

E Di Fabrizio

List of Publications by Year in descending order

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78
papers

4,757
citations

117625

34
h-index

91884

69
g-index

78
all docs

78
docs citations

78
times ranked

6452
citing authors

#	ARTICLE	IF	CITATIONS
1	Breaking the diffusion limit with super-hydrophobic delivery of molecules to plasmonic nanofocusing SERS structures. <i>Nature Photonics</i> , 2011, 5, 682-687.	31.4	638
2	Bacterial ratchet motors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 9541-9545.	7.1	559
3	Metamaterial electro-optic switch of nanoscale thickness. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	287
4	High-efficiency multilevel zone plates for keV X-rays. <i>Nature</i> , 1999, 401, 895-898.	27.8	247
5	Hot-electron nanoscopy using adiabatic compression of surface plasmons. <i>Nature Nanotechnology</i> , 2013, 8, 845-852.	31.5	239
6	Nanometer focusing of hard x rays by phase zone plates. <i>Review of Scientific Instruments</i> , 1999, 70, 2238-2241.	1.3	227
7	Changes in microbubble dynamics near a boundary revealed by combined optical micromanipulation and high-speed imaging. <i>Applied Physics Letters</i> , 2007, 90, .	3.3	166
8	Sharp beveled tip hollow microneedle arrays fabricated by LIGA and 3D soft lithography with polyvinyl alcohol. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 473-479.	2.6	136
9	Hard x-ray phase zone plate fabricated by lithographic techniques. <i>Applied Physics Letters</i> , 1992, 61, 1877-1879.	3.3	128
10	Integrated microfluidic device for single-cell trapping and spectroscopy. <i>Scientific Reports</i> , 2013, 3, 1258.	3.3	127
11	Optical Properties of Femtosecond Laser-Synthesized Silicon Nanoparticles in Deionized Water. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5102-5107.	3.1	95
12	Axicon lens on optical fiber forming optical tweezers, made by focused ion beam milling. <i>Microelectronic Engineering</i> , 2006, 83, 804-807.	2.4	88
13	Laser trapping and micro-manipulation using optical vortices. <i>Microelectronic Engineering</i> , 2005, 78-79, 125-131.	2.4	80
14	Emerging fabrication techniques for 3D nano-structuring in plasmonics and single molecule studies. <i>Nanoscale</i> , 2011, 3, 2689.	5.6	79
15	High-performance multilevel blazed x-ray microscopy Fresnel zone plates: Fabricated using x-ray lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1994, 12, 3979.	1.6	77
16	Magnetic field dependence of quantized and localized spin wave modes in thin rectangular magnetic dots. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 7709-7721.	1.8	77
17	Laser synthesis of ligand-free bimetallic nanoparticles for plasmonic applications. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3075-3082.	2.8	75
18	Ultra low concentrated molecular detection using super hydrophobic surface based biophotonic devices. <i>Microelectronic Engineering</i> , 2010, 87, 798-801.	2.4	72

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19	SERS analysis on exosomes using super-hydrophobic surfaces. <i>Microelectronic Engineering</i> , 2012, 97, 337-340.	2.4	68
20	Feasibility of transmission x-ray microscopy at 4 keV with spatial resolutions below 150 nm. <i>Applied Physics Letters</i> , 1999, 75, 4061-4063.	3.3	65
21	Water soluble nanoporous nanoparticle for in vivo targeted drug delivery and controlled release in B cells tumor context. <i>Nanoscale</i> , 2010, 2, 2230.	5.6	65
22	Focused ion beam lithography for two dimensional array structures for photonic applications. <i>Microelectronic Engineering</i> , 2005, 78-79, 11-15.	2.4	62
23	Direct mass spectrometry investigation on Pentacene thin film oxidation upon exposure to air. <i>Chemical Physics Letters</i> , 2009, 468, 193-196.	2.6	61
24	Focusing and imaging with increased numerical apertures through multimode fibers with micro-fabricated optics. <i>Optics Letters</i> , 2013, 38, 4935.	3.3	58
25	Optical micro-structures fabricated on top of optical fibers by means of two-photon photopolymerization. <i>Microelectronic Engineering</i> , 2010, 87, 876-879.	2.4	52
26	Fractal structure can explain the increased hydrophobicity of nanoporous silicon films. <i>Microelectronic Engineering</i> , 2011, 88, 2537-2540.	2.4	50
27	Nano-topography Enhances Communication in Neural Cells Networks. <i>Scientific Reports</i> , 2017, 7, 9841.	3.3	48
28	Development of zone plates with a blazed profile for hard x-ray applications. <i>Review of Scientific Instruments</i> , 1999, 70, 3537-3541.	1.3	47
29	Resonant second-harmonic generation in a GaAs photonic crystal waveguide. <i>Physical Review B</i> , 2003, 68, .	3.2	44
30	Multi-scheme approach for efficient surface plasmon polariton generation in metallic conical tips on AFM-based cantilevers. <i>Optics Express</i> , 2011, 19, 22268.	3.4	42
31	Finite size effects in patterned magnetic permalloy films. <i>Journal of Applied Physics</i> , 2000, 87, 5633-5635.	2.5	37
32	Micropatterned dry electrodes for brain-computer interface. <i>Microelectronic Engineering</i> , 2007, 84, 1737-1740.	2.4	36
33	Electroless deposition dynamics of silver nanoparticles clusters: A diffusion limited aggregation (DLA) approach. <i>Microelectronic Engineering</i> , 2012, 98, 359-362.	2.4	36
34	An Optimized Table-Top Small-Angle X-ray Scattering Set-up for the Nanoscale Structural Analysis of Soft Matter. <i>Scientific Reports</i> , 2014, 4, 6985.	3.3	36
35	Poly vinyl alcohol re-usable masters for microneedle replication. <i>Microelectronic Engineering</i> , 2009, 86, 752-756.	2.4	34
36	Behaviour of dental pulp stem cells on different types of innovative mesoporous and nanoporous silicon scaffolds with different functionalizations of the surfaces. <i>Journal of Biological Regulators and Homeostatic Agents</i> , 2015, 29, 991-7.	0.7	32

