Alfio Torrisi

List of Publications by Year
in descending order

130	1,052	566801 15	610482 24
papers	citations	h-index	g-index

131	131	131	665
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Graphene oxide as a radiation sensitive material for XPS dosimetry. Vacuum, 2020, 173, 109175.	1.6	64
2	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
3	Self-supporting graphene oxide films preparation and characterization methods. Vacuum, 2019, 160, 1-11.	1.6	44
4	A Compact â€œWater Windowâ€•Microscope with 60 nm Spatial Resolution for Applications in Biology and Nanotechnology. Microscopy and Microanalysis, 2015, 21, 1214-1223.	0.2	36
5	Band-like transport in high vacuum thermal reduced graphene oxide films. Vacuum, 2019, 165, 254-261.	1.6	30
6	Ion sputtering for preparation of thin MAX and MXene phases. Radiation Effects and Defects in Solids, 2020, 175, 177-189.	0.4	29
7	LAMQS analysis applied to ancient Egyptian bronze coins. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1657-1664.	0.6	26
8	Localized modification of graphene oxide properties by laser irradiation in vacuum. Vacuum, 2019, 165, 134-138.	1.6	25
9	Laser ablation parameters influencing gold nanoparticle synthesis in water. Radiation Effects and Defects in Solids, 2018, 173, 729-739.	0.4	24
10	Optical and electrical characterization of CuO/ZnO heterojunctions. Thin Solid Films, 2020, 693, 137656.	0.8	24
11	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
12	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
13	Investigations on graphene oxide for ion beam dosimetry applications. Vacuum, 2020, 178, 109451.	1.6	22
14	Protons accelerated in the target normal sheath acceleration regime by a femtosecond laser. Physical Review Accelerators and Beams, 2019, 22, .	0.6	22
15	Structural and spectroscopic investigations on graphene oxide foils irradiated by ion beams for dosimetry application. Vacuum, 2021, 188, 110185.	1.6	20
16	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
17	Porous polydimethylsiloxane filled with graphene-based material for biomedicine. Journal of Porous Materials, 2021, 28, 1481-1491.	1.3	15
18	Calibration of SiC Detectors for Nitrogen and Neon Plasma Emission Using Gas-Puff Target Sources. IEEE Transactions on Electron Devices, 2017, 64, 1120-1126.	1.6	14

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19	Bioimaging Using Full Field and Contact EUV and SXR Microscopes with Nanometer Spatial Resolution. Applied Sciences (Switzerland), 2017, 7, 548.	1.3	14
20	Polydimethylsiloxane containing gold nanoparticles for optical applications. Journal of Instrumentation, 2020, 15, C03044-C03044.	0.5	14
21	Temperature sensor based on IR-laser reduced Graphene Oxide. Journal of Instrumentation, 2020, 15, C04006-C04006.	0.5	14
22	From GO to rGO: An analysis of the progressive rippling induced by energetic ion irradiation. Applied Surface Science, 2022, 586, 152789.	3.1	14
23	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
24	A standâ€alone compact EUV microscope based on gasâ€puff target source. Journal of Microscopy, 2017, 265, 251-260.	0.8	13
25	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
26	A â€œwater windowâ€•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
27	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
28	A desktop extreme ultraviolet microscope based on a compact laser-plasma light source. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	12
29	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
30	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
31	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
32	Study of gold nanoparticles for mammography diagnostic and radiotherapy improvements. Reports of Practical Oncology and Radiotherapy, 2019, 24, 450-457.	0.3	10
33	RBS, PIXE, Ion-Microbeam and SR-FTIR Analyses of Pottery Fragments from Azerbaijan. Heritage, 2019, 2, 1852-1873.	0.9	10
34	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
35	Nitrogen diffusion in graphene oxide and reduced graphene oxide foils. Vacuum, 2021, 194, 110632.	1.6	10
36	LAMQS and XRF analyses of ancient Egyptian bronze coins. Radiation Effects and Defects in Solids, 2010, 165, 626-636.	0.4	9

