MATTEO CLERICI - CURRICULUM VITAE

PERSONAL INFORMATION

Name: Matteo Clerici
Date of birth: 20/04/1981
Nationalities: Italian and British
Residence: Italy
ORCID: 0000-0002-9100-8539
h-index: 37 (Google Scholar, 29/01/2026)
citations: 6722 (Google Scholar, 29/01/2026)
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SYNOPSIS

Academic Career: Dr. Clerici is Associate Professor at the University of Insubria (Como, Italy). Until September 2023, he was Professor of Photonics (Full Professor) at the University of Glasgow (UK), where he founded and led the Ultrafast Nonlinear Optics group. He joined Glasgow in 2015 following a Marie Curie International Outgoing Fellowship (2012–2015, Canada and UK) and a PBEEE–MELS fellowship (2011–2012, Canada). He obtained the PhD (2010), MSc (2016), and BSc (2003) in Physics from the University of Insubria.

Research Output: Dr. Clerici is the author of over 80 peer-reviewed journal articles, including 9 Physical Review Letters, 5 Science Advances, 3 Nature Communications, 2 Laser & Photonics Reviews, 3 Optica, and 1 Optica Quantum. Ten publications are authored as last author and include papers in leading journals. He is the inventor of 3 granted patents and has co-authored over 65 invited talks (3 keynotes) and more than 150 conference contributions (3 post-deadline papers).

Leadership and Supervision: Dr. Clerici has founded and led internationally active research groups in ultrafast and quantum photonics, serving as PI at the University of Glasgow and currently as Co-PI at the University of Insubria, where he also founded and directs the Como Lake Institute of Photonics. He has supervised 5 PhD students as first supervisor, several as co-supervisor, 3 postdoctoral researchers, and several dozen MSc, MEng, and BEng students. He has served as PhD examiner and convener, is a member of a doctoral board, and has held advisory roles for MSc programmes and academic validation panels. He has also contributed to academic citizenship and research governance through institutional service, including roles as early-career researchers' representative, member of departmental research quality and evaluation committees, expert reviewer for funding agencies, and participant in European-level project evaluation panels.

Research Funding and Grants: Dr. Clerici has secured funding for over 15 competitive research projects, predominantly as Principal Investigator. His portfolio includes programmes from the European Union, EPSRC, Innovate UK, the Royal Society, and national funding agencies, supporting fundamental and applied research in ultrafast and quantum photonics. Overall, he has attracted research funding exceeding €2.5 million.

Awards and Distinctions: Dr. Clerici was elected OPTICA Fellow in 2025 for pioneering contributions to ultrafast and quantum photonics. He obtained the Italian National Habilitation to Full Professor in 2023 and received the Sergio Panizza Award from the Italian Physical Society in 2014, a biennial award for researchers under 35. He has served as Program and General Chair of a major international conference, is a Senior Member of URSI, Topical Editor of Optics Letters, and former Editorial Board Member of Scientific Reports.

Societal Engagement: Dr. Clerici has contributed to societal engagement and knowledge valorisation through interviews, press releases, and science dissemination activities. He is co-organising an initiative with the University of Insubria and the Municipality of Como and has contributed to international training schools, including an Enrico Fermi school in Varenna (2014) and, as Director of the "New Trends in Ultrafast and Quantum Optics" school within the Lake Como School of Advanced Studies (LCSAS), a school planned for summer 2026.

PRESENT APPOINTMENT

10/2023-now Associate Professor, Dipartimento di Scienza e Alta Tecnologia, Università degli Studi dell'Insubria, Como, Italy. Co-PI of the research group: *Quantum and Ultrafast Photonics* (QUP).

PREVIOUS EMPLOYMENT HISTORY

08/22-09/23 *Professor of Photonics,* Full Professor at the School of Engineering, University of Glasgow, UK. PI of the research group: Ultrafast Nonlinear Optics (UNO)

08/19-08/22 Senior Lecturer at the James Watt School of Engineering, University of Glasgow, UK. PI of the research group: Ultrafast Nonlinear Optics (UNO)

10/15-07/19 Lecturer B at the School of Engineering, University of Glasgow, UK. PI of the research group: Ultrafast Nonlinear Optics (UNO)

2014-2015 Research associate (Marie-Curie fellow), Heriot-Watt University, Edinburgh, UK

2011-2014 Postdoc at INRS-EMT, Canada (PBEE and Marie-Curie fellow)

2009-2010 Postdoc (CNISM fellow) at Insubria University, Italy

ACADEMIC QUALIFICATIONS

2006-2010 Research Doctorate in Physics (Viva 08/02/2010), Università dell'Insubria, Italy

2003-2006 MSc in Physicsin Physics, 110/110 cum laude. Università dell'Insubria, Italy

2000-2003 BSc in Physics, 110/110, Università dell'Insubria, Italy

ESTEEM INDICATORS

Honors and Awards

2025 Elected OPTICA Fellow, for "*pioneering experiments in the field of ultrafast and quantum optics in the infrared part of the spectrum*".

2023 Habilitation to Full Professor, Ministero dell'Istruzione dell'Università e della Ricerca, Italy (02/B1).

2020 National Foreign Expert Projects Scholarship, the Ministry of Science and Technology, China.

2020 Elected Senior Member of the International Union of Radio Science (URSI)

2019 Top 20% EPSRC – UK Reviewers

2016 Habilitation to Associate Professor, Ministero dell'Istruzione dell'Università e Ricerca, Italy

2014 Sergio Panizza award from the Italian Physical Society, given every 2 years to a <35 years old researcher for relevant contributions to photonics

2013 Habilitation at "Maître de conferences" (Lecturer equivalent). Qualification n. 13230248856. Section: 30-Optics. Awarding body: Ministre de l'éducation nationale, de l'enseignement supérieur et de la recherche, France

2013 Poster Award at the International Workshop on Optical Terahertz Science and Technology (OTST), April 1-5, 2013, Kyoto, Japan

2007 Marie Curie ITN, ATLAS (International Training Network) scholarship

Professional Memberships

2016 – 2018 Member of the Institute of Physics (IOP)

2016 – now Member of the European Physical Society (EPS)

2010 – now Member of the Italian Physical Society (SIF)

2009 – now Member of the Optical Society (OSA, now Optica)

TEACHING & RELATED ADMINISTRATION

Teaching

2025 – now	Professor for the *Radio Protection* course, TPALL (Techniques of Prevention in the Environment and in the Workplace), Università degli Studi dell'Insubria, Como, Italy
2024 – now	Professor for the *Applied Physics* course, TPALL (Techniques of Prevention in the Environment and in the Workplace), Università degli Studi dell'Insubria, Como, Italy
2024 – now	Professor for the *Physics* course, Undergraduate course in Biotechnology, Università degli Studi dell'Insubria, Como, Italy
2023 – now	Professor for the *Laser Physics course*, MSc in Physics, Università degli Studi dell'Insubria, Como, Italy
2023 – 2024	Professor for the *Medical Physics*, Professional Education (Qualifying Degree for the Healthcare Profession of Professional Educator), Università degli Studi dell'Insubria, Como, Italy
2021 – 2023	Lecturer for "Engineering Mathematics 2" (2nd year), School of Engineering, UofG, UK
2015 – 2023	Lecturer and Convener for "Electromagnetics 2" (2nd year), School of Engineering, UofG, UK
2017 – 2023	Coordinator for "Design Special Topic 5" (5th year), School of Engineering, UofG, UK
2016 – 2018	Lecturer for "Microwave & Optical Communications" (4th year), School of Engineering, UofG, UK
2014	Lab demonstrator, Engineering and Physical Sciences, Heriot-Watt University, UK
2012	Ultrafast photonics & high-intensity light-matter interaction. Course for Masters and PhD students, INRS-EMT, Canada
2007 – 2009	Assistant for the "Laboratory course II" at the School of Physics, Università degli Studi dell' Insubira, Italy
2007	Assistant for the "Laboratory course IV" at the School of Physics, Università degli Studi dell' Insubira, Italy

Supervision at the University of Insubria

Master of Science (MSc)

2025 – 2026	Federico Tota (Physics)

Supervision at the University of Glasgow

Master of Science (MSc)

Supervisor

2022 – 2023	Zihao Wang (EEE)
	Ziyi Zhang (Computer System Engineering)
	Chung Chun Kao (Computer System Engineering)
	Jingzheng Ren (Computer System Engineering)
	Huize Xing (Computer System Engineering)
	Xintong Lin (Computer System Engineering)
2021 – 2022	Adil Shakeel (EEE)
	Jiashun Li (EEE)
	Jingyu Wu (EEE)
	Liran Wang (EEE)
	Naveen Kuthaganahalli Mahadev
	Yan Zhang (EEE)
	Yandan Lai (EEE)
2020 – 2021	Chenyu Fang (EEE)
	Chuyang Tao (EEE)

	Jialuo Xu (EEE)
	Shuang Gao (EEE)
	Yuanlin Chen (EEE)
	Lei Jin (EEE)
2019 – 2020	Xinyu Chen (EEE)
	Yiming Dong (EEE)
	Peike Lan (EEE)
	Xian Li (EEE)
	Teodor Docan (Quantum Technology – Physics)
2018 – 2019	Yunyi Xu (Computer Systems Eng.)
	Yunchi Wang (Electronics & Electrical Eng.)
2017 – 2018	Yuhe Huang (EEE)
2011 – 2012	Marco Cassataro (EEE, INRS-EMT Canada and DIEET Palermo)

Co-supervisor

2020 – 2021	Karan Rajashekar (EEE)
	Dongyu Wang (Computer System Eng.)
	Khin Pyae Sone Win (EEE & Mgt.)
	Zhaoan Ye (EEE)
2019 – 2020	Kai Gao (EEE & Mgt.)
	Daniels Vasijevs (Computer Systems Eng.)
2018 – 2019	Qinwen Guo (EEE & Mgt.)
	Shengyong Yu (EEE)
2007 – 2008	Eleonora Rubino, Laurea in Physics (Insubria, Italy)

Master of Engineering (MEng)

Supervisor

2019 – 2020	Dionysis Adamou (EEE)
2017 – 2018	Abu Bakar Inayat (EEE)

Co-supervisor

2020 – 2021	Sramek Radovan (EEE)
2018 – 2019	Alastair Tibbs (Product Design Eng.)
2017 – 2018	Anna Campbell (Product Design Eng.)
	William Shillabeer (Product Design Eng.)

