

Academic career

- Born in 1951 (Italy)
- Degree in Nuclear Engineering from Politecnico di Milano in 1976
- From 1977 to 1987 Researcher of the National Research Council (CNR)
- In 1984-85 visiting scientist at MIT (Cambridge, USA)
- From 1988 to 1993 Faculty member of Politecnico di Milano, as Associate Professor in Physics
- From 1994 to 2021 Full Professor in Physics at the same University
- From 2022 Professor Emeritus at the same University

Key experiences

- Developments of picosecond lasers and applications to photo-physics and to photo-chemistry
- Resonator design of solid-state lasers of high brightness
- Development of femtosecond lasers
- Femtosecond optical parametric amplifiers in the near infrared and in the visible
- Applications of ultrashort laser pulses to non-linear optics and to the study of ultrafast processes in polymers and quantum confined systems
- Pulse compression of high-energy femtosecond pulses by non-linear techniques
- Coherent vibrational dynamics in organic molecules
- High order harmonic generation for production of coherent radiation in the XUV
- Attosecond science

Main professional activities

- Member of the Optical Society of America and of the European Physical Society.
- Topical Editor of Optics Letters in the area of "Ultrafast Phenomena" (1998-2003).
- Chairman of CLEO/Europe-EQEC steering committee from 2005 to 2009.
- President of the Board of the "Quantum Electronics and Optics Division" of EPS, coordinating the activities in Europe in the field of optics and photonics (2002-2004)
- Director of the European Laser Facility "Centre for Ultrafast Science and Biomedical Optics" (CUSBO) at the Department of Physics of Politecnico di Milano, from 2002 to 2020. This facility provides access to European research groups for performing experiments in a broad area of laser applications. CUSBO is part of the network of European Laser Facilities "LASERLAB-Europe", funded by EU through several framework programs.
- Member of the Steering Committee of ELI Preparatory Phase (2007-2011), an ESFRI roadmap project.
- Chairman of the Scientific Advisory Committee of ELI-ALPS from 2013-2019.
- Chairman of the International Scientific and Technical Advisory Committee (ISTAC) of ELI Delivery Consortium from 2016-2019.
- Chairman of the General Assembly of LASERLAB-Europe AISBL from 2018-2020.
- Ministerial delegate in the General Assembly of ELI-ERIC from 2021.
- Member of scientific review committees of several international research institutes.

Honours

- Fellow of the Optical Society of America and of the European Physical Society
- "Enrico Fermi" 2020 prize of Società Italiana di Fisica

