUR 2015 – “Photosynthesis 2.0 - Italy” (Coordinatore).

- 2018-2021 - European Commission – Horizon 2020 Programme Grant Agreement number: 817690 — CropBooster-P — H2020-SFS-2018-2020/H2020-SFS-2018-1: “Preparatory action to Boost Global Crop Yield for Food & Nutrition Security and fueling a Bioeconomy — CropBooster-P” (Partner).

- 2019-2021 – Joint research projects of particular relevance Italy – South Korea funded by the Ministry of Foreign Affairs: Molecular and physiological bases of leaf senescence as determinant of plant productivity and resilience to climate change and environmental stresses (Coordinatore).

- 2018-2020 Project PRIN - COFIN 2018 (Italian Ministry of University and Research): “ Plant multitROphic interactions for bioinspired Strategies of PEst ConTrol (PROSPECT)” (Coordinatore).

- 2019-2021 Project “Partnership on Research and Innovation in the Mediterranean Area” (EU- art. 185 – PRIMA) - “Legumes in biodiversity-based farming systems in Mediterranean basin - LEGU-MED” (Partner).

- 2022-2027 European Commission – Horizon Europe Programme, grant agreement number 101058020: Integrated SERvices supporting a sustainable AGROecological transition (AgroServ) (Partner).

- 2022-2024 European Commission – Horizon Europe Programme, HORIZON-INFRA-2021-DEV-02-02 grant agreement number 101079772, Bringing EMPHASIS to operation: European Infrastructure for multi-scale Plant Phenomics and Simulation for food security in a changing climate(EMPHASIS-GO) (Partner).

- 2022-2025 Ministry of Research and University of Italy (MUR) EU - Recovery Funds. The Innovation INFRastructure dedicated to AGRo-Industrial technologies (INFRAGRI). (Coordinatore, 22 ME support, co-funded by agro-industry).

- 2023-2025 Project PRIN 2022 (Italian Ministry of University and Research): Plants talk, but do they listen? Unveiling plant responses to incoming (foreign) volatile organic compounds (Fore-VOC) Project code: 2022ZYCCJJ. (Coordinatore).

ASSOCIAZIONI E PARTECIPAZIONI AD ACCADEMIE:

- American Society of Plant Biologists (ASPB)
- Società Italiana di Selvicoltura ed Ecologia Forestale (SISEF)
- International Society of Photosynthesis Research
- Società Italiana di Biologia Vegetale (SIBV)

-Membro dell'Accademia Italiana di Scienze Forestali (2013-)
-Membro dell'Accademia dei Georgofili (2014-)

PRINCIPALI RELAZIONI A INVITO A CONGRESSI INTERNAZIONALI (> 200 relazioni a eventi scientifici nazionali):

- Conference on Trace-gas Emissions by Plants. Monterey, Ca. USA, 18-21 January 1990
- Photosynthetic Responses to the Environment symposium. Kona, Hawaii, USA, 25-27 August 1992
- Biogenic Emission in the Mediterranean Area Workshop. Ispra, Varese, 9-11 November 1994
- Control of Photosynthesis in Tree Species. Bordeaux, Francia, 27-29 August 1995
- Air Quality. Interdisciplinary opportunities in the environmental evaluation. Pisa, Italia, 19-21 October 1995
- Second International Symposium on Irrigation of Horticultural Crops. Chania, Greece, 9-13 September 1996
- XVI International Botanical Congress, St Louis, USA, 1-7 August 1999
- International Conference on Forest Ecosystem, Chengdu, P.R. China, 15-21 August 2000 (chair)
- Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Ventura, USA, 17-21 February 2000 (chair)
- "Phytovoc" workshop on biogenic volatile organic compounds, Montpellier, Francia, 22-23 March 2001 (chair)
- XII International Congress of Photosynthesis, Brisbane (Australia), 18-23 August 2001
- Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Oxford, UK, 1-6 September 2002 (chair)
- ACCENT (Atmospheric Composition Change: an European Network of Excellence) symposium, Urbino 12-17 July 2005 (keynote speaker)
- WATMED2 (Second Mediterranean Conference on water resources in the Mediterranean basin), Marrakech, Morocco 14-17 November 2005 (keynote speaker and session chair)
- ILEE (Investigating Life in Extreme Environments), ESF workshop, Barcelona, Spain 6-8 November 2005 (chair)
- "Volatile Organic Compounds in the Polluted Atmosphere" 3rd ACCENT Expert Workshop (Barnsdale, UK, 30 October – 1 November 2006) (keynote speaker)
- PTR-MS conference 2007 (Obergurgl, Austria 27 January-1 February 2007) (keynote speaker and chair).
- Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Ventura, USA, 25 February - 3 March 2007 (chair).
- Gordon Research Conference "Floral and vegetative volatiles", Les Diablerets, Switzerland, 7-12 October 2007 (invited speaker)
- Gordon Research Conference "CO2 assimilation in plants: from genome to biome", University of New England, Biddeford, ME, USA, August 17-22, 2008 (session chair)
- ESF Exploratory Workshop on Mesophyll conductance to CO_2: mechanisms, modeling and ecological implications. Hotel Sa Coma Playa, Mallorca, Spain. 28-30 September 2008 (co-organizer and invited speaker)
- ESF Winter school on "Ecology of plant volatile organic compounds". Wageningen, The Netherlands, 11-15 November 2008 (invited speaker)
- ESF Science meeting "Induced BVOC emissions: Processes and feedback mechanisms from cells to atmosphere" Taagepera, Estonia, 14 -17 January 2009 (invited speaker)
- European Commission, Research Directorate-General Symposium "Air Pollution - Climate Interactions, Contribution to European Policy Development", Brussels 3-4 November, 2009 (invited speaker)

- British Ecological Society (BES) Annual Symposium 2010: The integrative role of plant secondary metabolites in ecological systems University of Sussex, UK 12-14 April 2010 (invited speaker)
- Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Les Diablerets, Switzerland May 23-28, 2010 (invited speaker).
- Symposium "Photosynthesis and new environmental challenges" at the 15th International Photosynthesis Congress – Beijing, China, August 22-27, 2010 (chair e keynote speaker).
- European Research Course on Atmospheres - ERCA 2011, Grenoble, France 3-4 February 2011 (invited lecturer).
- 8th APGC Symposium - Plant Functioning in a Changing Global and Polluted Environment - Groningen, The Netherlands, June 5-9, 2011 (keynote speaker).
- COST FP0903 Action International Conference Ozone, climate change and forests 14-16 June 2011, Prague, Czech Republic (invited speaker)
- 3rd Integrated Land Ecosystem-Atmosphere Processes Study (iLEAPS) Science Conference – Early Carrier Scientist Workshop Garmisch-Partenkirchen, Germany 16-17 September 2011
- First joint congress of the Federation of the European Societies of Plant Biology – European Plant Science Organization (FESPB-EPSO), Freiburg, Germany, 29 July – 3 August 2012 (plenary lecturer – session chair).
- Gordon Research Conference - Plant Volatiles Exploring the Plant Headspace: Functional Analysis and Emerging Applications - Ventura, USA, 2014 (session chair).
- Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Girona, Spain, 2014 (keynote speaker).
- Gordon Research Conference - Plant Volatiles: Diversity of Targets, Effects and Applications of Plant Volatiles - Ventura, USA, 2016 (keynote speaker).
- Symposium "Stress: ecophysiology and biodiversity" at the 17th International Photosynthesis Congress – Maastricht, The Netherlands, August 7-12, 2016 (keynote speaker).
- Gordon Research Conference "Biogenic Hydrocarbon & the Atmosphere", Les Diablerets, Switzerland June 15-20, 2018 (session chair).
- Symposium: "Climate change impact on urban and natural forest" - Society for Experimental Biology (SEB) Annual Meeting 3-6 July 2018 Firenze, Italy (keynote speaker).
- 9° International Forum - Barilla Center for Food & Nutrition (BCFN) and United Nations Sustainable Development Solutions Network (UN SDSN), 28 November 2018, Hangar Bicocca-Milano, Italy (session chair).
- Conference Climate Change, Health of the Planet and Future of Humanity, Scientific results and future scenarios anticipating COP24 in Katowice in December 2018 - 15 November, 2018 - Casina Pio IV, Vatican City (organizer and keynote speaker).
- XV Sino-Italian Conference. Precision agriculture session (online). 21 March 2023 (keynote speaker).

PUBBLICAZIONI

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A0) Riviste internazionali

1) **Loreto F.**, G. Bongi. 1988. Analysis of stress status through natural fluorescent probes in intact leaves. Agricoltura Mediterranea 118: 344-353.

2) Bongi G., **F. Loreto**. 1989. Gas-exchange characteristics of salt-stressed leaves of olive (*Olea europea* L.). Plant Physiol. 90: 1408-1416.

3) **Loreto F.**, G. Bongi. 1989. Combined low temperature-high light effect on gas-exchange properties of jojoba leaves. Plant Physiol. 91: 1580-1585.

4) **Loreto F.**, T.D. Sharkey. 1990. A gas exchange study of photosynthesis and isoprene emission in red oak (*Quercus rubra* L.). Planta 182: 523-531.

5) **Loreto F.**, T.D. Sharkey. 1990. Low humidity can cause uneven photosynthesis in olive (*Olea europea* L.) leaves. Tree Physiology 6: 409-415.

6) Sharkey T.D., **F. Loreto**, C.F. Delwiche. 1991. High carbon dioxide and sun/shade effects on isoprene emission from oak and aspen tree leaves. Plant Cell Environ 14: 333-338.

7) Sharkey T.D., **F. Loreto**, C.F. Delwiche, I.W. Treichel. 1991. Fractionation of carbon isotopes during biogenesis of atmospheric isoprene. Plant Physiol. 97: 463-466.

8) Harley P.C., **F. Loreto**, G. Di Marco, T.D. Sharkey. 1992. Theoretical considerations when estimating the mesophyll conductance to CO_2 flux by analysis of the response of photosynthesis to CO_2. Plant Physiol. 98: 1429-1436.

9) **Loreto F.**, P.C. Harley, G. Di Marco, T.D. Sharkey. 1992. Estimation of the mesophyll conductance to CO_2 flux by three different methods. Plant Physiol. 98: 1437-1443.

10) Pammenter N.W., **F. Loreto**, T.D. Sharkey. 1993. End product feedback effects on photosynthetic electron transport. Photosynth. Res. 35: 5-14.

11) **Loreto F.**, H.H. Bursdall Jr., A. Tirro'. 1993. *Armillaria* infection and water stress influence on gas-exchange properties of Mediterranean trees. HortScience 28(3): 222-224.

12) **Loreto F.**, T.D. Sharkey. 1993. On the relationship between isoprene emission and photosynthetic metabolites under different environmental conditions. Planta 189: 420-424.

13) **Loreto F.**, T.D. Sharkey. 1993. Isoprene emission by plants is affected by transmissible wound signals. Plant Cell Environ. 16: 563-570.

14) Sharkey T.D., **F. Loreto**. 1993. Water stress, temperature, and light effects on the capacity for isoprene emission and photosynthesis of kudzu leaves. Oecologia 95: 328-333.

15) Di Marco, G., M.A. Iannelli, **F. Loreto**. 1994. Relationship between photosynthesis and photorespiration in field-grown wheat leaves. Photosynthetica 30: 45-51.

16) **Loreto F.**, G. Di Marco, D. Tricoli, T.D. Sharkey. 1994. Measurements of mesophyll conductance, photosynthetic electron transport and alternative electron sinks of field grown wheat leaves. Photosynth. Res. 41: 397-403.

17) Massacci A., M.A. Iannelli, F. Pietrini, **F. Loreto**. 1995. The effect of growth at low temperature on photosynthetic characteristics and mechanisms of photoprotection of maize leaves. J. Exp. Bot. 46: 119-127.

18) **Loreto F.**, D. Tricoli, G. Di Marco. 1995. On the relationship between electron transport rate and photosynthesis in leaves of the C_4 plant *Sorghum bicolor* exposed to water stress, temperature changes and carbon metabolism inhibition. Aust. J. Plant Physiol. 22: 885-892.

19) **Loreto F.**, P. Ciccioli, A. Cecinato, E. Brancaleoni, M. Frattoni, C. Fabozzi, D. Tricoli. 1996. Influence of environmental factors and air composition on the emission of α-pinene from *Quercus ilex* leaves. Plant Physiol. 110: 267-275.

20) **Loreto F.**, P. Ciccioli, A. Cecinato, E. Brancaleoni, M. Frattoni, D. Tricoli. 1996. Evidence of the photosynthetic origin of monoterpenes emitted by *Quercus ilex* leaves by ^{13}C labelling. Plant Physiol. 110: 1317-1322.

21) Laisk A., **F. Loreto**. 1996. Determining photosynthetic parameters from leaf CO_2 exchange and chlorophyll fluorescence: ribulose-1,5 bisphosphate carboxylase/oxygenase specificity factor, dark respiration in the light, excitation distribution between photosystems, alternative electron transport rate and mesophyll diffusion resistance. Plant Physiol. 110: 903-912.

22) Litvak M.E., **F. Loreto**, P.C. Harley, T.D. Sharkey, R.K. Monson. 1996. The response of isoprene emission rate and photosynthetic rate to photon flux and nitrogen supply in aspen and white oak trees. Plant Cell Environ. 19: 549-559.

23) Massacci A., A. Battistelli, **F. Loreto**. 1996. Effect of drought stress on photosynthetic characteristics, growth and sugar accumulation of field-grown sweet sorghum. Aust. J. Plant Physiol. 23: 331-340.

24) **Loreto F.,** P. Ciccioli, A. Cecinato, E. Brancaleoni, M. Frattoni, T.D. Sharkey. 1996. Different sources of reduced carbon contribute to form three classes of terpenoid emitted by Quercus ilex L. leaves. Proc. Natl Acad. Sci. USA. 93: 9966-9969.