Academic supervisor/co-supervisor for industrial placements

2021 – 2022	Arric Hamilton (EEE)
2020 – 2021	Miklas Riechmann (Electronics and Software Eng.)
2017 – 2018	Amber Ruddy (EEE)
2016 – 2017	Oliver Sharp (EEE)
	Tristan Robinson (Electronics with Music)

Bachelor of Engineering (BEng)

Supervisor

2016 – 2017	Peihong Tang (EEE)
	Junsong Huang (EEE with Information)

Co-supervisor

2020 – 2021	Chenrui Hu
	Xiang Shi (
2019 – 2020	Theerat Leelasithorn (EEE)

Sara Camposarcone (Aeronautical Eng.)
Qingshu Zhang (EEE & Communications)
Jonathan Zheng Bing Sheng (Aeronautical Eng, SIT)
Tay Jerold (Mechanical Design Eng., SIT)
Bryan Wong Liang Chern (Mechanical Design, SIT)
Lee Zhi Wei Gordon (Mechatronics, SIT)

2018 – 2019 Ng Jun Wei (Mechanical Design Eng., SIT)
Teo Dong Peng (Mechanical Design Eng., SIT)

2017 – 2018 Kai Ching Wong (Mechatronics)
Mohamed Al-Qabtan (EEE)
Varnica Jain (Mechatronics, SIT)
Eric Yuen QiHong (Mechatronics, SIT)
Melvin Tan Siew Yi (Mechatronics, SIT)
Wan Kin Keong Glenn (Mechatronics, SIT)

2016 – 2017 Noor Hanis Bin Mohamed Yunos (Mechatronics, SIT)
Ahmad Jaliani (Mechatronics, SIT)
Hui Fang Lean (Mechatronics, SIT)
P Thanaraj (Mechatronics, SIT).

Academic roles at Insubria University

2025 – now Co-Responsible for the Inter-University Scientific Platform entitled "Technologies for Energy, Health and the Environment"
2024 – now Director of the Como Lake Institute of Photonics
2024 – now Member of the doctoral board for Physics.
2024 – now Member of the AIQUA-R commission of the Department of Science and High Technology.

Advisory at the University of Glasgow

2022 – 2023 Advisor of studies for the Computer System Engineering MSc.
2021 – 2022 Advisor of studies for the EEE MSc.
2020 – 2021 Advisor of studies for the EEE MSc.
2019 – 2020 Advisor of studies for MSc courses Sustainable Energy and Mechatronics.
2018 – 2019 Advisor of studies for Sustainable Energy and Nanoscience and Nanotechnologies MSc.
2017– 2018 Advisor of studies for Sustainable Energy MSc and for Nanoscience and Nanotechnologies MSc.

Other responsibilities

2022 Independent Academic panel member for the validation of the MSc Quantum Technology course in the School of Life Sciences, University of Sussex.

RESEARCH & RELATED ADMINISTRATION

Supervision

Postdoctoral Researchers at the University of Glasgow

2022 – 2023 Seunjin Yoon
2019 – 2021 Adetunmise Dada
2018 – 2020 Shashi Prabhakar

PhD Students (1st supervisor) at the University of Glasgow

2022 Yu Lijun (left the supervision to Maria Chiara Braidotti)
2021 Ivi Afxenti

2021	Dionysis Adamou
2020	Lenny Hirsch
2019	Ruaridh Smith (academic supervisor for the EngD)
2018	Mehdi Ebrahim
2018	Sophie Law (retired)
2017	Taylor Shield
2017	Damian Powell (retired)

PhD (2nd supervisor) at the University of Glasgow

2021	Raul Alvarez Mendoza
2021	George Magdy Dawood Botros
2021	Natale Giovanni Pruriti
2020	Ultan Daly
2018	Conor Coughlan
2018	Gabriella Musarra
2018	Christy Cameron Simpson
2016	Ugne Griskeviciute
2012	Sze-Ping Ho (INRS-EMT, Canada)

PhD examiner

06/2024	PhD external examiner (Vilnius University, Lithuania) for Robertas Grigutis
09/2021	PhD external examiner (Queen's University Belfast, Northern Ireland) for Steffan Gwyn
02/2020	PhD internal examiner (School of Physics & Astronomy, UoG) for Sara Restuccia
10/2019	PhD convener (School of Engineering, UoG) for Manuel Reza
03/2019	PhD internal examiner (School of Engineering, UoG) for Kleanthis Erotokritou
02/2019	PhD convener (School of Engineering, UoG) for Jaroslaw Kirdoda
01/2019	PhD external examiner (French Atomic Energy Commission, France) for Mille Alisée Nguyen
12/2018	PhD internal examiner (School of Physics & Astronomy, UoG) for Peter Morris
02/2018	PhD external examiner (University of Insubria, Italy) for Sanjeev Kumar
12/2017	PhD convener (School of Engineering, UoG) for Charalambos Klitis
11/2017	PhD internal examiner (School of Engineering, UoG) for Andrea Pizzone
08/2017	PhD internal examiner (School of Engineering, UoG) for Monageng Kgwadi
03/2017	PhD internal examiner (School of Engineering, UoG) for Chengzhi Xie
12/2016	PhD internal examiner (School of Engineering, UoG) for Ross Millar
11/2016	PhD internal examiner (School of Physics & Astronomy, UoG) for Rair Macedo

RESEARCH GRANTS AND COLLABORATIONS

Grants at the University of Insubria

2026 – 2026	Laser4EU, PI, "Broadband THz Generation and Field-Resolved Sampling Driven by a 70 W, 76 MHz Femtosecond Source".
2025 – 2027	Bando Collabora e Innova Regione Lombardia, local PI, "RECOVER-AI" D: 6176711 - CUP: E19I25001140007.

Grants at the University of Glasgow

2024 – 2027	UKRI-EPSRC Standard Grant, co-I, ~£280k (owned portion - ~£1M total). Silicon Core Fibres: extending the reach of nonlinear fibre systems

2023 – 2025 Canada UK Commercialising Quantum Technology Programme: CR&D, ~£280k, PI. Broadband Quantum Synthesizer.

2023 – 2023 EPSRC Glasgow University Impact Acceleration Account, ~£37k, PI. Charge-amplifier-based high-quantum-efficiency detectors.

2022 – 2024 Innovate UK, ~£250k, co-I. A packaged source of multiplexed entangled photons (PADME/10031438).

2022 – 2023 Proof of Concept, QuantIC, £57k, PI. Visible entangled photons sources.

2021 – 2023 Innovate UK, £237k, PI. High Quantum Efficiency Detectors (PN 10001572).

2021 – 2023 Accelerated Development Fund, QuantIC. £234k, co-I. Quantum-enhanced multiphoton fluorescence microscopy

2020 – 2022 Royal Society of London Research Grant, £20k, PI. Few-cycle pulses for air-plasma physics (RGS\R1\201365)

2019 – 2023 DSTL Quantum PhD Scholarship, £157k, PI. Quantum-enhanced atmospheric sensor for airborne bio-hazard (DSTLXR1000141936)

2018 – 2021 UKRI Innovation Fellowship, £843k, PI. Infrared time-domain quantum optics: In-Tempo (EP/S001573/1)

2018 – 2019 Innovate UK, £180k, PI for the academic partner. Entangled Photon Emitter (EP/R043299/1)

2017 – 2019 EPSRC First Grant, £125k, PI. Quantum-enhanced THz spectroscopy and imaging (EP/P009697/1)

2017 – 2018 EPSRC Glasgow University Impact Acceleration Account, £32k, PI. An alternative approach to quantum-enhanced THz generation

2016 – 2017 Royal Society of London Research Grant, £13k, PI. High resolution dynamical coherent imaging (RG160355)

2012 – 2015 Marie-Curie International Outgoing Fellowship, £270k, PI. Kerr-based OPA for high energy infrared pulse generation. EU-FP7 (GN 299522)

2011 – 2012 PBEEE Fellowship,1st ranked in the national competition. £30k, PI. FQRNT through MELS, Canada. (GN 149187)

2009 – 2010 Research Fellowship (Assegnista di ricerca), £25k, PI. Consorzio Nazionale Interuniversitario per le Scienze Fisiche della Materia (CNISM)

Collaborations

- Tie-Jun Wang, State Key Laboratory of High Field Laser Physics, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China
- D. Faccio, M. Lavery, M. Sorel, R. Hadfield, University of Glasgow, UK
- L. Caspani, University of Strathclyde, UK
- M. Ferrera, F. Biancalana, and D. Ried, Heriot-Watt University, UK
- M. Peccianti and A. Pasquazi, Sussex University, UK
- R. Morandotti, L. Razzari, F. Légaré and F. Vidal, INRS-EMT, Montreal, Canada
- A. Couairon, École Polytechnique, Paris, France
- D. Christodoulides, CREOL, University of Central Florida, Orlando, USA
- J.-C. Diels, University of New Mexico, Albuquerque, NM, USA
- V. Shalaev and A. Boltasseva, Purdue University, IN, USA
- J. Moloney, M. Kolesik, University of Arizona, AZ, USA
- O. Jedrkiewicz and P. Di Trapani, University of Insubria, Italy

PROFESSIONAL ACTIVITIES BEYOND THE UNIVERSITY

Committees, Conference & Schools Organisation

2021 – 2022 General Chair for Integrated Photonics Research (OSA)

2020 – 2021	Program Chair for Integrated Photonics Research (OSA)
2020	Topic Co-Chair for the international conference Photon2020, IOP, UK
2019	Sub-committee Chair for Integrated Photonics Research (OSA)
2018 – 2019	Committee member for the international conference Integrated Photonics Research, Silicon, and Nano-Photonics (OSA)
2018 – 2019	Co-organizer for the Quantum Technology Summer School, University of Glasgow
2018	Committee member for the international conference CLEO Pacific Rim (OSA)
2017 – now	Commission D Panel Representative for URSI-UK
2016 – 2017	Committee member for the international conference Nonlinear Optics and Novel Phenomena at CLEO/QELS-US (OSA)
2014	Committee member for the international conference Photonics North 2014, Montreal, Canada
2014	Scientific Secretary for the Enrico Fermi Summer School "Frontiers in Modern Optics" of the Italian Physics Society (July 2014 in Varenna, Italy)
2009 – 2011	Member (and co-founder) of a company (Light-in-Light s.r.l., Como, Italy, VAT 03181930136) promoting the diffusion of knowledge through the organisation of events and technology transfer actions.
2009	International school "STELLA 2009" at ICFO. Led an experimental course aimed at demonstrating the generation of mid-infrared, few-cycle pulses through four- wave mixing in hollow-core fibres.
2008	International school "STELLA 2008" at FORTH (Crete, Greece). Led an experimental course aimed at the investigation of third-harmonic generation processes mediated by laser filamentation in bulk media.
2007	International school "STELLA 2007", VULCR and Vilnius Uni. Led an experimental course aimed at studying spatial solitons generated in a $\chi^{(2)}$ nonlinear crystal.

