

Dr. Andrea Fermi

Curriculum Vitae - updated June 2026

PERSONAL INFORMATION

Citizenship: Italian

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EDUCATION

- **April 2013:** PhD in Chemical Sciences, University of Bologna, Italy, and Aix-Marseille Université, France. Joint Phd Programme of the French-Italian University ("Vinci Program" framework). Co-supervisors: prof. Paola Ceroni (Italy) and prof. Marc Gingras (France). Thesis title: "*Poly-sulfurated aromatic compounds: synthesis and photophysical properties*". Research focused on the synthesis of new poly- and persulfurated aromatic compounds, their characterization, analysis of their photophysical properties and their use as building blocks in multichromophoric supramolecular polymers.
- **October 2009:** MSc (*Laurea Specialistica*) in Chemistry, University of Pavia, Italy. Final mark: 110/110 *cum laude*, ECTS equivalent: A; supervisor: prof. Luigi Fabbrizzi. Experimental research in Supramolecular Chemistry, defending a thesis on thermodynamic aspects of the interaction between anions and neutral receptors in solution.
- **December 2007:** BSc (*Laurea Triennale*) in Chemical Sciences, University of Pavia, Italy. Final mark: 110/110, ECTS equivalent: A. Thesis in Supramolecular Chemistry studying the anion templated synthesis of basic molecular machines like rotaxanes and catenanes. Supervisor: prof. Maurizio Licchelli.

CAREER

- **4 September 2023 - present:** Senior Researcher ("*Ricercatore a tempo determinato - tipo B*"; SSD: CHEM-03/A), University of Bologna, Department of Chemistry, Laboratory of Photochemical Nanosciences.
- **7 January 2021 - 3 September 2023:** Junior Researcher ("*Ricercatore a tempo determinato - tipo A*"; SSD: CHIM/03; SC: 03/B1), University of Bologna, Department of Chemistry, Laboratory of Photochemical Nanosciences.
- **December 2018 - December 2020:** post-doctoral research associate, University of Bologna, Italy (supervisor: prof. Giacomo Bergamini). Design and photophysical analysis of organic and inorganic species for application in photocatalytic reactions (funding by the Italian *Ministero dell'Università e della Ricerca*).
- **October 2016 - May 2018:** post-doctoral research associate, Cardiff University, United Kingdom (supervisor: prof. Davide Bonifazi). Development and photophysical characterisation of polypeptide-based chromophores for the conversion of solar energy.

From April 2017, in the framework of the MSCA-RISE “INFUSION” project, international scientific exchange with “Mediteknology SRL”, Bologna, Italy (supervisor: Dr. Giovanna Barbarella). Design, development and characterization of new oligo- and polythiophene-based chromophores for application in new generation electrochromic devices.

- **May 2015 - October 2016:** post-doctoral research associate at Université de Namur, Belgium (supervisor: prof. Davide Bonifazi). In the context of the “FLYCOAT” project, development and engineering of new bio-inspired hybrid materials for energy conversion and storage (in collaboration with “H2WIN SA”, Belgium).

From October 2015, in the context of the ERC project “COLORLANDS”, investigations on the photophysical and electrochemical properties of new classes of chromophores for the development of light-harvesting systems and for photocatalysed chemical transformations (in collaboration with Cardiff University, United Kingdom).

- **January 2013 - December 2014:** post-doctoral research associate (24 months grant) at University of Bologna, Italy. In the framework of the ERC starting grant “PhotoSi”, investigations on the photophysical properties of silicon nanoparticles, developing a series of covalently decorated hybrids as functional materials for antenna-based devices, under the supervision of prof. Paola Ceroni.
- **January 2010 - December 2012:** PhD student at University of Bologna, Italy (21 months) and Aix-Marseille Université (15 months).
- **March-July 2009:** Visiting student at the ECPM, CNRS-University of Strasbourg, France. Research activities for the MSc grade Thesis with the supervision of Dr. Françoise Arnaud.

FUNDING AND FELLOWSHIPS

- **PRIDE:** *“PRoduzione sostenibile di IDrogeno tramite sistemi fotoElettrochimici attivati dalla luce solare”*
Beneficiaries and partners: University of Bologna, University of Catania, University of Trieste, University of Messina.
Local coordinator: prof. Francesco Paolucci.
Funding: European Union (NextGenerationEU), Ministero dell’Università e della Ricerca.
- **ECOSISTER:** *“Ecosistema Territoriale di Innovazione dell’Emilia-Romagna”*
Beneficiaries and partners: University of Bologna, Regione Emilia-Romagna.
Local coordinator: prof. Marcello Romagnoli (Spoke 2).
Funding: European Union (NextGenerationEU), Ministero dell’Università e della Ricerca.
- **PRIN-P2022PZ2MM:** *“ENGINEERING LIGHT-activated materials for the abatement of ENVIRONMENTALLY hazardous and POLLUTING substances” (ENLIGHTENING)*
Beneficiaries and partners: Università di Bologna, Università di Parma, Università di Torino (Italy).
Principal investigator: **Dr. Andrea Fermi**.
Funding: Ministero dell’Università e della Ricerca.
- **PRIN-2022AWXS83:** *“PHOTOactive aerophobic hydroGels for hydrogEN generation in molecular-based photoelectrosynthetic cells” (PHOTOGEN)*
Beneficiaries and partners: Università di Bologna, Università di Ferrara, Università di Messina (Italy).
Local coordinator: **Dr. Andrea Fermi**.
Funding: Ministero dell’Università e della Ricerca.
- **H2020-Twinning of Research Institutions “Biomass4Synthons”:** *“Straightening training,*

research and innovation capacities in the valorization of bio-renewable resource

Beneficiaries and partners: Faculdade de Farmácia da Universidade de Lisboa (Portugal), Associação Blc3-Campus De Tecnologia E Inovação (Portugal), Università di Bologna (Italy), Spartax Chemicals, Lda (Portugal), Institute Of Organic Chemistry of the Bulgarian Academy Of Sciences (Bulgaria), Sorbonne Université (France), Universität Wien (Austria), Eindhoven University Of Technology (Netherlands).

