ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO
selezione pubblica per n. 1 posto/i di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera a) della Legge 240/2010 per il settore concorsuale 03/B1 - FONDAMENTI DELLE SCIENZE CHIMICHE E SISTEMI INORGANICI, settore scientifico-disciplinare CHIM/03 - CHIMICA GENERALE ED INORGANICA presso il Dipartimento di Chimica, (avviso bando pubblicato sulla G.U. n. 7 del 25/01/2022) Codice concorso 4934

Francesca Arcudi
CURRICULUM VITAE

INFORMAZIONI PERSONALI

COGNOME	**ARCUDI**
NOME	**FRANCESCA**
DATA DI NASCITA	8 AGOSTO 1988

TITOLI

TITOLO DI STUDIO

24 July 2013	**M.Sc. Degree in Chemistry** Department of Chemistry, University of Palermo, Italy M.Sc. dissertation titled: "Modification and applications of nanotubes". Supervisor: Prof. Renato Noto

TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO

4 May 2017	**Ph.D. in Chemistry (Doctor Europaeus)** Department of Chemistry and Pharmaceutical Sciences, University of Trieste, Italy Ph.D. dissertation titled: "Tailored Carbon Nanodots: shining light on their synthesis and applications". Supervisor: Prof. Maurizio Prato

CONTRATTI DI RICERCA, ASSEGNI DI RICERCA O EQUIVALENTI

September 2018-(31 August 2022)	**International Post-doctoral Research Fellow** Department of Chemistry, Northwestern University, Evanston, IL, USA Semiconductor quantum dots for fast biological imaging/sensing and for photocatalysis.

PI: Prof. Emily Weiss

Jan 2017- August 2018 **National Post-doctoral Research Fellow**

Department of Chemistry and Pharmaceutical Sciences, University of Trieste, Italy

Design, preparation and characterization of carbon nanoparticles and their hybrid materials.

PI: Prof. Maurizio Prato

19/04/2021 – 19/04/2030 Italian National Scientific Habilitation (**ASN**) as Associate Professor (**Fascia II**) in **General and Inorganic Chemistry, 03/B1**

18/11/2020 – 18/11/2029 Italian National Scientific Habilitation (**ASN**) as Associate Professor (**Fascia II**) in **Organic Chemistry, 03/C1**

ATTIVITÀ DIDATTICA A LIVELLO UNIVERSITARIO IN ITALIA O ALL'ESTERO

Winter **Quarter 2021** Teaching assistant "Chem 141- General Chemistry" (Prof. Veronica Berns), Northwestern University. Modules focus on concepts relevant to General and Inorganic Chemistry

9 weeks – individual teaching loading for 10 hours per week: Deliver lectures on my own creation, question-and-answer sessions with students to help prepare them for their assessments, weekly office's hours, grading assessments, and supervision of the laboratory activities of two groups of students (total students: 29)

Winter **Quarter 2022** Recitation Teaching assistant "Chem 152: Accelerated General Chemistry 2" (Prof. Joseph Hupp and Prof. Chad Mirkin), Northwestern University. Modules focus on concepts relevant to General and Advanced Inorganic Chemistry.

10 weeks – individual teaching loading for 5 hours per week: Deliver lectures on my own creation ("Recitation": increased in-person teaching lectures), question-and-answer sessions with students to help prepare them for their assessments, weekly office's hours, grading assessments (total students: 21)

(Teaching classes at Northwestern University include participation in teaching training)

Teaching assistant "Fondamenti di Chimica Organica", University of Trieste, a.a. 2014/15

10 CFU: Deliver lectures/exercises on my own creation, question-and-answer sessions with students to help prepare them for their assessments, weekly office's hours, grading assessments

Teaching assistant "Chimica Organica Avanzata", University of Trieste, a.a. 2013/14

10 CFU: Deliver lectures/exercises on my own creation, question-and-answer sessions with students to help prepare them for their assessments, weekly office's hours, grading assessments

SUPERVISIONE STUDENTI DI DOTTORATO

Michele Cacioppo, PhD 2020 (University of Trieste), co-supervisor. Under my supervision, he published Nature Communications and Angewandte Chemie as first name authors papers. He is currently pursuing post-doctoral work for H2020 DECADE project

