

Francesco Scotognella
Curriculum Vitae**Academic Records:**

- Since Nov 2011 **Associate Professor** in Physics at Politecnico di Milano (*Professore Associato*)
Ultrafast spectroscopy of inorganic nanocrystals, conjugated material and hybrid nanostructure with transient absorption including optical parametric amplification, times resolved photo luminescence
- Since 2012 Affiliated to the Center of NanoScience and Technology (CNST), Italian Institute of Technology (IIT) – Collaborations: Lberato Manna, Guglielmo Lanzani
Ultrafast studies of carbon based low dimensional materials and fabrication and development of photonic structures for switches and lasers
- Nov 2011 – Jan 2018 **Assistant Professor** in Physics at Politecnico di Milano (*Ricercatore*)
- 2014 – 2016 Associated to the Institute of Photonics and Nanotechnology, National Council of Research, Italy (CNR) – Collaborations: Maurizio Ferrari, Roberta Ramponi
Modeling, fabrication and characterization of disordered photonic structures
- Jul - Sep 2013 **Tan Chin Tuan Visiting Professor**, School of Electrical & Electronic Engineering, Nanyang Technological University, Singapore. – Collaboration: Professor Cesare Soci
Development of a custom made optical parametric amplifier based ultrafast transient absorption system for the characterization of hybrid nanostructures
- 2010 - 2011 **Postdoctoral fellow** at Politecnico di Milano - Professor Guglielmo Lanzani
Active participation (also administrative) in the European Project PHOTO-FET (Grant Agreement Number 248052).
Ultrafast studies of nanocrystals. Photonic integration of optical components, as microfluidic chips and light emitting/sensing transistors, for the realization of biomedical optical sensors. The realized optical sensors have been designed for cardiovascular disease monitoring.
- 2010 - 2011 **Adjunct Professor** (*Professore a contratto*) at Università degli Studi di Milano-Bicocca
Co-lecturer of Physics of Molecular Materials
- 2009 PhD (*Dottore di ricerca*) in *Materials Science*. Thesis defence: Dec 18th 2009.
- 2006 - 2009 PhD program at Università degli Studi di Milano-Bicocca. Supervisor: Professor Riccardo Tubino. Field: nanostructured materials for photonics. Developed a method for the preparation of alternating polymeric and nanoparticle layers with different refractive index with spin coating technique. Demonstrated *lasing in polymeric and nanoparticle dielectric periodic structures*.
- Mar - Oct 2008 **Visiting Scientist** at the University of Toronto, Canada - Professor G. A. Ozin.
Realization of sensing platforms for several vapours, liquids and biomolecules by using different materials chemistry strategies.
- 2006 Graduation from the University of Milano-Bicocca, Italy: Laurea magistrale (equivalent to Masters) in Material Science and Engineering. Master thesis entitled “Organic complexes of lanthanide ions for optical amplification” under the supervision of Professor Francesco Meinardi and Professor Riccardo Tubino.
- 2004 Graduation from the University of Parma, Italy: Laurea (equivalent to Bachelor) in Physics with a focus on magnetic nanostructures. Bachelor thesis entitled: “Characterization of magnetic nanostructures fabricated with radio-frequency (RF) sputtering”, under the supervision of Professor Luciano Tarricone and Dr. Giuseppe Turilli.

Citation Records:

Sum of the times cited: **1581** (Web of Science), **1684** (Scopus), **2069** (Google Scholar);
h-index: **22** (Web of Science), **23** (Scopus), **26** (Google Scholar).