25) Barbini R., F. Colao, R. Fantoni, A. Palucci, S. Ribezzo, G. Di Marco, A. Massacci, **F. Loreto**. 1997. Photosynthetic activity and electron transport measurements using laser pump and probe technique. Remote Sensing Reviews 15: 323-342.

26) Ciccioli P, C. Fabozzi, E. Brancaleoni, A. Cecinato, M. Frattoni, **F. Loreto**, J. Kesselmeier, L. Shafer, K. Bode, L. Torres, J-L. Fugit. 1997. Use of the isoprene algorithm for predicting the monoterpene emission from the mediterranean holm oak *Quercus ilex* L. Performances and limits of this approach. J. Geophys. Res. 102: 23319-23328.

27) **Loreto F**. 1997. Emission of isoprenoids by plants: their role in atmospheric chemistry, response to the environment, and biochemical pathway. Journal of Environmental Pathology, Toxicology and Oncology 26: 119-124.

28) Sharkey T.D., **F. Loreto**, D. Baldocchi, A. Guenther. 1997. The BEMA project: A North American perspective. Atmos. Environ. 31: 251-255.

29) Manes F., G. Astorino, M. Vitale, **F. Loreto**. 1997. Morpho-functional characteristics of *Quercus ilex* L. leaves of different age and their ecophysiological behaviour during different seasons. Plant Biosystems 131: 149-158.

30) **Loreto F.,** P. Ciccioli, E. Brancaleoni. 1997. The use of ^{13}C to study isoprenoid biochemical pathway of formation in leaves. Commissioned review, in press in Trends in Analytical Life Science 1: 125-130.

31) Antonielli M., S. Pasqualini, L. Ederli, P. Batini, S. Moscatello, **F. Loreto**. 1997. Physiological Characteristics of Tobacco Cultivars with Contrasting Sensitivity to Ozone. Environ. Exp. Bot. 38: 271-277.

32) **Loreto F.**, A. Forster, M Durr, O. Csiky, G. Seufert. 1998. On the monoterpene emission under heat stress and on the increased thermotolerance of leaves of *Quercus ilex* fumigated with selected monoterpenes. Plant Cell Environ. 21: 101-107.

33) **Loreto F.**, P. Ciccioli, E. Brancaleoni, R. Valentini, M. De Lillis, O. Csiky, G. Seufert. 1998. A hypothesis on the evolution of isoprenoid emission by oaks based on the correlation between emission type and *Quercus* taxonomy. Oecologia 115: 302-305.

34) Delfine S., A. Alvino, M. Zacchini, **F. Loreto**. 1998. Consequences of salt stress on conductances to CO_2 diffusion, Rubisco characteristics and anatomy of spinach leaves. Aust. J. Plant Physiol. 25: 395-402.

35) **Loreto F**., P. Ciccioli, E. Brancaleoni, A. Cecinato, M. Frattoni. 1998. Measurement of isoprenoid content in leaves of Mediterranean *Quercus* spp. by a novel and sensitive method and estimation of the isoprenoid partition between liquid and gas phase inside the leaves. Plant Sci. 136: 25-30.

36) Laisk A., B.H. Rasulov, **F. Loreto**. 1998. Thermoinhibition of photosynthesis as analyzed by gas exchange and chlorophyll fluorescence. Russian J. Plant Physiol. 45: 412-421.

37) Delfine S., A. Alvino, M.C. Villani, **F. Loreto**. 1999. Restrictions to carbon dioxide conductance and photosynthesis in spinach leaves recovering from salt stress. Plant Physiol. 119: 1101-1106.

38) **Loreto F.**, D. Tricoli, M. Centritto, A. Alvino, S. Delfine. 1999. Short-term effects of fumigation with gaseous methanol on photosynthesis of horticultural plants. J. Am. Soc. Hort. Sci.124: 377-380.

39) Di Martino C., S. Delfine, A. Alvino, **F. Loreto.** 1999. Photorespiration rate in spinach leaves under moderate NaCl stress. Photosynthetica 36: 233-242.

40) Pietrini F., M.A. Iannelli, A. Battistelli, S. Moscatello, **F. Loreto**, A. Massacci. 1999. Effects on photosynthesis, carbohydrate accumulation, and regrowth induced by temperature increase in maize genotypes with different sensitivity to low temperature. Aust. J. Plant Physiol. 26: 367-373.

41) **Loreto F.**, S. Delfine, G. Di Marco. 1999. Estimation of photorespiratory carbon dioxide recycling during photosynthesis. Aust. J. Plant Physiol. 26: 733-736.

42) **Loreto F.**, P. Ciccioli, E. Brancaleoni, M. Frattoni, S. Delfine. 2000. Incomplete 13C labeling of alpha-pinene content in *Quercus ilex* leaves and appearance of unlabeled C in alpha-pinene emission in the dark. Plant Cell Environ. 23: 229-234.

43) Delfine S., O. Csiky, G. Seufert, **F. Loreto**. 2000. Fumigation with exogenous monoterpenes of a non-isoprenoid-emitting oak (*Quercus suber* L.): monoterpene acquisition, translocation, and effect on the photosynthetic properties at high temperatures. New Phytol. 146: 27-36.

44) Pasqua G., B. Monacelli, F. Manes, A. Cuteri, **F. Loreto**. 2001. Istochemical study of secretory structures in oaks and other isoprenoid emitting plant species. Plant Biosystems 135: 19-24.

45) **Loreto F.**, P. Nascetti, A. Graverini, M. Mannozzi. 2000. Emission and content of monoterpenes in intact and wounded needles of the Mediterranean pine *Pinus pinea*. Funct. Ecol. 14: 589-595.

46) **Loreto F.** , S. Delfine. 2000. Emission of isoprene from salt-stressed *Eucalyptus globulus* leaves. Plant Physiol. 123: 1605-1610.

47) Centritto M., **F. Loreto**, A. Massacci, F. Pietrini, M.C. Villani, M. Zacchini. 2000. Improved growth and water use efficiency of cherry saplings under reduced light intensity. Ecological Research 15: 385-392.

48) Delfine S., **F. Loreto,** A. Alvino. 2001. Drought-stress effects on physiology, growth and biomass production of rainfed and irrigated bell pepper plants in the Mediterranean region. J. Amer. Soc. Hort. Sci. 126: 297-304.

49) **Loreto F.,** M. Mannozzi, C. Maris, P. Nascetti, F. Ferranti, S. Pasqualini. 2001. Ozone quenching properties of isoprene and its antioxidant role in leaves. Plant Physiol. 126: 993-1000.

50) **Loreto F.**, R.J. Fischbach, J.P. Schnitzler, P. Ciccioli, E. Brancaleoni, C. Calfapietra, G. Seufert. 2001. Monoterpene emission and monoterpene synthase activities in the Mediterranean evergreen oak *Quercus ilex* L. grown at elevated CO_2 concentrations. Global Change Biol. 7: 709-717.

51) **Loreto F.,** V. Velikova, G. Di Marco. 2001. Respiration in the light measured by $^{12}CO_2$ emission in $^{13}CO_2$ atmosphere in maize leaves**.** Aust. J. Plant Physiol. 28: 1103-1108.

52) **Loreto F.**, V. Velikova. 2001. Isoprene produced by leaves protects the photosynthetic apparatus against ozone damage, quenches ozone products, and reduces lipid peroxidation of cellular membranes. Plant Physiol. 127: 1781-1787.

53) Antonielli M., S. Pasqualini, P. Batini, L. Ederli, A. Massacci, **F. Loreto**. 2002. Physiological and anatomical characterization of Phragmites australis leaves. Aquat. Bot. 72: 55-66.

54) Pasqua G, B. Monacelli, C. Manfredini, **F. Loreto**, G. Perez. 2002. The role of isoprenoid accumulation and oxidation in sealing wounded needles of Mediterranean pines. Plant Sci. 163: 355-359

55) Pasqualini S., M. Antonielli, L. Ederli, C. Piccioni, **F. Loreto**. 2002. Ozone uptake and its effect on photosynthetic parameters of two tobacco cultivars with contrasting ozone sensitivity. Plant Physiol. Biochem. 40: 599-603.

56) **Loreto F**., M. Centritto, R. Baraldi, S. Liu. 2002. Emission of isoprenoids from natural vegetation in the Beijing region (Northern China). Plant Biosystems 136: 251-256.

57) **Loreto F.** 2002. Distribution of isoprenoid emitters in the Quercus genus around the world: chemo-taxonomical implications and evolutionary considerations based on the ecological function of the trait. Perspectives in Plant Ecology, Evolution and Systematics 5: 185-192.

58) Delfine S., R. Tognetti, **F. Loreto**, A. Alvino. 2002. Physiological and growth responses to water stress in field-grown bell pepper (Capsicum annuum L.). J. Hort. Sci. & Biotech. 77: 697-704.

59) Centritto M., **F. Loreto**, K. Chartzoulakis. 2003. The use of low CO_2 to estimate diffusional and non-diffusional limitations of photosynthetic capacity of salt-stressed olive saplings. Plant Cell Environ. 26: 585-594.

60) **Loreto F.**, M. Centritto, K. Chartzoulakis. 2003. Photosynthetic limitations in olive cultivars with different sensitivity to salt stress. Plant Cell Environ. 26: 595-601

61) Pinelli P., **F. Loreto**. 2003. 12CO2 emission from different metabolic pathways measured in illuminated and darkened C3 and C4 leaves at low, atmospheric, and elevated CO2 concentration. J. Exp. Bot. 54: 1761-1769.

62) Di Martino C., S. Delfine, R. Pizzuto, **F. Loreto**, A. Fuggi. 2003. Free amino acids and glycine betaine in leaf osmoregulation of spinach responding to increasing salt stress. New Phytol. 158: 455-463.

63) **Loreto F**., P. Pinelli, F. Manes, H. Kollist. 2004. Impact of ozone on monoterpene emissions and evidences for an isoprene-like antioxidant action of monoterpenes emitted by *Quercus ilex* (L.) leaves. Tree Physiol. 24: 361-367.

64) Rapparini F., R. Baraldi, F. Miglietta, **F. Loreto**. 2004. Isoprenoid emission in trees of *Quercus pubescens* and *Quercus ilex* with lifetime exposure to naturally high CO2 environment. Plant Cell Environ. 27: 381-391.

65) Scholefield P.A., K. J. Doick, B. Herbert, C. N. Hewitt, J-P. Schnitzler, P. Pinelli, **F. Loreto**. 2004. Impact of rising CO2 on VOC emissions: isoprene emission from *Phragmites australis* growing at elevated CO2 in a natural carbon dioxide spring. Plant Cell Environ. 27: 393-401.

66) Centritto M., P. Nascetti, L. Petrilli, A. Raschi, **F. Loreto**. 2004. Profiles of isoprene emission and photosynthetic parameters in hybrid poplars exposed to free-air CO2 enrichment. Plant Cell Environ. 27: 403-412.

67) Niinemets U, **F. Loreto**, M. Reichstein. 2004. Physiological and physico-chemical controls on foliar volatile organic compound emissions. Trends Plant Sci. 9: 180-186.

68) Alessio G.A., M. De Lillis, M. Fanelli, P. Pinelli, **F. Loreto.** 2004. Direct and indirect impacts of fire on the isoprenoids emission from Mediterranean vegetation. Funct. Ecol. 18: 357-364.

69) Flexas J., J. Bota, **F. Loreto**, G. Cornic, T.D. Sharkey. 2004. Diffusive and metabolic limitations to photosynthesis under drought and salinity in C3 plants. Plant Biol. 6: 269-279.

70) **Loreto F**., M. Centritto. 2004. Photosynthesis in a changing world. (Editorial for the special issue). Plant Biol. 6: 239-241.

71) **Loreto F**., P. Pinelli, E. Brancaleoni, P. Ciccioli. 2004. ^{13}C labelling reveals chloroplastic and extra-chloroplastic pools of dimethylallyl pyrophosphate and their contribution to isoprene formation. Plant Physiol. 135-1903-1907.

72) Velikova V., A. Edreva, **F. Loreto**. 2004. Endogenous isoprene protects *Phragmites australis* leaves against singlet oxygen. Physiol. Plant. 122: 219-225.

73) Velikova V**., F. Loreto**. 2005. On the relationship between isoprene emission and thermotolerance in *Phragmites australis* leaves exposed to high temperatures and during the recovery from a heat stress. Plant Cell Environ. 28: 318-327.

74) Delfine S., **F. Loreto**, P. Pinelli, R. Tognetti, A. Alvino. 2005. Isoprenoids content and photosynthetic limitations in rosemary and spearmint plants under water stress. Agriculture, Ecosystems and Environment 106: 243–252.

75) Velikova V.,P.Pinelli, **F. Loreto**. 2005.Consequences of inhibition of isoprene synthesis in *Phragmites australis* leaves exposed to elevated temperatures. Agric. Ecosys. Environ. 106: 209–217.

76) Centritto M., **F. Loreto**. 2005. Photosynthesis in a changing world: photosynthesis and abiotic stresses. (Editorial for the special issue). Agric. Ecosys. Environ. 106: 115-117.

77) Velikova V., P. Pinelli, S. Pasqualini, L. Reale, F. Ferranti, **F. Loreto.** 2005. Isoprene decreases the concentration of nitric oxide in leaves exposed to elevated ozone. New Phytol. 166: 419-426.

78) Alessio G.A., F. Pietrini, F. Brilli, **F. Loreto.** 2005. Characteristics of CO_2 exchange between peach stems and the atmosphere. Funct. Plant Biol 32: 787-795.

79) Velikova V., T. Tsonev, P. Pinelli, G. A. Alessio, **F. Loreto**. 2005. Localized O_3-fumigation for field-studies of the impact of different ozone doses on photosynthesis, respiration, electron transport rate and isoprene emission in Mediterranean oak species. Tree Physiol 25: 1523–1532.