Francesco Rigodanza, PhD 2018 (University of Trieste), co-supervisor. Under my supervision, he published Nature Communications and Angewandte Chemie as first name authors papers. He is currently pursuing post-doctoral work at the University of Padova

Jennifer Gomez, PhD 2018 (University of Trieste), co-supervisor. Under my supervision, she published Journal of Materials Chemistry B as first name author paper. She is currently pursuing post-doctoral work at Masaryk University

Aaron Stone, PhD 2023 (Northwestern University), co-supervisor. Under my supervision, he is currently preparing a first name author paper

Maya Pathuri, PhD 2025 (Northwestern University), co-supervisor. Under my supervision, she is currently preparing a first name author paper

DOCUMENTATA ATTIVITÀ DI FORMAZIONE O DI RICERCA PRESSO QUALIFICATI ISTITUTI ITALIANI O STRANIERI;

April 2015- August 2015 **Visiting Scholar**

Institut de Science et d'Ingénierie Supramoléculaires- Université de Strasbourg, France

Carbon nanodots hybrid materials for electrochemiluminescence applications

Supervisor: Prof. Luisa De Cola

September 2018-(31 August 2022) **International Post-doctoral Research Fellow**

Department of Chemistry, Northwestern University, Evanston, IL, USA

Semiconductor quantum dots for fast biological imaging/sensing and for photocatalysis.

PI: Prof. Emily Weiss

May 2017- August 2018 **National Post-doctoral Research Fellow**

Department of Chemistry and Pharmaceutical Sciences, University of Trieste, Italy

Design, preparation and characterization of carbon nanoparticles and their hybrid materials.

PI: Prof. Maurizio Prato

REALIZZAZIONE DI ATTIVITÀ PROGETTUALE

Experience in writing European Research Council (ERC) Grants:

ERC Advanced Grant "e-DOTS" awarded to Prof. Prato; ERC-AdG-2019 n. 885323

ERC Synergy Grant "IMMUNODOTS", positive evaluation in the first step - 2018; collaboration with the research groups of Prof. Maurizio Prato (University of Trieste) and Prof. Franco Locatelli (Director of Pediatric Hematology-Oncology, Ospedale Pediatrico Bambino Gesù and President of the "consiglio superiore di sanità") and Prof. Lorenzo Moretta (Director of Immunology, Ospedale Pediatrico Bambino Gesù) and Prof. Alessandro Moretta (Director of the Center of Excellence for Biomedical Research, University of Genoa, till 2018)

Experience in writing European Marie Skłodowska Curie Actions: Marie Sklodowska-Curie actions H2020-MSCA-IF-2018 awarded with the Seal of Excellence 2020 by the European Commission. Global Fellowship "MitoDOTS: Smart Optical Voltage Sensors based on Quantum Dots to monitor the Mitochondrial Membrane Potential."

Selected Member of the Chemistry Departmental Program Review 2021 of Northwestern University, Evanston, IL, USA

Selected Speaker/Spokesperson for the Center for Bio-inspired Energy Science during the review of Energy Frontier Research Centers by the U.S. Department of Energy (with Washington D.C. office on November 2020 – online)

Graduate Student Co-Advisor, Department of Chemistry, Northwestern University, Evanston, IL, USA (2019-present)

Graduate Student Co-Advisor, Department of Chemistry and Pharmaceutical Sciences, University of Trieste, Italy (2016-2020)

ORGANIZZAZIONE, DIREZIONE E COORDINAMENTO DI GRUPPI DI RICERCA NAZIONALI E INTERNAZIONALI, O PARTECIPAZIONE AGLI STESSI

Responsible of coordination and organization of 2 research units at Northwestern University (01/09/2018-present):

"Hierarchical Structure-Mediated Photocatalysis" in the Center for Bio-inspired Energy Science - an Energy Frontier Research Center (EFRC), funded by the U.S. Department of Energy.

"A Quantum Dot Probe for Nanosecond-Timescale Imaging of Fast Biological Processes" in the Dept. of Chemistry of Northwestern University, funded by the U. S. National Institute of Health.

