

METRICS (last update: 18/05/2025)

GOOGLE SCHOLAR: 189 publications, 1642 citations, h-index 21

SCOPUS: 174 publications, 1434 citations, h-index 18

WEB OF SCIENCES: 171 publications, 1330 citations, h-index 18

PUBLICATIONS in REFEREED JOURNALS:

1. A. Torrisi, A. M. Roszkowska, M. Cutroneo, L. Torrisi, "Spectroscopic Analysis of Silicone Intraocular Lenses by Optical Transmission Measurements and FTIR", *Int. Polym. Process.* (In Press, 2025).
2. A. Torrisi, M. Lentini, S. Pezzino, C. Gagliano, S. Lavallo, R. Malaguarnera, S. Castorina, F. Torrisi, A. Maniaci "The Promise and Challenges of 3D Bioprinting in Otolaryngology: A Contemporary Perspective Viewpoint", *Clin. Otolaryngol.* (In Press, 2025). DOI: 10.1111/coa.14333
3. L. Silipigni, M. Cutroneo, G. Salvato, A. Torrisi, L. Torrisi "Thermally treated GO foil dielectric properties under low and medium vacuum conditions", *Radiat. Eff. Defects S.* **180**(1-2), 4-15 (2025). DOI: 10.1080/10420150.2025.2474956
4. L. Torrisi, M. Cutroneo, A. Torrisi "Plasma production by laser ablation of heavy metals", *Contrib. Plasm. Phys.* e70023 (In Press, 2025, e70023).
5. M. Cutroneo, L. Silipigni, A. Torrisi, D. Franco, P. Malinsky, L. Torrisi "Polymethylmethacrylate-palladium composites as promising packaging material", *Radiat. Eff. Defects S.* **180**(1-2), 156-165 (2025). DOI: 10.1080/10420150.2025.2475365
6. L. Torrisi, A. Torrisi, M. Cutroneo "Carbon dots synthesization via graphite laser ablation in biocompatible solution", *Radiat. Eff. Defects S.* **180**(1-2), 180-189 (2025). DOI:10.1080/10420150.2025.2475367
7. L. Torrisi, V. Havranek, P. Malinsky, A. Mackova, D. Manno, A. Serra, A. Torrisi, M. Cutroneo "Visible fluorescence in carbon dots deposited on silicon under energetic proton beams excitation", *J. Nanoparticle Res.* **27**(3), 58 (2025). DOI: 10.1007/s11051-025-06255-9
8. L. Torrisi, M. Cutroneo, L. Silipigni, A. Torrisi, A. Signorile, D. Manno, A. Serra "Luminescent carbon dots structure by charcoal laser ablation in biocompatible liquid", *Fuller. Nanotub. Car. N.* (2025, In Press). DOI: 10.1080/1536383X.2025.2461504
9. L. Torrisi, A. Torrisi, M. Cutroneo "IR Pulsed Laser Ablation of Carbon Materials in High Vacuum", *Appl. Sci.* **14**(24), 11744 (2025). DOI: 10.3390/app142411744
10. L. Torrisi, A. Torrisi, D. Cosio, M. Cutroneo "Optical properties of carbon dots generated in liquid by pulsed IR laser at 1064 nm", *Fuller. Nanotub. Car. N.* **33**(5), 495-508 (2025). DOI: 10.1080/1536383X.2024.2424346
11. L. Torrisi, A. Torrisi, M. Cutroneo "Luminescence enhancement of carbon dots synthesized by intense CW laser at 450 nm irradiating biocompatible solutions", *Fuller. Nanotub. Car. N.* **33**(2), (2025). DOI: 10.1080/1536383X.2024.2391548