80) Girlanda M., M.A. Selosse, D. Cafasso, F. Brilli, S. Delfine, R. Fabbian, S. Ghignone, P. Pinelli, R. Segreto**, F. Loreto**, S. Cozzolino, S. Perotto. 2006. Inefficient Photosynthesis in the Mediterranean Orchid Limodorum abortivum (L.) Swartz is mirrored by specific association to ectomycorrhizal Russulaceae. Mol. Ecol. 15: 491-504.

81) Tholl D., W. Boland, A. Hansel, **F. Loreto**, U.S.R. Roese, J-P. Schnitzler. 2006. Practical approaches to plant volatile analysis. Plant J. 45: 540-560

82) Wittmann C., H. Pfanz, **F. Loreto**, F. Pietrini, M. Centritto, G. Alessio. 2006. Stem CO2-release under illumination: corticular photosynthesis, photorespiration or mitochondrial respiration? Plant Cell Environ. 29: 1149-1158.

83) Nogués I., F. Brilli, **F. Loreto**. 2006. Dimethylallyl diphosphate (DMADP) and geranyl-diphosphate (GDP) pools of plant species characterized by different isoprenoid emissions Plant Physiol. 141: 721-730

84) Noe SM, P. Ciccioli, E. Brancaleoni, **F. Loreto**, U. Niinemets. 2006. Emissions of monoterpenes linalool and ocimene respond differently to environmental changes due to differences in physico-chemical characteristics. Atmos. Env. 40: 4649–4662.

85) Rennenberg H., **F. Loreto**, A. Polle, F. Brilli, S. Fares, R.S. Beniwal, A. Gessler. 2006. Physiological responses of forest trees to heat and drought. Plant Biol. 8: 556-571.

86) Fares S., C.Barta, F. Brilli, M. Centritto, L. Ederli, F. Ferranti, S. Pasqualini, L. Reale, D. Tricoli, **F. Loreto**. 2006. Impact of high ozone on isoprene emission, photosynthesis and histology of developing Populus alba leaves directly or indirectly exposed to the pollutant. Physiol. Plant. 128: 456-465.

87) **Loreto F**., C. Barta, F. Brilli, I. Nogues. 2006. On the induction of volatile organic compound emissions by plants as consequence of wounding or fluctuations of light and temperature. Plant Cell Environ. 29: 1820-1828.

88) Barta C., **F. Loreto**. 2006. The relationship between the methyl-erythritol phosphate (MEP) pathway leading to emission of volatile isoprenoids and abscisic acid content in leaves. Plant Physiol. 141: 1676-1683.

89) Velikova V., **F. Loreto**, T. Tsonev, F. Brilli, A. Edreva. 2006. Isoprene prevents the negative consequences of high temperature stress in Platanus orientalis leaves. Funct. Plant Biol. 33: 931-940.

90) **Loreto F**., S. Fares. 2007. Is ozone flux inside leaves only a damage indicator? Clues from volatile isoprenoid studies. Plant Physiol. 143: 1096-1100.

91) **Loreto F**., M. Centritto, C. Barta, C. Calfapietra, S. Fares, R.K. Monson. 2007. The relationship between isoprene emission rate and dark respiration rate in white poplar (Populus alba L.) leaves. Plant Cell Environ. 30: 662-669.

92) Calfapietra C., A.E. Wiberley, T.G. Falbel, A.R. Linskey, G. Scarascia Mugnozza, D.F. Karnosky, **F. Loreto**, T.D. Sharkey. 2007. Isoprene synthase expression and protein levels are reduced under elevated O3 but not under elevated CO2 in field-grown aspen trees. Plant Cell Environ. 30: 654-661.

93) Brilli F., C. Barta, A. Fortunati, M.Lerdau, **F. Loreto**, M. Centritto. 2007. Response of isoprene emission and carbon metabolism to drought in white poplar (*Populus alba*) saplings. New Phytol. 175: 244-254.

94) Serafini D., F. Brilli, P. Pinelli, S. Delfine, **F. Loreto**. 2007. Photsynthetic properties of an orchid community in central Italy. J. Plant Interactions 2: 253-261.

95) Timperio A.M., G.M. D'Amici, C. Barta, **F. Loreto**, L. Zolla. 2007. Proteomic, pigment composition and organization of thylakoid membranes in iron-deficient spinach leaves. J Exp Bot. 58: 3695 – 3710.

96) Martinelli T., A. Whittaker, C. Masclaux-Daubresse, J.M. Farrant, F. Brilli, **F. Loreto**, C. Vazzana. 2007. Evidence for the presence of photorespiration in desiccation-sensitive leaves of the C4 "resurrection" plant Sporobolus stapfianus during dehydration stress. J Exp Bot 58: 3929 - 3939.

97) Sun P., A. Grignetti A., S. Liu, R. Casacchia, R. Salvatori, F. Pietrini, **F. Loreto**, M. Centritto. 2007. Associated changes in physiological parameters and spectral reflectance indices in olive (Olea europaea L.) leaves in response to different levels of water stress". International Journal of Remote Sensing 29: 1725-1743.

98) Vitale M., E. Salvatori, **F. Loreto**, S. Fares, F. Manes. 2008. Physiological responses of Quercus ilex leaves to water stress and acute ozone exposure under controlled conditions. Water Air Soil Pollut. 189: 113-125. DOI 10.1007/s11270-007-9560-4

99) Fares S., **F. Loreto**, E. Kleist, J. Wildt. 2008. Stomatal uptake and stomatal deposition of ozone in isoprene and monoterpene emitting plants. Plant Biol. 10: 44-54.

100) Fares S., F. Brilli, I. Noguès, V. Velikova, T. Tsonev, S. Dagli, **F. Loreto**. 2008. Isoprene emission and primary metabolism in Phragmites australis grown under different phosphorus levels. Plant Biol. 10: 38-43.

101) Velikova V, **F. Loreto**, F. Brilli, D. Stefanov, I. Yordanov. 2008. Characterization of juvenile and adult leaves of Eucalyptus globulus showing distinct heteroblastic development: photosynthesis and volatile isoprenoids. Plant Biol. 10: 55-64.

102) **Loreto F**, Kesselmeier J, Schnitzler J-P. 2008. Volatile organic compounds in the biosphere–atmosphere system: a preface. Plant Biol. 10: 2-7

103) **Loreto F**., M. Centritto. 2008. Leaf carbon assimilation in a water-limited world. Plant Biosystems 142: 154-161.

104) Calfapietra C., G. Scarascia Mugnozza, D.F. Karnosky, **F. Loreto**, T.D. Sharkey. 2008. Isoprene emission rates under elevated CO2 and O3 in two field-grown aspen clones differing for their sensitivity to O3. New Phytol. 179: 55–61.

105) Fortunati A., C. Barta, F. Brilli, M. Centritto, I. Zimmer, J-P. Schnitzler, **F. Loreto**. 2008. Isoprene emission is not temperature-dependent during and after severe drought-stress: a physiological and biochemical analysis. Plant J. 55: 687-697. doi: 10.1111/j.1365-313X.2008.03538.x

106) Centritto M., C. M. Di Bella, R. Baraldi, M.E. Beget, A. Kemerer, F. Rapparini, P. Oricchio, C. Rebella, **F. Loreto**. 2008. Monoterpene emissions from three Nothofagus species in Patagonia, Argentina. J. Plant Interactions 3: 119-125.

107) De Lillis M, PM Bianco, **F Loreto**. 2009. The influence of leaf water content and isoprenoids on flammability of some Mediterranean woody species. Int. J. Wildland Fire. 18: 203-212.

108) Velikova V, S. Fares, **F. Loreto**. 2008. Isoprene and nitric oxide reduce damages in leaves exposed to oxidative stress. Plant Cell Environ. 31, 1882–1894.

109) Calfapietra C, S. Fares, **F. Loreto**. 2009. Volatile organic compounds from Italian vegetation and their interaction with ozone. Environ. Poll. 157: 1478-1486.

110) Brilli F, P. Ciccioli, M. Frattoni, M. Prestininzi, A.F. Spanedda, **F. Loreto**. 2009. Constitutive and herbivore-induced monoterpenes emitted by *Populus x euroamericana* leaves are key volatiles that orient *Chrysomela populi* beetles. Plant Cell Environ. 32: 542-552.

111) Aganchich B, S. Wahbi, **F. Loreto**, M. Centritto. 2009. Regulation of photosynthetic limitations and antioxidant enzymatic activities in young olive (*Olea europaea* L.) plants in response to deficit irrigation. Tree Physiol. 29: 685-696.

112) Capitani D, F. Brilli, L. Mannina, N. Proietti, **F. Loreto**. 2009. In situ investigation of leaf water status by portable unilateral Nuclear Magnetic Resonance. Plant Physiol. 149: 1638-1647.

113) Vickers C.E., J. Gershenzon, M.T. Lerdau, **F. Loreto.** 2009. A unified mechanism of action for isoprenoids in plant abiotic stress. Nature Chem Biol. 5: 283-291.

114) **Loreto F**, T. Tsonev, M. Centritto. 2009. The impact of blue light on leaf mesophyll conductance. J. Exp. Bot. 60: 2283–2290.

115) Flexas J, **F. Loreto F**, U. Niinemets, TD Sharkey. 2009. Preface to the special issue on mesophyll conductance. J. Exp. Bot. 60: 2215-2216.

.

116) Fares S., S. Mereu, G. Scarascia Mugnozza, M. Vitale, F. Manes, M. Frattoni, P. Ciccioli, G. Gerosa, **F. Loreto**. 2009.The ACCENT-VOCBAS field campaign on biosphere-atmosphere interactions in a Mediterranean ecosystem of Castelporziano (Rome): site characteristics, climatic and meteorological conditions, and eco-physiology of vegetation. Biogeosciences, 6: 1043–1058.

117) Davison B., R. Taipale, B. Langford, P. Misztal, S. Fares, G. Matteucci, **F. Loreto**, J. N. Cape, J. Rinne, C. N. Hewitt. 2009. Concentrations and fluxes of biogenic volatile organic compounds above a Mediterranean macchia ecosystem in western Italy. Biogeosciences 6: 1655-1670.

118) **Loreto F**., F. Bagnoli, S. Fineschi. 2009. One species, many terpenes: matching chemical and biological diversity. Trends Plant Sci. 14: 416-420.

119) Velikova V., T. Tsonev, C. Barta, M. Centritto, D. Koleva, M. Stefanova, M. Busheva, **F. Loreto**. 2009. BVOC emissions, photosynthetic characteristics and changes in chloroplast ultrastructure of Platanus orientalis L. exposed to elevated CO2 and high temperature. Environ. Poll. 157: 2629-2637.

120) Fowler D., K. Pilegaard, M.A. Sutton, P. Ambus, M. Raivonen, J. Duyzer, D. Simpson, H. Fagerli, S. Fuzzi, J.K. Schjoerring, C. Granier, A. Neftel, I.S.A. Isaksen, P. Laj, M. Maione, P.S. Monks, J. Burkhardt, U. Daemmgen, J. Neirynck, E. Personne, R. Wichink-Kruit, K. Butterbach-Bahl, C. Flechard, J.P. Tuovinen, M. Coyle, G. Gerosa, B. Loubet, N. Altimir, L. Gruenhage, C. Ammann, S. Cieslik, E. Paoletti, T.N. Mikkelsen, H. Ro-Poulsen, P. Cellier, J.N. Cape, L. Horvath, **F. Loreto**, U. Niinemets, P.I. Palmer, J. Rinne, P. Misztal, E. Nemitz, D. Nilsson, S. Pryor, M.W. Gallagher, T. Vesala, U. Skiba, N. Bruggemann, S. Zechmeister-Boltenstern, J. Williams, C. O'Dowd, M.C. Facchini, G. de Leeuw, A. Flossman, N. Chaumerliac, J.W. Erisman. 2009. Atmospheric composition change: Ecosystems–Atmosphere interactions. Atmos. Environ. 43: 5193–5267

121) Fares S., A. Goldstein, **F. Loreto**. 2010. Determinants of ozone fluxes and metrics for ozone risk assessment in plants. J. Exp. Bot. 61: 629-633.

122) **Loreto F**., J-P Schnitzler. 2010. Abiotic stresses and induced BVOCs. Trends Plant Sci. 15: 154-166.

123) Dicke M., **F. Loreto**. 2010. Induced plant volatiles: from genes to climate change. Trends Plant Sci. 15: 115-117.

124) Fares S., E. Oksanen, M. Lännenpää, R. Julkunen-Tiitto, **F. Loreto**. 2010. Volatile emissions and phenolic compound concentrations along a vertical profile of *Populus nigra* leaves exposed to realistic ozone concentrations. Photosynth. Res. 104:61–74.

125) Lukac M., C. Calfapietra, A. Lagomarsino, **F. Loreto**. 2010. Global Climate Change and Tree Nutrition: Effects of Elevated CO_2 and Temperature. Tree Physiol. 30: 1209-1220.

126) Velikova V., G. Salerno, F. Frati, E. Peri, E. Conti, S. Colazza, **F. Loreto.** 2010. Influence of Feeding and Oviposition by Phytophagous Pentatomids on Photosynthesis of Herbaceous Plants. J. Chem Ecol. 36: 629-641.

127) Fares S., J.-H. Park, E. Ormeno, D.R. Gentner, M. McKay, **F. Loreto**, J. Karlik, A.H. Goldstein. 2010. Ozone uptake by citrus trees exposed to a range of ozone concentrations. Atmos. Environ. 44: 3404-3412.

128) Behnke K., A. Kaiser, I. Zimmer, N. Bruggemann, D. Janz, A. Polle, R. Hampp, R. Hansch, J. Popko, P. Schmitt-Kopplin, B. Ehlting, H. Rennenberg, C. Barta, **F. Loreto**, J-P. Schnitzler. 2010. RNAi-mediated suppression of isoprene emission in poplartransiently impacts phenolic metabolism under high temperature and high light intensities: a transcriptomic and metabolomic analysis. Plant Mol Biol. 74:61–75.