Selected Scientific Responsible of report-writing for the two units of research (2019-present)

Project participation - lead researcher and co-supervision of PhD candidates (01/01/2017-31/08/2017):

Project "Synthesis of Metal Nanoparticles Decorated Carbon Based Nanostructures for Biomedical Applications", funded by the King Saud University via the "Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali (INSTM)".

Project participation - lead researcher and co-supervision of PhD candidates (01/09/2020-present):

Project "Toward Selective Photocatalytic Conversion of Methane to Methanol by a Colloidal Quantum Dot: Spatio-Temporal Reaction Control and in Situ Methanol Protection Schemes", funded by the U.S. Department of Energy, Basic Energy Sciences (Solar Photochemistry Program).

FONDI RICEVUTI

Research Fellowship from Center for Bio-inspired Energy Science, Dept. of Chemistry, Northwestern University (01/09/2021 – 31/08/2022)

Research Fellowship from Center for Bio-inspired Energy Science, Dept. of Chemistry, Northwestern University (01/09/2020 – 31/08/2021)

Research Fellowship from U.S. National Institutes of Health, Dept. of Chemistry, Northwestern University (01/09/2019 – 31/08/2020)

Research Fellowship from U.S. National Institutes of Health, Dept. of Chemistry, Northwestern University (01/09/2018 – 31/08/2019)

PhD Fellowship from MIUR, University of Trieste (01/01/2014 – 31/12/2017)

Erasmus Traineeship Exchange Fellowship (07/04/2015 – 04/08/2015)

Undergraduate MIUR Fellowship "Progetto Lauree Scientifiche" (2006)

TITOLARITÀ DI BREVETTI

PATENTS (**INTERNATIONALS**)

1. Arcudi F., Đorđević L., Nagasing B., Stupp. S., Weiss E.A.. Quantum Dot Sensitized Photoreduction of Carbon Dioxide. USPTO 63/154,319. Appl. filed.

2. Arcudi F., Đorđević L., Stupp. S., Weiss E.A.. Selective Photocatalytic Reduction of Acetylene to Ethylene. USPTO 63/180,798. Appl. filed

ATTIVITÀ DI RELATORE A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI

IUPAC Canadian Chemistry Conference and Exhibition 2021 (104th CCCE), 13-20 August 2021. Oral, invited.

Italian Chemical Society Conference XXVI. 10-14 September 2017. Oral, invited (award ceremony).

EFRC Center for Bioinspired Energy Science, the U.S. Department of Energy conference meeting. 17 November 2020. Oral.

Center for Bio-inspired Energy Science, conference meeting. 27 May 2021. Oral.

Energy Frontier Research Centers Meeting (EFRC-Hub-CMS-CCS PI's Meeting). 18-19 October 2021. Poster.

Merck Young Chemists Symposium (MYCS) 2017, XVII Edition. 13-15 November 2017. Oral

European-Winter School on Physical Organic Chemistry (E-WISPOC) 2016. 31 January-5 February 2016. Poster + Oral.

Sigma-Aldrich Young Chemists Symposium (SAYCS) 2015. 27-29 October 2015. Poster + Oral.

The International Symposium on Macrocyclic and Supramolecular Chemistry (10th ISMSC) 2015. 28 June-2 July 2015. Poster.

Graphene Study 2014 (Graphene Flagship). 2-7 February 2014.

CONSEGUIMENTO DI PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA

Outstanding Researcher Award 2021 – International Institute for Nanotechnology, NU, USA

Early Career Award "Organic Chemistry for Environment, Energy and Nanoscience" 2018 – Division of Organic Chemistry, Italian Chemical Society

Reaxys Young Researcher Award 2018 – Reaxys, Elsevier

Primo Levi Award 2016, medal – Italian Chemical Society

Seal of Excellence Marie Skłodowska-Curie actions H2020-MSCA-IF-2018 – European Commission

Piano Lauree Scientifiche (PLS) Award 2006, Area Chimica, Palermo - MIUR

MEMBERSHIP E BOARD EDITORIALI

Italian Chemical Society

Next-Generation Advisory Board, Chem, Cell Press (2016 – 2019)