Editorial Appointments

2024 - now:	Topical Editor for Optics Letters
2016 – 2024:	Editorial Board member of Scientific Reports (Nature Publishing Journal), for the electronics, photonics and device physics category.

Reviewing activities

Projects

- Expert Reviewer for the European Community (2020, 2022, FET Open project).
- Reviewer, among others, for the European Research Council (ERC), Italian Ministry of Education, Universities and Research (MIUR); Latvian Council of Science, U.S. Army Research Office; MITACS Canada; Ontario Research Fund; Ministerio de Education, Gobierno de Chile. Reviewer and Full College Member of the Engineering and Physical Sciences Research Council (EPSRC).

Scientific manuscripts

- Reviewer for Science, Nature Publishing Group (including Nature Photonics and Nature Communications), American Physical Society (Phys. Rev. Lett. and others), Wiley, Optical Society of America (Optica, Optics Letters, Optics Express, and others), American Ceramic Society (ACS Photonics), Institute of Physics, Institute of Electrical and Electronics Engineers, Multidisciplinary Digital Publishing and Elsevier.

PUBLICATIONS

REFEREED PUBLICATIONS

2026

[A82] S. Stengel, J. I. Choi, A. B. Solanki, H. Ather, P. G. Chen, B. M. Triplett, M. Ozlu, K. R. Choi, A. Senichev, W. Jaffray, A. S. Lagutchev, L. Caspani, **M. Clerici**, L. Razzari, R. Morandotti, M. Ferrera, A. Boltasseva, V. M. Shalaev, *Quantum dot emission enhancement via coupling with an epsilon-near-zero sublayer,* APL Quantum 3**,** 016106 (2026)

2025

[A81] T. Dickinson, I. Afxenti, G. Astrauskaite, L. Hirsch, S. Nerenberg, O. Jedrkiewicz, D. Faccio, C. Müllenbroich, A. Gatti, **M. Clerici**, and L. Caspani," Quantum-enhanced second harmonic generation beyond the photon pairs regime", *Science Advances* 11, eadw4820 (2025).

[A80] A. Gatti, **M. Clerici**, and L. Caspani, "Enhancing upconversion with space–time entanglement: from twin photons to twin-beams", *Optica Quantum* 3, 269-279 (2025).

[A79] A. Pozzoli, M. Lamperti, **M. Clerici**, M. Bondani, and A. Allevi, "Optimal generation of mesoscopic twin-beam states by means of a natively femtosecond laser system", *APL Photonics* 10, 036116 (2025).

[A78] B. Momgaudis, **M. Clerici,** V. Jukna, P. Di Trapani, and O. Jedrkiewicz, "Dynamics of Bessel beam induced graphitization of diamond: exploring the role of in-bulk plasma", *Optical Materials Express* 15, 614 (2025). Editor's Pick.

[A77] D. Adamou, L. Hirsch, T. Shields, S. Yoon, A.C. Dada, J. M.R. Weaver, D. Faccio, M. Peccianti, L. Caspani and **M. Clerici**, "Quantum-enhanced time-domain spectroscopy", *Science Advances* 11, eadt2187 (2025).

2024

[A76] I. Afxenti, L. Yu, T. Shields, D. Faccio, T. Bradley, L. Caspani, **M. Clerici**, and A. C. Dada, "Polarization purity and dispersion characteristics of nested antiresonant nodeless hollow-core optical fiber at near- and short-wave-IR wavelengths for quantum communications", *Optics Express* 32, 34471 (2024).

[A75] W. Jaffray, F. Belli, S. Stengel, M. A. Vincenti, M. Scalora, **M. Clerici**, V. M. Shalaev, A. Boltasseva, and M. Ferrera, "High-Order Nonlinear Frequency Conversion in Transparent Conducting Oxide Thin Films", *Advanced Optical Materials*, 2401249 (2024).

[A74] L. Hirsch, D. Adamou, D. Faccio, M. Peccianti, **M. Clerici**, "Design of an Optimized Terahertz Time-Domain Spectroscopy System Pumped by a 30 W Yb:KGW Source at a 100 kHz Repetition Rate with 245 fs Pulse Duration", *Applied Sciences 14*, 6688 (2024).

[A73] W. Jaffray, **M. Clerici**, B. Heijnen, A. Boltasseva, V. M. Shalaev, M. Ferrera, "Nonlinear Loss Engineering in Near-Zero-Index Bulk Materials", *Advanced Optical Materials*, 2301232 (2024).

2023

[A72] R. Löscher, V. Moreno, D. Adamou, D. K. Kesim, M.C. Schroeder, **M. Clerici**, J.-P. Wolf, C.J. Saraceno, "High-power sub-picosecond filamentation at 1.03 μm with high repetition rates between 10 and 100 kHz", *APL Photonics* 8, 111303 (2023).

[A71] T.-J. Wang, M. H. Ebrahim, I. Afxenti, D. Adamou, A. C. Dada, R. Li, Y. Leng, J.-C. Diels, D. Faccio, A. Couairon, C. Milián, and **M. Clerici,** "Cumulative Effects in 100 kHz Repetition-

Rate Laser-Induced Plasma Filaments in Air", *Advanced Photonics Research*, 2200338 (2023).

2022

[A70] T. Shields, A. C. Dada, L. Hirsch, S. Yoon, J. M. R. Weaver, D. Faccio, L. Caspani, M. Peccianti, and **M. Clerici**, "Electro-Optical Sampling of Single-Cycle THz Fields with Single-Photon Detectors", *Sensors* 22, 9432 (2022).

[A69] D. Shah, A. C. Dada, J. P. Grant, D. R. S. Cumming, C. Altuzarra, T. S. Nowack, A. Lyons, **M. Clerici**, D. Faccio, "An all-dielectric metasurface polarimeter", *ACS Photonics* 9, 3245 (2022).

[A68] W. Jaffray, E. Carnemolla, C. Dobas, F. Belli, M. Mackenzie, J. Travers, A. K. Kar, **M. Clerici**, C. DeVault, V. M. Shalaev, A. Boltasseva, and M. Ferrera, "Near-zero-index ultra-fast pulse characterization", *Nature Communications* 13, 3536 (2022).

2021

[A67] A. C. Dada, J. Kaniewski, C. Gawith, M. Lavery, R. H. Hadfield, D. Faccio, and **M. Clerici**, "Near-maximal two-photon entanglement for optical quantum communication at 2.1μm", *Physical Review Applied* 16, L051005 (2021).

[A66] M. H. Ebrahim, A. Marini, V. Bruno, N. Kinsey, J. B. Khurgin, D. Faccio, and **M. Clerici**, "Temporal Dynamics of Strongly Coupled Epsilon Near-Zero Plasmonic Systems", *Applied Physics Letters* 119, 221101 (2021).

[A65] E. G. Carnemolla, W. Jaffray, **M. Clerici**, L. Caspani, D. Faccio, F. Biancalana, C. Devault, V. M. Shalaev, A. Boltasseva, and M. Ferrera, Visible photon generation via four-wave mixing in near-infrared near-zero-index thin films, *Optics Letters* 46, 5433-5436 (2021).

[A64] S. May, **M. Clerici**, and M. Sorel, "Supercontinuum generation in dispersion engineered AlGaAs-on-insulator waveguides", *Scientific Reports* 11, 2052 (2021).

[A63] J. B. Khurgin, **M. Clerici**, and N. Kinsey, "Fast and Slow Nonlinearities in Epsilon-Near-Zero Materials", *Laser & Photonics Reviews* 15, 2000291 (2021).

2020

[A62] J. S. Totero Gongora, L. Peters, J. Tunesi, V. Cecconi, **M. Clerici**, A. Pasquazi, and M. Peccianti, "All-Optical Two-Color Terahertz Emission from Quasi-2D Nonlinear Surfaces", *Physical Review Letters* 125, 263901 (2020).

[A61] S. Prabhakar, T. Shields, A. C. Dada, M. Ebrahim, G. G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield and **M. Clerici**, "Two-photon quantum interference and entanglement at 2.1 μm", *Science Advances* 6, eaay5195 (2020).

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Post-deadline papers

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Invited talks

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[IT63] T. Dickinson, I. Afxenti, G. Astrauskaite, L. Hirsch, S. Nerenberg, O. Jedrkiewicz, A. Gatti, D. Faccio, C. Müllenbroich, M. Clerici, and L. Caspani, "Enhanced Entangled Second Harmonic Generation Beyond the Photon Pairs Regime", Ultrafast Optics UFO XIV, Azores, Portugal, October 5-10, 2025.