129) Velikova V., T. Tsonev, **F. Loreto**, M. Centritto. 2011. Changes in photosynthesis, mesophyll conductance to CO2, and isoprenoid emissions in Populus nigra plants exposed to excess nickel. Env. Poll. 159: 1058-1066.

130) Fares S., T. Mahmood, S. Liu, **F. Loreto**, M. Centritto. 2011. Influence of growth temperature and measuring temperature on isoprene emission, diffusive limitations of photosynthesis and respiration in hybrid poplars. Atmos. Env. 45: 155-161.

131) Guidolotti G., C. Calfapietra, **F. Loreto.** 2011. The relationship between isoprene emission, CO_2 assimilation and water use efficiency across a range of poplar genotypes. Physiol Plant. 142: 297-304. doi:10.1111/j.1399-3054.2011.01463.x.
.
132) Centritto M., F. Brilli, R. Fodale, **F. Loreto**. 2011. Different sensitivity of isoprene emission, respiration and photosynthesis to high growth temperature coupled with drought stress in black poplar (*Populus nigra*) saplings. Tree Physiol. 31: 275-286.

133) Brilli F., T.M. Ruuskanen, R. Schnitzhofer, M. Muller, M. Breitenlechner, V. Bittner, G. Wohlfahrt, **F. Loreto**, A. Hansel. 2011. Detection of Plant Volatiles after Leaf Wounding and Darkening by Proton Transfer Reaction ‘‘Time-of-Flight’’ Mass Spectrometry (PTR-TOF). PLOS One 6(5): e20419. doi:10.1371/journal.pone.0020419

134) Velikova V., Z. Várkonyi, M. Szabó, L. Maslenkova, I. Nogues, L. Kovács, V. Peeva, M. Busheva, G. Garab, T.D. Sharkey, **F. Loreto**. 2011. Increased thermostability of thylakoid membranes in isoprene-emitting leaves probed with three biophysical techniques. Plant Physiol. 157: 905-916.

135) Beritognolo I., A. Harfouche, F. Brilli, G. Prosperini, M. Gaudet, M. Brosche’, F. Salani, E. Kuzminsky, P. Auvinen, L. Paulin, J. Kangasjarvi, **F. Loreto**, R. Valentini, G. Scarascia-Mugnozza, M. Sabatti. 2011. Comparative study of transcriptional and physiological responses to salinity stress in two contrasting *Populus alba* L. genotypes. Tree Physiol. 31: 1335-1355. DOI: 10.1093/treephys/tpr083.

136) Brilli F., L. Hörtnagl, A. Hammerle, A. Haslwanter, A. Hansel, **F. Loreto**, G. Wohlfahrt. 2011. Leaf and ecosystem response to soil water availability in mountain grasslands. Agr For Met.151: 1731-1740.

137) Wohlfahrt G., F. Brilli, L. Hörtnagl, X. Xu, H. Bingemer, A. Hansel, **F. Loreto**. 2012. Carbonyl sulfide (COS) as a tracer for canopy photosynthesis, transpiration and stomatal conductance: potential and limitations. Plant Cell Environ. 35: 657-667. DOI: 10.1111/j.1365-3040.2011.02451.x

138) Jardine K., R. Monson, L. Abrell, S. Saleska, A. Arneth, A. Jardine, T. Karl, S. Fares, A. Goldstein, **F. Loreto**, T.E. Huxman, P. Artaxo, F. Ishida. 2012. Within-plant isoprene oxidation confirmed by direct emissions of oxidation products methyl vinyl ketone and methacrolein. Global Change Biol. 18: 973-984. doi: 10.1111/j.1365-2486.2011.02610.x

139) Michelozzi M., **F. Loreto**, R. Colom, F. Rossi, R. Calamassi. 2011. Drought responses in Aleppo pine seedlings from two wild provenances with different climatic features. Photosynthetica 49 (4): 564-572,

140) Velikova V., T.D. Sharkey, **F. Loreto**. 2012. Stabilization of thylakoid membranes in isoprene-emitting plants reduces formation of reactive oxygen species. Plant Signaling & Behavior. 7: 139-141.

141) Velikova V., T. La Mantia, M. Lauteri, M. Michelozzi, I. Nogues, **F. Loreto**. 2012. The impact of winter flooding with saline water on foliar carbon uptake and the volatile fraction of leaves and fruits of lemon (Citrus x limon L. (Burm. f.)) trees. Funct Plant Biol. 39: 199-213.

142) Fineschi S., **F. Loreto**. 2012. Leaf volatile isoprenoids: an important defensive armament in forest tree species. iForest-Biosciences and Forestry 5: 13-17. doi: 10.3832/ifor0607-009.

143) Brilli F, L. Hörtnag, I. Bamberger, R. Schnitzhofer, T.M. Ruuskanen, A. Hansel, **F. Loreto**, G. Wohlfahrt. 2012. Qualitative and quantitative characterization of volatile organic compound emissions from cut grass. Env Sci & Technol. 46: 3859-3865. dx.doi.org/10.1021/es204025y.

144) Nogués I, J. Peñuelas, J. Llusià, M. Estiarte, S. Munné-Bosch, J. Sardans. **F. Loreto**. 2012. Physiological and antioxidant responses of *Erica multiflora* to drought and warming through different seasons. Plant Ecology 213: 649-661; DOI: 10.1007/s11258-012-0029-1

145) Medori M., L. Michelini, I. Nogues, **F. Loreto**, C. Calfapietra. 2012. The Impact of Root Temperature on Photosynthesis and Isoprene Emission in Three Different Plant Species. The Scientific World Journal doi:10.1100/2012/525827

146) Pallozzi E., A. Fortunati, G. Marino, **F. Loreto**, G. Agati, M. Centritto. 2012. BVOC emission from *Populus × canadensis* saplings in response to acute UV-A radiation. Physiol. Plant. 148: 51–61. DOI: 10.1111/j.1399-3054.2012.01687.x

147) Harrison S.P., C. Morfopoulos, K.G. Srikanta Dani, I. C. Prentice, A. Arneth, B.J. Atwell, M. P. Barkley, M. R. Leishman, **F. Loreto**, B. E. Medlyn, Ü. Niinemets, M. Possell, J. Peñuelas, I.J. Wright. 2013. Volatile isoprenoid emissions from plastid to planet. New Phytol. 197: 49-57.

148) Brilli F., T. Tsonev, T. Mahmood, V. Velikova, **F. Loreto**, M. Centritto. 2013. Ultradian variation of isoprene emission, photosynthesis, mesophyll conductance and optimum temperature sensitivity for isoprene emission in water-stressed *Eucalyptus citriodora* saplings. J. Exp. Bot. 64: 519-528.

149) Beckett M., **F. Loreto**, V. Velikova, C. Brunetti, M. Di Ferdinando, M. Tattini, C. Calfapietra, J.M. Farrant. 2012. Photosynthetic limitations and volatile and non-volatile isoprenoids in the poikilochlorophyllous resurrection plant *Xerophyta humilis* during dehydration and rehydration. Plant Cell Environ. 35: 2061-2074.

150) Fares S., G. Matteucci, G. Scarascia Mugnozza, A. Morani, C. Calfapietra, E. Salvatori, L. Fusaro, F. Manes**, F. Loreto**. 2013. Testing of models of stomatal ozone fluxes with field measurements in a mixed Mediterranean forest. Atmos. Environ. 67: 242-251.

151) Cappellin L., **F. Loreto**, E. Aprea, A. Romano, J. Sánchez del Pulgar, F. Gasperi, F. Biasioli. 2013. PTR-MS in Italy: A Multipurpose Sensor with Applications in Environmental, Agri-Food and Health Science. Sensors 13, 11923-11955.

152) Calfapietra C., S. Fares, F. Manes, A. Morani, G. Sgrigna, **F. Loreto**. 2013. Role of biogenic volatile organic compounds (BVOC) emitted by urban trees on ozone concentration in cities: a review. Env. Poll. 183: 71-80. http://dx.doi.org/10.1016/j.envpol.2013.03.012.

153) Pallozzi E., T. Tsonev, L. Copolovici, U. Niinemets, **F. Loreto**, M. Centritto. 2013. Isoprenoid emissions, photosynthesis and mesophyll diffusion conductances in response to blue light. Environ. Experim. Bot. 95: 50-58. http://dx.doi.org/10.1016/j.envexpbot.2013.06.001

154) **Loreto F.**, S. Pollastri, S. Fineschi, V. Velikova. 2014. Volatile isoprenoids and their importance for protection against environmental constraints in the Mediterranean area: Environ. Experim. Bot. 103: 99-106.

155) **Loreto F.**, F. Bagnoli, C. Calfapietra, D. Cafasso, M. De Lillis, G. Filibeck, S. Fineschi, G. Guidolotti, G. Sramkó, J. Tökölyi, C. Ricotta. 2014. Isoprenoid emission in hygrophyte and xerophyte European woody flora: ecological and evolutionary implications. Global Ecol. Biogeogr. 23: 334-345. DOI: 10.1111/geb.12124

156) Fares S., R.Schnitzhofer, X. Jiang, A. Guenther, A.Hansel, **F. Loreto**. 2013. Observations of Diurnal to Weekly Variations of Monoterpene-Dominated Fluxes of Volatile Organic Compounds from Mediterranean Forests: Implications for Regional Modeling. Env. Sci. Technol. 47: 11073–11082 dx.doi.org/10.1021/es4022156.

157) Sablok G., Y. Fu, V. Bobbio, M. Laura, G. Rotino, P. Bagnaresi, A. Allavena, V. Velikova, R. Viola, **F. Loreto**, M. Li, C. Varotto. 2014. Fuelling genetic and metabolic exploration of C3 bioenergy crops through the first reference transcriptome of Arundo donax L. Plant Biotech. J. doi: 10.1111/pbi.12159.

158) Pollastri S., T. Tsonev, **F. Loreto**. 2014. Isoprene improves photochemical efficiency and reduces heat dissipation in plants at physiological temperatures. J. Exp. Bot. 65: 1565–1570.

159) Tattini M., **F. Loreto**. 2014. Plants in the Mediterranean area: living in the sun. Environ. Experim. Bot. 103: 1-3.

160) Tattini M., V. Velikova, C. Vickers, C. Brunetti, M. Di Ferdinando, A. Trivellini, S. Fineschi, G. Agati, F. Ferrini**, F. Loreto**. 2014. Isoprene production in transgenic tobacco alters isoprenoid, non-structural carbohydrate and phenylpropanoid metabolism, and protects photosynthesis from drought stress. Plant Cell Environ. doi: 10.1111/pce.12350.

161) Ciccioli P., M. Centritto**, F. Loreto**. 2014. Biogenic volatile organic compound emissions from vegetation fires. Plant Cell Environ. doi: 10.1111/pce.12336.

162) Rinnan R., M. Steinke, T. McGenity, **F. Loreto**. 2014. Plant volatiles in extreme terrestrial and marine environments. Plant Cell Environ. doi: 10.1111/pce.12320.

163) **Loreto F.**, M. Dicke, J-P. Schnitzler, T.C.J. Turlings. 2014. Plant volatiles and the environment. Plant Cell Environ. DOI: 10.1111/pce.12369.

164) Kaling M., B. Kanawati, A.Ghirardo, A. Albert, J.B.Winkler, W. Heller, C. Barta, **F. Loreto**, P. Schmitt-Kopplin, J-P.Schnitzler. 2014. UV-B mediated metabolic rearrangements in poplar revealed by non-targeted metabolomics. Plant Cell Environ. doi: 10.1111/pce.12348.

165) Brilli F., B. Gioli, P. Ciccioli, D. Zona, **F. Loreto**, I.A. Janssens, R.Ceulemans. 2014. Proton Transfer Reaction Time-of-Flight Mass Spectrometric (PTR-TOFMS) determination of volatile organic compounds (VOCs) emitted from a biomass fire developed under stable nocturnal conditions. Atmos. Environ. 97: 54-67.

166) Centritto M, M. Haworth, G. Marino, E. Pallozzi, T. Tsonev, V.Velikova, I. Nogues, **F. Loreto**. 2014. Isoprene emission aids recovery of photosynthetic performance in transgenic Nicotiana tabacum following high intensity acute UV-B exposure. Plant Sci. DOI: 10.1016/j.plantsci.2014.06.004.

167) Fares S, **F. Loreto**. 2014. Isoprenoid emissions by the Mediterranean vegetation in Castelporziano. Rend. Fis. Acc. Lincei, DOI 10.1007/s12210-014-0331-z.

168) Srikanta Dani KG, S. Fineschi, **F. Loreto**. 2015. Biogenic volatile isoprenoid emission and levels of natural selection. Journal of the Indian Institute of Science 95: 1-14.

169) **Loreto F**, S. Fineschi. 2015. Reconciling functions and evolution of isoprene emission in higher plants. New Phytol Tansley insight. 206: 578-582. doi: 10.1111/nph.13242.

170) Tattini M., **F. Loreto**, A. Fini, L. Guidi, C. Brunetti, V. Velikova, A. Gori and F. Ferrini. 2015. Isoprenoids and phenylpropanoids are part of the antioxidant defense orchestrated daily by drought-stressed Platanus × acerifolia plants during Mediterranean summers. New Phytol. 207: 613-626. doi: 10.1111/nph.13380.

171) Ahrar M., D. Doneva, D. Koleva, A.Romano, M.Rodeghiero, T. Tsonev, F. Biasioli, M. Stefanova, V. Peeva, G. Wohlfahrt, **F. Loreto**, Claudio V., V. Velikova. 2015. Isoprene emission in the monocot Arundineae tribe in relation to functional and structural organization of the photosynthetic apparatus. Environ. Exp. Bot. 119: 87-95. doi: http://dx.doi.org/10.1016/j.envexpbot.2015.04.010.

172) Fares S., E. Paoletti , **F. Loreto**, F. Brilli. 2015. Bi-directional flux of methyl vinyl ketone and methacrolein in trees with different isoprenoid emission under realistic ambient concentrations. Environ. Sci. Technol. 49: 7735-7742. doi: 10.1021/acs.est.5b00673.