Citation Report by Web of Science

Products: 373

Citations: 15.819

h-index: 60

15 most cited articles

- 1) ***“Isolated single-cycle attosecond pulses”***
Sansone, G.; Benedetti, E.; Calegari, F.; Vozzi, C.; Avaldi, L.; Flammini, R.; Poletto, L.; Villoresi, P.; Altucci, C.; Velotta, R.; Stagira, S.; De Silvestri, S.; Nisoli, M., *SCIENCE*, **2006** 314, 443: **CIT 1397**
- 2) ***“Compression of high-energy laser pulses below 5 fs”***
Nisoli, M; De Silvestri, S; Svelto, O; Szipocs, R; Ferencz, K; Spielmann, C; Sartania, S; Krausz, F, *OPTICS LETTERS*, **1997** 22, 522: **CIT 889**
- 3) ***Generation of high energy 10 fs pulses by a new pulse compression technique***
Nisoli, M; De Silvestri, S; Svelto, O, *APPLIED PHYSICS LETTERS*, **1996** 68, 2793: **CIT 822**
- 4) ***Ultrafast optical parametric amplifiers***
Cerullo, G; De Silvestri, S, *REVIEW OF SCIENTIFIC INSTRUMENTS*, **2003** 74, 1: **CIT 698**
- 5) ***Absolute-phase phenomena in photoionization with few-cycle laser pulses***
Paulus, GG; Grasbon, F; Walther, H; Villoresi, P; Nisoli, M; Stagira, S; Priori, E; De Silvestri, S, *NATURE*, **2001** 414, 182: **CIT 621**
- 6) ***Tracing photoinduced electron transfer process in conjugated polymer/fullerene bulk heterojunctions in real time***, Brabec, CJ; Zerza, G; Cerullo, G; De Silvestri, S; Luzzati, S; Hummelen, JC; Sariciftci, S, *CHEMICAL PHYSICS LETTERS*, **2001** 340, 232: **CIT 532**
- 7) ***Femtosecond writing of active optical waveguides with astigmatically shaped beams***, Osellame, R; Taccheo, S; Marangoni, M; Ramponi, R; Laporta, P; Polli, D; De Silvestri, S; Cerullo, G, *J. OF THE OPT. SOC. OF AM. B-OPTICAL PHYSICS*, **2003** 20, 1559: **CIT 319**
- 8) ***Generalized molecular orbital tomography***, Vozzi, C.; Negro, M.; Calegari, F.; Sansone, G.; Nisoli, M.; De Silvestri, S.; Stagira, S., *NATURE PHYSICS*, **2011** 7, 822: **CIT 318**
- 9) ***3-Pulse Scattering for femtosecond dephasing studies – Theory and experiments***
Weiner, AM; De Silvestri, S; Ippen, EP, *J. OF THE OPT. SOC. OF AM. B-OPTICAL PHYSICS*, **1985** 2, 654: **CIT 267**
- 10) ***Sub-8-fs pulses from an ultrabroadband optical parametric amplifier in the visible***, Cerullo, G; Nisoli, M; Stagira, S; De Silvestri, S, *OPTICS LETTERS*, **1998** 23, 1283: **CIT 228**
- 11) ***Nonadiabatic three-dimensional model of high-order harmonic generation in the few-optical-cycle regime***, Priori, E; Cerullo, G; Nisoli, M; Stagira, S; De Silvestri, S; Villoresi, P; Poletto, L; Ceccherini, P; Altucci, C; Bruzzese, R; de Lisio, C, *PHYSICAL REVIEW A*, **2000** 61, 63801: **CIT 227**
- 12) ***Dynamics of electron-magnon interaction and ultrafast demagnetization in thin iron films***, E. Carpene, E. Mancini, C. Dallera, M. Brenna, E. Puppini, and S. De Silvestri, *Phys. Rev. B* **78**, **2008**, 174422: **CIT 225**
- 13) ***Photosynthetic light harvesting by carotenoids: Detection of an intermediate excited state***
Cerullo, G; Polli, D; Lanzani, G; De Silvestri, S; Hashimoto, H; Cogdell, RJ, *SCIENCE*, **2002** 298, 2395: **CIT 215**
- 14) ***Generation of 3.8-fs pulses from adaptive compression of a cascaded hollow fiber supercontinuum***, Schenkel, B; Biegert, J; Keller, U; Vozzi, C; Nisoli, M; Sansone, G; Stagira, S; De Silvestri, S; Svelto, O, *OPTICS LETTERS*, **2003** 28, 1987: **CIT 200**
- 15) ***Femtosecond micromachining of symmetric waveguides at 1.5 μ m by astigmatic beam focusing***, Cerullo, G; Osellame, R; Taccheo, S; Marangoni, M; Polli, D; Ramponi, R; Laporta, P; De Silvestri, S, *OPTICS LETTERS*, **2002** 27, 1938: **CIT 182**

