

# Alfio Torrisi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8332156/publications.pdf>

Version: 2024-02-01

130  
papers

1,052  
citations

566801

15  
h-index

610482

24  
g-index

131  
all docs

131  
docs citations

131  
times ranked

665  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene oxide modifications induced by excimer laser irradiations. Surface and Interface Analysis, 2022, 54, 567-575.	0.8	1
2	Incidence of Phage Capsid Organization on the Resistance to High Energy Proton Beams. Applied Sciences (Switzerland), 2022, 12, 988.	1.3	2
3	Mass Quadrupole Spectrometry Coupled to Laser Ablation for Cultural Heritage Applications. , 2022, , 445-464.		1
4	Measurements on Five Characterizing Properties of Graphene Oxide and Reduced Graphene Oxide Foils. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100628.	0.8	19
5	Source-drain electrical conduction and radiation detection in graphene-based field effect transistor (GFET). Journal of Instrumentation, 2022, 17, P02008.	0.5	2
6	Pulsed laser cleaning (PLC) applied to samples in cultural heritage field. Radiation Effects and Defects in Solids, 2022, 177, 27-39.	0.4	2
7	From GO to rGO: An analysis of the progressive rippling induced by energetic ion irradiation. Applied Surface Science, 2022, 586, 152789.	3.1	14
8	Argon diffusion in graphene oxide and reduced graphene oxide foils. Vacuum, 2022, 200, 110993.	1.6	4
9	Proton beam dosimetry based on the graphene oxide reduction and Raman spectroscopy. Vacuum, 2022, 201, 111113.	1.6	5
10	SiC and Ion collectors as diagnostics of laser-generated plasma at intensity of $10^{10}$ W/cm <sup>2</sup> . Journal of Instrumentation, 2022, 17, P04016.	0.5	1
11	Pulsed-laser deposition and photocatalytic activity of pure rutile and anatase TiO <sub>2</sub> films: Impact of single-phased target and deposition conditions. Vacuum, 2022, 202, 111150.	1.6	3
12	Enhancement of the polydimethylsiloxane (PDMS) luminescence to develop a proton scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, , 167012.	0.7	0
13	CO <sub>2</sub> diffusion in graphene oxide and reduced graphene oxide foils and its comparison with N <sub>2</sub> and Ar. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	1
14	Ancient Bones Characterization and Preparation Through Freeze-Drying Process. International Journal of Thermophysics, 2022, 43, .	1.0	1
15	Linear Energy Transfer (LET) dependence of graphene oxide dosimeter for different ionizing radiations. Vacuum, 2022, 203, 111240.	1.6	1
16	Advantages to use graphene oxide thin targets in forward ion acceleration using <i>fs</i> lasers. Contributions To Plasma Physics, 2022, 62, .	0.5	2
17	Ni, Ti, and NiTi laser ablation in vacuum and in water to deposit thin films or to generate nanoparticles in solution. Contributions To Plasma Physics, 2021, 61, .	0.5	5
18	Nuclear reactions for protontherapy intensification. Nuclear Instruments & Methods in Physics Research B, 2021, 486, 28-36.	0.6	3