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[C139] R. Löscher, V. Moreno, D. Adamou, D. K. Kesim, M. C. Schroeder, M. Clerici, J.-P. Wolf, C. Saraceno, "Quasi-stationary hydrodynamics in high repetition rate filamentation", Optica High-brightness Sources and Light Driven Interaction Congres 2024, Vienna, Austria, March 12-14, 2024 (oral).

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[C129] T.-J. Wang, M. H. Ebrahim, I. Afxenti, D. Adamou, C. Milián, A. C. Dada, R. Li, Y. Leng, J.-C. Diels, D. Faccio, A. Couairon, and M. Clerici, "High-repetition-rate laser filaments in air", Photon2022, Nottingham, UK, August 30-September 2, 2022 (oral).

[C128] T. Shields, A. C. Dada, L. Hirsch, S. Yoon, J. M. R. Weaver, D. Faccio, L. Caspani, M. Peccianti, and M Clerici, "Electro-optical sampling of single-cycle THz fields with single-photon detectors", Photon2022, Nottingham, UK, August 30-September 2, 2022 (oral).

[C127] A. Dada, T. Shields, S. Prabhakar, M. Ebrahim, J. Kaniewski, G. G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield, D. Faccio, M. Clerici, "Generation and device-independent verification of near-maximal polarisation entanglement at 2.1 $\boldsymbol{\mu}$m", Photon2022, Nottingham, UK, August 30-September 2, 2022 (oral).

[C126] Y. Shah, A. C. Dada, J. Grant, D. C. Cumming, C. Altuzarra, T. Nowack, A. Lyons, M. Clerici, D. Faccio, "An all-Dielectric Metasurface Polarimeter", Novel Optical Materials and Applications (NOMA), Maastricht, Netherlands, July 24-28, 2022 (oral).

[C125] M. H. Ebrahim, A. Marini, V. Bruno, N. Kinsey, J. B. Khurgin, D. Faccio, M. Clerici, "Temporal Dynamics of Strongly Coupled Epsilon-Near-Zero Modes", Integrated Photonics Research (IPR), Maastricht, Netherlands, July 24-28, 2022 (oral).

2021

[C123] Juan S. Totero Gongora, Luke Peters, Jacob Tunesi, Vittorio Cecconi, Matteo Clerici, Alessia Pasquazi, and Marco Peccianti, "Phase-matching-free Two-color Terahertz Emission from Quasi-2D media,", CLEO US, May 9-14, 2021 (oral).

[C122] A. C. Dada, J. Kaniewski, C. Gawith, M. Lavery, R. H. Hadfield, D. Faccio, and M. Clerici, "Near-maximal Polarization Entanglement for Quantum Communications at 2.1 μm", Frontiers in Optics + Laser Science (FIO LS), 01 – 04 November 2021, online (oral).

[C121] A. C. Dada, J. Kaniewski, C. Gawith, M. Lavery, R. H. Hadfield, D. Faccio, and M. Clerici, "Near-maximal Polarization Entanglement for Device-Independent Quantum Key Distribution at 2.1 μm", QCrypt 2021, 23-27 August 2021 (oral).

[C120] A. Dada, T. Shields, S. Prabhakar, M. Ebrahim, G. G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield, and M. Clerici, "Generation and Characterization of Two-Photon Entanglement in the Midinfrared", SPIE Photonex + Vacuum Technologies, Glasgow, Scotland, United Kingdom, 28 - 30 September 2021 (oral).

[C119] A. Dada, J. Kaniewski, C. Gawith, M. Lavery, R. H. Hadfield, D. Faccio, M. Clerici, Near-maximal Polarisation Entanglement for Device-Independent Quantum Key Distribution at 2.1 μm, Quantum, Atomic, and Molecular Physics (QuAMP 2021), 31 August - 3 September 2021, Online (oral).

[C118] S. May, H. Mahmudlu, A. Angulo Martínez, M. Kues, A. C. Dada, M. Clerici, and M. Sorel, "Integrated nonlinear photonics in AlGaAs-on-insulator waveguides", Proc. SPIE 11689, Integrated Optics: Devices, Materials, and Technologies XXV, 116891C, SPIE OPTO, March 5, 2021 (oral).

[C117] M. H. Ebrahim, A. Marini, V. Bruno, D. Faccio, and M. Clerici, "Temporal Dynamics of Strongly-Coupled Epsilon Near-Zero Metasurfaces", META 2021, Warsaw, Poland, July 20-23, 2021 (oral).

[C116] M. H. Ebrahim, A. Marini, V. Bruno, D. Faccio, and M. Clerici, "Temporal Dynamics of Strongly Coupled Epsilon Near-Zero Plasmonic Systems", CLEO Europe - EQEC 2021, June 21-25, 2021 (oral).

2020

[C115] T. Shields, S. Prabhakar, A. Dada, M. Ebrahim, G. G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield, and M. Clerici, "Mid-infrared Quantum Interference and Polarization Entanglement", OSA High-brightness Sources and Light-driven Interactions Congress 2020 (EUVXRAY, HILAS, MICS), Washington, DC United States, November 16-20, 2020 (oral).

[C114] S. Prabhakar, T. Shields, A. Dada, M. Ebrahim, G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield, M. Clerici, "Mid-Infrared Two-Photon Interference and Entanglement", 7th Annual Bristol Quantum Information Technologies Workshop, April 27-29, 2020 (poster).

[C113] A. Dada, T. Shields, S. Prabhakar, M. Ebrahim, G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield, M. Clerici, Mid-infrared Two-Photon Interference and Entanglement, 9th EPS-QEOD Europhoton Conference, 30 August-4 September 2020 (virtual).

[C112] T. Shields, A. Dada, S. Prabhakar, M. Ebrahim, G. Taylor, D. Morozov, K. Erotokritou, S. Miki, M. Yabuno, H. Terai, C. Gawith, M. Kues, L. Caspani, R. H. Hadfield, M. Clerici, "Generation and detection of polarization entanglement at 2.1 micron", Quantum Technology International Conference, November 2-4, 2020 (virtual).

2019

[C111] S. Prabhakar, T. Shields, D. Powell, G. G. Taylor, D. Morozov, M. Ebrahim, M. Kues, L. Caspani, C. Gawith, R. H. Hadfield, and M. Clerici, "Generation and Detection of Photon Pairs at 2.080 μm by Spontaneous Parametric Down Conversion in a PPLN Crystal", Integrated Photonics Research, Silicon and Nanophotonics, Burlingame, California United States, 29 July–1 August 2019 (oral).

[C110] V. Bruno, S. Vezzoli, C. DeVault, V.M. Shalaev, A. Boltasseva, M. Clerici, M. Ferrera, D. Faccio, "Highly Efficient Frequency Shifting from Temporally Modulated Epsilon-Near-Zero Surfaces", CLEO/Europe-EQEC Conference, Munich, Germany, June 23-27, 2019 (oral).

[C109] T. Shields, S. Prabhakar, D. Powell, G. Taylor, D. Morozov, M. Ebrahim, M. Kues, L. Caspani, C. Gawith, R. Hadfield, and M. Clerici, "Photon Pair Generation at 2.080 μm by Down-conversion", CLEO/Europe-EQEC Conference, Munich, Germany, June 23-27, 2019 (oral).

[C108] J. S. Totero Gongora, L. Peters, J. Tunesi, M. Clerici, A. Pasquazi, and M. Peccianti, "Two-colour Surface Optical Rectification: Route to All-optical Control of Terahertz Emission from Quasi-2D structures", CLEO/Europe-EQEC Conference, Munich, Germany, June 23-27, 2019 (oral).

[C107] A. Tomasino, R. Piccoli, Y. Jestin, S. Delprat, M. Chaker, M. Peccianti, M. Clerici, A. Busacca, L. Razzari, and R. Morandotti, "Coherent Reconstruction of Ultra-broadband THz Pulses in a Silicon Nitride-based Solid-state Device", CLEO/Europe-EQEC Conference, June 23-27, 2019 (oral).

[C106] S. Prabhakar, T. Shields, D. Powell, G. Taylor, D. Morozov, M. Ebrahim, M. Kues, L. Caspani, C. Gawith, R. Hadfield, and M. Clerici, "Generation and Detection of Down-converted Photon Pairs at 2.080 μm", CLEO- US, San José, US, May 5-10, 2019 (poster).

[C105] T. Shields, S. Prabhakar, D. Powell, G. G. Taylor, D. Morozov, M. Ebrahim, M. Kues, L. Caspani, C. Gawith, R. H. Hadfield, and M. Clerici, "Generation and Detection of Down-converted Photon Pairs at 2.080 μm" , UK URSI Symposium 2019, National Physical Laboratory, 10 January 2019 (oral), best presentation award.

2018

[C104] A. Tomasino, R. Piccoli, Y. Jestin, A. Busacca, S. Delprat, M. Chaker, M. Peccianti, M. Clerici, L. Razzari, and R. Morandotti, "Silicon nitride-based deep sub-**λ** slit for ultra-broadband THz coherent detection", CLEO: QELS Fundamental Science, San José, US, May 13-18, 2018.

[C103] E.G. Carnemolla, V. Bruno, L. Caspani, M. Clerici, S. Vezzoli, T. Roger, C. DeVault, J. Kim, J. Shaltout, V. Shalaev, A. Boltasseva, D. Faccio, and M. Ferrera, "Giant nonlinear frequency shift in epsilon-near-zero aluminum zinc oxide thin films", CLEO: Science and Innovations, San José, US, May 13-18, 2018.

[C102] V. Bruno, S. Vezzoli, C. DeVault, T. Roger, V.M. Shalaev, A. Boltasseva, M. Ferrera, Marcello, M. Clerici, A. Dubietis, and D. Faccio, "Optical time reversal from time-dependent Epsilon-Near-Zero media", CLEO: QELS Fundamental Science, San José, US, May 13-18, 2018.