173) Nogués, I., V. Muzzini, **F. Loreto**, M.A. Bustamante. 2015. Drought and soil amendment control over monoterpene emission in rosemary plants. Sci Total Environ. 538: 768-778.

174) Fini, A., **F. Loreto**, M. Tattini, C. Giordano, F. Ferrini, C. Brunetti, M. Centritto. 2016. Mesophyll conductance plays a central role in leaf functioning of Oleaceae species exposed to contrasting sunlight irradiance. Physiol Plant. 157: 54-68. doi: 10.1111/ppl.12401.

175) Brilli, F. B. Gioli, S. Fares, T. Zenone, D. Zona, B. Gielen, **F. Loreto**, I. Janssens, R. Ceulemans. 2016. Rapid leaf development drives the seasonal pattern of volatile organic compound (VOC) fluxes in a coppiced bioenergy poplar plantation. Plant Cell Environ. 39: 539-555. doi: 10.1111/pce.12638.

176) Haworth M., M. Centritto, A. Giovannelli, G. Marino, N. Proietti, D. Capitani, A. De Carlo, **F. Loreto**. 2016. Xylem morphology determines the drought response of two *Arundo donax* ecotypes from contrasting habitats. Global Change Biol - Bioenergy. doi: 10.1111/gcbb.12322.

177) Haworth M., S.L. Cosentino, G. Marino, C. Brunetti, D. Scordia, G. Testa, E. Riggi, G. Avola, **F. Loreto**, M. Centritto. 2016. Physiological responses of Arundo donax ecotypes to drought: a common garden study. Global Change Biol - Bioenergy doi: 10.1111/gcbb.12348

178) Dani Kaidala Ganesha, S. Fineschi, M. Michelozzi, **F. Loreto**. 2016. Do cytokinins, volatile isoprenoids and carotenoids synergically delay leaf senescence? Plant Cell Environ. 39, 1103–1111. doi: 10.1111/pce.12705.

179) Drielly Sousa Santana Vieira D., G. Emiliani, M. Michelozzi, M. Centritto, F. Luro , R. Morillon, **F. Loreto**, A. Gesteira, BE. Maserti. 2016. Polyploidization alters constitutive content of volatile organic compounds (VOC) and improves membrane stability under water deficit in Volkamer lemon (Citrus limonia Osb.) leaves. Environ Exp. Bot. 126: 1-9. doi:10.1016/j.envexpbot.2016.02.010.

180) Fu Y., M. Poli, G. Sablok, B. Wang, Y. Liang, N. La Porta, V. Velikova, **F. Loreto**, M. Li, C. Varotto. 2016. Dissection of early transcriptional responses to water stress in Arundo donax L. by unigene-based RNA-Seq. Biotechnology for Biofuels. DOI 10.1186/s13068-016-0471-8

181) Arena C., T. Tsonev, D. Doneva, V. De Micco, M. Michelozzi, C. Brunetti, M. Centritto, S. Fineschi, V. Velikova, **F. Loreto**. 2016. The effect of light quality on growth, photosynthesis, leaf anatomy and volatile isoprenoids of a monoterpene-emitting herbaceous species (Solanum lycopersicum L.) and an isoprene-emitting tree (Platanus orientalis L.). Environ. Exp. Bot. 130: 122-132. doi:10.1016/j.envexpbot.2016.05.014

182) Velikova V., C. Brunetti, M. Tattini, D. Doneva, M. Ahrar, T. Tsonev, M. Stefanova, T. Ganeva, A. Gori, F. Ferrini, C. Varotto, **F. Loreto**. 2016. Physiological significance of isoprenoids and phenylpropanoids in drought response of Arundinoideae species with contrasting habitats and metabolism. Plant Cell Environ. 39: 2185-2197. DOI: 10.1111/pce.12785.

183) Catola S., S. D. K. Ganesha, L. Calamai, **F. Loreto**, A. Ranieri,M. Centritto. 2016. Headspace-solid phase microextraction approach for dimethylsulfoniopropionate quantification in Solanum lycopersicum plants subjected to water stress. Frontiers in Plant Sciences. doi: 10.3389/fpls.2016.01257.

184) Nogués I., J. Llusià, R. Ogaya, S. Munné-Bosch, J. Sardans, J. Peñuelas, **F.Loreto.** 2014. Physiological and antioxidant responses of Quercus ilex to drought in two different seasons. Plant Biosystems 268-278. http://dx.doi.org/10.1080/11263504.2013.768557.

185) Srikanta Dani K. G., G. Marino, C. Taiti, S. Mancuso, B. J. Atwell, **F. Loreto**, M. Centritto. 2016. De novo post-illumination monoterpene burst in Quercus ilex (holm oak). Planta DOI: 10.1007/s00425-016-2636-x.

186) Salerno G., F. Frati, G. Marino, L. Ederli, S. Pasqualini, **F. Loreto**, S. Colazza, M. Centritto. 2017. Effects of water stress on emission of volatile organic 1 compounds by Vicia faba, and consequences for attraction of the egg parasitoid Trissolcus basalis. J. Pest Sci. DOI 10.1007/s10340-016-0830-z.

187) Srikanta Dani K. G., A. M. Silva Benavides, M. Michelozzi, G. Peluso, G. Torzillo, **F. Loreto**. 2017. Relationship between isoprene emission and photosynthesis in diatoms, and its implications for global marine isoprene estimates. Marine Chemistry 189: 17-24. http://dx.doi.org/10.1016/j.marchem.2016.12.005.

188) Srikanta Dani K. G., **F. Loreto**. 2017. Trade-off between dimethyl sulphide and isoprene emission from marine phytoplankton. Trends Plant Sci. http://dx.doi.org/10.1016/j.tplants.2017.01.006

189) Guarino S., E. Peri, S. Colazza, N. Luchi, M. Michelozzi, **F. Loreto**. 2017. Impact of the invasive painted bug, *Bagrada hilaris* on physiological traits of its host *Brassica oleracea* var botrytis. Arthropod-Plant Interactions. DOI 10.1007/s11829-017-9516-6.

190) Cappellin L., A. Algarra Alarcon, I. Herdlinger-Blatt, J. Sanchez, F. Biasioli, S. Martin, **F. Loreto**, K. McKinney. 2017. Field observations of volatile organic compound (VOC) exchange in red oaks. Atmos. Chem. Phys. doi:10.5194/acp-17-1-2017.

191) Ahrar M., D. Doneva, M. Tattini, C. Brunetti, A. Gori, M. Rodeghiero, G. Wohlfahrt, F. Biasioli, C. Varotto, **F. Loreto**, V. Velikova. 2017. Phenotypic differences in response to drought stress in ecotypes of Arundo donax adapted to different environments. J. Exp. Bot. doi:10.1093/jxb/erx125.

192) Haworth M., S. Catola, G. Marino, C. Brunetti, M. Michelozzi, E. Riggi, G. Avola, S.L. Cosentino, **F. Loreto**, M. Centritto. 2017. Moderate Drought Stress Induces Increased Foliar Dimethylsulphoniopropionate (DMSP) Concentration and Isoprene Emission in Two Contrasting Ecotypes of Arundo donax. Frontiers Plant Sci. doi: 10.3389/fpls.2017.01016.

193) Li M., J. Xu, A. Algarra Alarcon, S. Carlin, E. Barbaro, L. Cappellin, V. Velikova, U. Vrhovsek, **F. Loreto**, C. Varotto. 2017. In Planta Recapitulation of Isoprene Synthases Evolution from Ocimene Synthases. Mol. Biol. Evol. DOI: https://doi.org/10.1093/molbev/msx178.

194) Fini A, C. Brunetti, F. Loreto, M. Centritto, F. Ferrini, M. Tattini. 2017. Isoprene Responses and Functions in Plants Challenged by Environmental Pressures Associated to Climate Change. Frontiers Plant Sci. | doi: 10.3389/fpls.2017.01281.

195) Marino G., C. Brunetti,, M. Tattini, A. Romano, F. Biasioli, R.Tognetti, **F. Loreto**, F. Ferrini, M. Centritto. 2017. Dissecting the role of isoprene and stress-related hormones (ABA and ethylene) in Populus nigra exposed to unequal root zone water stress. Tree Physiol. doi:10.1093/treephys/tpx083.

196) Ederli L., C. Brunetti, M. Centritto, S. Colazza, F. Frati, **F. Loreto**, G. Marino, G. Salerno, S.Pasqualini. 2017. Infestation of Broad Bean (Vicia faba) by the Green Stink Bug (Nezara viridula) Decreases Shoot Abscisic Acid Contents under Well-Watered and Drought Conditions. Frontiers Plant Sci. doi: 10.3389/fpls.2017.00959

197) Doneva D., M. Ahrar, T. Tsonev, **F. Loreto**, C. Varotto, V. Velikova. 2017. The role of isoprene in two Arundineae species exposed to progressive drought. C.R. Bulg. Acad. Sci. 2: 203-212.

198) Fernandez-Martınez M, J. Llusia, I. Filella, U. Niinemets, A.Arneth, I.J. Wright, **F. Loreto**, J. Penuelas. 2017. Nutrient-rich plants emit a less intense blend of volatile isoprenoids. New Phytol. doi: 10.1111/nph.14889.

199) Pollastri S., A. Savvides, M. Pesando, E. Lumini, M.G. Volpe, E.A. Ozudogru, A. Faccio, F. De Cunzo, M. Michelozzi, M. Lambardi, V. Fotopoulos**, F. Loreto**, M. Centritto, R. Balestrini. 2018. Impact of two arbuscular mycorrhizal fungi on Arundo donax L. response to salt stress. Planta 247:573–585. https://doi.org/10.1007/s00425-017-2808-3.

200) Haworth M., G. Marino, S.L. Cosentino, C. Brunetti, A. De Carlo, G. Avola, E. Riggi, F. **Loreto**, M. Centritto. 2018. Increased free abscisic acid during drought enhances stomatal sensitivity and modifies stomatal behaviour in fast growing giant reed (Arundo donax). Environ Exp. Bot. 147: 116-124. https://doi.org/10.1016/j.envexpbot.2017.11.002

201) Haworth M., C. P. Scutt, C. Douthe, G. Marino, M.T. G. Gomes, **F. Loreto**, J. Flexas, M. Centritto. 2018. Allocation of the epidermis to stomata relates to stomatal physiological control:Stomatal factors involved in the evolutionary diversification of the angiosperms and development of amphistomaty. Environ Exp. Bot. 151: 55-63. https://doi.org/10.1016/j.envexpbot.2018.04.010.

202) Catola S., M. Centritto, P. Cascone, A. Ranieri, **F. Loreto**, L. Calamai, R. Balestrini, E. Guerrieri. 2018. Effects of single or combined water deficit and aphid attack on tomato volatile organic compound (VOC) emission and plant-plant communication. Environ. Exp. Bot. 153: 54-62.

203) Brunetti C., **F. Loreto**, F. Ferrini, A. Gori, L. Guidi, D. Remorini, M. Centritto, A. Fini, M. Tattini. 2018

Metabolic plasticity in the hygrophyte Moringa oleifera exposed to water stress. Tree Physiol. https://doi.org/10.1093/treephys/tpy089.

204) Haworth M., G. Marino, E. Riggi, G. Avola, C. Brunetti, D. Scordia, G. Testa, M.T. Gaudio Gomes, **F. Loreto**, S. Cosentino, M. Centritto. 2018. The effect of summer drought on the yield of Arundo donax is reduced by the retention of photosynthetic capacity and leaf growth later in the growing season. Ann. Bot. doi: 10.1093/aob/mcy223.

205) Brilli F., S. Pollastri, A. Raio, R. Baraldi, L. Neri, P. Bartolini, A. Podda, **F. Loreto**, B.E. Maserti, R. Balestrini. 2019. Root colonization by Pseudomonas chlororaphis primes tomato (Lycopersicum esculentum) plants for enhanced tolerance to water stress. J Plant Physiol 232: 82–93.

206) Costa C., U. Schurr, **F. Loreto**, P. Menesatti, S.C. Carpentier. 2019. Plant phenotyping research trends, a Science mapping approach. Frontiers in Plant Science, doi: 10.3389/fpls.2018.01933.

207) Velikova V., T. Tsonev, M. Tattini, C. Arena, S. Krumova, D. Koleva, V. Peeva, S. Stojchev, S. Todinova, L. Izzo, C. Brunetti, M. Stefanova, S. Taneva. **F. Loreto**. 2019. Physiological and structural adjustments of two ecotypes of Platanus orientalis L. from different habitats in response to drought and re-watering. Conservation Physiology. Doi: 10.1093/conphys/coy073.

208) Brunetti C., A. Gori, G. Marino, P. Latini, A.P. Sobolev, A. Nardini, M. Haworth, A. Giovannelli, D. Capitani, **F. Loreto**, G. Taylor, G. Scarascia Mugnozza, A. Harfouche, M. Centritto. 2019. Dynamic changes of ABA content in different plants organs of water-stressed Populus nigra: effects on carbon fixation and soluble carbohydrates. Ann Bot. doi: 10.1093/aob/mcz005.

209) Guidolotti G., E. Pallozzi, O. Gavrichkova, A. Scartazza, M. Mattioni, **F. Loreto**, C. Calfapietra. 2019. Emission of constitutive isoprene, induced monoterpenes and other volatiles under high temperatures in Eucalyptus camaldulensis: a 13C labelling study. Plant Cell Environ. https://doi.org/10.1111/pce.13521.

210) Cappellin L., **F. Loreto**, F. Biasioli, P. Pastore, K. McKinney. 2019.A mechanism for biogenic production and emission of MEK from MVK decoupled from isoprene biosynthesis. Atmos. Chem. Phys., 19: 3125–3135, https://doi.org/10.5194/acp-19-3125-2019.