Guest Editor, Special Issue "Carbon Nanomaterials for Imaging and Sensing", Materials, MDPI

ATTIVITA' DA REFEREE (PEER-REVIEWED INTERNATIONAL JOURNALS)

Nature Communications (Nature Publishing Group), ACS Nano (ACS Publications), Chemistry of Materials (ACS Publications), The Journal of Physical Chemistry (ACS Publications), ACS Omega (ACS Publications), Journal of Materials Science (Springer Nature Publications), Scientific Reports (Nature Publishing Group), Carbon (Elsevier), Materials (MDPI), Nanomaterials (MDPI), Sensors (MDPI), Journal of Nanomaterials (Hindawi), JPhys Materials (IOPScience).

PRODUZIONE SCIENTIFICA

METRIX OVERVIEW

(Source: Scopus 24 February 2022)

H index: 15

Citations: 1059

Average citations per publication (26): **41**

Total "impact factor": 333.9

Average "impact factor" per publication (26): **12.8**

ORCID ID: 0000-0003-1909-5241

Scopus Author ID: 56271551400

Google Scholar: https://scholar.google.it/citations?user=aGmpM8QAAAAJ&hl=it

PUBBLICAZIONI SCIENTIFICHE

SELECTED (12) PUBLICATIONS (PEER-REVIEWED INTERNATIONAL JOURNALS):

12/12: Research Articles

3/12: First Name Author and Corresponding Author

2/12: Second Name Author and Corresponding Author

6/12: First Name Author

10/12: I.F.>13

2/12: 12>I.F.> 5

1. Arcudi F., Đorđević L., Nagasing B., Stupp S. I., Weiss E. A. "Quantum Dot-Sensitized Photoreduction of CO_2 in Water with Turnover Number > 80,000" **Journal of the American Chemical Society**, 143 (43), 18131–18138 (2021). **I.F. 15.419**. Publisher: American Chemical Society. ISSN: 0002-7863. https://doi.org/10.1021/jacs.1c06961. Cit (Scopus 24/2/22): 3

2. **Arcudi F.* (*corresponding author)**, Đorđević L., Rebeccani S., Cacioppo M., Zanut A., Valenti G., Paolucci F., Prato M.. "Lighting up the Electrochemiluminescence of Carbon Dots through Pre- and Post-Synthetic Design" **Advanced Science**, 8, 13, 202100125 (2021). **I.F. 16.806**. Publisher: Wiley-Blackwell. ISSN: 2198-3844. https://doi.org/10.1002/advs.202100125. Cit (Scopus 24/2/22): 6

3. Đorđević L., **Arcudi F.* (*corresponding author)**, D'Urso A., Cacioppo M., Micali N., Bürgi T., Purrello R., Prato M.. "Design principles of chiral carbon nanodots help convey chirality from molecular to nanoscale level" **Nature Communications**, 9, 3442 (2018). **I.F. 14.919**. Publisher: Springer Nature. ISSN: 2041-1723. https://doi.org/10.1038/s41467-018-05561-2. Cit.: 83

4. Đorđević L., **Arcudi F.* (*corresponding author)**, Prato M.. "Preparation, functionalization and characterization of engineered carbon nanodots" **Nature Protocols**, 14 (10), 2931–2953 (2019). **I.F. =**

13.491. Publisher: Springer Nature. ISSN: 1754-2189. https://doi.org/10.1038/s41596-019-0207-x. Cit (Scopus 24/2/22): 39

5. **Arcudi F.**, Westmoreland D. E., Weiss E. A.. "Colloidally Stable CdS Quantum Dots in Water with Electrostatically Stabilized Weak-Binding, Sulfur-Free Ligands" **Chemistry A European J.**, 25, 14469–14474 (2019). **I.F. = 5.236**. Publisher: Wiley-Blackwell. ISSN: 0947-6539. https://doi.org/10.1002/chem.201903908. Cit (Scopus 24/2/22): 3