2017

[C101] P. Lassonde, B.E. Schmidt, Bruno E.; G. Ernotte, M. Clerici, R. Morandotti, H. Ibrahim, and F. Légaré, "Deep UV pulse shaping at 207 nm through Fourier-domain frequency upconversion", Frontier in Optics, Washington DC, United States, September 18-21, 2017.

[C100] B. E. Schmidt, V. Gruson, P. Lassonde, G. Ernotte, A. Leblanc, M. Clerici, R. Morandotti, L. DiMauro, P. B. Corkum, H. Ibrahim, and F. Legare, "Frequency domain Nonlinear Optics", Nonlinear Optics, Waikoloa, Hawaii United States, July 17–21, 2017.

[C099] A. Markov, A. Mazhorova, H. Breitenborn, A. Bruhacs, M. Clerici, D. Modotto, O. Jedrkiewicz, P. Di Trapani, A. Major, F. Vidal, and R. Morandotti, "Efficient Broadband Optical Parametric Amplification in Non-Uniform Bulk Crystals", CLEO: QELS Fundamental Science, San Jose, California, United States, May 14–19, 2017.

[C098] A. Tomasino, A. Mazhorova, M. Clerici, M. Peccianti, S.-P. Ho, Y. Jestin, A. Pasquazi, A. Markov, X. Jin, R. Piccoli, S. Delprat, M. Chaker, A. Busacca, J. Ali, L. Razzari, and R. Morandotti, "Affordable, ultra-broadband coherent detection of terahertz pulses via CMOS-

compatible solid-state devices", CLEO: QELS Fundamental Science, San Jose, California, United States, May 14–19, 2017.

[C097] H. Breitenborn, R. Naccache, A. Mazhorova, M. Clerici, R. Piccoli, L. K. Khorashad, A. O. Govorov, L. Razzari, F. Vetrone, and R. Morandotti, "Multi-dimensional Imaging in the Terahertz Regime for Theranostic Applications", CLEO: QELS Fundamental Science, San Jose, California, United States, May 14–19, 2017.

[C096] H. Breitenborn, R. Naccache, A. Mazhorova, M. Clerici, R. Piccoli, L. K. Khorashad, A. O. Govorov, L. Razzari, F. Vetrone, and R. Morandotti, "Multi-dimensional Imaging in the Terahertz Regime for Theranostic Applications", CLEO: QELS Fundamental Science, San Jose, California, United States, May 14–19, 2017.

[C095] B. E. Schmidt, P. Lassonde, G. Ernotte, M. Clerici, R. Morandotti, H. Ibrahim, and F. Légaré, "Linearizing Nonlinear Optics", CLEO: Science and Innovations, San Jose, California, United States, May 14–19, 2017.

2016

[C094] A.M. Shaltout, M. Clerici, N. Kinsey, R. Kaipurath, J. Kim, E. G. Carnemolla, D. Faccio, A. Boltasseva, V.M. Shalaev, and M. Ferrera, "Doppler-Shift Emulation Using Highly Time-Refracting TCO Layer", CLEO: QELS Fundamental Science, San José, US, June 5-10, 2016.

[C093] A. Mazhorova, M. Clerici, M. Peccianti, S.-P. Ho, L. Razzari, Y. Jestin, A. Pasquazi, A. Tomasino, A. Markov, R. Piccoli, A. Busacca, J. Ali, and R. Morandotti, "Asymmetric Dual-Grating Micro-Slit Configuration for Broadband Solid State Coherent Detection of THz Pulses", CLEO: Science and Innovations, San José, US, June 5-10, 2016.

[C092] A. Mazhorova, R. Naccache, M. Clerici, L. K. Khorashad, A. O. Govorov, L Razzari, F. Vetrone, and R. Morandotti, ""Teramometry" and Plasmonic Nanoparticle Imaging for Temperature-Sensing in the Terahertz Regime", CLEO: QELS Fundamental Science, San José, US, June 5-10, 2016.

[C091] A. Markov, A. Mazhorova, O. Yaakobi, M. Clerici, D. Modotto, O. Jedrkiewicz, P. Di Trapani, A. Major, F. Vidal, and R. Morandotti, "Autoresonant Three-Wave-Mixing in Non-Uniform Second-Order Nonlinear Bulk Crystals", CLEO: Science and Innovations, San José, US, June 5-10, 2016.

[C090] A.M. Shaltout, M. Clerici, N. Kinsey, R. Kaipurath, J. Kim, E. G. Carnemolla, D. Faccio, A. Boltasseva, V.M. Shalaev, and M. Ferrera, "Experimental Time-Varying Light Reflection in an Epsilon-Near-Zero Active Medium", 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics (Meta'16), Malaga, Spain, July 25-28, 2016.

[C089] C. DeVault, N. Kinsey, M. Clerici, J. Kim, E.G. Carnemolla, A. Shaltout, D. Faccio, V.M. Shalaev, M. Ferrera, and A. Boltasseva, "Simultaneous Contribution of Ultrafast Interband and Intraband Dynamics in Al:ZnO", 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics (Meta'16), Malaga, Spain, July 25-28, 2016.

[C088] L. Caspani, R. Kaipurath, M. Clerici, M. Ferrera, T. Roger, A. Di Falco, J. Kim, N. Kinsey, V. M. Shalaev, A. Boltasseva, D. Faccio, "Linear enhancement of the Kerr nonlinear index in the epsilon-near-zero regime", 7th International Conference on Metamaterials, Photonic Crystals and Plasmonics (Meta'16), Malaga, Spain, July 25-28, 2016.

2015

[C087] D. Faccio, R. Kaipurath, M. Pietrzyk, L. Caspani, T. Roger, M. Clerici and, A. Di Falco, "Resonant Dielectric, Semiconductor and Metallic Nanostructures", ICMAT2015, Suntec Singapore, June 28 – July 3, 2015 (poster).

[C086] C. Reimer, M. Kues, L. Caspani, B. Wetzel, P. Roztocki, M. Clerici, Y. Jestin, M. Ferrera, M. Peccianti, A. Pasquazi, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Integrated bi-chromatically pumped optical parametric oscillator for orthogonally polarized photon pair generation", Integrated Photonics Research, Silicon and Nano Photonics, Boston, US, June 27-July 1, 2015 (oral).

[C085] M. Clerici, M. Petev, N. Westerberg, E. Rubino, D. Moss, A. Couairon, F. Légaré, R. Morandotti, and D. Faccio, "Stimulated Emission of Dispersive Waves", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C084] M. Clerici, Y. Hu, P. Lassonde, C. Milián, A. Couairon, D. Christodoulides, Z. Chen, L. Razzari, F. Légaré, D. Faccio, Roberto Morandotti, "Guiding Discharges Around Obstacles", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C083] M. Clerici, S.-P. Ho, A. Mazhorova, M. Peccianti, A. Pasquazi, L. Razzari, J. Ali, and R. Morandotti, "Micro-Slit Assisted Coherent Broadband Terahertz Detection", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C082] M. Missori, J. Bagniuk, M. Clerici, J. Lojewska, M. Misiti, L. Peters, R. Morandotti, A. Mosca Conte, O. Pulci, L. Teodonio, C. Violante, and M. Peccianti, "Terahertz Waves for Ancient Manuscripts Conservation", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (poster).

[C081] A. Pasquazi, M. Peccianti, M. Clerici, C. Conti, and R. Morandotti, "Collapse Arrest in Instantaneous Kerr Media via Parametric Interactions", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C080] L. Caspani, C. Reimer, M. Clerici, M. Ferrera, M. Kues, M. Peccianti, A. Pasquazi, L. Razzari, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Wavelength-Multiplexed Heralded Single Photon Source on a Chip", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C079] L. Caspani, C. Reimer, M. Kues, B. Wetzel, P. Roztocki, M. Clerici, Y. Jestin, M. Ferrera, M. Peccianti, A. Pasquazi, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Direct Generation of Cross-Polarized Photons on a Chip", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C078] R. K. Kaipurath, M. Pietrzyk, L. Caspani, T. Roger, M. Clerici, D. Faccio, and A. Di Falco," Nonlinear Epsilon-Near-Zero Metamaterials", CLEO/Europe-EQEC, Munich, Germany, June 21-25, 2015 (oral).

[C077] M. Pietrzyk, R. K. Kaipurath, L. Caspani, T. Roger, M. Clerici, D. Faccio, A. Di Falco, "Nonlinear properties of epsilon near zero metamaterials," EuroNanoForum 2015, Riga, Latvia 2015, June 10-12, 2015, (poster).

[C076] M. Clerici, Y. Hu, P. Lassonde, C. Milián, A. Couairon, D. Christodoulides, Z. Chen, L. Razzari, F. Légaré, D. Faccio, Roberto Morandotti, "Laser Guided Curved Electric Discharges", CLEO, San José, US, May 10-15, 2015 (oral).

[C075] D. Faccio, S. Rao, A. Lyons, T. Roger, M. Clerici, "Coherent control of negative refraction in grapheme", NanoMeta 2015, Seefeld, Austria, January 5-8, 2015 (oral).

2014

[C074] M. Missori, A. Mosca Conte, J. Bagniuk, M. Clerici, J. Łojewska, M. C. Misiti, R. Morandotti , M. Peccianti, O. Pulci, L. Teodonio, C. Violante "UV/Vis-IR-THz spectroscopy for conservation studies of ancient paper", International Workshop THz-ARTE, ENEA-Frascati, Italy, December 2-3 (2014).

[C073] C. Reimer, L. Caspani, Y. Jestin, M. Clerici, M. Ferrera, M. Peccianti, A. Pasquazi, B. Little, S. Chu, D. Moss, R. Morandotti, "Direct Generation of Orthogonally Polarized Photon Pairs via Spontaneous Non-Degenerate FWM on a Chip", Frontiers in Modern Optics (FIO) 2014, Tucson, Arizona, US, October 19-23, 2014 (oral).

[C072] S.-P. Ho, A. Mazhorova, M. Shalaby, M. Peccianti, M. Clerici, A. Pasquazi, Y. Ozturk, J. B. Ali, R. Morandotti, "Grating-patterned sub-wavelength terahertz beam characterization via an all- optical knife-edge technique," SPIE Photonics Asia, Beijing, China, October 9-11, 2014 (oral).