211) Feng Z., X. Yuan, S. Fares, **F. Loreto**, P. Li, Y. Hoshika, E. Paoletti. 2019. Isoprene is more affected by climate drivers than monoterpenes: a meta-analytic review on plant isoprenoid emissions. Plant Cell Environ. 42: 1939-1949. DOI: 10.1111/pce.13535.

212) Brilli F., **F. Loreto**, I. Baccelli. 2019. Exploiting Plant Volatile Organic Compounds (VOCs) in Agriculture to Improve Sustainable Defense Strategies and Productivity of Crops. Front. Plant Sci. 10:264. doi: 10.3389/fpls.2019.00264.

213) Pollastri S., I. Jorba, T.J. Hawkins, J. Llusià, M. Michelozzi, D. Navajas, J. Penuelas, P.J. Hussey, M.R. Knight, **F. Loreto.** 2019. Leaves of isoprene-emitting tobacco plants maintain PSII stability at high temperatures. New Phytol. 223: 1307-1318, doi: 10.1111/nph.15847.

214) Cocozza C., F. Brilli, L. Meozzi, S.Pignattelli, S. Rotundo, C. Brunetti, C. Giordano, S. Pollastri, M. Centritto, G.P. Accotto, R. Tognetti. **F. Loreto**. 2019. Impact of high or low levels of phosphorus and high sodium in soils on productivity and stress tolerance of Arundo donax. Plant Sci. https://doi.org/10.1016/j.plantsci.2019.110260.

215) Gionfriddo M., L. De Gara, F**. Loreto**. 2019. Directed Evolution of Plant Processes: toward a Green (r)Evolution? Trends Plant Sci. 24: 999-1007, https://doi.org/10.1016/j.tplants.2019.08.004.

216) Costa, J. M., J. Marques da Silva, C. Pinheiro, M. Baron, P. Mylona, M. Centritto, M. Haworth, **F. Loreto**, B. Uzilday, I. Turkan, M.M. Oliveira. 2019. Opportunities and Limitations of Crop Phenotyping in Southern European Countries. Frontiers Plant Sci. DOI:10.3389/fpls.2019.01125.

217) Fineschi S., **F. Loreto**. 2020. A survey of multiple interactions between plants and the urban environment. Frontiers in Forests and Global Change 3:xx-xx doi: 10.3389/ffgc.2020.00030.

218) Brunetti C., A. Gori, B. Baesso Moura, **F. Loreto**, F. Sebastiani, E. Giordani, F. Ferrini. 2020. Phenotypic plasticity of two *Moringa oleifera* ecotypes from different climatic zones under water stress and re-watering. Conservation Physiology. DOI: 10.1093/conphys/coaa028.

219) Brunetti C., T. Savi, A. Nardini, **F. Loreto**, A. Gori, M. Centritto. 2020. Changes in abscisic acid content during and after drought are related to carbohydrate mobilization and hydraulic recovery in poplar stems. Tree Physiol. DOI:10.1093/treephys/tpaa032.

220) Velikova V., C. Arena, L.G. Izzo, T. Tsonev, D. Koleva, M. Tattini, O. Roeva, A. De Maio, **F. Loreto**. 2020. Functional and Structural Leaf Plasticity Determine Photosynthetic Performances during Drought Stress and Recovery in Two Platanus orientalis Populations from Contrasting Habitats. Int. J. Mol. Sci. 21: 3912. doi:10.3390/ijms21113912.

221) Cocozza C., F. Brilli, S. Pignattelli, S. Pollastri, C. Brunetti, C. Gonnelli, R. Tognetti, M. Centritto, **F. Loreto**. 2020. The excess of phosphorus in soil reduces physiological performances over time but enhances prompt recovery of salt-stressed Arundo donax plants. Plant Physiol. Biochem. 151: 556–565. https://doi.org/10.1016/j.plaphy.2020.04.011.

222) Dani K.G.S., S. Fineschi, M. Michelozzi, A. Trivellini, S. Pollastri, **F. Loreto**. 2020. Diversification of petal monoterpene profiles during floral development and senescence in wild roses: relationships among geraniol content, petal colour, and floral lifespan. Oecologia. https://doi.org/10.1007/s00442-020-04710-z.

223) Perreca E., J. Rohwer, D. González-Cabanelas, **F. Loreto**, A. Schmidt, J. Gershenzon, L. P. Wright. 2020. Effect of Drought on the Methylerythritol 4-Phosphate (MEP) Pathway in the Isoprene Emitting Conifer Picea glauca. Front. Plant Sci. 11:546295. doi: 10.3389/fpls.2020.546295

224) Dani K.G.S., G. Torzillo, M. Michelozzi, R. Baraldi, **F. Loreto**. 2020. Isoprene Emission in Darkness by a Facultative Heterotrophic Green Alga. Front. Plant Sci. doi: 10.3389/fpls.2020.598786.

225) Haworth M., G. Marino, **F. Loreto**, M. Centritto. 2021. Integrating stomatal physiology and morphology: evolution of stomatal control and development of future crops. Oecologia. https://doi.org/10.1007/s00442-021-04857-3.

226) Giordano D., A. Facchiano, S. D'Auria, **F. Loreto**. 2021. On the capacity of putative plant odorant-binding proteins to bind volatile plant isoprenoids. Biorxiv https://doi.org/10.1101/2021.03.02.433599.

227) Pollastri S., I. Baccelli, **F. Loreto**. 2021. Isoprene: An Antioxidant Itself or a Molecule with Multiple Regulatory Functions in Plants? Antioxidants doi.org/10.3390/antiox10050684.

228) Lombardi M., L. De Gara, **F. Loreto**. 2021. Determinants of root system architecture for future-ready, stress-resilient crops. Physiol. Plant. DOI: 10.1111/ppl.13439.

229) Giordano D., A. Facchiano, S. D'Auria1, **F. Loreto.** 2021. A hypothesis on the capacity of plant odorant-binding proteins to bind volatile isoprenoids based on in silico evidences. eLife 10:e66741. DOI: https://doi.org/10.7554/eLife.66741.

230) Harbinson J., M.A.J. Parry, J. Davies, N. Rolland, **F. Loreto**, R. Wilhelm, K. Metzlaff, R. Klein Lankhorst. 2021. Designing the Crops for the Future; The CropBooster Program. Biology, 10, 690. https://doi.org/10.3390/biology10070690

231) **Loreto F.**, S. D'Auria. 2021. How do plants sense volatiles sent by other plants? Trends Plant Sci. https://doi.org/10.1016/j.tplants.2021.08.009.

232) Janni M., C. Cocozza, F. Brilli, S. Pignattelli, F. Vurro, N. Coppede, M. Bettelli, D. Calestani**, F. Loreto**, A. Zappettini. 2021. Real-time monitoring of Arundo donax response to saline stress through the application of in vivo sensing technology. Sci. Rep. https://doi.org/10.1038/s41598-021-97872-6.

233) Dani S.K.G., S. Pollastri,1 S.Pinosio, M. Reichelt, T.D. Sharkey, J-P Schnitzler, **F. Loreto**. 2021. Isoprene enhances leaf cytokinin metabolism and induces early senescence. New Phytol. 234: 961–974 doi: 10.1111/nph.17833.

234) Brilli, F., S.K.G. Dani, S. Pasqualini, A. Costarelli, S. Cannavo', F. Paolocci, G. Chini Zittelli, G. Mugnai,

R. Baraldi, **F. Loreto**. 2022. Exposure to different light intensities affects emission of volatiles and accumulations of both pigments and phenolics in Azolla filiculoides. Physiol Plant. https://doi.org/10.1111/ppl.13619.

235) Martinelli F., A-L. Vollheyde, M.A. Cebrián-Piqueras, C. von Haaren, E. Lorenzetti, P. Barberi, **F. Loreto**, A.R. Piergiovanni, V.V. Totev, A. Bedini, R. Kron Morelli, N. Yahia, M.A. Rezki, S. Ouslim, F.Z. Fyad-Lameche, A. Bekki, S. Sikora, D. Rodríguez-Navarro, M. Camacho, R. Nabbout, R. Amil, D. Trabelsi, D. Yucel, S. Yousefi. 2022. LEGU-MED: Developing Biodiversity-Based Agriculture with Legume Cropping Systems in the Mediterranean Basin. Agronomy 12(1), 132; https://doi.org/10.3390/agronomy12010132.

236) Dani S.K.G., **F. Loreto**. 2022. Plant volatiles as regulators of hormone homeostasis. New Phytol Tansley Insight. 234: 804–812 doi: 10.1111/nph.18035.

237) Mancini I., G. Domingo, M. Bracale, **F. Loreto**, S. Pollastri. 2022.Isoprene Emission Influences the Proteomic Profile of Arabidopsis Plants under Well-Watered and Drought-Stress Conditions. Int J. Mol. Sci., 23: 3836. https://doi.org/10.3390/ijms23073836.

238) Brilli F., S. Pignattelli, R. Baraldi, L. Neri, S. Pollastri, C. Gonnelli, A. Giovannelli, **F. Loreto**, C. Cocozza. 2022. Root Exposure to 5-Aminolevulinic acid (ALA) Affects Leaf Element Accumulation, Isoprene Emission, Phytohormonal Balance, and Photosynthesis of Salt-Stressed Arundo donax. Int J. Mol. Sci., 23: 4311. https://doi.org/10.3390/ijms23084311.

239) Rotunno S., C. Cocozza, V. Pantaleo, P. Leonetti, L. Bertoldi, G. Valle, G.P. Accotto, **F. Loreto**, G.S. Scippa, L. Miozzi. 2022. Identification of Known and Novel Arundo donax L. MicroRNAs and Their Targets Using High-Throughput Sequencing and Degradome Analysis. Life 12(5), 651; https://doi.org/10.3390/life12050651.

240) Haworth M., G. Marino, **F. Loreto**, M. Centritto. 2022. The evolution of diffusive and biochemical capacities for photosynthesis was predominantly shaped by CO2 with a smaller contribution from O2. Sci Total Envir. https://doi.org/10.1016/j.scitotenv.2022.156606.

241) Salbitani G., P. Carillo, C. Di Martino, F. Bolinesi, O. Mangoni, **F. Loreto**, S. Carfagna. 2022. Microalgae cross-fertilization: short-term effects of Galdieria phlegrea extract on growth, photosynthesis and enzyme activity of Chlorella sorokiniana cells. J. Appl. Phycol. https://doi.org/10.1007/s10811-022-02769-0.

242) Russo A., S. Pollastri, M. Ruocco, M.M. Monti, **F. Loreto**. 2022. Volatile organic compounds in the interaction between plants and beneficial microorganisms. J. Plant Inter. 17, 840-852. https://doi.org/10.1080/17429145.2022.2107243.

243) Burgess A.J., C. Masclaux-Daubresse, G. Strittmatter, A.P.M. Weber, S.H. Taylor, J. Harbinson, X. Yin, S. Long, M.J. Paul, P. Westhoff, **F. Loreto**, A. Ceriotti, V.L.R. Saltenis, M. Pribil, P. Nacry, L.B. Scharff, P.E. Jensen, B. Muller, J-P. Cohan, J. Foulkes, P. Rogowsky, P. Debaeke, C. Meyer, H. Nelissen, D. Inzé, R. Klein Lankhorst, M.A.J. Parry, E.H. Murchie, A. Baekelandt. 2022. Improving crop yield potential: Underlying biological processes and future prospects. Food and Energy Security. https://doi.10.1002/fes3.435.

244) Velikova V., K.G.S. Dani, F. Loreto. 2022. Origin, evolution, and future of isoprene and nitric oxide interactions within leaves. https://doi.org/10.1093/jxb/erac459.

245) Pollastri S., V. Velikova, M. Castaldini, S. Fineschi, A. Ghirardo, J. Renaut, J-P Schnitzler, K. Sergeant, J.B. Winkler, S. Zorzan, **F. Loreto**. 2023. Isoprene-Emitting Tobacco Plants Are Less Affected by Moderate Water Deficit under Future Climate Change Scenario and Show Adjustments of Stress-Related Proteins in Actual Climate. Plants 12: 333; https://doi.org/10.3390/plants12020333.

246) Pinheiro C., G. Emiliani, G. Marino, A.S. Fortunato, M. Haworth, A. De Carlo, M.M. Chaves, **F. Loreto**, M. Centritto. 2023. Metabolic background, not photosynthetic physiology, determines drought and drought recovery responses in C3 and C2 Moricandias. Int. J. Mol. Sci. 24(4), 4094; https://doi.org/10.3390/ijms24044094

247) Proietti S., G. Salvatore Falconieri, L. Bertini, A. Pascale, E. Bizzarri, J. Morales-Sanfrutos, E. Sabido, M. Ruocco, M.M. Monti, A. Russo, K. Dziurka, M. Ceci, F. Loreto, C. Caruso. 2023. Beauveria bassiana rewires molecular mechanisms related to growth and defense of tomato host plant. J. Exp. Bot. https://doi.org/10.1093/jxb/erad148 A.

AO1) Covers of journals

1) Australian Journal of Plant Physiology 2001: 28 n. 11

2) Plant Cell Environment 2004: 27: n. 4

3) Plant Biology 2004: 6: n. 3

4) Plant Biology 2008: 10: n. 1

5) Plant Cell Environment 2009: 32: n.5

A1) Libri (id = lettera) e Capitoli di libro (id = numero)

a) Terrestrial photosynthesis in a changing environment. 2012. J. Flexas, **F. Loreto**, H. Medrano eds. Cambridge University, Cambridge UK. ISBN-13: 9780521899413.

1) Sharkey T.D., **F. Loreto**, C.F. Delwiche. 1991. The biochemistry of isoprene emission from leaves during photosynthesis. In " Environmental and metabolic controls of trace-gas emission by plants". T.D. Sharkey, B. Holland, H.A. Mooney eds. Academic Press, New York, Publ., cap. 6. pp.153-184.