Local coordinator: prof. Pier Giorgio Cozzi.

Funding: European Commission.

- **H2020-RIA “CONDOR”:** *“COmbined suN-Driven Oxidation and CO2 Reduction”*

Beneficiaries and partners: University of Bologna (Italy), ICIQ (Spain), CNR (Italy), Universiteit Utrecht (Netherlands), Università di Ferrara (Italy), ENGIE (France), Laborelec (Belgium), HY-GEAR BV (Netherlands), Amires s.r.o. (Czechia), University of North Carolina (USA).

Local coordinator: prof. Paola Ceroni.

Funding: European Commission.

- **MSCA-ITN “PhotoReAct”:** *“Photocatalysis as a tool for synthetic organic chemistry”*

Beneficiaries and partners: University of Bologna (Italy), Universiteit van Amsterdam (Netherlands), University of St Andrews (UK), Universität Leipzig (Germany), Institute of Organic Chemistry - Polish Academy of Sciences (Poland), Universität Zürich (Switzerland), University of Manchester (UK), CNRS (France), Università di Pavia (Italy), Universität Münster (Germany), Ecosynth (Belgium), Johnson Matthey PLC (UK), ComInnex Zrt. (Hungary), Janssen Cilag SA (Spain).

Local coordinator: prof. Paola Ceroni.

Funding: European Commission.

- **MSCA-ITN “PhotoTrain”:** *“Entrepreneurial dynamic self-organized interfaces in photocatalysis: a multidisciplinary training network converting light into products”*

Beneficiaries and partners: University of Bologna (Italy), Cardiff University (UK), CNR-IFN (Italy), ICIQ (Spain), University of Trieste (Italy), Katholieke Universiteit Leuven (Belgium), Technion (Israel), Elvysys (France), Dr. Reddy’s Laboratories Ltd. (UK), A.P.E. Research SRL (Italy), IOCD (international), ICTP (International), SINCHEM (International).

Coordinator: prof. Giacomo Bergamini.

Funding: European Commission.

- **“Self-organized photoactive systems for photocatalysis”:** post-doctoral research project at Department of Chemistry “G. Ciamician”, University of Bologna.

Coordinator: prof. Giacomo Bergamini.

Funding: Ministero dell’Università e della Ricerca.

- **MSCA-RISE “INFUSION”:** *“Engineering optoelectronic Interfaces: a global action intersecting FUndamental conceptS and technology implementatION of self-organized organic materials”*

Beneficiaries and partners: Cardiff University (UK), CNR (Italy), Universidade NOVA de Lisboa (Portugal), YNVISIBLE SA (Portugal), Mediteknology SRL (Italy), A.P.E. Research SRL (Italy), Université de Namur (Belgium), University of Karachi (Pakistan), Universidad Nacional de La Plata (Argentina).

Local coordinator: prof. Davide Bonifazi, Cardiff University.

Funding: European Commission.

- **ERC “COLORLANDS”:** *“COLOR Ordering Templated by Hierarchized Supramolecular Porous FlatLANDS”*.

Principal investigator: prof. Davide Bonifazi, Université de Namur (Belgium) and Cardiff University

(UK).

Funding: European Commission.

- **FLYCOAT**: “*Résines biosourcées nanorenforcées pour coatings sur aluminium: du procédé de production ‘solvent-free’ aux applications durables et multifonctionnelles dans le transport*”

Beneficiaries and partners: Université de Namur, Katholieke Universiteit Leuven, Université de Liège, Université Libre de Bruxelles (Belgium).

Local coordinator: prof. Davide Bonifazi, Université de Namur (Belgium).

Funding: Région Wallonie (Belgium).

- **ERC “PHOTOSI”**: “*Silicon nanocrystals coated by photoactive molecules: a new class of organic-inorganic hybrid materials for solar energy conversion*”

Principal investigator: prof. Paola Ceroni, University of Bologna (Italy).

Funding: European Commission.

- **PRIN 20085ZXFEE**: “*Sistemi supramolecolari per la conversione dell’energia solare*”

Local coordinator: prof. Paola Ceroni.

Funding: Ministero dell’Università e della Ricerca.

- **“Marco Polo” fellowship**: visiting PhD student at Aix-Marseille Université.

Funding: University of Bologna.

- **Vinci Fellowship**: PhD student for the joint “Vinci programme” of the Franco-Italian University.

Coordinators: prof. Paola Ceroni (University of Bologna) and prof. Marc Gingras (Aix-Marseille Université).

Funding: Franco-Italian University (intergovernmental).

- **Collegio Ghislieri fellowship**: visiting student at EPCM-CNRS, Strasbourg, France.

Funding: Collegio Ghislieri, Pavia, Italy.

TEACHING AND STUDENT SUPERVISION

– Lectures held at the Department of Chemistry, University of Bologna

- May 2026 - present: lecturer for the course “Photoreactivity and Photocatalysis” (6 hours), Doctoral School of the Department of Chemistry “G. Ciamician” and Department of Industrial Chemistry “Toso Montanari”.
- February 2026 - present: lecturer for the course “Photochemistry Laboratory” (24 hours, MSc “Photochemistry and Molecular Materials”, 1st year; SSD: CHIM/03, 2 CFU).
- September 2023 - 2025: lecturer for the course “Biomimetic Supramolecular Chemistry” (48 hours, MSc “Photochemistry and Molecular Materials”, 2nd year; SSD: CHIM/03, 6 CFU).
- September 2021 - December 2022: lecturer for the course “Advanced Supramolecular Chemistry” (36 hours, MSc “Photochemistry and Molecular Materials”, 2nd year; SSD: CHIM/03, 6 CFU).
- February 2021 - present: lecturer for the course “Laboratory of Coordination Chemistry” (32 hours, BSc “Chimica e Chimica dei Materiali”, 2nd year; SSD: CHIM/03, 2 CFU).