[C071] D. Faccio, T. Roger, F. Biancalana, M. Petev, M. Clerici, R. Morandotti, F. Légaré, D. Majus, G. Tamosauskas, A. Dubietis, A. Couairon, P. Panagiotopoulos, M. Kolesik, and G. Genty, "Resonant Radiation Physics in Collapsing Light Pulses", Advanced Laser Technology, Cassis, France, October 6-10, 2014 (oral).

[C070] C. Reimer, L. Caspani, Y. Jestin, M. Clerici, M. Ferrera, M. Peccianti, A. Pasquazi, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Direct generation of orthogonally polarized photon pairs on a chip via spontaneous non-degenerate FWM", Nonlinear Photonics, Barcelona, Spain, July 27-31, 2014 (oral).

[C069] A. Pasquazi, M. Peccianti, M. Clerici, C. Conti, R. Morandotti, "Collapse Arrest in Instantaneous Kerr Media via Parametric Interactions", Nonlinear Photonics, Barcelona, Spain, July 27-31, 2014. (oral).

[C068] M. Clerici, A. Mazhorova, S. P. Ho, M. Peccianti, A. Pasquazi, L. Razzari, J. Ali, R. Morandotti, "On Chip Broadband Terahertz Detection via Four-Wave Mixing in Electrically Biased Silica Micro-Slits", Nonlinear Photonics, Barcelona, Spain, July 27-31, 2014 (oral).

[C067] C. Reimer, L. Caspani, M. Clerici, M. Ferrera, M. Kues, M. Peccianti, A. Pasquazi, L. Razzari, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Integrated source of multiplexed heralded photons", IEEE Summer Topicals, Montreal, July 14-16, Canada, 2014 (oral).

[C066] O. Yaakobi, A. Mazhorova, M. Clerici, G. Dupras, D. Modotto, F. Vidal, and R. Morandotti, "Autoresonant Harmonic Generation in Nonuniform Crystals," CLEO, San José, US, June 8-13, 2014 (oral).

[C065] A. Mazhorova, S.-P. Ho, M. Clerici, M. Peccianti, A. Pasquazi, L. Razzari, J. Ali, and R Morandotti, "Terahertz Field Induced Second Harmonic Coherent Detection Scheme Based on a Biased Nonlinear Micro-slit," CLEO, San José, US, June 8-13, 2014 (oral).

[C064] R. Naccache, A. Mazhorova, M. Clerici, L. Razzari, F. Vetrone, R. Morandotti, "Plasmonic Heating and Temperature-Sensing in the Terahertz Regime - Thermometry and Imaging," CLEO, San José, US, June 8-13, 2014 (oral).

[C063] M. K. Mridha, A. Mazhorova, M. Clerici, I. Al-Naib, M. Daneau, X. Ropagnol, M. Peccianti, C. Reimer, M. Ferrera, L. Razzari, F. Vidal, and R. Morandotti, CLEO, San José, US, June 8-13, 2014 (poster).

[C062] L. Caspani, C. Reimer, M. Clerici, M. Ferrera, M. Peccianti, A. Pasquazi, L. Razzari, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Integrated Source of Multiplexed Photon Pairs," CLEO, San José, US, June 8-13, 2014 (oral).

[C061] C. Reimer, L. Caspani, Y. Jestin, M. Clerici, M. Ferrera, M. Peccianti, A. Pasquazi, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Orthogonally polarized correlated photon pair generation on a chip via self-pumped spontaneous non-degenerate FWM," CLEO, San José, US, June 8-13, 2014, (oral).

[C060] M. Ferrera, C. Reimer, A. Pasquazi, M. Peccianti, M. Clerici, L. Caspani, B. E. Little, S. T. Chu, R. Morandotti, and D. J. Moss, "Characterization of ultra-high repetition rate mode-locked lasers with an integrated all-optical RF spectrum analyzer", CLEO, San José, US, June 8-13, 2014 (oral).

[C059] S.-P. Ho, A. Mazhorova, M. Shalaby, M. Peccianti, M. Clerici, A. Pasquazi, Y. Ozturk, J. Ali, and R. Morandotti, "Rectangular-shaped sub-wavelength terahertz beam profiling via an all-optical knife-edge technique," CLEO, San José, US, June 8-13, 2014 (poster).

[C058] C. Reimer, L. Caspani, M. Clerici, M. Ferrera, M. Kues, M. Peccianti, A. Pasquazi, L. Razzari, B. E. Little, S. T. Chu, D. J. Moss, and R. Morandotti, "Multiplexed Photon-Pair Source on a Chip", Fotonica, Naples, May 12-14, Italy, 2014 (oral).

2013

[C057] R. Naccache, M. Clerici, F. Vetrone, R. Morandotti, "Interaction of Terahertz Radiation with Plasmonic Nanostructures", Materials Science & Technology 2013, October 27-31, Montreal, Canada, 2013 (oral).

[C056] M. Clerici, M. Peccianti, B. E. Schmidt, L. Caspani, M. Shalaby, M. Giguère, A. Lotti, A. Couairon, F. Légaré, T. Ozaki, D. Faccio, and R. Morandotti, "A Scaling Mechanism for Increasing the Terahertz Emission from Ionization of Air", CLEO, San José, US, June 9-14, 2013 (oral).

[C055] S. P. Ho, M. Shalaby, M. Peccianti, M. Clerici, A. Pasquazi, Y. Ozturk, J. Ali, and R. Morandotti, "Terahertz Characterization via an All-Optical, Ultra-Thin-Knife-Edge Technique", CLEO, San José, US, June 9-14, 2013 (oral).

[C054] M. K. Mridha, A. Mazhorova, M. Daneau, M. Clerici, M. Peccianti, P.-L. Lavertu, X. Ropagnol, F. Vidal, and R. Morandotti, "Low Dispersion Propagation of Broadband THz Pulses in a Two-Wire Waveguide", CLEO, San José, US, June 9-14, 2013 (oral).

[C053] O. Yaakobi, L. Caspani, M. Clerici, F. Vidal, and R. Morandotti, "Complete Pump Depletion by Autoresonant Wave Mixing in Nonuniform Second Order Media", CLEO, San José, US, June 9-14, 2013 (poster).

[C052] M. Clerici, L. Caspani, E. Rubino, M. Peccianti, M. Cassataro, A. Busacca, T. Ozaki, D. Faccio, and R. Morandotti, "Counter-Propagating Difference Frequency Mixing in Diamond with Terahertz Waves", CLEO, San José, US, June 9-14, 2013 (oral).

[C051] A. Pasquazi, M. Peccianti, M. Clerici, C. Buscemi, A. Busacca, and R. Morandotti, "Observation of Collapse Arrest in Pure Kerr Media Sustained by a Parametric Interaction", CLEO, San José, US, June 9-14, 2013 (oral).

[C050] H. P. Bazargani, J.-B. Quélène, P. Dumais, A. Malacarne, M. Clerici, R. Morandotti, C. Callender, and J. Azaña, "On-chip single-shot and real-time self-referenced phase characterization of GHz-rate telecommunication signals", CLEO, San José, US, June 9-14, 2013 (oral).

[C049] M. K. Mridha, M. Daneau, A. Mazhorova, M. Clerici, M. Peccianti, P.-L. Lavertu, X. Ropagnol, F. Vidal, R. Morandotti, "Two-Wire waveguides for Broadband, Low-Dispersion Propagation of Terahertz Pulses", Photonics North 2013, Ottawa, Canada, June 3-5, 2013 (oral).

[C048] O. Yaakobi, L. Caspani, M. Clerici, F. Vidal, and R. Morandotti, "Autoresonant three-wave mixing in inhomogeneous media", Photonics North 2013, Ottawa, Canada, June 3-5, 2013 (oral).

[C047] S. P. Ho, M. Shalaby, M. Peccianti, M. Clerici, A. Pasquazi, Y. Ozturk, J. Ali, and R. Morandotti, "An All-Optical, Zero-Thickness Knife-Edge For Terahertz Characterization", Photonics North 2013, Ottawa, Canada, June 3-5, 2013 (oral).

[C046] M. Clerici, M. Peccianti, B. E. Schmidt, L. Caspani, M. Shalaby, M. Giguère, A. Lotti, A. Couairon, F. Légaré, T. Ozaki, D. Faccio and R. Morandotti," Scaling of the Terahertz Emission From Laser Induced Plasma with Increasing Pump Wavelength", Photonics North 2013, Ottawa, Canada, June 3-5, 2013 (oral).

[C045] M. Clerici, L. Caspani, E. Rubino, M. Peccianti, M. Cassataro, A. Busacca, T. Ozaki, D. Faccio, and R. Morandotti,"Counter-Propagating Four-Wave Mixing in Diamond with Terahertz Waves", Photonics North 2013, Ottawa, Canada, June 3-5, 2013 (oral).

[C044] M. Clerici, L. Caspani, E. Rubino, M. Peccianti, M. Cassataro, A. Busacca, T. Ozaki, D. Faccio, R. Morandotti, "Electric-Field Induced Second-Harmonic FROG Characterization of Long-Wavelength, Few-Cycle Pulses", CLEO/Europe-IQEC, Munich, Germany, May 12-16, 2013 (oral).

[C043] S. P. Ho, M. Peccianti, M. Clerici, A. Pasquazi, L. Caspani, F. Buccheri, J. Ali, A. Busacca, and R. Morandotti, "Exact Reconstruction of Sub-wavelength THz Source Profile via Combination of Knife-edge Technique and Time-domain Spectroscopy", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (poster).

[C042] S. P. Ho, M. Shalaby, M. Peccianti, M. Clerici, A. Pasquazi, Y. Ozturk, J. Ali, and R. Morandotti, "A Novel Optical Approach for THz Radiation Features Characterization", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (oral).