2) Evans J.R., **F. Loreto**. 1999. Acquisition and diffusion of CO_2 in higher plant leaves. In: "Photosynthesis: Physiology and Metabolism". R.C. Leegood, T.D. Sharkey, S von Caemmerer eds. Kluwer Academic, Dordrecht, Publ. cap. 14, 322-351.

3) Massacci A., **F. Loreto**. 2002. Diffusive resistances to CO2 entry in the leaves and their limitations to photosynthesis. In: "Handbook of plant and crop physiology". M. Pessarakli ed. Kluwer, Dordrecht, The Netherlands, cap. 15, 327-336.

4) **Loreto F.**, N. Baker, D. Ort. 2004. Environmental constraints on photosynthesis: From the chloroplast to the leaf. In: "Photosynthetic Adaptation: Chloroplast to the Landscape" W. Smith, TC. Vogelmann, C. Chritchley, eds, Springer, Berlin, Germany, ch. 9, pp 231-261.

5) Evans J.R., I. Terashima, Y. Hanba, **F. Loreto**. 2004. CO2 capture: chloroplast to leaf. In: "Photosynthetic Adaptation: Chloroplast to the Landscape" W. Smith, TC. Vogelmann, C. Chritchley, eds, Springer, Berlin, Germany, ch. 5, pp. 107-132.

6) Bagnoli F., S. Fineschi**, F. Loreto**. 2012. Volatile isoprenoids and abiotic stresses. In "The Ecology of Plant Secondary Metabolites: From Genes to Global Processes" G.R. Iason, M. Dicke, S.E.. Hartley eds, Cambridge University Press, ch. 6, pp. 101-119.

7) Brugnoli E. **F. Loreto**, M. Ribas-Carbo. 2012. Stable isotopic compositions related to photosynthesis, photorespiration and respiration. In: Terrestrial photosynthesis in a changing environment. J. Flexas, **F. Loreto**, H. Medrano eds. Cambridge University, Cambridge UK. Ch. 11: pp. 152-168.

8) Chaves M., J. Flexas, J. Gulias, **F. Loreto**, H. Medrano. 2012. Photosynthesis under water deficits, flooding and salinity. In: Terrestrial photosynthesis in a changing environment. J. Flexas, **F. Loreto**, H. Medrano eds. Cambridge University, Cambridge UK. Ch. 20 pp. 299-312.

9) Nogues I, **F. Loreto**. 2013. Regulation of isoprene and monoterpene emissions. In: Isoprenoid synthesis in plants and microorganisms. T.J. Bach, M. Rohmer eds. Springer, Heidelberg, Germany. Ch. 10 pp. 139-154.

10) Fineschi S., **F. Loreto**, M. Staudt, J. Penuelas. 2013. Diversification of Volatile Isoprenoid Emissions from Trees: Evolutionary and Ecological Perspectives. In: Biology, Controls and Models of Tree Volatile Organic Compound Emissions, Tree Physiology 5, U. Niinemets, RK Monson, eds., DOI 10.1007/978-94-007-6606-8 1, Springer, Dordrecht, Germany. Ch 1, pp. 1-20.

11) Possell M., **F. Loreto**. 2013. The Role of Volatile Organic Compounds in Plant Resistance to Abiotic Stresses: Responses and Mechanisms. In: Biology, Controls and Models of Tree Volatile Organic Compound Emissions, Tree Physiology 5, U. Niinemets, RK Monson, eds., DOI 10.1007/978-94-007-6606-8_8, Springer, Dordrecht, Germany. Ch 8, pp. 209-235.

12) **Loreto F**., S. Fares. 2013. Biogenic volatile organic compounds and their impacts in biosphere-atmosphere interactions. In: Climate change, air pollution and global challenges, R. Matyssek, N. Clarke, P. Cudlin, T.N. Mikkelsen, J-P. Tuovinen, G. Wieser, E. Paoletti, eds. Elsevier, Oxford, UK. Ch. 4, pp. 57-76.

13) Fares S., Mereu S., Scarascia-Mugnozza G., Vitale M., Manes F., Frattoni M., Ciccioli P., Gerosa G., **Loreto F**. 2016. The Accent-Vocbas field campaign on bioshpere-atmosphere interactions in a Mediterranean ecosystem of Castelporziano (Rome): site characteristics, climate and meteorological conditions, and eco-physiology of vegetation. In: Photosynthesis: genetics, environmental and evolutionary aspects, P. Stewart, S. Globig eds. CRC Press Boca Raton USA, Ch. 10, pp. 188-220.

14) Clark M.S., C. Verde, S. Fineschi, **F. Loreto**, L.S. Peck, G. di Prisco. 2020. Life in the extreme environments of our planet under pressure: Climate-induced threats and exploitation opportunities. In: Life in Extreme Environments: Insights in Biological Capability, G. di Prisco, H.G.M. Edwards, J. Elster, A.H.L. Huiskes eds. Cambridge University Press, pp. 151-183.

A2) Proceedings di congressi internazionali

1) **Loreto F.**, G. Bongi. 1987. Control of photosynthesis under salt stress in olive. In: "Interantional Conference on Agrometereology" Cesena 1987, F. Prodi, F. Rossi, G. Cristoferi eds. Fondazione Cesena Agricoltura Publ. 412-414.

2) Bongi G., **F. Loreto**. 1989. In broadleaved evergreens apparent variations in Fv/Fm induced by photoinhibition are coupled to reductions in PSII RC unit size. Advanced Study Institute NATO-FEBS, Spetsai, Grecia 1988. In "Techniques and New Developments in Photosynthesis Research" NATO-ASI Series. J.Barber and R. Malkin eds. Plenum Press, New York, Publ. 555-559.

3) Sharkey T.D., **F. Loreto**, T.L. Vassey. 1990. Effects of stress on photosynthesis. In "Current research on photosynthesis" Proc. of 8th Int. Congr. on Photosynthesis. Stoccolma, Svezia, agosto 1989. M. Baltscheffsky, ed. Kluwer Academic, The Netherlands, Publ. Vol.4: 549-556.

4) **Loreto F.**, T.D. Sharkey. 1992. On the relationship between isoprene emission and photosynthetic metabolites under different enironmental conditions. In: "Research in Photosynthesis" N. Murata ed. Kluwer Academic, The Netherlands, Publ. Vol.4: 843-846.

Sharkey T.D., P. Vanderveer, **F. Loreto**. 1992. Biogenic hydrocarbons: measurements on kudzu in 1992. In “Proccedings Conference on Emission Inventory Issues in the 1990s”. Air and Waste Management Association, Durham, NC, USA.

5) **Loreto F.**, T.D. Sharkey. 1993. Plant isoprene emission responses to the environment. In "Photosynthetic response to the environment". H.Y. Yamamoto and C.M. Smith eds. American Society of Plant Physiologists series, Vol.8: 226-232.

Sharkey T.D., X. Socias, **F. Loreto**. 1994. CO_2 effects on photosynthetic end-product synthesis and feedback. In "Gaseous pollutants and plant metabolism". R. Alscher and A.R. Wellburn eds. Crown House, Essex, Publ. pp. 55-78.

6) Kramer D.M., G. Di Marco, **F. Loreto**. 1995. Contribution of plastoquinone quenching to saturation pulse-induced rise of chlorophyll fluorescence in leaves. In: "Photosynthesis: from light to biosphere". P. Mathis ed. Kluwer Academic, The Netherlands, Publ. Vol. I: 147-150.

7) Massacci A., M.A. Iannelli, F. Pietrini, A. Battistelli, S. Moscatello, **F. Loreto**. 1995. The effect of water stress on photosynthetic characteristics, growth and sugar accumulation of field grown sweet sorghum. In: "Photosynthesis: from light to biosphere". P. Mathis ed. Kluwer Academic, The Netherlands, Publ. Vol. IV: 585-588.

8) **Loreto F.**, P. Ciccioli, A. Cecinato, E. Brancaleoni, M. Frattoni. 1995. Relationship between photosynthesis and -pinene emission from *Quercus ilex* leaves under different environmental conditions. In: "Photosynthesis: from light to biosphere". P. Mathis ed. Kluwer Academic, The Netherlands, Publ. Vol. V: 945-948.

9) **Loreto F.**, S. Delfine, A. Alvino. 1997. On the contribution of mesophyll resistance to CO2 diffusion to photosynthesis limitation during water and salt stress. Acta Hort. 449: 417-422.

10) Simon V., L. Dutaur, J.L. Fugit, L. Torres, J. Kesselmeier, K. Bode, L. Schafer, A. Wolf, P. Ciccioli, E. Brancaleoni, A. Cecinato, M. Frattoni, **F. Loreto**. 1997. Emission of terpenes and isoprene from the different oak species Quercus ilex L., Quercus pubescens L. and Quercus agrifolia L. In: "The oxidizing capacity of the troposhere" B. Larsen, B. Versino, G. Angeletti eds. European Commission, Brussels, Belgium Publ., 472-475.

11) Massacci A., M. Antonielli, S. Pasqualini, L. Ederli, P. Batini, **F. Loreto**. 2000. Phragmites australis in the Trasimeno lake (Central Italy): importance of the morpho-physiological characteristics of plants for ecosystem preservation. In: COST action 837. Phytoremediation 2000-State of the art in Europe-An intercontinental comparison. P.J. Kaltsikes ed. Agricultural University of Athens Publ.,29-31.

12) Centritto M., M.C. Villani, **F. Loreto**, S. Delfine, A. Alvino. 2000. Combined effects of salinity stress and methanol application on growth and physiology of melon plants. In: "Proc. 3rd ISHS symposium on irrigation of horticultural crops." H. Ferreira, H. Jones eds. Acta Hort. 537: 655-661

13) Delfine S., A. Alvino, **F. Loreto**, M. Centritto, G. Santarelli. 2000. Effects of water stress on the yield and photosynthesis of field-grown sweet pepper (*Capsicum annuum* L.). In: "Proc. 3rd ISHS symposium on irrigation of horticultural crops." H. Ferreira, H. Jones eds. Acta Hort. 537: 223-229.

14) **Loreto F**., M.C. Villani, M. Centritto, S. Delfine, A. Alvino. 2000. Interaction between water stress and methanol spray on field-grown pepper (*Capsicum annuum* L.). In: "Proc. 3rd ISHS symposium on irrigation of horticultural crops." H. Ferreira, H. Jones eds. Acta Hort. 537: 259- 265.

15) Delfine S., A. Alvino, M.C. Villani, G. Santarelli, **F. Loreto**. 2000. Agronomic and physiological aspects of salinity stress on a field-grown tomato crop). In: "Proc. 3rd ISHS symposium on irrigation of horticultural crops." H. Ferreira, H. Jones eds. Acta Hort. 537: 647-654.

16) Massacci A., M. Centritto, **F. Loreto**, F. Pietrini, M.C. Villani. 2000. Effects of reduced growth light on transpiration and net photosynthesis of cherry saplings. In: "Proc. 3rd ISHS symposium on irrigation of horticultural crops." H. Ferreira, H. Jones eds. Acta Hort. 537: 287-232.

17) **Loreto F**., M. Centritto. 2001. Ecophysiology of trees exposed to stress conditions. In: "Forestry and agroforestry for environmental protection and rural development" Beijing China, Nov. 1999. pp. 161-169.

18) Velikova V., X. Cui, D. Stella, **F. Loreto**. 2001. Ozone damage in leaves of forest trees is reduced by exogenous and endogenous isoprene. In: Forest Research; a challenge for an integrated European approach. K. Radoglou ed. 265-268.

19) **Loreto F.,** R.J. Fischbach, J-P. Schnitzler, P. Ciccioli, C. Calfapietra, R. Baraldi, F. Rapparini. 2001. Isoprenoid emission by forest trees grown at elevated CO_2 concentrations. In: Forest Research; a challenge for an integrated European approach. K. Radoglou ed. 175-178.

20) **Loreto F.,** V. Velikova, D. Stella, D. Tricoli, G. Di Marco. 2001. Measurements of mitochondrial respiration in the light and estimation of its refixation in C3 and C4 leaves. 12th International Congress of Photosynthesis, August 18-23 August, Brisbane, Australia, CSIRO Publ. S29-004. pp. 1-4

21) Centritto M., S. Liu, **F. Loreto**. 2005. Biogenic emissions of volatile organic compounds by urban forests. Chinese Forestry Science and Technology 4: 20-26.

22) Nogues I., S. Fares, E. Oksanen, **F. Loreto**. 2008. Ozone effects on the metabolism and the antioxidant system of poplar leaves at different stages of development. In: Photosynthesis: energy from the sun. J.F. Allen, E. Gantt, J.H. Golbeck, B. Osmond eds. Springer Publ. 1317-1321.

23) Scala V., M. Scarpari, M. Reverberi, M. Punelli, C. Miccoli, S. La Starza, C. Fanelli,I. Nogués, **F. Loreto**, M. Michelozzi. 2016. Lipid signals in the interaction between mycotoxigenic fungi and their hosts: the case of lipid-derived BVOCs in Aspergillus flavus-maize interaction. In: Proc. III IS ISHS 2016 on Postharvest Pathology: Using Science to Increase Food Availability. A. Ippolito et al. eds. Acta Hortic. 1144.. DOI 10.17660 Acta Hortic. 149-156.

A3) Abstracts (pubblicati in riviste internazionali)

1) Bongi G., **F. Loreto**. 1988. Effect of diffuse light on stomatal opening. Plant Physiol. 86, 4 (suppl): 118.

2) **Loreto F.**, T.D. Sharkey. 1989. Photosynthetic response to humidity changes in olive. Plant Physiol. 89, 4 (suppl.): 164.

3) **Loreto F.**, T.D. Sharkey. 1990. Looking for the causes of isoprene emission by plants: a survey in Red Oak leaves. Plant Physiol. 93, 1 (suppl.):126.

4) **Loreto F.**, P.C. Harley, T.D. Sharkey. 1990. How, why, and when to look at mesophyll resistance in plants. Comunicazione alla 16th Annual Midwest Photosynthesis Conference. Turkey Run, Indiana, USA, 28-30 ottobre 1990.