#	ARTICLE	IF	CITATIONS
19	Cold electrons acceleration in TNSA laser-generated plasma using a low-contrast fs laser. Contributions To Plasma Physics, 2021, 61, e202000097.	0.5	2
20	2.5-MeV neutron source controlled by high-intensity pulsed laser generating plasma. Contributions To Plasma Physics, 2021, 61, e202000213.	0.5	0
21	Carbon-based innovative materials for nuclear physics applications (CIMA), INFN project. Radiation Effects and Defects in Solids, 2021, 176, 100-118.	0.4	7
22	IR laser ablation of high boiling elements (C, Mo, Ta, W and Re). Radiation Effects and Defects in Solids, 2021, 176, 2-16.	0.4	1
23	Pressure sensor based on porous polydimethylsiloxane with embedded gold nanoparticles. Journal of Materials Science: Materials in Electronics, 2021, 32, 8703-8715.	1.1	6
24	The characterisation of polydimethylsiloxane containing gold nanoparticles as a function of curing time. Surface and Interface Analysis, 2021, 53, 618-626.	0.8	3
25	UV and soft x-ray emission from gaseous and solid targets employing SiC detectors. Plasma Science and Technology, 2021, 23, 055508.	0.7	3
26	Porous polydimethylsiloxane filled with graphene-based material for biomedicine. Journal of Porous Materials, 2021, 28, 1481-1491.	1.3	15
27	Structural and spectroscopic investigations on graphene oxide foils irradiated by ion beams for dosimetry application. Vacuum, 2021, 188, 110185.	1.6	20
28	Six MeV proton acceleration from plasma generated by high-intensity laser using advanced thin polyethylene targets. Contributions To Plasma Physics, 2021, 61, e202100024.	0.5	1
29	SiC, Si and diamond detectors for comparison of laser-generated plasma in TNSA regime. Journal of Instrumentation, 2021, 16, P08026.	0.5	1
30	Diffusion of nitrogen gas through polyethylene based films. Polymer Crystallization, 2021, 4, e10207.	0.5	3
31	Chemiresistors Based on Li-Doped Cu-TiO <sub>2</sub> Films. Chemosensors, 2021, 9, 246.	1.8	3
32	Aluminum ion plasma monitored by SiC detectors from low to high laser intensity and from ns up to fs pulse duration. Optics Communications, 2021, 496, 127129.	1.0	3
33	Structural phase modifications induced by energetic ion beams in graphene oxide. Vacuum, 2021, 193, 110513.	1.6	7
34	Nitrogen diffusion in graphene oxide and reduced graphene oxide foils. Vacuum, 2021, 194, 110632.	1.6	10
35	Eight MeV per charge state from 300 ps laser ion acceleration by using micrometric foils. Contributions To Plasma Physics, 2021, 61, e202000185.	0.5	3
36	Synthesis of Cu-Ti thin film multilayers on silicon substrates. Bulletin of Materials Science, 2021, 44, 1.	0.8	4

#	ARTICLE	IF	CITATIONS
37	M13 Phages Uptake of Gold Nanoparticles for Radio- and Thermal-Therapy and Contrast Imaging Improvement. Applied Sciences (Switzerland), 2021, 11, 11391.	1.3	1
38	Optical and electrical characterization of CuO/ZnO heterojunctions. Thin Solid Films, 2020, 693, 137656.	0.8	24
39	Protons and carbon ions acceleration in the targetâ€œnormalâ€œsheathâ€œacceleration regime using lowâ€œcontrast fs laser and metalâ€œgraphene targets. Contributions To Plasma Physics, 2020, 60, e201900076.	0.5	8
40	Preparation of heterogenous copper-titanium oxides for chemiresistor applications. Materials Today: Proceedings, 2020, 33, 2512-2516.	0.9	4
41	Multilayered Cuâ€œTi deposition on silicon substrates for chemiresistor applications. Phosphorus, Sulfur and Silicon and the Related Elements, 2020, 195, 932-935.	0.8	3
42	Polydimethylsiloxaneâ€œgraphene oxide composite improving performance by ion beam irradiation. Surface and Interface Analysis, 2020, 52, 1156-1162.	0.8	8
43	Biological Applications of Short Wavelength Microscopy Based on Compact, Laser-Produced Gas-Puff Plasma Source. Applied Sciences (Switzerland), 2020, 10, 8338.	1.3	6
44	Reduction of graphene oxide foils by IR laser irradiation in air. Journal of Instrumentation, 2020, 15, C03006-C03006.	0.5	6
45	Laser and ion beams graphene oxide reduction for microelectronic devices. Radiation Effects and Defects in Solids, 2020, 175, 226-240.	0.4	4
46	Ion, electron and laser beams for Cultural Heritage investigations by Czech-Italian collaboration. Journal of Instrumentation, 2020, 15, C04050-C04050.	0.5	0
47	Laser-generated Cu plasma in vacuum and in nitrogen gas. Vacuum, 2020, 178, 109422.	1.6	5
48	Polydimethylsiloxane containing gold nanoparticles for optical applications. Journal of Instrumentation, 2020, 15, C03044-C03044.	0.5	14
49	Characterization of Si and SiC detectors for laser-generated plasma monitoring in short wavelength range. Journal of Instrumentation, 2020, 15, C05027-C05027.	0.5	2
50	Target normal sheath ion acceleration by fs laser irradiating metal/reduced graphene oxide targets. Journal of Instrumentation, 2020, 15, C03056-C03056.	0.5	1
51	Linearity studies of HD-810 dosimeters by light ion beams. Radiation Effects and Defects in Solids, 2020, 175, 383-393.	0.4	0
52	Temperature and environment effects on the graphene oxide reduction via electrical conductivity studies. Journal of Materials Science: Materials in Electronics, 2020, 31, 11847-11854.	1.1	11
53	Small-field dosimetry based on reduced graphene oxide under MeV helium beam irradiation. Radiation Effects and Defects in Solids, 2020, 175, 120-135.	0.4	8
54	Lithium encapsulation in etched nuclear pores in polyethylene terephthalate. Nuclear Instruments & Methods in Physics Research B, 2020, 469, 19-23.	0.6	4