12. A. Torrisi, A. M. Roszkowska, M. Cutroneo, L. Torrisi "Irradiation of hydrophilic acrylic intraocular lenses by a 365 nm UV lamp", *Open Physics* **22**(1), (2024). DOI: 10.1515/phys-2024-0097
13. A. Torrisi, M. Cutroneo, L. Torrisi, S. Lavallo, A. Forzina, F. Pegreffi "Unveiling the Potential of Vitamin D3 Orodispersible Films: A Comprehensive FTIR and UV-Vis Spectroscopic Study", *Molecules* **29**, 16, 3762 (2024). DOI: 10.3390/molecules29163762
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15. L. Torrisi, M. Cutroneo, B. Fazio, S. Conoci, G. Salvato, A. Torrisi, L. Silipigni "Graphene oxidation and reduction in medium vacuum by an UV lamp at 365 nm wavelength", *Radiat. Eff. Defects S.* **179**(9-10), 1394-1408 (2024). DOI: 10.1080/10420150.2024.2346321
16. L. Torrisi, A. Torrisi, M. Cutroneo "SiC plasma characterization produced by 3 ns pulse laser at 10^{10} W/cm² intensity", *Radiat. Eff. Defects S.* (2024, In Press). DOI: 10.1080/10420150.2024.2369122
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18. L. Torrisi, L. Silipigni, A. Torrisi, M. Cutroneo "Luminescence in laser-generated functionalized carbon dots", *Opt. Laser Technol.* **177**, 111089 (2024). DOI: 10.1016/j.optlastec.2024.111089
19. L. Torrisi, V. Havranek, A. Mackova, L. Calcagno, A. Torrisi, M. Cutroneo "Comparison between conventional Si and new generation of SiC detector for high proton energy spectrometry", *J. Instrum.* **19**, P04032 (2024). DOI: 10.1088/1748-0221/19/04/P04032
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21. L. Torrisi, L. Silipigni, A. Torrisi, M. Cutroneo "Investigations on MoS₂ plasma by IR pulsed laser irradiation in high vacuum", *PSST* **26**, 0755072024 (2024). DOI: 10.1088/2058-6272/ad3615
22. L. Torrisi, A. Torrisi, M. Cutroneo "Fullerene C₂₀ carbon nucleation induced by IR ns pulsed laser-generated plasma", *Fuller.* **32**, 8, 783-790 (2024). DOI: 10.1080/1536383X.2024.2328801.
23. L. Silipigni, M. Cutroneo, B. Fazio, G. Salvato, A. Torrisi, E. Piperopoulos, L. Torrisi "Influence of curing time on some properties of GNPs/PDMS nanocomposites", *Radiat. Eff. Defects S.* **179**(1-2), 162-174 (2024). DOI: 10.1080/10420150.2024.2318725.
24. L. Torrisi, L. Silipigni, M. Cutroneo, A. Torrisi "Ion acceleration from golden mylar film irradiated by visible ns pulsed laser", *Contrib. Plasm. Phys.* **64**, 9, e202300166 (2024). DOI: 10.1002/ctpp.202300166.
25. L. Torrisi, L. Silipigni, M. Cutroneo, A. Torrisi "Ion acceleration from aluminised mylar film irradiated by visible ns pulsed laser", *Radiat. Eff. Defects S.* **179**(1-2), 64-75 (2024). DOI: 10.1080/10420150.2024.2318713.
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31. L. Torrisi, L. Silipigni, M. Cutroneo, A. Torrisi "Mass spectrometry of graphene oxide thermal reduction in vacuum", *Radiat. Eff. Defect S.* **178**(1-2), 28-39 (2023). DOI: 10.1080/10420150.2023.2186867
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38. L. Torrisi, L. Silipigni, G. Salvato, M. Cutroneo, A. Torrisi, "Graphene-based materials: properties, advancements and applications", *Radiat. Eff. Defect S.* **177**(11-12), 1151-1165 (2022). DOI: 10.1080/10420150.2022.2136075
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CONFERENCE ABSTRACTS, TALKS, WORKSHOPS and POSTER PRESENTATIONS:

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2. L. Torrisi, D. Lombardo, L. Silipigni, A. Torrisi, M. Cutroneo, "Luminescence of Carbon dots produced by laser ablation in biocompatible liquid", Workshop "Light Interaction", 20st May 2024, Accademia Peloritana dei Pericolanti, Messina (Italy).
3. A. Torrisi, "Progettazione e realizzazione di dispositivi di potenza e rivelatori di radiazione", UNICT PNRR RTDday, 25th July, 2023, Rettorato Università di Catania (Italy).
4. L. Torrisi, L. Silipigni, G. Salvato, M. Cutroneo, A. Torrisi "Graphene-based materials: properties, advancements and applications", Workshop on Physics and Engineering: synergy of innovative materials' technology and applications in basic research, 21st November 2022, Accademia Peloritana dei Pericolanti, Messina (Italy).
5. L. Servoli, C. Grimaldi, L. Calcagnile, A.P. Caricato, G.A.P. Cirrone, T. Croci, R. Di Lorenzo, M. Fabi, P.P. Falciglia, L. Frontini, G. Cuttone, B. Gianfelici, M. Ionica, M. Italiani, K. Kanxheri, M. Large, V. Liberali, M. Martino, G. Maruccio, G. Mazza, M. Menichelli, G.G. Milluzzo, A.G. Monteduro, A. Morozzi, F. Moscatelli, S. Pallotta, M. Paolucci, D. Passeri, I.V. Patti, M. Pedio, M. Petasecca, G. Petringa, F. Peverini, L. Piccolo, P. Placidi, G. Quarta, S. Rizzato, G. Rossi, A. Stabile, C. Talamonti, A. Torrisi, R.J. Wheadon, M. Villani, N. Wyrsh "Hydrogenated amorphous silicon (a:Si-H) detectors for Space Weather Applications", ASI (Italian Space Agency) – Workshop Tematiche e obiettivi per futuri programmi scientifici spaziali, 20th - 22th April 2022, Rome (Italy).
6. A. Torrisi and P.W. Wachulak "Sorgenti a gas-puff permicroscopia in trasmissione di campioni biologici", 107° National Conference SIF, 13th - 17th September 2021 (Online Conference) – Video Communication.
7. A. Serra, D. Manno, A. Torrisi, L. Calcagnile, M. Martino, A. Buccolieri, G. Quarta, M. Cesaria, P. Verwilligen, A.P. Caricato "Characterization of pulsed-laser deposited diamond-like carbon films for micro-pattern gas detectors", 107° National Conference SIF, 13th - 17th September 2021 (Online Conference) – Video Communication.
8. D. Manno, A. Serra, A. Torrisi, L. Calcagnile, M. Cutroneo, L. Silipigni, L. Torrisi "Transmission electron microscopy for the analysis of defects induced in graphene oxide by ion irradiation", 107° National Conference SIF, 13th - 17th September, 2021 (Online Conference) – Video Communication.
9. M. Cutroneo, M. Davidkova, V. Havranek, A. Mackova, P. Malinsky, L. Silipigni, P. Slepicka, D. Fajstavr, A. Torrisi, L. Torrisi "Pulsed laser deposition of thin films on polydimethylsiloxane for Biomedical application", ANPC 2020, Prague (Czech Republic), 12th -16th September 2021 – POSTER

10. A. Torrisi, M. Cutroneo, L. Silipigni, L. Torrisi "Diagnostic and radiotherapy improvement employing metallic biocompatible nanoparticles", E-MRS 9th European Nanoanalysis Symposium, 9th October, 2020 (Online Conference) – POSTER
11. A. Torrisi, P. Horak, A. Cannavò, G. Ceccio, J. Vacik, J. Grym, J. Vanis, R. Yatskiv "Multilayered Cu-Ti deposition on silicon substrates for chemiresistor applications", PBSi2019, Rome (Italy), 2nd - 4th December, 2019 – POSTER
12. A. Torrisi, P. Wachulak, H. Fiedorowicz, L. Torrisi "Characterization of Si and SiC detectors for laser-generated plasma monitoring in short wavelength range", PPLA 2019, Pisa (Italy), 29th -31st October, 2019 – **INVITED TALK**
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21. A. Torrisi, P. W. Wachulak, H. Fiedorowicz, L. Torrisi "Silicon carbide detectors for diagnostics of laser-produced plasmas", SPIE, Conf. EOO19, Optics+Optoelectronics, Prague (Czech Republic), 1st -4th April, 2019 - POSTER
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29. M. Cutroneo, L. Torrisi, A. Torrisi, J. Badziak, M. Rosinsky, A. Mackowa, P. Malinsky, Z. Sofer, R. Battger "Hybrid Graphene Based Material Promising Target in Laser Matter Interaction", CHANNELING 2018, Ischia (Italy), 23rd -28th September, 2018
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34. A. Torrisi, P. Wachulak, A. Bartnik, Ł. Węgrzyński, T. Fok, H. Fiedorowicz, „Development and optimization of a "water window" microscope based on a gas-puff target laser-produced plasma source", Plasma Physics by Laser and Applications, 8th PPLA 2017, University of Messina, Messina (Italy), 5th -7th July, 2017 – **INVITED TALK**