RELEVANT PUBLICATION LIST

1. A. Andreoni, R. Cubeddu, S. De Silvestri, P. Laporta, O. Svelto "Time-delayed two-step selective laser photodamage of dye-biomolecules complexes", **Phys. Rev. Lett.** **45**, 431 (1980).
2. S. De Silvestri, P. Laporta, O. Svelto "Analysis of quarter-wave dielectric-mirror dispersion in femtosecond dye-laser cavities", **Opt. Lett.** **9**, 335 (1984).
3. A.M. Weiner, S. De Silvestri, E.P. Ippen "Three-pulse scattering for femtosecond dephasing studies: theory and experiments", **J. Opt. Soc. Am. B** **2**, 654 (1985).
4. S. De Silvestri, J. Fujimoto, E.P. Ippen, E.B. Gamble, L.R. Williams, K.A. Nelson "Femtosecond time-resolved observations of optic phonon dephasing by stimulated Raman scattering in α -perylene crystal from 20-300 K", **Chem. Phys. Lett.** **116**, 146 (1985).
5. S. De Silvestri, P. Laporta, V. Magni "14-Watt continuous wave mode-locked Nd:YAG laser", **Opt. Lett.** **11**, 785 (1986).
6. S. De Silvestri, P. Laporta, V. Magni, O. Svelto "Radially variable reflectivity output coupler of novel design for unstable resonators", **Opt. Lett.** **12**, 84 (1987).
7. M. Nisoli, S. De Silvestri, V. Magni, O. Svelto, R. Danielius, A. Piskarskas, G. Valiulis, A. Varanavicius "Highly efficient parametric conversion of femtosecond Ti:Sapphire laser pulses at 1 kHz" **Opt. Lett.** **19**, 1973 (1994).
8. M. Nisoli, V. Magni, S. De Silvestri, O. Svelto, D. Campi, C. Coriasso "Study of exciton dynamics in InGaAs/InP quantum wells using a femtosecond optical parametric amplifier", **Appl. Phys. Lett.** **66**, 227 (1995).
9. W. Graupner, G. Leising, G. Lanzani, M. Nisoli, S. De Silvestri, U. Scherf "Femtosecond relaxation of photoexcitations in a poly(para-phenylene)-type ladderpolymer", **Phys. Rev. Lett.** **76**, 847 (1996).
10. M. Nisoli, S. De Silvestri, O. Svelto "Generation of high energy 10 fs pulses by a new pulse compression technique", **Appl. Phys. Lett.** **68**, 2793 (1996).
11. M. Nisoli, S. De Silvestri, G. Valiulis, A. Varanavicius "Fivefold femtosecond pulse compression by sum frequency generation", **Appl. Phys. Lett.** **68**, 3540 (1996).
12. M. Nisoli, S. De Silvestri, O. Svelto, R. Scholtz, R. Fanciulli, V. Pellegrini, F. Beltram, F. Bassani "Single-electron subpicosecond coherent dynamics in KBr F-centers", **Phys. Rev. Lett.** **77**, 3463 (1996).
13. M. Nisoli, S. De Silvestri, D. Campi, and C. Coriasso "Ultrafast transmittance changes induced by exciton or carrier photogeneration in InGaAs/InP quantum wells" **J. Opt. Soc. Am. B** **14**, 1870 (1997).
14. M. Nisoli, S. De Silvestri, O. Svelto, R. Szipöcs, K. Ferencz, Ch. Spielmann, S. Sartania, F. Krausz "Compression of high energy laser pulses below 5 fs", **Opt. Lett.** **22**, 522 (1997).
15. M. Nisoli, S. Stagira, S. De Silvestri, A. Stella, P. Tognini, P. Cheyssac, R. Kofman "Ultrafast electronic dynamics in solid and liquid gallium nanoparticles", **Phys. Rev. Lett.** **78**, 3575 (1997).
16. G. Lanzani, S. Frolov, P. A. Lane, Z. V. Vardeny, M. Nisoli, S. De Silvestri "Transient spectroscopy of Frenkel and charge transfer excitons in α -sexithienyl films", **Phys. Rev. Lett.** **79**, 3066-3069 (1997).
17. M. Nisoli, S. Stagira, S. De Silvestri, O. Svelto, G. Valiulis, and A. Varanavicius "Parametric generation of high-energy 14.5-fs light pulses at 1.5 μm ", **Opt. Lett.** **23**, 630 (1998).
18. G. Cerullo, M. Nisoli, S. Stagira, and S. De Silvestri "Sub-8-fs pulses from an ultrabroadband optical parametric amplifier in the visible", **Opt. Lett.** **23**, 1283 (1998).
19. W. Graupner, G. Cerullo, G. Lanzani, M. Nisoli, E. J. W. List, G. Leising, S. De Silvestri "Direct observation of ultrafast field-induced charge generation in ladder-type poly(para-phenylene)", **Phys. Rev. Lett.** **81**, 3259 (1998).
20. G. Cerullo, M. Nisoli, S. Stagira, S. De Silvestri, G. Tempea, F. Krausz, K. Ferencz "Mirror-dispersion-controlled sub-10-fs optical parametric amplifier in the visible", **Opt. Lett.** **24**, 1529 (1999).
21. G. Cerullo, G. Lanzani, M. Muccini, C. Taliani, S. De Silvestri "Real-time vibronic coupling dynamics in a prototypical conjugated oligomer" **Phys. Rev. Lett.** **83**, 231 (1999).
22. E. Priori, G. Cerullo, M. Nisoli, S. Stagira, S. De Silvestri, P. Villoresi, L. Poletto, P. Ceccherini, C. Altucci, R. Bruzzese, C. de Lisio "Non-adiabatic three-dimensional model of high-order harmonic generation in the few-optical cycle regime", **Phys. Rev. A** **61**, 63801-1-8 (2000).