#	ARTICLE	IF	CITATIONS
55	Laser-generated ns plasma pulses characterized using SiC Schottky diode. Contributions To Plasma Physics, 2020, 60, e202000012.	0.5	3
56	Biocompatible nanoparticles production by pulsed laser ablation in liquids. Journal of Instrumentation, 2020, 15, C03053-C03053.	0.5	8
57	Gold nanoparticles for physics and bio-medicine applications. Radiation Effects and Defects in Solids, 2020, 175, 68-83.	0.4	5
58	Ion sputtering for preparation of thin MAX and MXene phases. Radiation Effects and Defects in Solids, 2020, 175, 177-189.	0.4	29
59	Physical study of proton therapy at CANAM laboratory on medulloblastoma cell lines DAOY. Radiation Effects and Defects in Solids, 2020, 175, 863-878.	0.4	4
60	Effect of Ar <sup>+</sup> irradiation of Ti <sub>3</sub> InC <sub>2</sub> at different ion beam fluences. Surface and Coatings Technology, 2020, 394, 125834.	2.2	8
61	Hybrid graphene-based material promising target in laser matter interaction. Journal of Instrumentation, 2020, 15, C01021-C01021.	0.5	1
62	Graphene oxide as a radiation sensitive material for XPS dosimetry. Vacuum, 2020, 173, 109175.	1.6	64
63	Ion acceleration from aluminium plasma generated by a femtosecond laser in different conditions. Contributions To Plasma Physics, 2020, 60, e201900187.	0.5	3
64	IR ns pulsed laser irradiation of Polydimethylsiloxane in vacuum. Vacuum, 2020, 177, 109361.	1.6	9
65	Target normal sheath acceleration by fs laser and advanced carbon foils with gold films and nanoparticles. Physics of Plasmas, 2020, 27, 043107.	0.7	6
66	Distribution of lithium in doped nuclear pores of polyethylene terephthalate by neutron depth profiling. Radiation Effects and Defects in Solids, 2020, 175, 325-331.	0.4	2
67	Temperature sensor based on IR-laser reduced Graphene Oxide. Journal of Instrumentation, 2020, 15, C04006-C04006.	0.5	14
68	Investigations on graphene oxide for ion beam dosimetry applications. Vacuum, 2020, 178, 109451.	1.6	22
69	Selective modification of electrical insulator material by ion micro beam for the fabrication of circuit elements. Radiation Effects and Defects in Solids, 2020, 175, 307-317.	0.4	4
70	Study of gold nanoparticles for mammography diagnostic and radiotherapy improvements. Reports of Practical Oncology and Radiotherapy, 2019, 24, 450-457.	0.3	10
71	Effects of the Laser Irradiation on Graphene Oxide Foils in Vacuum and Air. Physics of the Solid State, 2019, 61, 1327-1331.	0.2	22
72	RBS, PIXE, Ion-Microbeam and SR-FTIR Analyses of Pottery Fragments from Azerbaijan. Heritage, 2019, 2, 1852-1873.	0.9	10