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37	Characterization of thin films for TNSA laser irradiation. Journal of Physics: Conference Series, 2014, 508, 012012.	0.3	9
38	Gafchromic HD-V2 investigations using MeV ion beams in vacuum. Radiation Effects and Defects in Solids, 2019, 174, 1063-1075.	0.4	9
39	IR ns pulsed laser irradiation of Polydimethylsiloxane in vacuum. Vacuum, 2020, 177, 109361.	1.6	9
40	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
41	Nanostructured targets for TNSA laser ion acceleration. Nukleonika, 2016, 61, 103-108.	0.3	8
42	Protons and carbon ions acceleration in the targetâ€normalâ€sheathâ€acceleration regime using lowâ€contrast fs laser and metalâ€graphene targets. Contributions To Plasma Physics, 2020, 60, e201900076.	0.5	8
43	Polydimethylsiloxaneâ€“graphene oxide composite improving performance by ion beam irradiation. Surface and Interface Analysis, 2020, 52, 1156-1162.	0.8	8
44	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
45	Biocompatible nanoparticles production by pulsed laser ablation in liquids. Journal of Instrumentation, 2020, 15, C03053-C03053.	0.5	8
46	Effect of Ar+ irradiation of Ti3InC2 at different ion beam fluences. Surface and Coatings Technology, 2020, 394, 125834.	2.2	8
47	Carbon-based innovative materials for nuclear physics applications (CIMA), INFN project. Radiation Effects and Defects in Solids, 2021, 176, 100-118.	0.4	7
48	Structural phase modifications induced by energetic ion beams in graphene oxide. Vacuum, 2021, 193, 110513.	1.6	7
49	Silver coins analyses by X-ray fluorescence methods. Journal of X-Ray Science and Technology, 2013, 21, 381-390.	0.7	6
50	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
51	SiC detector for high helium energy spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 903, 309-316.	0.7	6
52	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
53	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
54	Nearâ€3â€MeV protons from targetâ€normalâ€sheathâ€acceleration femtosecond laser irradiating advanced targets. Contributions To Plasma Physics, 2019, 59, e201800127.	0.5	6

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55	Biological Applications of Short Wavelength Microscopy Based on Compact, Laser-Produced Gas-Puff Plasma Source. Applied Sciences (Switzerland), 2020, 10, 8338.	1.3	6
56	Reduction of graphene oxide foils by IR laser irradiation in air. Journal of Instrumentation, 2020, 15, C03006-C03006.	0.5	6
57	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
58	Pressure sensor based on porous polydimethylsiloxane with embedded gold nanoparticles. Journal of Materials Science: Materials in Electronics, 2021, 32, 8703-8715.	1.1	6
59	Biological and material science applications of EUV and SXR nanoscale imaging systems based on double stream gas puff target laser plasma sources. Nuclear Instruments & Methods in Physics Research B, 2017, 411, 29-34.	0.6	5
60	Nanoimaging using soft X-ray and EUV laser-plasma sources. EPJ Web of Conferences, 2018, 167, 03001.	0.1	5
61	Investigation of the effect of plasma waves excitation on target normal sheath ion acceleration using fs laserâ€irradiating hydrogenated structures. Contributions To Plasma Physics, 2019, 59, e201900029.	0.5	5
62	Laser-generated Cu plasma in vacuum and in nitrogen gas. Vacuum, 2020, 178, 109422.	1.6	5
63	Gold nanoparticles for physics and bio-medicine applications. Radiation Effects and Defects in Solids, 2020, 175, 68-83.	0.4	5
64	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
65	Monitoring of the plasma generated by a gas-puff target source. Physical Review Accelerators and Beams, 2019, 22, .	0.6	5
66	Proton beam dosimetry based on the graphene oxide reduction and Raman spectroscopy. Vacuum, 2022, 201, 111113.	1.6	5
67	Measurement of Li diffusion in porous carbon by neutron depth profiling. Radiation Effects and Defects in Solids, 2018, 173, 836-841.	0.4	4
68	Tantalum ion acceleration in laserâ€generated plasma and dependence on the pulse duration. Contributions To Plasma Physics, 2019, 59, e201900043.	0.5	4
69	Laser ablation of boron nitride in vacuum and in water. Radiation Effects and Defects in Solids, 2019, 174, 76-91.	0.4	4
70	Reduced graphene oxide foils for ion stripping applications. Radiation Effects and Defects in Solids, 2019, 174, 973-984.	0.4	4
71	SiC detectors for evaluation of laserâ€“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
72	Preparation of heterogenous copper-titanium oxides for chemiresistor applications. Materials Today: Proceedings, 2020, 33, 2512-2516.	0.9	4