23. P. Villorosi, P. Ceccherini, L. Poletto, G. Tondello, C. Altucci, R. Bruzzese, C. de Lisio, M. Nisoli, S. Stagira, G. Cerullo, S. De Silvestri, O. Svelto "Spectral features and modelling of high-order harmonics generated by sub-10-fs pulses", **Phys. Rev. Lett.** **85**, 2494 (2000).
24. G.G. Paulus, F. Grasbon, H. Walther, P. Villorosi, M. Nisoli, S. Stagira, E. Priori, S. De Silvestri "Absolute-phase phenomena in photoionization with few-cycle laser pulses", **Nature** **414**, 182 (2001).
25. G. Lanzani, G. Cerullo, M. Zavelani-Rossi, S. De Silvestri, D. Comoretto, G. Musso, G. Dellepiane "Triplet excitons generation mechanism in a new soluble (red-phase) polydiacetylene", **Phys. Rev. Lett.** **87**, 187402 (2001).
26. M. Zavelani-Rossi, G. Cerullo, S. De Silvestri, L. Gallmann, N. Matuschek, G. Steinmeyer, U. Keller, G. Angelow, V. Scheuer, T. Tschudi "Pulse compression over a 170-THz bandwidth in the visible by use of only chirped mirrors", **Opt. Lett.** **26**, 1155 (2001).
27. R.A.G. Cinelli, V. Tozzini, V. Pellegrini, F. Beltram, G. Cerullo, M. Zavelani-Rossi, S. De Silvestri, M. Tyagi, M. Giacca "Coherent dynamics of photoexcited green fluorescent proteins", **Phys. Rev. Lett.** **86**, 3439 (2001).
28. M. Nisoli, E. Priori, G. Sansone, S. Stagira, G. Cerullo, S. De Silvestri, C. Altucci, R. Bruzzese, C. de Lisio, P. Villorosi, L. Poletto, M. Pascolini, G. Tondello "High-Brightness High-Order Harmonic Generation by Truncated Bessel Beams in the Sub-10-fs Regime", **Phys. Rev. Lett.** **88**, 33902 (2002).
29. G. Cerullo, D. Polli, G. Lanzani, S. De Silvestri, H. Hashimoto, R. Cogdell "New insight on photosynthetic light harvesting by carotenoids with ultrafast studies", **Science** **298**, 2395 (2002).
30. B. Schenkel, J. Biegert, U. Keller, C. Vozzi, M. Nisoli, G. Sansone, S. Stagira, S. De Silvestri, O. Svelto "Generation of 3.8 fs pulses from adaptive compression of a cascaded hollow fiber supercontinuum", **Opt. Lett.** **28**, 1987 (2003)
31. F. Grasbon, G. G. Paulus, H. Walther, P. Villorosi, G. Sansone, S. Stagira, M. Nisoli, S. De Silvestri "Above-threshold ionization at the few-cycle limit", **Phys. Rev. Lett.** **91**, 173003 (2003).
32. G. Cerullo, S. De Silvestri "Ultrafast optical parametric amplifiers", **Rev. Sci. Instr.** **74**, 1 (2003).
33. M. Nisoli, G. Sansone, S. Stagira, S. De Silvestri, C. Vozzi, M. Pascolini, L. Poletto, P. Villorosi, G. Tondello, "Effects of carrier-envelope phase differences of few-optical-cycle light pulses in single-shot high-order-harmonic spectra", **Phys. Rev. Lett.** **91**, 213905 (2003).
34. G. Sansone, C. Vozzi, S. Stagira, M. Pascolini, L. Poletto, P. Villorosi, G. Tondello, S. De Silvestri, M. Nisoli "Observation of carrier-envelope phase phenomena in the multi-optical-cycle regime", **Phys. Rev. Lett.** **92**, 113904 (2004).
35. D. Polli, G. Cerullo, G. Lanzani, S. De Silvestri, K. Yanagi, H. Hashimoto, R.J. Cogdell, "Conjugation length dependence of internal conversion in carotenoids: role of the intermediate state", **Phys. Rev. Lett.** **93**, 163002 (2004).
36. C. Manzoni, G. Cerullo, S. De Silvestri, "Ultrabroadband self-phase-stabilized pulses by difference-frequency generation", **Opt. Lett.** **29**, 2668 (2004).
37. M. Labardi, M. Allegrini, M. Zavelani-Rossi, D. Polli, G. Cerullo, S. De Silvestri, O. Svelto, "Highly efficient second-harmonic nanosource for near-field optics and microscopy", **Opt. Lett.** **29**, 62 (2004)
38. M. Labardi, M. Zavelani-Rossi, D. Polli, G. Cerullo, M. Allegrini, S. De Silvestri, O. Svelto "Characterization of femtosecond light pulses coupled to hollow-pyramid near-field probes: localization in space and time", **Appl. Phys. Lett.** **86**, 031105 (2005).
39. C. Vozzi, M. Nisoli, J-P. Caumes, G. Sansone, S. Stagira, S. De Silvestri, M. Vecchiocattivi, D. Bassi, M. Pascolini, L. Poletto, P. Villorosi, G. Tondello, "Cluster effects in high-order harmonics generated by ultrashort light pulses", **Appl. Phys. Lett.** **86**, 111121 (2005).
40. G. Sansone, E. Benedetti, J-P. Caumes, S. Stagira, C. Vozzi, M. Pascolini, L. Poletto, P. Villorosi, S. De Silvestri, M. Nisoli, "Measurement of harmonic phase differences by interference of attosecond light pulses", **Phys. Rev. Lett.** **94**, 193903 (2005).
41. F. Calegari, S. Stagira, C. D'Andrea, G. Valentini, C. Vozzi, M. Nisoli, S. De Silvestri, L. Poletto, P. Villorosi, A. Faenov, T. Pikuz, "Table-top soft x-ray imaging of nanometric films", **App. Phys. Lett.** **89**, 111122 (2006).