– Other lectures

- June 2026: lecturer at the “Una Europa Summer School 2026” for doctoral researchers (topic: “Organic Chromophores in Action: From Luminescence to Photocatalysis”), 29 June-3 July 2026, Bologna, Italy.

- June 2025: lecturer at the “X Ciamician Photochemistry School” (topic: *Photoinduced energy transfer*), 9-12 June 2025, Bologna, Italy.
- April-May 2025: visiting researcher at the Yokohama National University (Japan).
- June 2022: lecturer at the “IX Ciamician Photochemistry School” (topic: *Bimolecular dynamic quenching and photoinduced energy transfer*), 6-10 June 2022, Bologna, Italy.

– **Supervision and Tutoring**

- Supervisor of 1 PhD student (2024–27) and co-supervisor of 1 PhD student (2022-2025) at the University of Bologna.
- Supervisor of 4 BSc students (2022–23) and 3 MSc students (2022-25) at the University of Bologna . Co-supervisor of 1 undergraduate student for BSc thesis (2013) and 6 Master students for MSc thesis at the University of Bologna (2012, 2020–2025); 1 BSc student at Aix-Marseille Université (2011).
- January 2025 - present: student’s tutor at the [Collegio Superiore](#) (area: Chemistry), University of Bologna.
- November 2019 - July 2020: teaching tutor for the course “General Chemistry” (50 hours, BSc “*Tecnologie per il territorio e l’ambiente agro-forestale*”, 1st year; SSD: CHIM/03) at the Department of Agricultural and Food Sciences, University of Bologna (main teacher: prof. Enrico Rampazzo).
- Since December 2017: mentoring and tutoring activities for BSc and MSc Chemistry students of the Collegio Ghislieri, Pavia, as *alumnus* of the same institution.
- Day-to-day advisor for 5 PhD students at Cardiff University (2016-2017).
- Laboratory tutor for the course “Laboratory of General Chemistry” (25 hours, BSc, 1st year; SSD: CHIM/03) at the Department of Chemistry, University of Pavia (main teacher: prof. Piersandro Pallavicini, 2008).

ACHIEVEMENTS AND AWARDS

- *Abilitazione Scientifica Nazionale* (national scientific qualification), issued on March 14th 2025 (2nd level, sector code: CHEM-05/A, “Organic Chemistry”; validity: until March 14th 2037).
- *Abilitazione Scientifica Nazionale* (national scientific qualification), issued on February 28th 2025 (2nd level, sector code: CHEM-06/A, “Chemical Foundations of Technologies”; validity: until February 28th 2037).
- *Abilitazione Scientifica Nazionale* (national scientific qualification), issued on October 3rd 2022 (2nd level, sector code: CHEM-03/A, “General and Inorganic Chemistry”; validity: until October 3rd 2034).
- 2014 C’NANO prize for best PhD thesis in Nanosciences and Nanotechnology, from the Nanosciences division of the French National Research Council (CNRS), Région Provence-Alpes-Côte d’Azur.
- *Chem. Commun.* **2026**: included in a themed collection of the same journal, dedicated to “[Celebrating 200 years of Benzene](#)” (guest editors: Ben Feringa and Nazario Martín).
- *ACS Catal.* **2025**, 15, 21213: selected by the Editorial Board on [Synfacts 2026](#), 22(03), 298, highlighting significant recent developments and future trends in synthetic chemistry.
- *Angew. Chem. Int. Ed.* **2025**, 64, e202420009: highlighted on [Hot Topic: Photocatalysis](#), a selection of impactful papers by *Chemistry Europe*.
- *Chem. Eur. J.* **2024**, 30, e202401768: rated as “Hot Paper” by the journal Editorial Office.
- *Adv. Synth. Catal.* **2024**, 366, 798-805: rated as “Hot Paper” by the journal Editorial Office.

- Highlighted as *Outstanding Reviewer* for 2023 by the editorial board of *Chemical Science*: [Chem. Sci.](#) **2024**, *15*, 12634.
- *Eur. J. Org. Chem.* **2023**, *26*, e202300421: ranked as [Top Viewed Article](#) (within 10% most viewed papers in 2023) by the journal Office.
- *Eur. J. Org. Chem.* **2023**, *26*, e202300421: highlighted on the journal [front cover](#).
- [Best poster](#) award at the XLIX Congresso Nazionale di Chimica Inorganica (Società Chimica Italiana), 12–15 September 2023, Perugia, Italy.
- *Adv. Synth. Catal.* **2022**, *364*, 3410: rated as [Top Downloaded Article](#) (10% most downloaded papers in 2023) by the journal Editorial Office; rated as VIP (Very Important Publication) by the journal Editorial Office.
- *Angew. Chem. Int. Ed.* **2022**, *61*, e202114981: ranked as [Top Downloaded Article](#) (first 12 months from publication) by the journal Editorial Office.
- *Nanoscale Horiz.* **2021**, *6*, 676: highlighted in [Spotlight Collection](#) for the journal's most cited papers in Europe; selected for a [Horizons Community Board collection](#) focussing on optical and photonic materials and devices.
- *Eur. J. Org. Chem.* **2021**, *11*, 1624: rated as [Top Downloaded Article](#) (first 12 months of publication) by the journal Editorial Office; [highlighted](#) on *ChemistryViews*, the online science news magazine of *Chemistry Europe*, and on the journal [cover](#).
- *Eur. J. Org. Chem.* **2020**, *45*, 6955: rated as VIP (Very Important Paper) by the journal Editorial Office.
- *Chem. Eur. J.* **2016**, *22*, 5665: rated as “Hot Paper” by the journal Editorial Office and highlighted on the journal [back cover](#).
- *Chem. Eur. J.* **2014**, *20*, 10661: highlighted on the journal [back cover](#).
- *J. Am. Chem. Soc.* **2014**, *136*, 6395: [highlighted](#) in 2014 on “*Noteworthy Chemistry*”, an on-line feature produced by the American Chemical Society that collects and summarizes innovative ideas from a larger body of chemical literature. The same paper was [highlighted](#) at national level by the French National Research Center (CNRS).
- *J. Mater. Chem. C*, **2013**, *1*, 2717: selected to be featured in a [virtual issue](#) on *J. Mater. Chem. C*, celebrating the 20th anniversary of Aggregation Induced Emission on journals edited by the Royal Society of Chemistry.