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73	Laser and ion beams graphene oxide reduction for microelectronic devices. Radiation Effects and Defects in Solids, 2020, 175, 226-240.	0.4	4
74	Lithium encapsulation in etched nuclear pores in polyethylene terephthalate. Nuclear Instruments & Methods in Physics Research B, 2020, 469, 19-23.	0.6	4
75	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
76	Synthesis of Cuâ€“Ti thin film multilayers on silicon substrates. Bulletin of Materials Science, 2021, 44, 1.	0.8	4
77	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
78	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
79	Argon diffusion in graphene oxide and reduced graphene oxide foils. Vacuum, 2022, 200, 110993.	1.6	4
80	Fresnel zone plate telescope for condenser alignment in water-window microscope. Journal of Optics (United Kingdom), 2015, 17, 055606.	1.0	3
81	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
82	Multilayered Cuâ€“Ti deposition on silicon substrates for chemiresistor applications. Phosphorus, Sulfur and Silicon and the Related Elements, 2020, 195, 932-935.	0.8	3
83	Laserâ€generated ns plasma pulses characterized using SiC Schottky diode. Contributions To Plasma Physics, 2020, 60, e202000012.	0.5	3
84	Ion acceleration from aluminium plasma generated by a femtosecond laser in different conditions. Contributions To Plasma Physics, 2020, 60, e201900187.	0.5	3
85	Nuclear reactions for protontherapy intensification. Nuclear Instruments & Methods in Physics Research B, 2021, 486, 28-36.	0.6	3
86	The characterisation of polydimethylsiloxane containing gold nanoparticles as a function of curing time. Surface and Interface Analysis, 2021, 53, 618-626.	0.8	3
87	UV and soft x-ray emission from gaseous and solid targets employing SiC detectors. Plasma Science and Technology, 2021, 23, 055508.	0.7	3
88	Diffusion of nitrogen gas through polyethylene based films. Polymer Crystallization, 2021, 4, e10207.	0.5	3
89	Chemiresistors Based on Li-Doped CuOâ€“TiO2 Films. Chemosensors, 2021, 9, 246.	1.8	3
90	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

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91	Eight <scp>MeV</scp> per charge state from 300 ps laser ion acceleration by using micrometric foils. Contributions To Plasma Physics, 2021, 61, e202000185.	0.5	3
92	Silicon carbide detectors for diagnostics of laser-produced plasmas. , 2019, , .		3
93	Pulsed-laser deposition and photocatalytic activity of pure rutile and anatase TiO2 films: Impact of single-phased target and deposition conditions. Vacuum, 2022, 202, 111150.	1.6	3
94	Soft X-ray microscope with nanometer spatial resolution and its applications. Proceedings of SPIE, 2016, , .	0.8	2
95	Nanoscale imaging applications of soft X-ray microscope based on a gas-puff target source. Journal of Physics: Conference Series, 2017, 849, 012050.	0.3	2
96	Spectroscopy of backscattered Cu ions detected by CR39 through grayness analysis of ion-etch tracks. Radiation Measurements, 2019, 129, 106204.	0.7	2
97	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
98	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
99	Cold electrons acceleration in TNSA laserâ€generated plasma using a lowâ€contrast fs laser. Contributions To Plasma Physics, 2021, 61, e202000097.	0.5	2
100	Tomographic imaging using a compact soft X-ray microscope based on a laser plasma light source. , 2019, , .		2
101	Incidence of Phage Capsid Organization on the Resistance to High Energy Proton Beams. Applied Sciences (Switzerland), 2022, 12, 988.	1.3	2
102	Source-drain electrical conduction and radiation detection in graphene-based field effect transistor (GFET). Journal of Instrumentation, 2022, 17, P02008.	0.5	2
103	Pulsed laser cleaning (PLC) applied to samples in cultural heritage field. Radiation Effects and Defects in Solids, 2022, 177, 27-39.	0.4	2
104	Advantages to use graphene oxide thin targets in forward ion acceleration using fs lasers. Contributions To Plasma Physics, 2022, 62, .	0.5	2
105	Laser ablation coupled to mass quadrupole spectrometry for analysis in the cultural heritage. Journal of Physics: Conference Series, 2014, 508, 012025.	0.3	1
106	Nanoscale Imaging Using a Compact Laser Plasma Source of Soft X-Rays and Extreme Ultraviolet (EUV). Springer Proceedings in Physics, 2018, , 251-260.	0.1	1
107	Development and optimization of a â€œwater windowâ€•microscope based on a gas-puff target laser-produced plasma source. EPJ Web of Conferences, 2018, 167, 03002.	0.1	1
108	Target normal sheath ion acceleration by fs laser irradiating metal/reduced graphene oxide targets. Journal of Instrumentation, 2020, 15, C03056-C03056.	0.5	1