5) Sharkey T.D., C.F. Delwiche, **F. Loreto**. 1991. Isoprene emission from oak leaves studied with ^{13}C. Plant Physiol. 96, 1:37.

6) Di Marco G., **F. Loreto**. 1991. Testing a method for in vivo estimation of mesophyll conductance of leaves. Plant Physiol. 96, 1:131.

7) **Loreto F.**, P.C. Harley, T.D. Sharkey. 1991. Mesophyll resistance to CO_2 diffusion. Plant Physiol. 96, 1:133.

8) **Loreto F.**, T.D. Sharkey. 1992. Mechanical stresses affect isoprene emission by velvet bean plants. Plant Physiol. 99, 1: 101.

9) **Loreto F.**, T.D. Sharkey. 1992. A study of the relationship between isoprene emission and photosynthetic metabolites in velvet bean. Plant Physiol. 99,1: 103.

10) Di Marco G., D. Tricoli, **F. Loreto**. 1993. Measurements of electron transport on wheat leaves. Plant Physiol. 102,1: 139.

11) Sharkey T.D., **F. Loreto**. 1993. Water stress, temperature, and light effects on isoprene emission and photosynthesis in kudzu leaves. Plant Physiol. 102,1: 159.

12) Pietrini F., M.A. Iannelli, A. Massacci, **F. Loreto**, G. Di Marco. 1994. Changes in biochemical characteristics and growth rate of maize plants acclimated to chilling temperature. Plant Physiol. 105,1: 172.

13) Iannelli M.A., F. Pietrini, A. Massacci, **F. Loreto**. 1994. Changes in photochemical properties of maize leaves acclimated to chilling temperature. Plant Physiol. 105,1: 172.

14) **Loreto F.**, P. Ciccioli, A. Cecinato, E. Brancaleoni, M. Frattoni. 1997. Simultaneous measurements of emission and content of terpenes in leaves of oak species. Plant Physiol. 114,3: 218.

15) Centritto M., C. Calfapietra, G.A. Alessio, **F. Loreto**. 2005. On the relationships between isoprene emission and light and dark respiration in hybrid poplars under free-air CO2 enrichment. Geophysical Research Abstracts, Vol. 7, 10622.

16) Velikova V, Edreva A, Tsonev T, Gesheva E, Dagnon S, Loreto F, Gurel A, Jones H. 2007. Secondary metabolites: Tools for stress protection in plants. Compar Biochem Physiol A – Mol Int Physiol 146: S263

A4) Electronic publications

1) **Loreto F.**, P. Ciccioli, E. Brancaleoni, A. Cecinato, M. Frattoni. 1997. Simultaneous measurements of emission and content of monoterpenes in leaves of oak species. In "Biogenic hydrocarbons in the atmospheric boundary layer" University of Virginia-Charlottesville, VI, USA. http://aeolus.evsc.Virginia.edu/~kml15h/conf/

2) **Loreto F.**, P. Ciccioli, E. Brancaleoni. 1997. The use of 13C to study the isoprenoid biochemical pathway of formation in leaves. In "Cyber congress on analytical bioscience, CCAB97". http://www.anachem.umu.se/mirrors/CCAB97/1st/mini_review/mr019/loreto.html

3) Ciccioli P., E. Brancaleoni, M. Frattoni, A. Brachetti, S. Marta**, F. Loreto**, G. Seufert, M. Vitullo, G. Tirone, R. Valentini. 2002. Daily and Seasonal Variations of Monoterpene Emissions from an Evergreen Oak (*Quercus ilex* L.) Forest of Southern Europe. In: "A changing atmosphere", 8th European Symposium on the Physico-Chemical Behaviour of Atmospheric Pollutants.
http://www.ei.jrc.it/ap/events/torino2001/torinocd/Documents/Terrestrial/TO4.htm

A5) Position papers (peer-reviewed)

1) Amils R, Blix A, Danson M, Ebel C, Ellis-Evans C, Gaill F, Hinghofer-Szalkay H, Hinrichs K, **Loreto F**, Prieur D, Ranjbaran F, Valentin K, Vestergaard E, Walter N. 2007. Investigating life in extreme environments. A European perspective. (ed N. Walter) European Science Foundation, Strasbourg, pp. 1-59.

B0) Riviste nazionali

1) Bongi G., **F. Loreto**, M. Lupattelli. 1987. Gas-exchange properties of different salt-stressed broadleaf evergreens. Giorn. Bot. It. 121: 186-187.

2) Barbini R., F. Colao, R. Fantoni, A. Palucci, S. Ribezzo, G. Di Marco, A. Massacci, **F. Loreto**. 1994. Misure di attivita' fotosintetica con tecnica di eccitazione a due laser. Energia, Ambiente e Innovazione 6: 48-51.

3) Massacci A., M.A. Iannelli, F. Pietrini, A. Battistelli, S. Moscatello, **F. Loreto**. 1995. The effect of water stress on photosynthetic characteristics, growth and sugar accumulation of field grown sweet sorghum. Giorn. Bot. It. 129: 1114-1115

4) **Loreto F.**, P. Ciccioli, A. Cecinato, E. Brancaleoni, M. Frattoni. 1995. Relationship between photosynthesis and α-pinene emission from *Quercus ilex* leaves. Giorn. Bot. It. 129: 953-954.

5) **Loreto F.**, P. Pinelli, D. Stella. 2002. Idrocarburi biogenici ed ozono in specie forestali. Informatore Fitopatologico 3: 18-20.

6) **Loreto F**., M. Mannozzi, P. Nascetti. 2002. Gas-exchanges by Eucalyptus leaves exposed to transient salinity stress. Inf. Bot. It. 35: 15-17.

7) Scarascia-Mugnozza G., **F. Loreto**, G. Matteucci, P. Ciccioli. 2004. Scambi di energia e materia fra ecosistemi forestali e atmosfera in rapporto ai cambiamenti ambientali. Rendiconti dell'Accademia Nazionale delle Scienze, 122: 295-313.

8) Lai, A., Bacchetta, L., Piccinelli, D., Tompetrini, S., Pinelli, P., Bernardini, C., Triolo, L., **Loreto, F.** 2004. Evaluation of physiological parameters as response to abiotic stresses in Arbutus unedo and development of protocol for in vitro propagation. Italus Hortus 11: 123-127

9) Ciccioli P., **F. Loreto.** 2007. Impatto della combustione di biomassa sulla qualita' dell'atmosfera. 2007. Rendiconti xdell'Accademia delle Scienze detta dei XL. 31: 169-178

10) Brilli F., D. Tricoli, S. Fares, M. Centritto, **F. Loreto.** 2007, The use of branch enclosures to asses direct and indirect effects of elevated CO2 on photosynthesis, respiration and isoprene emission of *Populus alba* leaves. Forest@, 4:60-68

11) Haworth M., **F. Loreto**, M. Centritto. 2016. Restoration of dryland ecosystem services is non-deferrable to sustain food security and mitigate climate change impacts. Rendiconti Accademia Nazionale delle Scienze detta dei XL Memorie di Scienze Fisiche e Naturali 134, Vol. XL, Parte II, pp. 165-170

B1) Libri e monografie (italiano)

1) **Loreto F.** 1999. Emissione di terpeni nelle foreste Mediterranee. In: Progetto strategico foreste e produzioni forestali nel territorio montano. G. Asciuto, ed. Pezzino, Palermo, Publ. Vol. 5, pp. 59-66.

2) Colom M.R., F. Pietrini, A. Scartazza, **F. Loreto**, C. Asunis, C. Vazzana. 2001. Attivita' fotosintetica e composizione specifica della macchia mediterranea. In: Il progetto Pianosa-Lab. F.P. Vaccari, F. Miglietta, G. Zerbi, eds., Forum, Udine, Publ., pp. 27-38.

3) Baraldi R., F. Rapparini, **F. Loreto**, F. Pietrini, G. Di Marco. 2001. Emissione di composti organici volatili dalla vegetazione della macchia mediterranea. In: Il progetto Pianosa-Lab. F.P. Vaccari, F. Miglietta, G. Zerbi, eds., Forum, Udine, Publ., pp. 91-100.

4) **Loreto F**. 2001. Emissioni di componenti volatili di olii essenziali e resine. In: Ruoli ecologici ed impieghi commerciali di olii essenziali e resine. In: I Georgofili, Atti dell'Accdemia dei Georgofili Societa' Editrice Fiorentina, vol 48 (I-II) pp. 245-250

5) **Loreto F.**, P. Pinelli. 2002. Emissione di isoprenoidi dalla vegetazione urbana. In: Ecosistemi. Accademia Nazionale dei Lincei, pp. 223-227.

6) Fares S., J. Wildt, **F. Loreto**. 2007. Relazione tra rimozione di ozono a livello fogliare ed emissione di isoprenoidi nelle specie forestali. In: Ozono e vegetazione: il contributo della ricerca italiana (a cura di C. Nali e M. Ferretti). I quaderni del Centro Enrico Avanzi dell'Università di Pisa, vol. 4, pp. 104, Felici Editore, Pisa

7) 7) **Loreto F**., S. Moscatelli. 2018. Ricerca, innovazione e industria agroalimentare. In: Ricerca, innovazione e industria agroalimentare. Collana Europa: le sfide della scienza – Treccani ed. pp 613-620.

B4) Rapporti interni

1) Barbini R., F. Colao, R. Fantoni, A. Palucci, S. Ribezzo, G. Di Marco, A. Massacci, **F. Loreto**. 1994. Photosynthetic activity and electron transport measurements using laser pump and probe technique. ENEA, RT/INN/94/35.

2) **Loreto F.** 1996. Emissione di terpenoidi dalla vegetazione: biochimica, rispsota ai fattori ambientali e coinvolgimento nella chimica dell'atmosfera. In: Global Change. Commissione Italiana IGBP, ed. CNR Publ. 141-142.

3) **Loreto F**., P. Nascetti, F. Pietrini, G. Di Marco, R. Baraldi, F. Rapparini, F. Miglietta. 2001. Le emissioni biogeniche ed il loro ruolo nel futuro (FUTURE-VOC). In: Global Change. Commissione Italiana IGBP, ed. CNR Publ. 206.

4) Vaccari F.P. et al. 2001. Il Pianosa-Lab: progetto di ricerca e monitoraggio degli ecosistemi terrestri dell'area Mediterranea. In: Global Change. Commissione Italiana IGBP, ed. CNR Publ. 228-230.

5) Ciccioli P., **F. Loreto**. 2007. I composti organici volatili di origine biogenica (BVOC) nell'atmosfera e loro ruolo nei cambiamenti climatici. In: "Clima e cambiamenti climatici: le attività di ricerca del CNR" B. Carli, G. Cavarretta, M. Colacino, S. Fuzzi eds, CNR, Roma, 637-640

Disseminazione su riviste e TV

Decine di interviste su testate giornalistiche e televisive nazionali sui temi dell'agricoltura e dell'alimentazione. Alcuni esempi:

ADNKronos:
http://images.google.de/imgres?imgurl=https%3A%2F%2Fi.ytimg.com%2Fvi%2Fl-Esge35vJg%2Fhqdefault.jpg&imgrefurl=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dl-Esge35vJg&h=360&w=480&tbnid=HBeDLM5NSdwZqM%3A&docid=gdnDoafeyBQssM&ei=2wWfV_zNNYnCgAa236LwBA&tbm=isch&iact=rc&uact=3&dur=537&page=1&start=0&ndsp=19&ved=0ahUKEwi8p5n545_OAhUJIcAKHbavCE4QMwgeKAAwAA&bih=643&biw=1366

AGRONOTIZIE:
http://www.disba.cnr.it/index.php/it/video/1356-vino-le-nuove-tecnologie-del-cnr-per-la-tracciabilita-

https://www.youtube.com/watch?v=rNimPeKs5rs (30 risposte per l'agricoltura, parla Francesco Loreto del Cnr)

RADIORAI:
Baobab 2013 http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-de33c04c-b503-4931-8917-e13b41e9abe1-radio1.html

RAI EXPO:
http://images.google.de/imgres?imgurl=https%3A%2F%2Fi.ytimg.com%2Fvi%2FkLfLunEtAJU%2Fhqdefault.jpg&imgrefurl=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DkLfLunEtAJU&h=360&w=480&tbnid=jBgwZjZAhg0NMM%3A&docid=9Zd-LNLpEyFLcM&ei=2wWfV_zNNYnCgAa236LwBA&tbm=isch&iact=rc&uact=3&dur=5788&page=1&start=0&ndsp=19&ved=0ahUKEwi8p5n545_OAhUJIcAKHbavCE4QMwgkKAMwAw&bih=643&biw=1366

RAI2:
http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-163ba429-df9d-43e4-9c65-7bf098093b90-tg2.html#p=0

http://www.disba.cnr.it/index.php/it/video?start=44

http://www.daa.cnr.it/index.php/it/video/1603-sicurezza-degli-alimenti-servizio-sugli-ogm-

RAINEWS24:
http://www.rainews.it/dl/rainews/media/EXPO2015-Vivaio-Ricerca-interazione-dei-saperi-legati-al-cibo-negli-eventi-CNR-video-faa57273-d262-4cdf-bea3-b63eedd61f7f.html

RESEARCH ITALY:
https://www.researchitaly.it/conoscere/progetti-e-storie-di-successo/interviste-e-testimonianze/cnr-a-expo-2015-con-vivaio-ricerca-il-bilancio-researchitaly-intervista-francesco-loreto/

YOU TUBE:
https://www.youtube.com/watch?v=pcIR4Sk5Krk (Prof Francesco Loreto - Il verde pubblico nel sistema dell'ecologia urbana)

RAI NEWTON:
https://www.raiplay.it/video/2020/10/La-sfida-dellagricoltura-sostenibile-680896cc-0aa5-49e6-8eb6-99a4ba455068.html (Prof. Francesco Loreto – La sfida dell'agricoltura sostenibile)