ORGANIZATION OF SCIENTIFIC EVENTS AND MEMBERSHIPS

- **2026**: “Italian Photochemistry Meeting 2026”, University of Bologna, 10-13 June 2026; member of the organizing committee.
- **2025**: “X Ciamician Photochemistry School”, University of Bologna, 9-12 June 2025; main organizer.
- **2024**: “C³-day 2024”, Center for Chemical Catalysis (C³), University of Bologna, 4 June 2024; member of the organizing committee.
- **2023**: “Contest for Chemical Catalysis”, Center for Chemical Catalysis (C³), University of Bologna, 18 April 2023; member of the organizing committee.
- **2022**: “IX Ciamician Photochemistry School”, University of Bologna, 6-10 June 2022; member of the organizing committee.
- **2019**: “VIII Ciamician Photochemistry School”, University of Bologna, 10-14 June 2019; member of the organizing committee.
- **2013**: “VI Ciamician Photochemistry School”, University of Bologna, 3-6 June 2013; member of the

organizing committee.

- Member of the interdepartmental “Center of Chemical Catalysis” (C³) at the University of Bologna.
- Member of the Italian Chemical Society.
- Member of the Italian Group of Photochemistry.

OTHER SCIENTIFIC ACTIVITIES AND PEER REVIEWING

- Guest Editor for a [Spotlight Collection](#) on *Dalton Transactions* (topic: “Aggregation induced luminescence of metal complexes”), launched in April 2022.
- Referee for international peer-reviewed journals: ACS Catalysis, ACS Sustainable Chemistry & Engineering, Advanced Functional Materials, [Advanced Optical Materials](#), Angewandte Chemie International Edition, ChemCatChem, Chemical Communications, Chemical Science ([Outstanding Reviewer 2023](#); [Reviewer Spotlight](#), July 2023), [Chemistry European Journal](#), Dalton Transactions, Dyes and Pigments, Journal of the American Chemical Society, Journal of Physical Chemistry, New Journal of Chemistry, Photochem.

PUBLICATIONS

- P46.** F. Calogero, G. D’Onghia, F. Fina, Z. Ziani, L. Sensoli, A. Gualandi*, **A. Fermi**, P. Ceroni*, P. G. Cozzi*, “N-Aryl Acridone Derivatives as Effective Catalysts for Challenging Energy Transfer Reactions”, [accepted](#); *ChemRxiv* **2025**, [preprint](#).
- P45.** S. d’Agostino*, A. Vitale, Y. Kapadiya, M. Gingras, F. Negri*, P. Ceroni, **A. Fermi***, “Polymorphism-Dependent Room-Temperature Phosphorescence of a Persulfurated Benzene”, *Chem. Commun.* **2026**, *62*, 6567.
- P44.** M. Gasparetto, A. Sveiczzer, **A. Fermi**, M. Raji, R. J. Fair, T. Noël, P. Ceroni*, G. Sipos*, “In Situ Generated Triazine Co-Catalyst Unlocks Amidine Arylation under Dual Nickel/Photoredox Catalysis: A Platform for Mild C–N Bond Formation”, *ACS Catal.* **2025**, *15*, 21213; *ChemRxiv* **2025**, [preprint](#).
- P43.** **A. Fermi***, S. Gahlot, E. Jorand, S. d’Agostino*, Y. Dai, F. Negri*, C. Moustrou, M. Gingras*, P. Ceroni, “Room-Temperature Phosphorescence Vapochromism Through Conformational Control”, *J. Am. Chem. Soc.* **2025**, *147*, 32309; *ChemRxiv* **2025**, [preprint](#).
- P42.** F. Calogero, E. Pinosa, L. Sensoli, A. Gualandi*, S. Dutta, B. Maity, L. Cavallo*, **A. Fermi**, P. Ceroni, P. G. Cozzi*, “Photoredox/Nickel-Catalyzed Diastereoselective Allylation of Aldehydes with Morita-Baylis-Hillman Adducts”, *ACS Catal.* **2025**, *15*, 8303.
- P41.** **A. Fermi***, “Conformation dependent room temperature phosphorescence in organic materials”, *ChemPhotoChem* **2025**, *9*, e202400404.
- P40.** M. Villa, **A. Fermi**, F. Calogero, A. Gualandi, P. Franchi, M. Lucarini, B. Ventura*, P. G. Cozzi*, P. Ceroni*, “Unlocking the ConPeT mechanism: Correspondence on «Catalytic Asymmetric Redox-Neutral [3+2] Photocycloadditions of Cyclopropyl Ketones with Vinylazaarenes Enabled by Consecutive Photoinduced Electron Transfer»”, *Angew. Chem. Int. Ed.* **2025**, *64*, e202420009.
- P39.** A. Fracassa, F. Calogero, G. Pavan, P. Nikolaou, **A. Fermi**, P. Ceroni, F. Paolucci, P. G. Cozzi, T. Scattolin, N. Demitri, A. Gualandi*, A. Aliprandi*, G. Valenti*, “Tunable electrochemiluminescence of TADF luminophores: manipulating efficiency and unveiling water-soluble emitters”, *Chem. Sci.* **2024**, *15*, 17892.