Project activity:

- 2016 Marie Curie project. Localized Surface Plasmon Resonance in doped semiconductor nanocrystals (SONAR). Grant Agreement no. 734690. **Coordinator**. Website: <http://www.sonar-h2020.eu/>
- 2015 Marie Curie project. Supramolecularly eNginEered arCHitectures for optoelectRONics and photONICS: a multi-site initial training action (SYNCHRONICS). Work package leader.
- 2013 Cariplo 2013. Green nanomaterials for next-generation photovoltaics (GREENS). Duration: 24 months. Participant.
- 2013 Italian-Israeli Project. Ultrafast dynamics of light induced charge separation in hybrid semiconductor-metal nanoparticle photocatalysts (ULTRAFast NANO). Duration: 24 months. Participant.
- 2013 EU project LLP. Organic Electronics and Applications (OREA). Duration: 24 months. Participant.
- 2012 Cariplo 2012. Doped colloidal Nanocrystal Heterostructures for transformational breakthrough in Solid-state lighting (EDONHIST). Duration: 24 months. 280 k€. **Scientific Responsible** for Politecnico di Milano. 90 k€
- 2012 Cariplo 2012. Micro-laser based on rod-shaped self-assembling colloidal semiconductor nanocrystals (NANOCRYSLAS). Duration: 24 months. Participant.
- 2012 PRIN 2010-2011. Dispositivi Solari a Coloranti di Nuova Generazione: Sensibilizzatori e Conduttori Nano-Ingegnerizzati (DSSCX). Protocol No. 20104XET32. Duration: 36 months. about 772 k€. **Scientific Responsible** for Politecnico di Milano. about 93 k€
- 2010 EU project STREP. Integrated Photonic Field-Effect Technology for bio-sensing functional components (PHOTO-FET). Duration: 36 months. Participant.

Supervision of graduate students and postdoctoral fellows:

Postdoctoral fellows: Giuseppe M. Paternò, IT, SYNCHRONICS project; Ilka Kriegel, D, EDONHIST project; Marcelo Alcocer, UK, DSSCX project.

PhD students: Michele Guizzardi, IT; Luca Moretti, IT; Diana Figueroa, Cuba; Sameer Guduru, India; Eduardo Aluicio Sarduy, Cuba.

Supervisor of 5 Master thesis and 20 Bachelor thesis.

Committees:

- 1) Plasmonica2013 Workshop nazionale di plasmonica e applicazioni, Milano, 1-3 July 2013. Organizing Committee.
- 2) International Conference on Quantum Dots (QD 2014), Pisa, 11-16 May 2014, Co-organizer.
- 3) European Optical Society Biennial Meeting (EOSAM) 2018, TOM 7 - Organic & Hybrid Semiconductor Materials and Devices, 8 – 12 October 2018, Delft, Netherlands (http://www.myeos.org/events/eosam2018_tom7). Co-chairman.

Affiliations and Professional Service:

- Member of the American Chemical Society (2009)

- Member of SIF, Società Italiana di Fisica (2009)

- Referee for peer-reviewed journals: *Journal of Physical Chemistry*, *Synthetic Metals*, *Optical Materials*, *Journal of Intelligent Material Systems and Structures*, *Chemical Physics Letters*, *Journal of Nanoscience and Nanotechnology*, *Optics Communications*, *Chemistry of Materials*, *Journal of the American Chemical Society*, *Thin Solid Films*, *Physical Review Letters*, *ACS Nano*, *ACS Applied Materials & Interfaces*, *Laser and Photonics Reviews*, *Journal of Materials Chemistry C*.

Teaching experience:

2017 - 2018 **Lecturer** (Experimental Physics for Mechanics/Aerospace/Energy Engineers), at Politecnico di Milano.

- 2012 - 2017 **Lecturer** (Experimental Physics for Civil and Environmental Engineers), at Politecnico di Milano.
- 2011 - 2012 Teaching Assistance (Experimental Physics for Aerospace/Energetic/Mechanic Engineers), for Prof. Giulio Cerullo and Prof. Alberto Tagliaferri, at Politecnico di Milano.
- 2010 - 2011 **Co-lecturer**, with Prof. R. Tubino, of the course "*Physics of Molecular Materials*" at Università di Milano Bicocca.
- 2011 Teaching Assistance (Experimental Physics for Aerospace/Energetic/Mechanic Engineers), for Prof. Giulio Cerullo and Prof. Alberto Tagliaferri, at Politecnico di Milano.
- 2011 Laboratory Tutoring (Experimental Physics for Aerospace/Energetic/Mechanic Engineers), for Prof. Giulio Cerullo and Prof. Alberto Tagliaferri, at Politecnico di Milano.
- 2010 Teaching Assistance (Experimental Physics for Civil Engineers), for Prof. Margherita Zavelani-Rossi, at Politecnico di Milano.
- 2010 Laboratory Tutoring (Experimental Physics for Civil Engineers), for Prof. Margherita Zavelani-Rossi, at Politecnico di Milano.
- 2009 – 2010 Lessons on *Organic Photovoltaics and Dye Sensitized Solar Cells* for the course *Physics of Molecular Materials* of Prof. Riccardo Tubino, Università di Milano Bicocca (A.A. 2008-2009 and A.A. 2009-2010).
- Mar 2007/9 "Progetto Lauree Scientifiche", a project for high school students under the supervision of Dr. Simona Binetti, at Università di Milano Bicocca. Lessons and laboratory experiences on *Dye Sensitized Solar Cells*.