6. Rizzo, C.†, **Arcudi F.† (†equal contribution)**, Đorđević L., Dintcheva N. T., Noto R., D'Anna F., Prato M.. "Nitrogen-Doped Carbon Nanodots-Ionogels: Preparation, Characterization, and Radical Scavenging Activity" **ACS Nano**, 12, 1296–1305 (2018). **I.F. = 15.881**. Publisher: American Chemical Society. ISSN: 1936-0851. https://doi.org/10.1021/acsnano.7b07529. Cit (Scopus 24/2/22):56

7. **Arcudi F.**, Đorđević L., Prato M.. "Rationally Designed Carbon Nanodots towards Pure White-Light Emission" **Angewandte Chemie Int. Ed.**, 56, 4170–4173 (2017). **I.F. 15.336**. Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201612160. Cit (Scopus 24/2/22): 70

8. **Arcudi F.**, Strauss V., Đorđević L., Cadranel A., Guldi D. M., Prato M.. "Porphyrin Antennas on Carbon Nanodots: Excited State Energy and Electron Transduction" **Angewandte Chemie Int. Ed.**, 56, 12097–12101 (2017). **I.F. 15.336**. Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201704544. Cit (Scopus 24/2/22): 44

9. Carrara S.†, **Arcudi F.† (†equal contribution)**, Prato M., De Cola L.. "Amine-Rich Nitrogen-Doped Carbon Nanodots as a Platform for Self-Enhancing Electrochemiluminescence" **Angewandte Chemie Int. Ed.**, 56, 4757–4761 (2017). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201611879. Cit (Scopus 24/2/22): 129

10. Dimos K.†, **Arcudi F. †* (*corresponding author and †equal contribution)**, Kouloumpis A., Koutselas I. B., Rudolf P., Gournis D., Prato M.. "Top-down and bottom-up approaches to transparent, flexible and luminescent nitrogen-doped carbon nanodot-clay hybrid films" **Nanoscale**, 9 (29), 10256–10262 (2017). I.F. = 7.79. Publisher: Royal Society of Chemistry. ISSN: 2040-3364. https://doi.org/10.1039/C7NR02673K. Cit (Scopus 24/2/22): 34

11. **Arcudi F.* (*corresponding author)**, Đorđević L., Prato M.. "Synthesis, Separation, and Characterization of Small and Highly Fluorescent Nitrogen-Doped Carbon NanoDots" **Angewandte Chemie Int. Ed.**, 55, 2107–2112 (2016). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201510158. Cit (Scopus 24/2/22): 193

12. Rigodanza F., Đorđević L., **Arcudi F.**, Prato M.. "Customizing the Electrochemical Properties of Carbon Nanodots by Using Quinones in Bottom-Up Synthesis" **Angewandte Chemie Int. Ed.**, 57, 5062–5067 (2018). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201801707. Cit (Scopus 24/2/22): 46

ALL PUBLICATIONS (PEER-REVIEWED INTERNATIONAL JOURNALS):

4/26: First Name Author and Corresponding Author (Nature Nanotechnology, Angewandte Chemie, Advanced Science, Nanoscale)

2/26: Second Name Author and Corresponding Author (Nature Communications, Nature Protocols)

9/26: First Name Author (include 3 Angewandte Chemie, Journal of the American Chemical Society, ACS Nano, Accounts of Chemical Research)

18/26: I.F.>13

† = equal contribution; * = corresponding author

1. Đorđević L., **Arcudi F.†,* (†equal contribution and *corresponding author)**, Prato M.. "A multifunctional chemical toolbox to engineer carbon dots for biomedical and energy-related applications" **Nature Nanotechnology** 17, 112-130 (2022). **I.F. 39.213**. Publisher: Springer Nature. ISSN: 1748-3387. https://doi.org/10.1038/s41565-021-01051-7. Cit (Scopus 24/2/22): 0

2. **Arcudi F.**, Đorđević L., Prato M.. "Design, Synthesis, and Functionalization Strategies of Tailored Carbon Nanodots" **Accounts of Chemical Research**, 52, 2070–2079 (2019). **I.F. = 22.384**. Publisher: American Chemical Society. ISSN: 0001-4842. https://doi.org/10.1021/acs.accounts.9b00249. Cit (Scopus 24/2/22): 71