42. G. Sansone, E. Benedetti, J.-P. Caumes, S. Stagira, C. Vozzi, S. De Silvestri, M. Nisoli. "Control of long electron quantum paths in high-order harmonic generation by phase-stabilized light pulses", **Phys. Rev. A** **73**, 053408 (2006).
43. C. Manzoni, C. Vozzi, E. Benedetti, G. Sansone, S. Stagira, O. Svelto, S. De Silvestri, M. Nisoli, G. Cerullo, "Generation of high-energy self-phase-stabilized pulses by difference-frequency generation followed by optical parametric amplification" **Opt. Lett.** **31**, 963 (2006).
44. C. Vozzi, G. Cirimi, C. Manzoni, E. Benedetti, F. Calegari, G. Sansone, S. Stagira, O. Svelto, S. De Silvestri, M. Nisoli, G. Cerullo "High-energy, few-optical-cycle pulses at 1.5 μm with passive carrier-envelope phase stabilization", **Optics Express** **14**, 10109 (2006).
45. D. Polli, G. Cerullo, G. Lanzani, S. De Silvestri, H. Hashimoto, R. J. Cogdell, " Carotenoid-bacteriochlorophyll energy transfer in LH2 complexes studied with 10-fs time resolution" **Biophys. J.** **90**, 2486 (2006).
46. G. Sansone, E. Benedetti, F. Calegari, C. Vozzi, L. Avaldi, R. Flammini, L. Poletto, P. Villoresi, C. Altucci, R. Velotta, S. Stagira, S. De Silvestri, M. Nisoli, " Isolated single cycle attosecond pulses", **Science** **314**, 443 (2006).
47. C. Vozzi, F. Calegari, E. Benedetti, S. Gasilov, G. Sansone, G. Cerullo, M. Nisoli, S. De Silvestri, and S. Stagira, "Millijoule-level phase-stabilized few-optical-cycle infrared parametric source," **Opt. Lett.** **32**, 2957 (2007)
48. F. Calegari, G. Valentini, C. Vozzi, E. Benedetti, J. Cabanillas-Gonzalez, A. Faenov, S. Gasilov, T. Pikuz, L. Poletto, G. Sansone, P. Villoresi, M. Nisoli, S. De Silvestri, and S. Stagira, "Elemental sensitivity in soft x-ray imaging with a laser-plasma source and a color center detector," **Opt. Lett.** **32**, 2593 (2007)
49. F. Calegari, C. Vozzi, S. Gasilov, E. Benedetti, G. Sansone, M. Nisoli, S. De Silvestri, and S. Stagira" Rotational Raman Effects in the Wake of Optical Filamentation", **Phys. Rev. Lett.** **100**, 123006 (2008)
50. E. Carpenne, E. Mancini, C. Dallera, M. Brenna, E. Puppini, S. De Silvestri "Dynamics of electron-magnon interaction and ultrafast demagnetization in thin iron films ", **Phys. Rev. B** **78**, 174422 (2008)