Language skills:

Italian (mother tongue)

English (written: excellent, oral: excellent)

French (written: basic, oral: basic).

Refereed Manuscripts:*Journal Papers:*

- [1] F. Scotognella, I. Kriegel, S. Sassolini, Covalent functionalized black phosphorus quantum dots, *Optical Materials*. 75 (2018) 521–524. doi:10.1016/j.optmat.2017.11.016.
- [2] V. Robbiano, G.M. Paterno, A.A. La Mattina, S.G. Motti, G. Lanzani, F. Scotognella, G. Barillaro, Room-Temperature Low-Threshold Lasing From Monolithically Integrated Nanostructured Porous Silicon Hybrid Microcavities, *ACS Nano*. (2018). doi:10.1021/acsnano.8b00875.
- [3] R. Ragni, F. Scotognella, D. Vona, L. Moretti, E. Altamura, G. Cecccone, D. Mehn, S.R. Cicco, F. Palumbo, G. Lanzani, G.M. Farinola, Hybrid Photonic Nanostructures by In Vivo Incorporation of an Organic Fluorophore into Diatom Algae, *Advanced Functional Materials*. (2018) 1706214. doi:10.1002/adfm.201706214.
- [4] G.M. Paterno, N. Barbero, S. Galliano, C. Barolo, Guglielmo Lanzani, F. Scotognella, R. Borrelli, Excited State Photophysics of Squaraine Dyes for Photovoltaic Applications: an Alternative Deactivation Scenario, *Journal of Materials Chemistry C*. (2018). doi:10.1039/C7TC05078J.
- [5] G.M. Paternò, L. Moscardi, I. Kriegel, F. Scotognella, G. Lanzani, Electro-optic and magneto-optic photonic devices based on multilayer photonic structures, *Journal of Photonics for Energy*. 8 (2018) 1. doi:10.1117/1.JPE.8.032201.
- [6] G.M. Paternò, C. Iseppon, A. D’Altri, C. Fasanotti, G. Merati, M. Randi, A. Desii, E.A.A. Pogna, D. Viola, G. Cerullo, F. Scotognella, I. Kriegel, Solution processable and optically switchable 1D photonic structures, *Scientific Reports*. 8 (2018). doi:10.1038/s41598-018-21824-w.
- [7] I. Kriegel, F. Scotognella, Light-induced switching in pDTE–FICO 1D photonic structures, *Optics Communications*. 410 (2018) 703–706. doi:10.1016/j.optcom.2017.11.019.
- [8] A. Fernandez-Bravo, K. Yao, E.S. Barnard, N.J. Borys, E.S. Levy, B. Tian, C.A. Tajon, L. Moretti, M.V. Altoe, S. Aloni, K. Beketayev, F. Scotognella, B.E. Cohen, E.M. Chan, P.J. Schuck, Continuous-wave upconverting nanoparticle microlasers, *Nature Nanotechnology*. (2018). doi:10.1038/s41565-018-0161-8.