3. **Arcudi F.**, Đorđević L., Nagasing B., Stupp S. I., Weiss E. A. "Quantum Dot-Sensitized Photoreduction of CO_2 in Water with Turnover Number > 80,000" **Journal of the American Chemical Society**, 143 (43), 18131–18138 (2021). **I.F. 15.419**. Publisher: American Chemical Society. ISSN: 0002-7863. https://doi.org/10.1021/jacs.1c06961. Cit (Scopus 24/2/22): 3

4. **Arcudi F.* (*corresponding author)**, Đorđević L., Rebeccani S., Cacioppo M., Zanut A., Valenti G., Paolucci F., Prato M.. "Lighting up the Electrochemiluminescence of Carbon Dots through Pre- and Post-Synthetic Design" **Advanced Science**, 8, 13, 202100125 (2021). **I.F. 16.806**. Publisher: Wiley-Blackwell. ISSN: 2198-3844. https://doi.org/10.1002/advs.202100125. Cit (Scopus 24/2/22): 6

5. Đorđević L., **Arcudi F.* (*corresponding author)**, D'Urso A., Cacioppo M., Micali N., Bürgi T., Purrello R., Prato M.. "Design principles of chiral carbon nanodots help convey chirality from molecular to nanoscale level" **Nature Communications**, 9, 3442 (2018). **I.F. 14.919**. Publisher: Springer Nature. ISSN: 2041-1723. https://doi.org/10.1038/s41467-018-05561-2. Cit.: 83

6. Đorđević L., **Arcudi F.* (*corresponding author)**, Prato M.. "Preparation, functionalization and characterization of engineered carbon nanodots" **Nature Protocols**, 14 (10), 2931–2953 (2019). **I.F. = 13.491**. Publisher: Springer Nature. ISSN: 1754-2189. https://doi.org/10.1038/s41596-019-0207-x. Cit (Scopus 24/2/22): 39

7. **Arcudi F.**, Westmoreland D. E., Weiss E. A.. "Colloidally Stable CdS Quantum Dots in Water with Electrostatically Stabilized Weak-Binding, Sulfur-Free Ligands" **Chemistry A European J.**, 25, 14469–14474 (2019). **I.F. = 5.236**. Publisher: Wiley-Blackwell. ISSN: 0947-6539. https://doi.org/10.1002/chem.201903908. Cit (Scopus 24/2/22): 3

8. Rizzo, C.†, **Arcudi F.† (†equal contribution)**, Đorđević L., Dintcheva N. T., Noto R., D'Anna F., Prato M.. "Nitrogen-Doped Carbon Nanodots-Ionogels: Preparation, Characterization, and Radical Scavenging Activity" **ACS Nano**, 12, 1296–1305 (2018). **I.F. = 15.881**. Publisher: American Chemical Society. ISSN: 1936-0851. https://doi.org/10.1021/acsnano.7b07529. Cit (Scopus 24/2/22):56

9. **Arcudi F.**, Đorđević L., Prato M.. "Rationally Designed Carbon Nanodots towards Pure White-Light Emission" **Angewandte Chemie Int. Ed.**, 56, 4170–4173 (2017). **I.F. 15.336**. Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201612160. Cit (Scopus 24/2/22): 70

10. **Arcudi F.**, Strauss V., Đorđević L., Cadranel A., Guldi D. M., Prato M.. "Porphyrin Antennas on Carbon Nanodots: Excited State Energy and Electron Transduction" **Angewandte Chemie Int. Ed.**, 56, 12097–12101 (2017). **I.F. 15.336**. Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201704544. Cit (Scopus 24/2/22): 44

11. Carrara S.†, **Arcudi F.† (†equal contribution)**, Prato M., De Cola L.. "Amine-Rich Nitrogen-Doped Carbon Nanodots as a Platform for Self-Enhancing Electrochemiluminescence" **Angewandte Chemie Int. Ed.**, 56, 4757–4761 (2017). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201611879. Cit (Scopus 24/2/22): 129