51. D. Polli, M.R. Antognazza, D. Brida, G. Lanzani, G. Cerullo, S. De Silvestri "Broadband pump-probe spectroscopy with sub-10-fs resolution for probing ultrafast internal conversion and coherent phonons in carotenoids", **Chem. Phys.** **350**, 45 (2008)
52. C. Vozzi, F. Calegari, F. Frassetto, L. Poletto, G. Sansone, P. Villoresi, M. Nisoli, S. De Silvestri, and S. Stagira, "Coherent continuum generation above 100 eV driven by an ir parametric source in a two-color scheme", **Phys. Rev. A** **79**, 033842 (2009).
53. C. Vozzi, R. Torres, M. Negro, L. Brugnera, T. Siegel, C. Altrucci, R. Velotta, F. Frassetto, L. Poletto, P. Villoresi, S. De Silvestri, S. Stagira, J.J. Marangos "High harmonic generation spectroscopy of hydrocarbons", **Appl. Phys. Letters** **97**, 241103 (2010).
54. C. Altucci, R. Velotta, V. Tosa, P. Villoresi, F. Frassetto, L. Poletto, C. Vozzi, F. Calegari, M. Negro, S. De Silvestri, S. Stagira, "Interplay between group-delay-dispersion-induced polarization gating and ionization to generate isolated attosecond pulses from multicycle lasers", **Opt. Letters** **35**, 2798 (2010).
55. A. Bassi, D. Brida, C. D'Andrea, G. Valentini, R. Cubeddu, S. De Silvestri, G. Cerullo, "Time-gated optical projection tomography", **Opt. Letters** **35**, 2732 (2010).
56. C. Vozzi, M. Negro, F. Calegari, G. Sansone, M. Nisoli, S. De Silvestri, S. Stagira, "Generalized molecular orbital tomography", **Nature Physics** **7**, 822 (2011)
57. F. Calegari, M. Lucchini, M. Negro, C. Vozzi, L. Poletto, O. Svelto, S. De Silvestri, G. Sansone, S. Stagira, M. Nisoli, "Temporal gating methods for the generation of isolated attosecond pulses" **J. Phys. B: Atomic, Molecular and Optical Physics** **45**, 074002 (2012)
58. M. Negro, M. Devetta, D. Faccialá, S. De Silvestri, C. Vozzi, S. Stagira, "High-order harmonic spectroscopy for molecular imaging of polyatomic molecules" *Faraday Discussions*, **171**, 133-143 (2014).
59. A. Trabatttoni, T. Oksenhendler, H. Joussetin, G. Tempea, S. De Silvestri, G. Sansone, F. Calegari, M. Nisoli, "Self-referenced spectral interferometry for single-shot measurement of sub-5-fs pulses", **Rev. Scient. Instr.** **86**, 113106 (2015)
60. L. Moretti, L. Criante, G. Lanzani, S. De Silvestri, G. Cerullo, F. Scotognella, "Field-Induced Stimulated Emission in a Polymer-Liquid Crystal Mixture" **J. Phys. Chem. C** **119**, 23632-23637 (2015)