- [9] A. Chiasera, C. Meroni, S. Varas, S. Valligatla, F. Scotognella, Y.G. Boucher, A. Lukowiak, L. Zur, G.C. Righini, M. Ferrari, Photonic band edge assisted spontaneous emission enhancement from all Er 3+ 1-D photonic band gap structure, *Optical Materials*. 80 (2018) 106–109. doi:10.1016/j.optmat.2018.04.034.
- [10] A. Chiasera, C. Meroni, F. Scotognella, Y.G. Boucher, G. Galzerano, A. Lukowiak, D. Ristic, G. Speranza, S. Valligatla, S. Varas, L. Zur, M. Ivanda, G.C. Righini, S. Taccheo, R. Ramponi, M. Ferrari, Coherent emission from fully Er 3+ doped monolithic 1-D dielectric microcavity fabricated by rf-sputtering, *Optical Materials*. (2018). doi:10.1016/j.optmat.2018.04.057.
- [11] Y. Ben-Shahar, J.P. Philbin, F. Scotognella, L. Ganzer, G. Cerullo, E. Rabani, U. Banin, Charge carrier dynamics in photocatalytic hybrid semiconductor-metal nanorods: crossover from Auger recombination to charge transfer., *Nano Letters*. (2018). doi:10.1021/acs.nanolett.8b02169.
- [12] M. Bellingeri, Z.-M. Lu, D. Cassi, F. Scotognella, Analyses of the response of a complex weighted network to nodes removal strategies considering links weight: The case of the Beijing urban road system, *Modern Physics Letters B*. 32 (2018) 1850067. doi:10.1142/S0217984918500677.
- [13] M. Bellingeri, D. Bevacqua, F. Scotognella, Z.-M. L., D. Cassi, Efficacy of local attack strategies on the Beijing road complex weighted network, *Physica A: Statistical Mechanics and Its Applications*. (2018). doi:10.1016/j.physa.2018.06.127.
- [14] A. Agrawal, I. Kriegel, E.L. Runnerstrom, F. Scotognella, A. Llordes, D.J. Milliron, Rationalizing the Impact of Surface Depletion on Electrochemical Modulation of Plasmon Resonance Absorption in Metal Oxide Nanocrystals, *ACS Photonics*. 5 (2018) 2044–2050. doi:10.1021/acsp Photonics.7b01587.
- [15] C. Urso, M. Barawi, R. Gaspari, G. Sirigu, I. Kriegel, M. Zavelani-Rossi, F. Scotognella, M. Manca, M. Prato, L. De Trizio, L. Manna, Colloidal Synthesis of Bipolar Off-Stoichiometric Gallium Iron Oxide Spinel-Type Nanocrystals with Near-IR Plasmon Resonance, *Journal of the American Chemical Society*. 139 (2017) 1198–1206. doi:10.1021/jacs.6b11063.
- [16] T. Stoll, F. Branchi, J. Réhault, F. Scotognella, F. Tassone, I. Kriegel, G. Cerullo, Two-Dimensional Electronic Spectroscopy Unravels sub-100 fs Electron and Hole Relaxation Dynamics in Cd-Chalcogenide