#	ARTICLE	IF	CITATIONS
73	Characterization of reduced Graphene oxide films used as stripper foils in a 3.0-Mv Tandetron. Radiation Physics and Chemistry, 2019, 165, 108397.	1.4	6
74	Tantalum ion acceleration in laser-generated plasma and dependence on the pulse duration. Contributions To Plasma Physics, 2019, 59, e201900043.	0.5	4
75	Spectroscopy of backscattered Cu ions detected by CR39 through grayness analysis of ion-etch tracks. Radiation Measurements, 2019, 129, 106204.	0.7	2
76	Band-like transport in high vacuum thermal reduced graphene oxide films. Vacuum, 2019, 165, 254-261.	1.6	30
77	Investigation of the effect of plasma waves excitation on target normal sheath ion acceleration using <math>10</math> fs laser-irradiating hydrogenated structures. Contributions To Plasma Physics, 2019, 59, e201900029.	0.5	5
78	Effects of the ion bombardment on the structure and composition of GO and rGO foils. Materials Chemistry and Physics, 2019, 232, 272-277.	2.0	23
79	Characterization of graphene oxide film by implantation of low energy copper ions. Nuclear Instruments & Methods in Physics Research B, 2019, 460, 169-174.	0.6	13
80	Laser ablation of boron nitride in vacuum and in water. Radiation Effects and Defects in Solids, 2019, 174, 76-91.	0.4	4
81	Localized modification of graphene oxide properties by laser irradiation in vacuum. Vacuum, 2019, 165, 134-138.	1.6	25
82	Ion track etching in polyethylene-terephthalate studied by charge particle transmission technique. Radiation Effects and Defects in Solids, 2019, 174, 148-157.	0.4	6
83	A "water window" tomography based on a laser-plasma double-stream gas-puff target soft X-ray source. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	13
84	Near-3 MeV protons from target-normal-sheath acceleration femtosecond laser irradiating advanced targets. Contributions To Plasma Physics, 2019, 59, e201800127.	0.5	6
85	Study of gold nanoparticle transport by M13 phages towards disease tissues as targeting procedure for radiotherapy applications. Gold Bulletin, 2019, 52, 135-144.	1.1	10
86	Micro ion beam used to optimize the quality of microstructures based on polydimethylsiloxane. Nuclear Instruments & Methods in Physics Research B, 2019, 459, 137-142.	0.6	13
87	Reduced graphene oxide foils for ion stripping applications. Radiation Effects and Defects in Solids, 2019, 174, 973-984.	0.4	4
88	Gafchromic HD-V2 investigations using MeV ion beams in vacuum. Radiation Effects and Defects in Solids, 2019, 174, 1063-1075.	0.4	9
89	Self-supporting graphene oxide films preparation and characterization methods. Vacuum, 2019, 160, 1-11.	1.6	44
90	SiC detectors for evaluation of laser-plasma dynamics employing gas-puff targets. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 922, 250-256.	0.7	4

#	ARTICLE	IF	CITATIONS
91	Protons accelerated in the target normal sheath acceleration regime by a femtosecond laser. <i>Physical Review Accelerators and Beams</i> , 2019, 22, .	0.6	22
92	Monitoring of the plasma generated by a gas-puff target source. <i>Physical Review Accelerators and Beams</i> , 2019, 22, .	0.6	5
93	Tomographic imaging using a compact soft X-ray microscope based on a laser plasma light source. , 2019, , .		2
94	Silicon carbide detectors for diagnostics of laser-produced plasmas. , 2019, , .		3
95	Nanoscale Imaging Using a Compact Laser Plasma Source of Soft X-Rays and Extreme Ultraviolet (EUV). <i>Springer Proceedings in Physics</i> , 2018, , 251-260.	0.1	1
96	Nanoimaging using soft X-ray and EUV laser-plasma sources. <i>EPJ Web of Conferences</i> , 2018, 167, 03001.	0.1	5
97	Laser ablation parameters influencing gold nanoparticle synthesis in water. <i>Radiation Effects and Defects in Solids</i> , 2018, 173, 729-739.	0.4	24
98	Measurement of Li diffusion in porous carbon by neutron depth profiling. <i>Radiation Effects and Defects in Solids</i> , 2018, 173, 836-841.	0.4	4
99	SiC detector for high helium energy spectroscopy. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 903, 309-316.	0.7	6
100	Development and optimization of a "water window" microscope based on a gas-puff target laser-produced plasma source. <i>EPJ Web of Conferences</i> , 2018, 167, 03002.	0.1	1
101	Nanoimaging Using Soft X-Ray and EUV Sources Based on Double Stream Gas Puff Targets. <i>Acta Physica Polonica A</i> , 2018, 133, 271-276.	0.2	1
102	Calibration of SiC Detectors for Nitrogen and Neon Plasma Emission Using Gas-Puff Target Sources. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 1120-1126.	1.6	14
103	Soft x-ray imaging with incoherent sources. , 2017, , .		0
104	Biological and material science applications of EUV and SXR nanoscale imaging systems based on double stream gas puff target laser plasma sources. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2017, 411, 29-34.	0.6	5
105	A desktop extreme ultraviolet microscope based on a compact laser-plasma light source. <i>Applied Physics B: Lasers and Optics</i> , 2017, 123, 1.	1.1	12
106	A stand-alone compact EUV microscope based on gas-puff target source. <i>Journal of Microscopy</i> , 2017, 265, 251-260.	0.8	13
107	Bioimaging Using Full Field and Contact EUV and SXR Microscopes with Nanometer Spatial Resolution. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 548.	1.3	14
108	Nanoscale imaging applications of soft X-ray microscope based on a gas-puff target source. <i>Journal of Physics: Conference Series</i> , 2017, 849, 012050.	0.3	2