- P38.** M. Villa, **A. Fermi**, F. Calogero, X. Wu, A. Gualandi, P. G. Cozzi, A. Troisi*, B. Ventura*, P. Ceroni*, “Organic super-reducing photocatalysts generate solvated electrons via two consecutive photon induced processes”, *Chem. Sci.* **2024**, *15*, 14739.
- P37.** F. Calogero, L. Wilczek, E. Pinosa, A. Gualandi*, R. Dorta, A. Herrera, Y. Dai, A. Rossignol, F. Negri*, Z. Ziani, **A. Fermi**, P. Ceroni*, P. G. Cozzi*, “Stable Meisenheimer Complexes as Powerful Photoreductants Readily Obtained from Aza-Heteroaromatic Compounds”, *Angew. Chem. Int. Ed.* **2024**, *63*, e202411074.
- P36.** **A. Fermi***, S. D’Agostino*, Y. Dai, F. Brunetti, F. Negri*, M. Gingras, P. Ceroni, “Unravelling the Role of Structural Factors in the Luminescence Properties of Persulfurated Benzenes”, *Chem. Eur. J.* **2024**, *30*, e202401768.
- P35.** I. A. S. Campos, **A. Fermi**, B. Ventura, C. A. F. Moraes, G. H. Ribeiro, T. Venâncio, P. Ceroni*, R. M. Carlos*, “Modulation of the excited states of Ruthenium(II)-perylene dyad to access near-IR luminescence, long-lived perylene triplet state, and singlet oxygen photosensitization”, *Inorg. Chem.* **2024**, *63*, 10, 4595.
- P34.** E. Pinosa, Y. Gelato, F. Calogero, M. M. Mosconi, A. Gualandi*, **A. Fermi**, P. Ceroni, P. G. Cozzi*, “Dual photoredox catalysis with vanadium complexes in low oxidation state: a highly diastereoselective pinacol coupling”, *Adv. Synth. Catal.* **2024**, *366*, 798.
- P33.** M. A. Bryden, M. Villa, **A. Fermi**, P. Ceroni*, E. Z. Colman*, “Dual Photosensitizer Cycles Working Synergistically in a C(sp)-C(sp³) Cross-Coupling Reaction”, *Asian J. Org. Chem.* **2023**, *12*, e202300347.
- P32.** **A. Fermi***, P. Ceroni, I. R. Laskar, “Aggregation Induced Emission of metal complexes: advances and perspectives”, *Dalton Trans.* **2023**, *52*, 10637 – editorial.
- P31.** E. Pinosa, A. Gualandi, **A. Fermi**, P. Ceroni, P. G. Cozzi*, F. Calogero*, “A dual photoredox and Cp₂TiCl₂ catalyzed approach for the direct access to α-vinyl-β-hydroxy esters”, *Eur. J. Org. Chem.* **2023**, *26*, e202300421.
- P30.** L. Rapisarda, **A. Fermi***, P. Ceroni, R. Giovanelli, G. Bertuzzi*, M. Bandini*, “Electrochemical C(sp³)-H functionalization of ethers via hydrogen-atom transfer by means of cathodic reduction”, *Chem. Commun.* **2023**, *59*, 2664.
- P29.** E. Pinosa, E. Bassan, S. Çetin, M. Villa, S. Potenti, F. Calogero, A. Gualandi*, **A. Fermi***, P. Ceroni, P. G. Cozzi*, “Light induced access to carbazole-1,3-carbonitrile: towards an efficient thermally activated delayed fluorescent (TADF) photocatalyst for Cobalt mediated allylations”, *J. Org. Chem.* **2023**, *88*, 6390.
- P28.** M. A. Bryden, F. Millward, T. Matulaitis, D. Chen, M. Villa, **A. Fermi**, S. Çetin, P. Ceroni*, E. Zysman-Colman*, “Moving Beyond Cyanoarene Thermally Activated Delayed Fluorescence Compounds as Photocatalysts: An Assessment of the Performance of a Pyrimidyl Sulfone Photocatalyst in Comparison to 4CzIPN”, *J. Org. Chem.* **2023**, *88*, 6364.
- P27.** S. Rodríguez-Nuévalos, A. M. Costero, M. Parra, S. Gil, P. Arroyo, J. A. Sáez*, P. Gaviña*, P. Ceroni, **A. Fermi**, “Colorimetric and fluorescent BODIPY-hydrazone probes for the detection of γ-hydroxybutyric acid (GHB) and cathinones”, *Dyes Pigm.* **2022**, *207*, 110757.
- P26.** F. Calogero, G. Magagnano, S. Potenti, A. Gualandi*, **A. Fermi***, P. Ceroni, P. G. Cozzi*, “Dual photoredox and nickel catalysed reductive coupling of alkynes and aldehydes”, *Adv. Synth. Catal.* **2022**, *364*, 3410.
- P25.** F. Calogero, G. Magagnano, S. Potenti, F. Pasca, **A. Fermi***, A. Gualandi*, P. Ceroni, G. Bergamini, P. G. Cozzi*, “Diastereoselective and Enantioselective Photoredox Pinacol Coupling Promoted by Titanium Complexes with a Red-Absorbing Organic Dye”, *Chem. Sci.* **2022**, *13*,

5973.