[C041] L. Razzari, A. Toma, M. Clerici, M. Shalaby, G. Das, C. Liberale, M. Chirumamilla, R. Proietti Zaccaria, F. De Angelis, M. Peccianti, R. Morandotti, and E. Di Fabrizio, "Resonant Nanoantennas for Terahertz Light", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (oral).

[C040] M. Kumar Mridha, M. Daneau, A. Mazhorova, M. Clerici, M. Peccianti, P.-L. Lavertu, X. Ropagnol, F. Vidal, and R. Morandotti, "Low Dispersion, broadband propagation of THz pulses in a Two-Wire waveguide", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (poster).

[C039] M. Clerici, M. Peccianti, B. E. Schmidt, L. Caspani, M. Shalaby, M. Giguère, A. Lotti, A. Couairon, F. Légaré, T. Ozaki, D. Faccio, and Roberto Morandotti, "Scaling of the Terahertz Field From Two-Color Driven Gas Ionization With Increasing Pump Wavelength", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (poster).

[C038] M. Clerici, D. Faccio, L. Caspani, M. Shalaby, M. Peccianti, B. E. Schmidt, O. Yaakobi, F. Vidal, F. Légaré, T. Ozaki, and R. Morandotti, "THz-Optical Four-Wave Mixing in Air and Coherent N_2^+ Emission", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (oral).

[C037] M. Clerici, L. Caspani, E. Rubino, M. Peccianti, M. Cassataro, A. Busacca, T. Ozaki, D. Faccio, and R. Morandotti, "Counter-Propagating Four-Wave Mixing in Diamond with Terahertz Waves", International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (poster).

[C036] M. Shalaby, M. Peccianti, Y. Ozturk, M. Clerici, I. Al-Naib, L. Razzari, A. Mazhorova, M. Skorobogatiy, and R. Morandotti, "Broadband THz Faraday Rotation in a Magnetic Liquid",

International Workshop on Optical Terahertz Science and Technology (OTST), Kyoto, Japan, April 1-5, 2013 (poster).

[C035] D. Faccio and Others, "Enhanced single cycle THz pulse generation and applications in nonlinear THz photonics", US-UK Workshop in Mid-IR to THz Technology and Applications, Royal Society of Edinburgh, 22-24 George Street, Edinburgh, UK, February 18-19, 2013 (oral).

[C034] M. Clerici, M. Peccianti, B. E. Schmidt, L. Caspani, M. Shalaby, M. Giguère, O. Yaakobi, A. Lotti, F. Vidal, A. Couairon, F. Légaré, T. Ozaki, D. Faccio, and R. Morandotti, "Envelope and field effects in the nonlinear interaction of broadband terahertz fields and optical pulses in air", San Francisco, CA, US, February 2-7, 2013 (oral).

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[C033] M. Peccianti, A. Pasquazi, L. Caspani, L. Razzari, M. Ferrera, D. Duchesne, M. Clerici, B. Little, S. T. Chu, D. J. Moss, and R Morandotti, "Parametric oscillation in CMOScompatible microring resonators induced with a self-locking scheme", Latin America Optics & Photonics Conference (Laop), São Sebastião, Brazil, November 10-13, 2012 (poster).

[C032] A. Pasquazi, M. Peccianti, L. Caspani, L. Razzari, M. Ferrera, D. Duchesne, M. Clerici, B. E. Little; S. T. Chu; D. J. Moss and R. Morandotti, "A self-locking scheme for robust parametric oscillation in CMOS-compatible microring resonators", FIO (Frontiers in Optics) 2012, Rochester, New York, US, October 14-18, 2012 (oral).

[C031] A. Pasquazi, M. Peccianti, L. Caspani, L. Razzari, M. Ferrera, D. Duchesne, M. Clerici, B. E. Little, S. T. Chu, D. J. Moss, R. Morandotti, "Self-locked OPO in CMOS-compatible microring resonators", Nonlinear Photonics, Colorado Springs, US, June 17-21, 2012 (oral).

[C030] M. Peccianti, M. Clerici, M. Shalaby, L. Caspani, A. Lotti, A. Couairon, D. Cooke, T. Ozaki, D. Faccio, R. Morandotti, "Terahertz Field Detection Boost by Nonlinear Collapse of Normally Dispersed Optical Pulses", Nonlinear Photonics, Colorado Springs, US, June 17-21, 2012 (poster).

[C029] M. Shalaby, M. Peccianti, Y. Ozturk, M. Clerici, I. Al-Naib, L. Razzari, A. Mazhorova, M. Skorobogatiy, T. Ozaki, and R. Morandotti, "Broadband THz Faraday rotation in a magnetic liquid", Photonics North Conference, Montreal, Canada, June 6-8, 2012 (poster).

[C028] Y. Ozturk, M. Shalaby, M. Clerici, J.-Y. Hwang, A. Pignolet, R. Morandotti, "Ultrafast laser-induced spin dynamics of cerium and bismuth co-modified iron garnet thin film", Photonics North Conference, Montreal, Canada, June 6-8, 2012 (oral).

[C027] M. Clerici, D. Faccio, M. Shalaby, M. Giguère, B. E. Schmidt, M. Peccianti, L. Caspani, F. Légaré, T. Ozaki, and R. Morandotti, "Electric-field characterization of long wavelength, few-cycles pulses by electric field-induced second-harmonic FROG", Photonics North Conference, Montreal, Canada, June 6-8, 2012 (oral).

[C026] M. Clerici, M. Peccianti, M. Shalaby, L. Caspani, A. Lotti, A. Couairon, D. Cooke, T. Ozaki, D. Faccio, and R. Morandotti, "Chirp enhanced Broadband THz detection in gas", Photonics North Conference, Montreal, Canada, June 6-8, 2012 (oral).

[C025] M. Shalaby, M. Peccianti, Y. Ozturk, M. Clerici, I. Al- Naib, L. Razzari, A. Mazhorova, M. Skorobogatiy, T. Ozaki, and R. Morandotti, "Magnetic field induced switching of terahertz pulses in a liquid", Photonics North Conference, Montreal, Canada, June 6-8, 2012 (oral).

[C024] P. Tannouri, M. Clerici, M. Peccianti, M.J. Strain, A. Pasquazi, S. P. Ho, K. A. Rutkowska, M. Sorel and R. Morandotti, "Notch Nonlinear Frequency Blue Shift and Observation of Second

Harmonic Generation in AlGaAs Bragg Grating Waveguides", Photonics North Conference, Montreal, Canada, June 6-8, 2012 (oral).

[C023] Y. Hu, M. Li, D. Bongiovanni, M. Clerici, Z. Chen, J. Azana, R. Morandotti, "High-intensity self-accelerating Airy pulses and controllable spectral shifting in nonlinear Kerr media", CLEO, San José, US, May 6-11, 2012 (oral).

[C022] M. Clerici, D. Faccio, M. Shalaby, M. Giguère, B. E. Schmidt, M. Peccianti, F. Légaré, T. Ozaki, R. Morandotti, "Electric-Field Induced Second-Harmonic FROG Characterization of Long-Wavelength, Few-Cycle Pulses", CLEO, San José, US, May 6-11, 2012 (oral).

[C021] M. Clerici, M. Peccianti, M. Shalaby, L. Caspani, A. Lotti, A. Couairon, D. G. Cooke, T. Ozaki; D. Faccio; R. Morandotti, "Enhanced Detection of Broadband Terahertz Fields via the Filamentation of Chirped Optical Pulses", CLEO, San José, US, May 6-11, 2012 (oral).

[C020] L. Caspani, M. Peccianti, A. Pasquazi, M. Clerici, Luca Razzari, B. E. Little, S. T. Chu, D. J. Moss, R. Morandotti, "Self-locked low threshold OPO in a CMOS-compatible microring resonator", CLEO, San José, US, May 6-11, 2012 (oral).

[C019] M. Shalaby, M. Peccianti, Y. Ozturk, L. Razzari, M. Clerici, A. Mazhorova, M. Skorobogatiy, T. Ozaki, R. Morandotti, "Polarization-sensitive Magnetic Field Induced Modulation of Broadband THz Pulses in Liquid", CLEO, San José, US, May 6-11, 2012 (oral).

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[C018] G. Valiulis, V. Jukna, O. Jedrkiewicz, M. Clerici, E. Rubino, P. DiTrapani, " X pulse formation via phase-mismatched second harmonic generation", 39th Lithuanian national physics conference, Vilnius, Lithuania, October 7, 2011 (oral).

[C017] M. Clerici, M. Peccianti, M. Shalaby, T. Ozaki, D. Cooke, D. Faccio, and R. Morandotti, "Enhanced Detection of Broadband Terahertz Field by Filamentation of Chirped Optical Pulses", 2011 IEEE Photonic Society Annual Meeting, Arlington, Virginia, US, October 9-13, 2011 (oral).

[C016] P. Tannouri, M. Clerici, M. Peccianti, A. Pasquazi, M.J. Strain, S.P. Ho, I. Rowe, K.A. Rutkowska, M. Sorel, R. Morandotti, "Nonlinear Notch Shift in AlGaAs Bragg Grating Waveguides", 7th International Workshop on Fibre Optics and Passive Components (WFOPC 2011), Montreal, Canada, July 13-15 (poster).

[C015] P.K. Bates, S. Teichmann, S. Cousin, A. Gru□n, A. Couairon, M. Clerici, A. Lotti, D. Faccio, P. Di Trapani and J. Biegert, "Angle-frequency analysis of high-order harmonic generation", 20th International Laser Physics Workshop (LPHYS'11), Sarajevo, Bosnia and Herzegovina, July 11–15, 2011 (oral).

[C014] P. Tannouri, M.J. Strain, M. Clerici, M. Peccianti, A. Pasquazi, S.P. Ho, I. Rowe, K.A. Rutkowska, M. Sorel, R. Morandotti, "Nonlinear Notch Blue-Shift in AlGaAs Bragg Grating Waveguides", Advanced Photonics Congress, Toronto, Canada, June 12-15, 2011 (oral).