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36. A. Torrisi, P. Wachulak, A. Bartnik, Ł. Wegrzynski, T. Fok, H. Fiedorowicz, L. Pina "Employment of short wavelength radiation for development of nanoimaging systems based on a double stream gas-puff target sources and Fresnel optics", Extreme-ultraviolet and X-ray Training in Advanced Technologies for Interdisciplinary Cooperation EXTATIC 2017 Welcome Week Workshop, Trieste (Italy), 16th - 20th January, 2017 – TALK
37. P. W. Wachulak, A. Torrisi, A. Bartnik, Ł. Wegrzynski, T. Fok, H. Fiedorowicz "Mikroskop pracujący w zakresie „okna wodnego” z rozdzielczością 60 nm na bazie laserowo-plazmowego źródła SXR i jego przykładowe aplikacje", XI sympozjum Techniki Laserowej (Laser Technology Symposium), Jastarnia, Poland, 27th – 30th September 2016
38. H. Fiedorowicz, A. Bartnik, P. Wachulak, R. Jarocki, J. Kostecki, M. Szczurek, D. Adjei, I. Ul Ahad, M. Ayele, T. Fok, I. Saber, A. Szczurek, T. Fok, A. Torrisi, Ł. Wegrzynski "Laserowo-plazmowe źródła miękkiego promieniowania rentgenowskiego i skrajnego nadfioletu (EUV) do zastosowań w nauce i technologii", XI sympozjum Techniki Laserowej (Laser Technology Symposium), Jastarnia (Poland), 27th – 30th September, 2016
39. P. W. Wachulak, A. Bartnik, A. Torrisi, Ł. Wegrzynski, T. Fok, H. Fiedorowicz "Extreme Ultraviolet and soft X-ray microscopes with nanometer spatial resolution based on laser-plasma sources and their applications". COST Action MP1302 Nanospectroscopy, Joint MC and WG Meeting and Topical Meeting on Nanoparticles, Military University of Technology, Warsaw (Poland), 13th - 16th September, 2016
40. A. Torrisi, P. Wachulak, A. Bartnik, Ł. Wegrzynski, T. Fok, H. Fiedorowicz "Recent developments in table-top SXR/EUV microscopy using compact gas-puff target sources"- XRM 2016, Oxford (United Kingdom), 15th - 19th August, 2016 – POSTER
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42. A. Torrisi, P. W. Wachulak, M. F. Nawaz, H. Fiedorowicz, L. Pina "Characterization and optimization of SXR and EUV nanoscale imaging microscopy based on double stream gas-puff target sources", Extreme-ultraviolet and X-ray Training in Advanced Technologies for Interdisciplinary Cooperation EXTATIC 2016 Welcome Week Workshop, Southampton (United Kingdom), 11th - 15th January, 2016 – TALK
43. P. Wachulak, A. Torrisi, L. Wegrzynski, A. Bartnik, T. Fok, H. Fiedorowicz "Soft X-ray compact microscope based on a double stream gas puff target source and applications", XFEL Users Meeting 2016, DESY Hamburg (Germany), 27th - 29th January, 2016
44. P.W. Wachulak, A. Bartnik, A. Torrisi, L. Wegrzynski, T. Fok, J. Kostecki, R. Jarocki, A. Szczurek, M. Szczurek, D. Adjei, M. G. Ayele, I. Saber, H. Fiedorowicz "Desk-top soft X-ray microscopy based on compact laser plasma X-ray sources", LASERLAB-EUROPE III Joint JRA Meeting, Milan (Italy), 23rd - 25th November, 2015

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46. P. W. Wachulak, A. Torrisi, M. F. Nawaz, Š. Vondrová, J. Turňová, A. Bartnik, D. Adjei, L. Wegrzynski, T. Fok, H. Fiedorowicz "Desk-top "Water Window" microscope based on LPP gas puff target source and its applications", PPLA 2015, Frascati, (Italy), 5th - 7th October, 2015
47. M. Rosinski, J. Badziak, P. Parys, A. Zaras-Szydlowska, L. Torrisi, L. Ryc, A. Szydlowski, A. Malinowska, B. Kaczmarczyk, J. Makowski, A. Torrisi "Acceleration of protons in plasma produced from a thin plastic or aluminium target by a femtosecond laser", PPLA 2015, Frascati, (Italy), 5th - 7th October, 2015
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52. M. Rosiński, J. Badziak, L. Torrisi, B. Kaczmarczyk, J. Makowski, P. Parys, L. Ryć, A. Torrisi and A. Zará-Szydlowska, "Acceleration of protons in plasma produced from a thin plastic or aluminium target by a femtosecond laser", PLASMA2015, Warsaw (Poland), 7th - 11th September, 2015
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