- P24.** M. Villa, P. Ceroni, **A. Fermi***, “Tetrachromophoric systems based on rigid tetraphenylmethane (TPM) and tetraphenylethylene (TPE) scaffolds”, *ChemPlusChem* **2022**, *87*, e202100558.
- P23.** F. Calogero, S. Potenti, E. Bassan, **A. Fermi**, A. Gualandi*, J. Monaldi, B. Dereli, B. Maity, L. Cavallo*, P. Ceroni*, P. G. Cozzi*, “Nickel Mediated Enantioselective Photoredox Allylation of Aldehydes with Visible Light”, *Angew. Chem. Int. Ed.* **2022**, *61*, e202114981.
- P22.** G. Morselli*, M. Villa, **A. Fermi**, K. Critchley, P. Ceroni*, “Luminescent Copper Indium Sulfide (CIS) Quantum Dots for Bioimaging Applications”, *Nanoscale Horiz.* **2021**, *6*, 676.
- P21.** F. Calogero, A. Gualandi*, M. Di Matteo, S. Potenti, **A. Fermi**, G. Bergamini, P. G. Cozzi* “Photoredox propargylation of aldehydes catalytic in Titanium”, *J. Org. Chem.* **2021**, *86*, 7002.
- P20.** S. Potenti, A. Gualandi*, A. Puggioli, **A. Fermi**, G. Bergamini, P. G. Cozzi*, “Photoredox Allylation Reactions Mediated by Bismuth in Aqueous Conditions”, *Eur. J. Org. Chem.* **2021**, *11*, 1624.
- P19.** G. Mercuri, M. Moroni, **A. Fermi***, G. Bergamini, S. Galli*, G. Giambastiani, A. Rossin*, “Zirconium Metal-Organic Frameworks Containing a Biselenophene Linker: Synthesis, Characterization, and Luminescent Properties”, *Inorg. Chem.* **2020**, *59*, 15832.
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- P14.** F. Di Maria*, M. Zangoli, M. Gazzano, E. Fabiano, D. Gentili, A. Zanelli, **A. Fermi**, G. Bergamini, D. Bonifazi, A. Perinot, M. Caironi, R. Mazzaro, G. Gigli, A. Liscio, G. Barbarella*, “Controlling the Functional Properties of Oligothiophene Crystalline Nano/Microfibers via Tailoring of the Self-Assembling Molecular Precursors”, *Adv. Funct. Mater.* **2018**, *28*, 1801946.
- P13.** A. Sciutto, **A. Fermi**, A. Folli, T. Battisti, J. Beames, D. M. Murphy, D. Bonifazi*, “Customizing photoredox properties of PXX-based dyes through energy level rigid shifts of frontier molecular orbitals”, *Chem. Eur. J.* **2018**, *24*, 4382.
- P12.** T. Miletić, **A. Fermi**, I. Papadakis, I. Orfanos, N. Karampitsos, A. Avramopoulos, N. Dimitri, F. De Leo, S. J. A. Pope, M. G. Papadopoulos, S. Couris, D. Bonifazi*, “A twisted bay-substituted quaterylene phosphorescing in the NIR spectral region”, *Helv. Chim. Acta* **2017**, *100*, e1700192.
- P11.** Y. Yu, G. Fan, **A. Fermi**, R. Mazzaro, V. Morandi, P. Ceroni, D.-M. Smilgies, B. A. Korgel*, “Size-Dependent Photoluminescence Efficiency of Silicon Nanocrystal Quantum Dots”, *J. Phys. Chem. C* **2017**, *121*, 23240.
- P10.** J. Dosso, J. Tasseroul, F. Fasano, D. Marinelli, N. Biot, **A. Fermi**, D. Bonifazi*, “Synthesis and Optoelectronic Properties of Hexa-peri-hexabenzoborazinocoronene”, *Angew. Chem. Int. Ed.* **2017**, *56*, 4483.
- P09.** T. Miletić, **A. Fermi**, I. Orfanos, A. Avramopoulos, F. De Leo, N. Dimitri, G. Bergamini, P. Ceroni, M. G. Papadopoulos, S. Couris, D. Bonifazi*, “Tailoring colors by O annulation of polycyclic aromatic

- hydrocarbons”, *Chem. Eur. J.* **2017**, *23*, 2363.
- P08.** A. Kremer, **A. Fermi**, N. Biot, J. Wouters, D. Bonifazi*, “Supramolecular Wiring of Benzo-1,3-chalcogenazoles through Programmed Chalcogen Bonding Interactions”, *Chem. Eur. J.* **2016**, *22*, 5665.
- P07.** **A. Fermi**, M. Locritani, G. Di Carlo, M. Pizzotti, S. Caramori, Y. Yu, B. A. Korgel, G. Bergamini*, P. Ceroni*, “Light-harvesting antennae based on photoactive silicon nanocrystals functionalized with porphyrin chromophores”, *Faraday Discuss.* **2015**, *185*, 481.
- P06.** G. Bergamini, **A. Fermi**, M. Marchini, M. Locritani, A. Credi, M. Venturi, F. Negri*, P. Ceroni*, M. Baroncini*, “A Highly Luminescent Tetramer from a Weakly Emitting Monomer: Acid- and Redox-Controlled Multiple Complexation by Cucurbit[7]uril”, *Chem. Eur. J.* **2014**, *20*, 7054.
- P05.** **A. Fermi**, G. Bergamini, R. Peresutti, E. Marchi, M. Roy, P. Ceroni*, M. Gingras*, “Molecular asterisks with a persulfurated benzene core are among the strongest organic phosphorescent emitters in the solid state”, *Dyes Pigm.* **2014**, *110*, 113.
- P04.** **A. Fermi**, P. Ceroni, M. Roy, M. Gingras*, G. Bergamini*, “Synthesis, Characterization, and Metal Ion Coordination of a Multichromophoric Highly Luminescent Polysulfurated Pyrene”, *Chem. Eur. J.* **2014**, *20*, 10661.
- P03.** **A. Fermi**, G. Bergamini, M. Roy, M. Gingras*, P. Ceroni*, “Turn-on Phosphorescence by Metal Coordination to a Multivalent Terpyridine Ligand: A New Paradigm for Luminescent Sensors”, *J. Am. Chem. Soc.* **2014**, *136*, 6395.
- P02.** G. Bergamini, **A. Fermi**, C. Botta, U. Giovanella, S. Di Motta, F. Negri*, R. Peresutti, M. Gingras*, P. Ceroni*, “A persulfurated benzene molecule exhibits outstanding phosphorescence in rigid environments: from computational study to organic nanocrystals and OLED applications”, *J. Mater. Chem. C* **2013**, *1*, 2717.
- P01.** G. Bergamini, J. K. Molloy, **A. Fermi**, P. Ceroni*, F. G. Klärner, U. Hahn*, “Diazapyrenium cored dendrimers: electron poor guests for a molecular clip host”, *New J. Chem.* **2012**, *36*, 354.