[C013] P. Tannouri, M. Clerici, M. Peccianti, A. Pasquazi, M.J. Strain, S.P. Ho, I. Rowe, K.A. Rutkowska, M. Sorel, R. Morandotti, "Exploitation d'effets non-linéaires dans un guide d'ondes d'AlGaAs à réseau de Bragg pour la commutation tout-optique", Colloque de Plasma-Québec 2011, Montreal, Canada, May 25-27, 2011 (poster).

[C012] P. Tannouri, M. Clerici, M. Peccianti, A. Pasquazi, M.J. Strain, S.P. Ho, I. Rowe, K.A. Rutkowska, M. Sorel, R. Morandotti, "Nonlinear Notch Blue-Shift in AlGaAs Bragg Grating Waveguides", 13th Photonics North Conference, Ottawa, Canada, May 16-18, 2011 (oral).

[C011] M. Clerici, M. Peccianti, M.J. Strain, P. Tannouri, A. Pasquazi, S.P. Ho, I. Rowe, K.A. Rutkowska, M. Sorel, R. Morandotti, "Notch Nonlinear Frequency Shift in AlGaAs Bragg Grating Waveguides", CLEO, Baltimore, US, May 1-6, 2011 (oral).

[C010] M. Peccianti, S. P. Ho, F. Buccheri, M. Clerici, A. Busacca, T. Ozaki, J. Ali, R. Morandotti, "Space-time features of THz emission from optical rectification in sub-wavelength areas", CLEO, Baltimore, US, May 1-6, 2011 (oral).

[C009] S.P. Ho, M. Peccianti, F. Buccheri, M. Clerici, A. Busacca, T. Ozaki, J. Ali, R. Morandotti, "Space-time features of THz emitted from optical rectification occurring in sub-wavelength scales", Photonics North, Ottawa, Canada, May 16-18, 2011 (oral).

[C008] S.P. Ho, M. Clerici, M. Peccianti, F. Buccheri, A. Busacca, T. Ozaki, J. Ali, R. Morandotti, "Spatio-temporal characteristics of THz emission at the subwavelength scale via optical rectification", OSA Topical Meeting, Optical Sensors (Sensors), Toronto, Canada, June 12-15, 2011 (oral).

[C007] S.P. Ho, M. Peccianti, F. Buccheri, M. Clerici, A. Busacca, T. Ozaki, J. Ali, R. Morandotti, "Space-time features of THz emitted from optical rectification occurring in sub-wavelength scales", OTST, Santa Barbara, California, March 13-17, 2011 (poster).

[C006] P.K. Bates, S. Teichmann, S. Cousin, A. Grun, J. Biegert, A. Couairon, M. Clerici, A. Lotti, D. Faccio, P. Di Trapani, "Angle-frequency analysis of high-order harmonic generation", High Intensity Lasers and High Field Phenomena (HILAS), Istanbul, Turkey, February 16, 2011 (oral).

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[C005] M. Clerici, O. Jedrkiewicz, E. Rubino, L. Tartara, D. Faccio, V. Degiorgio, P. Di Trapani, "Spatiotemporal pulse shaping via seeded optical parametric amplification", EOS annual meeting 2008, Paris, France, 2008 (oral). Selected for a free publication of the reported results in JEOS:RP, EOS.

[C004] M. Clerici, D. Faccio, A. Averchi, O. Jedrkiewicz, S. Tzortzakis, D.G. Papazoglou, F. Bragheri, L. Tartara, A. Trita, S. Henin, I. Cristiani, A. Couairon, P. Di Trapani, "Spontaneous Bessel Beam Formation and Filamentation in Presence of Two-Photon Absorption", EOS annual meeting, Paris, France, 2008 (oral). Selected for a free publication of the reported results in JEOS:RP, EOS.

[C003] O. Jedrkiewicz, M. Clerici, D. Faccio, and P. Di Trapani, "Generation and control of coherent conical pulses in seeded optical parametric amplification" Ultrafast Phenomena Conference, Stresa, Italy, 2008 (poster).

2006

[C002] O. Jedrkiewicz, M. Clerici, A. Picozzi, D. Faccio and P. Di Trapani, "Emergence of X-shaped spatiotemporal coherence in optical waves", EOS Annual Meeting, Paris, France, 2006 (oral).

[C001] M. Clerici, O. Jedrkiewicz, A. Picozzi, D. Faccio and P. Di Trapani, "Experimental Evidence of X-shaped Spatiotemporal Coherence of Superfluorescence Radiation", FIO (Frontiers In Optics, Rochester), New York, US, 2006 (oral).

Seminars & Workshops

[SW18] M. Clerici, "Quantum Enhanced Time Domain Spectroscopy", University of Konstanz, Konstanz, Germany. 01 July 2025, Seminar.

[SW17] M. Clerici, "Quantum Enhanced Time Domain Spectroscopy", invited contribution at the workshop "*Quantum-Enhanced Spectroscopies For Biosystems*", organized by the Facoltà

di Scienze Matematiche, Fisiche e Naturali, Dipartimento di Matematica e Fisica "Niccolò Tartaglia", Università Cattolica del Sacro Cuore, Brescia, Italy. 16 June 2025. Workshop.

[SW16] M. Clerici, "Quantum Enhanced Time Domain Spectroscopy", University of Brescia, Brescia, Italy. 12 February 2025. Seminar.

[SW15] M. Clerici, "Attoscience – a Nobel journey", University of Insubria, Como, Italy. 7 February 2024. Seminar.

[SW14] M. Clerici, "Quantum optics in the infrared", Bochum University, Germany. 29 August 2022. Seminar.

[SW13] M. Clerici, "Quantum optics in the infrared", University of Insubria, Italy. 23 June 2021. Seminar.

[SW12] M. Clerici, "Controlling optical nonlinearities of transparent conducting oxides at the epsilon-near-zero", Personal invitation to participate in Ministry of Defence sponsored joint UK-Israel metamaterial workshop, 58 Prince's Gate South Kensington. 22 May 2019. Workshop.

[SW11] M. Clerici, "Controlling optical nonlinearities of transparent conducting oxides at the epsilon-near-zero", University of Sussex, UK. 13 December 2018. Seminar.

[SW10] M. Clerici, "Broadband Terahertz photonics and future perspectives", School of Physics and Astronomy, University of Glasgow, UK. 2 December 2016. Seminar.

[SW09] M. Clerici, "Air breakdown with lasers: THz, lightening and more", School of Physics and Astronomy, University of Glasgow, UK. 6 April 2016. Seminar.

[SW08] M. Clerici, "Novel THz technologies", State Key Laboratory on Integrated Optoelectronics, Institute of Semiconductors, Chinese Academy of Sciences, Beijing, China. 11 October 2014. Seminar.

[SW07] M. Clerici, "Recent Trends in THz Spectroscopy and Plasmonics: a Threefold Perspective", Department of Electronic Engineering, The Chinese University of Hong Kong, China. 16 May 2014. Seminar.

[SW06] M. Clerici, "Filling the terahertz gap", Heriot-Watt University, School of Engineering and Physical Sciences, EH14 4AS, Edinburgh, UK. 2014. Seminar.

[SW05] M. Clerici, "Filling the terahertz gap", Universitá degli Studi Dell'Insubria, via Valleggio 11, 22100 Como, Italy. 11 January 2013. Seminar.

[SW04] M. Clerici, "Terahertz pulses from laser-induced ionization of air and their interaction with optical fields", Department of Physics and Astronomy University of New Mexico, 800 Yale Blvd. NE Albuquerque, NM 87131, US. 11 October 2012. Seminar.

[SW03] M. Clerici, M. Peccianti, L. Caspani, A. Pasquazi, S. P. Ho, F. Buccheri, T. Ozaki, A. Busacca, J. Ali, and R. Morandotti, "Novel Trend in Photonics 2012", INRS-EMT, Varennes, Canada. 8 February 2012. Workshop.

[SW02] M. Clerici, M. Peccianti, L. Caspani, A. Pasquazi, S.P. Ho, F. Buccheri, M. Shalaby, T. Ozaki, A. Busacca, J. Ali, A. Lotti, A. Couairon, D. Faccio, D. Cooke and R. Morandotti, "Novel development in THz Science: imaging and detection", Invited contribution at a Workshop at Tsinghua University, Beijing, China. 25 September 2011. Workshop

[SW01] M. Clerici, "Ultra-short laser pulse spatio-temporal shaping and novel propagation properties", INRS-EMT, Varennes, Canada, April 2010. Seminar.

BOOKS, BOOKS CHAPTERS AND PROCEEDINGS

Books & Monographs

[BO1] "Frontiers in Modern Optics", Proceedings of the International School of Physics "Enrico Fermi", Course 190, Società Italiana di Fisica. Edited by D. Faccio, J. Dudley and M. Clerici, 2016.

[BO2] "Ultra-Short Laser Pulse Spatio-Temporal Shaping and Novel Propagation Properties", Matteo Clerici, Lulu Press Inc, ISBN13 9781446650714, 2010.

Conference Proceedings & Book Chapters

[CP3] A. Mazhorova, M.K. Mridha, M. Daneau, M. Clerici, M. Peccianti, P.-L. Lavertu, X. Ropagnol, F. Vidal, R. Morandotti, "Low Dispersion Propagation of Broad-Band THz Pulses in a Two-Wire Waveguide", in Nano-Structures for Optics and Photonics, pages 533-535, Springer Netherlands, 2015.

[CP2] D. Faccio, F. Belgiorno, S. Cacciatori, M. Clerici, V. Gorini, G. Ortenzi, L. Rizzi, E. Rubino, V.G. Sala, "Analogue gravity and ultrashort laser pulse filamentation", Nonlinear Optics and Applications IV-Proc. of SPIE, 7728, p. 77280M-1 (2010).

[CP1] O. Jedrkiewicz, M. Clerici, D. Faccio and P. Di Trapani, "Generation and control of coherent conical pulses in seeded optical parametric amplification", Ultrafast Phenomena XVI in Springer Series in Chemical Physics, 92, Part 9, 825-827 (2009).