61. D. Faccialà, S. Pabst, B.D. Bruner, A.G. Ciriolo, S. De Silvestri, M. Devetta, M. Negro, H. Soifer, S. Stagira, N. Dudovich, C. Vozzi, "Probe of Multielectron Dynamics in Xenon by Caustics in High-Order Harmonic Generation", **Phys. Rev. Letters** 117, 093902 (2016)
62. Perri, A., Gaida, J.H., Farina, A., Preda, F., Viola, D., Ballottari, M., Hauer, J., De Silvestri, S., D'Andrea, C., Cerullo, G., Polli, D., "Time- and frequency-resolved fluorescence with a single TCSPC detector via a Fourier-transform approach" **Optics Express**, 26, 2270-2279 (2018)
63. Cerullo, G., De Silvestri, S., Manzoni, C., "Optical parametric amplifiers" **Encyclopedia of Modern Optics**, 1-5, 290-301 (2018)
64. Lucchini, M., Lucarelli, G.D., Murari, M., Trabattoni, A., Fabris, N., Frassetto, F., De Silvestri, S., Poletto, L., Nisoli, M., "Few-femtosecond extreme-ultraviolet pulses fully reconstructed by a ptychographic technique", **Optics Express**, 26, 6771-6784 (2018)
65. Valensise, C.M., Kumar, V., de la Cadena, A., De Silvestri, S., Cerullo, G., Polli, D. "Vibrational phase imaging by stimulated Raman scattering via polarization-division interferometry", **Optics Express**, 27, 19407-19417 (2019)
66. G. Crippa, D. Faccialà, P.P. Geetha, A. Pusala, M. Musheghyan, A. Assion, M. Bonanomi, E. Cinquanta, A. G. Ciriolo, M. Devetta, D. Fazzi, L. Gatto, S. De Silvestri, C. Vozzi, S. Stagira, "Time-domain spectroscopy of methane excited by resonant high-energy mid-IR pulses", **Journal of Physics: Photonics**, 3, 034020 (2021)
67. C. Trovatiello, G. Piccinini, S. Forti, F. Fabbri, A. Rossi, S. De Silvestri, C. Coletti, G. Cerullo, S. Dal Conte, "Ultrafast hot carrier transfer in WS₂/graphene large area heterostructures", **npj 2D Materials and Applications**, 24 (2022)