#	ARTICLE	IF	CITATIONS
109	Plasma characterization of the gas-puff target source dedicated for soft X-ray microscopy using SiC detectors. Nukleonika, 2016, 61, 139-143.	0.3	8
110	Table-top water-window soft X-ray microscope using a Z-pinching capillary discharge source. Journal of Instrumentation, 2016, 11, P07002-P07002.	0.5	11
111	Characterization and optimization of images acquired by a compact soft X-ray microscope based on a double stream gas-puff target source. Journal of Instrumentation, 2016, 11, C04003-C04003.	0.5	3
112	Soft X-ray microscope with nanometer spatial resolution and its applications. Proceedings of SPIE, 2016, , .	0.8	2
113	Acceleration of protons in plasma produced from a thin plastic or aluminum target by a femtosecond laser. Journal of Instrumentation, 2016, 11, C05017-C05017.	0.5	6
114	Nanostructured targets for TNSA laser ion acceleration. Nukleonika, 2016, 61, 103-108.	0.3	8
115	Resonant absorption effects induced by polarized laser light irradiating thin foils in the tnsa regime of ion acceleration. Journal of Instrumentation, 2016, 11, C04008-C04008.	0.5	0
116	Ancient bronze coins from Mediterranean basin: LAMQS potentiality for lead isotopes comparative analysis with former mineral. Applied Surface Science, 2016, 387, 529-538.	3.1	13
117	Applications of a Compact "Water Window" Source for Investigations of Nanostructures Using SXR Microscope. Acta Physica Polonica A, 2016, 129, 169-171.	0.2	4
118	A Compact "Water Window" Microscope with 60 nm Spatial Resolution for Applications in Biology and Nanotechnology. Microscopy and Microanalysis, 2015, 21, 1214-1223.	0.2	36
119	Fresnel zone plate telescope for condenser alignment in water-window microscope. Journal of Optics (United Kingdom), 2015, 17, 055606.	1.0	3
120	Desktop water window microscope using a double-stream gas puff target source. Applied Physics B: Lasers and Optics, 2015, 118, 573-578.	1.1	48
121	Nanoscale imaging and optimization of a compact "water window" SXR microscope. Proceedings of SPIE, 2015, , .	0.8	0
122	A compact "water-window" microscope with 60-nm spatial resolution based on a double stream gas-puff target and Fresnel zone plate optics. , 2015, , .		0
123	Laser plasma sources of soft x-rays and extreme ultraviolet (EUV) for application in science and technology. Proceedings of SPIE, 2015, , .	0.8	0
124	Laser ablation coupled to mass quadrupole spectrometry for analysis in the cultural heritage. Journal of Physics: Conference Series, 2014, 508, 012025.	0.3	1
125	Characterization of thin films for TNSA laser irradiation. Journal of Physics: Conference Series, 2014, 508, 012012.	0.3	9
126	Silver coins analyses by X-ray fluorescence methods. Journal of X-Ray Science and Technology, 2013, 21, 381-390.	0.7	6



#	ARTICLE	IF	CITATIONS
127	LAMQS analysis applied to ancient Egyptian bronze coins. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1657-1664.	0.6	26
128	LAMQS and XRF analyses of ancient Egyptian bronze coins. Radiation Effects and Defects in Solids, 2010, 165, 626-636.	0.4	9
129	Laser and electron beams physical analyses applied to the comparison between two silver tetradrachm greek coins. European Physical Journal D, 2009, 54, 225-232.	0.6	11
130	Light luminescence and trapping in polydimethylsiloxane foils with low concentration of gold nanoparticles. Radiation Effects and Defects in Solids, 0, , 1-17.	0.4	1