- Nanostructures, *The Journal of Physical Chemistry Letters*. 8 (2017) 2285–2290. doi:10.1021/acs.jpcclett.7b00682.
- [17] G.M. Paternò, Q. Chen, X.-Y. Wang, J. Liu, S.G. Motti, A. Petrozza, X. Feng, G. Lanzani, K. Müllen, A. Narita, F. Scotognella, Synthesis of Dibenzo[*h*,*s*t]ovalene and Its Amplified Spontaneous Emission in a Polystyrene Matrix, *Angewandte Chemie International Edition*. 56 (2017) 6753–6757. doi:10.1002/anie.201700730.
- [18] G.M. Paternò, L. Moretti, A.J. Barker, C. D’Andrea, A. Luzio, N. Barbero, S. Galliano, C. Barolo, G. Lanzani, F. Scotognella, Near-infrared emitting single squaraine dye aggregates with large Stokes shifts, *J. Mater. Chem. C*. 5 (2017) 7732–7738. doi:10.1039/C7TC01375B.
- [19] C. Nayak, A. Aghajamali, F. Scotognella, A. Saha, Effect of standard deviation, strength of magnetic field and electron density on the photonic band gap of an extrinsic disorder plasma photonic structure, *Optical Materials*. 72 (2017) 25–30. doi:10.1016/j.optmat.2017.05.021.
- [20] M. Natali, S.D. Quiroga, L. Passoni, L. Criante, E. Benvenuti, G. Bolognini, L. Favaretto, M. Melucci, M. Muccini, F. Scotognella, F. Di Fonzo, S. Toffanin, Simultaneous Tenfold Brightness Enhancement and Emitted-Light Spectral Tunability in Transparent Ambipolar Organic Light-Emitting Transistor by Integration of High-*k* Photonic Crystal, *Advanced Functional Materials*. 27 (2017) 1605164. doi:10.1002/adfm.201605164.
- [21] I. Kriegel, F. Scotognella, L. Manna, Plasmonic doped semiconductor nanocrystals: Properties, fabrication, applications and perspectives, *Physics Reports*. 674 (2017) 1–52. doi:10.1016/j.physrep.2017.01.003.
- [22] I. Kriegel, F. Scotognella, Three material and four material one-dimensional phononic crystals, *Physica E: Low-Dimensional Systems and Nanostructures*. 85 (2017) 34–37. doi:10.1016/j.physe.2016.08.009.
- [23] I. Kriegel, F. Scotognella, Magneto-optical switching in microcavities based on a TGG defect sandwiched between periodic and disordered one-dimensional photonic structures, *Optik - International Journal for Light and Electron Optics*. 142 (2017) 249–255. doi:10.1016/j.ijleo.2017.05.091.
- [24] R. Gaspari, G. Della Valle, S. Ghosh, I. Kriegel, F. Scotognella, A. Cavalli, L. Manna, Quasi-static resonances in the visible spectrum from all-dielectric intermediate band semiconductor nanocrystals, *Nano Letters*. (2017). doi:10.1021/acs.nanolett.7b03787.
- [25] M. Bellingeri, A. Chiasera, I. Kriegel, F. Scotognella, Optical properties of periodic, quasi-periodic, and disordered one-dimensional photonic structures, *Optical Materials*. 72 (2017) 403–421. doi:10.1016/j.optmat.2017.06.033.
- [26] G. Soavi, F. Scotognella, G. Lanzani, G. Cerullo, Ultrafast Photophysics of Single-Walled Carbon Nanotubes, *Advanced Optical Materials*. 4 (2016) 1670–1688. doi:10.1002/adom.201600361.
- [27] I. Kriegel, C. Urso, D. Viola, L. De Trizio, F. Scotognella, G. Cerullo, L. Manna, Ultrafast Photodoping and Plasmon Dynamics in Fluorine–Indium Codoped Cadmium Oxide Nanocrystals for All-Optical Signal Manipulation at Optical Communication Wavelengths, *The Journal of Physical Chemistry Letters*. 7 (2016) 3873–3881. doi:10.1021/acs.jpcclett.6b01904.
- [28] I. Kriegel, S. Toffanin, F. Scotognella, Black phosphorus-based one-dimensional photonic crystals and microcavities, *Applied Optics*. 55 (2016) 9288. doi:10.1364/AO.55.009288.
- [29] I. Kriegel, F. Scotognella, Periodic transmission peak splitting in one dimensional disordered photonic structures, *Optical Materials*. 58 (2016) 113–115. doi:10.1016/j.optmat.2016.03.035.
- [30] I. Kriegel, F. Scotognella, A probabilistic model of the electron transport in films of nanocrystals arranged in a cubic lattice, *Thin Solid Films*. 612 (2016) 327–330. doi:10.1016/j.tsf.2016.06.029.
- [31] I. Kriegel, F. Scotognella, G. Soavi, R. Brescia, J. Rodríguez-Fernández, J. Feldmann, G. Lanzani, F. Tassone, Delayed electron relaxation in CdTe nanorods studied by spectral analysis of the ultrafast transient absorption, *Chemical Physics*. 471 (2016) 39–45. doi:10.1016/j.chemphys.2015.08.002.
- [32] S.S.K. Guduru, F. Scotognella, A. Chiasera, V. Sreeramulu, L. Criante, K.C. Vishnubhatla, M. Ferrari, R. Ramponi, G. Lanzani, R.M. Vázquez, Highly integrated lab-on-a-chip for fluorescence detection, *Optical Engineering*. 55 (2016) 097102. doi:10.1117/1.OE.55.9.097102.
- [33] L.N. Glanzmann, D.J. Mowbray, D.G. Figueroa del Valle, F. Scotognella, G. Lanzani, A. Rubio, Photoinduced Absorption within Single-Walled Carbon Nanotube Systems, *The Journal of Physical Chemistry C*. 120 (2016) 1926–1935. doi:10.1021/acs.jpcc.5b10025.