PARTICIPATION TO CONFERENCES, SEMINARS AND WORKSHOPS

- CS43.** “Luminescent polysulfurated benzenes: a versatile platform for RTP and TADF materials”
A. Fermi – Oral presentation – 10th EuChemS Chemistry Congress, 12–16 July 2026, Antwerp, Belgium.
- CS42.** “Expanding the toolbox of visible light-activated photoredox catalysis”
A. Fermi – Oral presentation – JIWSC Japan-Italy Workshop on Sustainable Chemistry, 11–12 September 2025, Bologna, Italy.
- CS41.** “Conformation-Controlled Vapochromic Phosphorescence at Room Temperature”
A. Fermi – Oral presentation – 32nd International Conference on Photochemistry, 13–18 July 2025, Aachen, Germany.
- CS40.** “Conformation-Controlled Vapochromic Phosphorescence at Room Temperature”
F. Battaglia, **A. Fermi** – Contributed poster presentation – Italian Photochemistry Meeting, 8–12 July 2025, Rome, Italy.
- CS39.** “Conformational dependent luminescence in solids”
A. Fermi – Seminar – 28 April 2025, Department of Chemistry and Life Science, Yokohama National University, Japan.
- CS38.** “Beyond Fluorescence: Harnessing Triplet States in Organic Materials”
A. Fermi – Invited talk – 21 April 2025, Department of Chemistry and Life Science, Yokohama

National University, Japan.

- CS37.** “*Synthesis of cobalt complexes catalytic for visible light-assisted hydrogen evolution from hybrid photoelectrodes design*”
F. Battaglia, **A. Fermi** – Contributed poster presentation – 5–7 December 2024, Italian Photochemistry Meeting, Rome, Italy.
- CS36.** “*Triangulenium ions: Versatile Organic Photocatalysts for Metallaphotoredox protocols*”
E. Pinosa, F. Calogero, **A. Fermi**, A. Gualandi, P. Ceroni, P. G. Cozzi – Contributed oral presentation – SCI2024 XXVIII Congresso Nazionale della Società Chimica Italiana, 26–30 August 2024, Milan, Italy.
- CS35.** “*Lithium-azaaromatics complexes as powerful visible-light activated photoreductants*”
A. Fermi – Oral presentation – 45th International Conference on Coordination Chemistry, 28 July–2 August 2024, Colorado State University, Ft. Collins (CO), USA.
- CS34.** “*Unravelling the luminescence properties of persulfurated benzenes*”
A. Fermi – Oral presentation – XXIX PhotoIUPAC, 14–20 July 2024, Valencia, Spain.
- CS33.** “*Targetting Ar-X bonds with powerful visible light-activated photoreductants*”
A. Fermi – Oral presentation – Interdepartmental Center for Chemical Catalysis (C³) Meeting, 4 June 2024, Bologna, Italy.
- CS32.** “*Organic dyes in metallaphotoredox catalysis: a big picture*”
A. Fermi – Oral presentation – Summer School on “Process intensification by flow chemistry”, 8–10 May 2024, Lisbon, Portugal.
- CS31.** “*Shedding light on persulfurated benzenes: how to tune their luminescence properties*”
A. Fermi – Poster presentation – XLIX Congresso Nazionale di Chimica Inorganica (Società Chimica Italiana), 12–15 September 2023, Perugia, Italy (awarded as *Best poster*).
- CS30.** “*Excited state processes and properties in photoredox catalysis*”
A. Fermi – Oral presentation – Winter School on Photosynthesis and Photocatalysis, 14–16 February 2023, Sofia, Bulgaria.
- CS29.** “*Insights into the luminescence properties of persulfurated benzenes*”
A. Fermi – Oral presentation – Italian Photochemistry Meeting, 15–17 December 2022, Ferrara, Italy.
- CS28.** “*Earth-abundant metal complexes in metallaphotoredox catalysis enabled by visible light*”
A. Fermi – Oral presentation – XLVIII Congresso Nazionale di Chimica Inorganica (Società Chimica Italiana), 6–9 September 2022, Pisa, Italy.
- CS27.** “*Organic dyes in metallaphotoredox catalysis: strategies and perspectives for C-C bond formation enabled by visible light*”
A. Fermi – Oral presentation – 8th EuChemS Chemistry Congress, 28 August–1 September 2022, Lisbon, Portugal.
- CS26.** “*Enabling metallaphotoredox catalysis with visible light*”
A. Fermi – Oral presentation – XXVIII PhotoIUPAC, 17–22 July 2022, Amsterdam, Netherlands.
- CS25.** “*Strategies for C-C bond formation in metallaphotoredox catalysis enabled by visible light*”
A. Fermi – Poster presentation – XXXVIII Reunión Bienal Real Sociedad Española de Química, 27–30 June 2022, Granada, Spain.
- CS24.** “*Enabling metallaphotoredox catalysis with visible light*”
A. Fermi – Oral presentation – Interdepartmental Center for Chemical Catalysis (C³) Meeting, 31 May 2022, Bologna, Italy.
- CS23.** “*Cromofori organici per la catalisi fotoredox*”