12. Dimos K.†, **Arcudi F. †* (*corresponding author and †equal contribution)**, Kouloumpis A., Koutselas I. B., Rudolf P., Gournis D., Prato M.. "Top-down and bottom-up approaches to transparent, flexible and luminescent nitrogen-doped carbon nanodot-clay hybrid films" **Nanoscale**, 9 (29), 10256–10262 (2017). I.F. = 7.79. Publisher: Royal Society of Chemistry. ISSN: 2040-3364. https://doi.org/10.1039/C7NR02673K. Cit (Scopus 24/2/22): 34

13. **Arcudi F.* (*corresponding author)**, Đorđević L., Prato M.. "Synthesis, Separation, and Characterization of Small and Highly Fluorescent Nitrogen-Doped Carbon NanoDots" **Angewandte Chemie Int. Ed.**, 55, 2107–2112 (2016). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201510158. Cit (Scopus 24/2/22): 193

14. Rigodanza F., Đorđević L., **Arcudi F.**, Prato M.. "Customizing the Electrochemical Properties of Carbon Nanodots by Using Quinones in Bottom-Up Synthesis" **Angewandte Chemie Int. Ed.**, 57, 5062–5067 (2018). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.201801707. Cit (Scopus 24/2/22): 46

15. Rigodanza F., Burian M., **Arcudi F.**, Đorđević L., Amenitsch H., Prato M.. "Snapshots into carbon dots formation through a combined spectroscopic approach" **Nature Communications**, 12, 2640 (2021). **I.F. 14.919**. Publisher: Springer Nature. ISSN: 2041-1723. https://doi.org/10.1038/s41467-021-22902-w. Cit (Scopus 24/2/22): 18

16. Yan, H., Cacioppo, M., Megahed, S., **Arcudi, F.**, Đorđević, L., Zhu, D., Prato M., Parak, W., Feliu, N.. "Influence of the chirality of carbon nanodots on their interaction with proteins and cells" **Nature Communications**, 17, 7208 (2021). **I.F. 14.919**. Publisher: Springer Nature. ISSN: 2041-1723. https://doi.org/10.1038/s41467-021-27406-1. Cit (Scopus 24/2/22): 0

17. Đorđević L., Casimiro L., Demitri N., Baroncini M., Silvi S., **Arcudi F.**, Credi A., Prato M.. "Light-Controlled Regioselective Synthesis of Fullerene Bis-Adducts" **Angewandte Chemie Int. Ed.** 60 (1), 313–320 (2021). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.202009235. Cit (Scopus 24/2/22): 6

18. Cacioppo M., Scharl T., Đorđević L., Cadranel A., **Arcudi F.**, Guldi D. M., Prato, M.. "Symmetry-Breaking Charge-Transfer Chromophore Interactions Supported by Carbon Nanodots" **Angewandte Chemie Int. Ed.**, 59 (31), 12779–12784 (2020). **I.F. 15.336.** Publisher: Wiley-Blackwell. ISSN: 1433-7851. https://doi.org/10.1002/anie.202004638. Cit (Scopus 24/2/22): 10

19. Đorđević L., Haines P., Cacioppo M., **Arcudi F.**, Scharl T., Cadranel A., Guldi D. M., Prato M.. "Synthesis and excited state processes of arrays containing amine-rich carbon dots and unsymmetrical rylene diimides" **Materials Chemistry Frontiers**, 4 (12), 3640–3648 (2020). **I.F. 6.482**. Publisher: Royal Society of Chemistry. ISSN: 2052-1537. https://doi.org/10.1039/D0QM00407C. Cit (Scopus 24/2/22): 6

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21. Amato F., Cacioppo M., **Arcudi F.**, Prato M., Mituo M., Fernandes E. G., Carreño M. N. P., Pereyra I., Bartoli J. R.. "Nitrogen-doped Carbon Nanodots/PMMA Nanocomposites for Solar Cells Applications" **Chemical Engineering Trans.**, 74, 1105–1110 (2019). **I.F. = 0.693.** Publisher: Italian Association of Chemical Engineering - AIDIC. ISSN: 2283-9216. https://doi.org/10.3303/CET1974185. Cit (Scopus 24/2/22): 4

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