- [34] S. Ghosh, T. Avellini, A. Petrelli, I. Kriegel, R. Gaspari, G. Almeida, G. Bertoni, A. Cavalli, F. Scotognella, T. Pellegrino, L. Manna, Colloidal CuFeS₂ Nanocrystals: Intermediate Fe d-Band Leads to High Photothermal Conversion Efficiency, *Chemistry of Materials*. 28 (2016) 4848–4858. doi:10.1021/acs.chemmater.6b02192.
- [35] D.G. Figueroa del Valle, L. Moretti, I. Maqueira-Albo, E. Aluicio-Sarduy, I. Kriegel, G. Lanzani, F. Scotognella, Ultrafast Hole Transfer from (6,5) SWCNT to P3HT:PCBM Blend by Resonant Excitation, *The Journal of Physical Chemistry Letters*. 7 (2016) 3353–3358. doi:10.1021/acs.jpcllett.6b01377.
- [36] A. Chiasera, F. Scotognella, S. Valligatla, S. Varas, J. Jasieniak, L. Criante, A. Lukowiak, D. Ristic, R.R. Gonçalves, S. Taccheo, M. Ivanda, G.C. Righini, R. Ramponi, A. Martucci, M. Ferrari, Glass-based 1-D dielectric microcavities, *Optical Materials*. (2016). doi:10.1016/j.optmat.2016.04.014.
- [37] Y. Ben-Shahar, F. Scotognella, I. Kriegel, L. Moretti, G. Cerullo, E. Rabani, U. Banin, Optimal metal domain size for photocatalysis with hybrid semiconductor-metal nanorods, *Nature Communications*. 7 (2016) 10413. doi:10.1038/ncomms10413.
- [38] E. Aluicio-Sarduy, S. Callegari, D.G. Figueroa del Valle, A. Desii, I. Kriegel, F. Scotognella, Electric field induced structural colour tuning of a silver/titanium dioxide nanoparticle one-dimensional photonic crystal, *Beilstein Journal of Nanotechnology*. 7 (2016) 1404–1410. doi:10.3762/bjnano.7.131.
- [39] S. Varo, L. Criante, L. Passoni, A.D. Vedove, E. Aluicio-Sarduy, F.D. Fonzo, G. Lanzani, F. Scotognella, Control of the chemiluminescence spectrum with porous Bragg mirrors, *Advanced Device Materials*. 1 (2015) 65–68. doi:10.1179/2055031615Y.0000000005.
- [40] S. Valligatla, A. Chiasera, S. Varas, P. Das, B.N. Shivakiran Bhaktha, A. Łukowiak, F. Scotognella, D. Narayana Rao, R. Ramponi, G.C. Righini, M. Ferrari, Optical field enhanced nonlinear absorption and optical limiting properties of 1-D dielectric photonic crystal with ZnO defect, *Optical Materials*. 50, Part B (2015) 229–233. doi:10.1016/j.optmat.2015.10.032.
- [41] G. Soavi, F. Scotognella, D. Viola, T. Hefner, T. Hertel, G. Cerullo, G. Lanzani, High energetic excitons in carbon nanotubes directly probe charge-carriers, *Scientific Reports*. 5 (2015) 9681. doi:10.1038/srep09681.
- [42] G. Soavi, A. Grupp, A. Budweg, F. Scotognella, T. Hefner, T. Hertel, G. Lanzani, A. Leitenstorfer, G. Cerullo, D. Brida, Below-gap excitation of semiconducting single-wall carbon nanotubes, *Nanoscale*. 7 (2015) 18337–18342. doi:10.1039/C5NR05218A.
- [43] F. Scotognella, A. Chiasera, L. Criante, E. Aluicio-Sarduy, S. Varas, S. Pelli, A. Łukowiak, G.C. Righini, R. Ramponi, M. Ferrari, Metal oxide one dimensional photonic crystals made by RF sputtering and spin coating, *Ceramics International*. 41 (2015) 8655–8659. doi:10.1016/j.ceramint.2015.03.077.
- [44] L. Moretti, F. Scotognella, Control of the average light transmission in one-dimensional photonic structures by tuning the random layer thickness distribution, *Optical Materials*. 46 (2015) 450–453. doi:10.1016/j.optmat.2015.05.002.
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- [46] I. Kriegel, F. Scotognella, Tunable light filtering by a Bragg mirror/heavily doped semiconducting nanocrystal composite, *Beilstein Journal of Nanotechnology*. 6 (2015) 193–200. doi:10.3762/bjnano.6.18.
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- [52] D.G. Figueroa del Valle, E. Aluicio-Sarduy, F. Scotognella, Photonic band gap in 1D multilayers made by alternating SiO₂ or PMMA with MoS₂ or WS₂ monolayers, *Optical Materials.* 48 (2015) 267–270. doi:10.1016/j.optmat.2015.08.012.
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- [56] T. Borzda, C. Gadermaier, N. Vujicic, P. Topolovsek, M. Borovsak, T. Mertelj, D. Viola, C. Manzoni, E.A.A. Pogna, D. Brida, M.R. Antognazza, F. Scotognella, G. Lanzani, G. Cerullo, D. Mihailovic, Charge Photogeneration in Few-Layer MoS₂, *Advanced Functional Materials.* 25 (2015) 3351–3358. doi:10.1002/adfm.201500709.
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SPIE Newsroom:

- [S-1] **F. Scotognella**, L. Criante, *Photonic crystals color-tunable at low voltages*, *SPIE Newsroom*, 11 March 2013, DOI: 10.1117/2.1201303.004758

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Invited Seminars:

- [S-10] SPIE Photonics Europe 2018, Strasbourg (France), 22 – 26 April 2018 Structural color tuning in 1D photonic crystals with electric field and magnetic field
- [S-9] SPIE Photonics West, San Francisco (CA), 28th January – 2nd February 2015, *Tailoring the optical properties of one-dimensional (1D) photonic structures.*
- [S-8] SPIE Photonics West, San Francisco (CA), 7th – 12th February 2015, *Disorder in one-dimensional multilayer photonic structures.*
- [S-7] E-MRS 2014 Fall Meeting, Warsaw, Poland, 15th – 18th Spetember 2014. *Disorder in Photonic Structures induced by random layer thickness.*
- [S-6] CNR – Istituto di Fotonica e Nanotecnologie, CSMFO Lab., Trento, October 24th 2013, *Some materials aspects in photonic structures: infiltration in multilayers, photonic crystals made with four compounds, inhomogeneous optical media.*
- [S-5] School of Electrical & Electronic Engineering, Nanyang Technological University, Singapore, Sept. 9th 2013, *Ultrafast Plasmon Dynamics of Heavily-doped Semiconductor Nanocrystals.*
- [S-4] F. Scotognella, *Nanotechnology in LED manufacturing*, Workshop Technological innovation and opportunities in the lighting business, May 6th 2013, Politecnico di Milano.
- [S-3] International conference “Dye sensitized solar cells: from materials to devices”, Torino, 31st January – 1st February 2013, *Inorganic quantum dots, porous photonic crystals and their utilization for sensitized solar cells.*
- [S-2] Università degli Studi di Parma, Dipartimento di Chimica Generale ed Inorganica, Chimica Analitica, Chimica Fisica, June 11th 2012, *Ultrafast dynamics in semiconductor and metallic nanostructures.*
- [S-1] Seminar für Photonik und Optoelektronik, Ludwig-Maximilians-Universität München, December 8th 2008, *Photophysics of Organic Emitters in Photonic Structures.*

Co-author of more than 50 contributions to national and international conferences (MRS, SPIE, Quantum Dots ...).