- A. Fermi** – Oral presentation – Ciam-In-Talk, 21 December 2021, Department of Chemistry, University of Bologna, Italy.
- CS22.** “*Isophthalonitrile derivatives as TADF-active chromophores for metallaphotoredox catalysis*”
A. Fermi – Oral presentation – Italian Photochemistry Meeting, 16–18 December 2021, Turin, Italy.
- CS21.** “*Towards synthetic cathinones detection through hydrazone-BODIPY derivatives*”
S. Rodríguez-Nuévalos, A. M. Costero, M. Parra, P. Ceroni, **A. Fermi** – Contributed poster presentation – XVII Simposio de Investigadores Jóvenes de la RSEQ, 23–26 November 2021, Alcalá de Henares, Spain.
- CS20.** “*Enabling visible-light metallaphotoredox catalysis with isophthalonitrile derivatives: new routes for C–C bond formation*”
A. Fermi – Oral presentation – GIF2, Giornate Italiane di Fotochimica (GIF) del Gruppo Italiano di Fotochimica (GIF), 23–24 September 2021 — *on-line conference*.
- CS19.** “*Visible-light activated metallaphotoredox catalysis enabled by TiIV complexes: new routes for C–C bond formation*”
A. Fermi – Oral presentation – XXVII Congresso Nazionale della Società Chimica Italiana, 14–23 September 2021 — *on-line conference*.
- CS18.** “*Metallaphotoredox catalysis enabled by visible-light absorbing isophthalonitrile derivatives*”
A. Fermi, A. Gualandi, F. Calogero, S. Potenti, S. Guazzi, A. Puggioli, M. Di Matteo, M. Mazzarini, G. Bergamini, P. G. Cozzi – Poster presentation – 30th International Conference on Photochemistry 2021, 19–23 July 2021, Geneva, Switzerland — *on-line conference*.
- CS17.** Workshop on Academic Writing and Publishing, Enago Academy, 13 February 2020, University of Bologna.
- CS16.** 2nd NanoScientific Forum Europe on Scanning Probe Microscopy (Park Systems), 11–13 September 2019, University of Bologna. Hands-on sessions on Kelvin Probe Force Microscopy.
- CS15.** “*Heteroatom-containing aromatic compounds: a journey through luminescent molecules*”
A. Fermi – Invited oral presentation – 5 December 2017, Department of Chemistry, University of Trieste.
- CS14.** “*Tuning optoelectronic properties of heteroatom-doped aromatic hydrocarbons*”
A. Fermi – Invited oral presentation – Coffee Talk@ISOF-CNR, 4 July 2017, Bologna, Italy.
- CS13.** “*Photoinduced electron transfer in organic chemistry*”
A. Fermi – Oral presentation – Organic Section Seminars, School of Chemistry, 8 february 2017, Cardiff, UK.
- CS12.** “*Extended O-doped polycyclic aromatics: tuning the gaps*”
A. Fermi, T. Miletić, A. Sciutto, D. Bonifazi – Poster presentation – Southampton Supramolecular Chemistry Symposium 2016, 24 June 2016, Southampton, UK.
- CS11.** “*Asymmetrical N-substituted naphthalene diimides as building blocks in multichromophoric systems*”
A. Fermi, A. Berezin, D. Bonifazi – Oral presentation – 1st International Caparica Christmas Congress on Translational Chemistry, 7–10 December 2015, Caparica, Portugal.
- CS10.** “*Sulfur-Rich Polyaromatic Architectures: Asterisks, Dendrimers, Polymers, Helicenes and Their Metal Interactions*”
A. Fermi, G. Bergamini, M. Roy, P. Ceroni, M. Gingras – Contributed talk – GECOM-CONCORD 2015, 26–29 May 2015, S.te-Foy-Lès-Lyon, France.
- CS09.** “*Silicon nanocrystals coated by porphyrins as light-harvesting antennae*”
P. Ceroni, M. Locritani, **A. Fermi**, G. Bergamini, Y. Yu, B. Korgel – Contributed talk – 227th ECS

Meeting, 24–28 May 2015, Chicago, USA.

CS08. 1st AFMeeting 2015 (Bruker), Milan, Italy, 24–25 February 2015. Overview on several AFM techniques for application in biological systems and nanomaterials.

CS07. “*Polysulfurated aromatic molecules as ligands in multichromophoric supramolecular networks*”
A. Fermi – Oral presentation – XLI Congresso Nazionale Chimica Inorganica, 5 September 2013, Parma, Italy.

CS06. “*Switching dendrimer luminescence by metal ion coordination*”
P. Ceroni, E. Marchi, **A. Fermi**, M. Baroncini, G. Bergamini – Contributed talk – International Conference on Photochemistry ICP2013, 21–25 July 2013, Leuven, Belgium.

CS05. “*A Persulfurated Benzene Molecule with Bright Phosphorescence in Rigid Environments: Photo-physics, Computational Investigation and OLED applications*”
S. Di Motta, F. Negri, G. Bergamini, C. Botta, U. Giovanella, **A. Fermi**, R. Peresutti, M. Gingras, P. Ceroni – Contributed poster presentation – 11th International Symposium on Functional π -Electron Systems, 2–7 June 2013, Arcachon, France.

CS04. “*Polysulfurated asterisks: a class of highly luminescent solids*”
A. Fermi, P. Ceroni, G. Bergamini, C. Botta, M. Gingras – Poster presentation – XXIV IUPAC Symposium On Photochemistry, 15–20 July 2012, Coimbra, Portugal.

CS03. “*Thiophenylene Dendrimers. Properties and Applications*”
M. Gingras, V. Placide, O. Margeat, E. Levillain, A. Allain, P. Ceroni, V. Balzani, **A. Fermi**, H.-J. Raeder, S. Karthäuser – Contributed talk – 7th International Dendrimer Symposium (IDS7), 26 June–1 July 2011, Gaithersburg, Maryland, USA.

CS02. Participation to the 7th “BCP Journée Scientifique Interface Biologie-Chimie-Physique”, 6 December 2010, CNRS-Marseilles, France.

CS01. “*Polysulfurated dendrimers as new optoelectronic materials*”
A. Fermi, P. Ceroni, G. Bergamini, M. Gingras – Poster presentation – XXIII IUPAC Symposium On Photochemistry, 11–16 July 2010, Ferrara, Italy.