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109	Hybrid graphene-based material promising target in laser matter interaction. Journal of Instrumentation, 2020, 15, C01021-C01021.	0.5	1
110	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
111	Six MeV proton acceleration from plasma generated by highâ€intensity laser using advanced thin polyethylene targets. Contributions To Plasma Physics, 2021, 61, e202100024.	0.5	1
112	SiC, Si and diamond detectors for comparison of laser-generated plasma in TNSA regime. Journal of Instrumentation, 2021, 16, P08026.	0.5	1
113	Nanoimaging Using Soft X-Ray and EUV Sources Based on Double Stream Gas Puff Targets. Acta Physica Polonica A, 2018, 133, 271-276.	0.2	1
114	M13 Phages Uptake of Gold Nanoparticles for Radio- and Thermal-Therapy and Contrast Imaging Improvement. Applied Sciences (Switzerland), 2021, 11, 11391.	1.3	1
115	Graphene oxide modifications induced by excimer laser irradiations. Surface and Interface Analysis, 2022, 54, 567-575.	0.8	1
116	Mass Quadrupole Spectrometry Coupled to Laser Ablation for Cultural Heritage Applications. , 2022, , 445-464.		1
117	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
118	SiC and Ion collectors as diagnostics of laser-generated plasma at intensity of 10¹⁰W/cm². Journal of Instrumentation, 2022, 17, P04016.	0.5	1
119	CO2 diffusion in graphene oxide and reduced graphene oxide foils and its comparison with N2 and Ar. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	1
120	Ancient Bones Characterization and Preparation Through Freeze-Drying Process. International Journal of Thermophysics, 2022, 43, .	1.0	1
121	Linear Energy Transfer (LET) dependence of graphene oxide dosimeter for different ionizing radiations. Vacuum, 2022, 203, 111240.	1.6	1
122	Nanoscale imaging and optimization of a compact "water window" SXR microscope. Proceedings of SPIE, 2015, , .	0.8	0
123	A compact â€œwater-windowâ€•microscope with 60-nm spatial resolution based on a double stream gas-puff target and Fresnel zone plate optics. , 2015, , .		0
124	Laser plasma sources of soft x-rays and extreme ultraviolet (EUV) for application in science and technology. Proceedings of SPIE, 2015, , .	0.8	0
125	Resonant absorption effects induced by polarized laser ligth irradiating thin foils in the tnsa regime of ion acceleration. Journal of Instrumentation, 2016, 11, C04008-C04008.	0.5	0
126	Soft x-ray imaging with incoherent sources. , 2017, , .		0

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127	Ion, electron and laser beams for Cultural Heritage investigations by Czech-Italian collaboration. Journal of Instrumentation, 2020, 15, C04050-C04050.	0.5	0
128	Linearity studies of HD-810 dosimeters by light ion beams. Radiation Effects and Defects in Solids, 2020, 175, 383-393.	0.4	0
129	2.5â€•MeV neutron source controlled by highâ€intensity pulsed laser generating plasma. Contributions To Plasma Physics, 2021, 61, e202000213.	0.5	0
130	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