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37	Design and fabrication of on-fiber diffractive elements for fiber-waveguide coupling by means of e-beam lithography. <i>Microelectronic Engineering</i> , 2003, 67-68, 169-174.	2.4	30
38	Surface enhanced Raman scattering substrate based on gold-coated anodic porous alumina template. <i>Microelectronic Engineering</i> , 2012, 97, 383-386.	2.4	30
39	A compact and disposable transdermal drug delivery system. <i>Microelectronic Engineering</i> , 2008, 85, 1066-1073.	2.4	25
40	Cell rolling and adhesion on surfaces in shear flow. A model for an antibody-based microfluidic screening system. <i>Microelectronic Engineering</i> , 2012, 98, 668-671.	2.4	24
41	Fabrication of hard x-ray phase zone plate by x-ray lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1993, 11, 2588.	1.6	22
42	X-ray lithography for micro- and nano-fabrication at ELETTRA for interdisciplinary applications. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S3517-S3535.	1.8	22
43	Analysis of the interactions between pentacene film and air molecules by means of Raman spectroscopy. <i>Chemical Physics Letters</i> , 2008, 462, 234-237.	2.6	21
44	Tailored Ag nanoparticles/nanoporous superhydrophobic surfaces hybrid devices for the detection of single molecule. <i>Microelectronic Engineering</i> , 2012, 97, 349-352.	2.4	21
45	Non periodic patterning of super-hydrophobic surfaces for the manipulation of few molecules. <i>Microelectronic Engineering</i> , 2013, 111, 272-276.	2.4	21
46	Plasmonic 3D-structures based on silver decorated nanotips for biological sensing. <i>Optics and Lasers in Engineering</i> , 2016, 76, 45-51.	3.8	20
47	Nanoporous- micropatterned- superhydrophobic surfaces as harvesting agents for few low molecular weight molecules. <i>Microelectronic Engineering</i> , 2011, 88, 1749-1752.	2.4	19
48	Optimization and characterization of Au cuboid nanostructures as a SERS device for sensing applications. <i>Microelectronic Engineering</i> , 2012, 97, 189-192.	2.4	19
49	Nanoplasmonic structures for biophotonic applications: SERS overview. <i>Annalen Der Physik</i> , 2012, 524, 620-636.	2.4	18
50	Nanoporous silicon nanoparticles for drug delivery applications. <i>Microelectronic Engineering</i> , 2012, 98, 626-629.	2.4	17
51	Spin-wave frequency discretization in submicron rectangular prisms. <i>Journal of Applied Physics</i> , 2003, 93, 7595-7597.	2.5	15
52	Fabrication and characterization of a nanoantenna-based Raman device for ultrasensitive spectroscopic applications. <i>Microelectronic Engineering</i> , 2012, 98, 424-427.	2.4	15
53	Adiabatic nanofocusing: spectroscopy, transport and imaging investigation of the nano world. <i>Journal of Optics (United Kingdom)</i> , 2014, 16, 114003.	2.2	14
54	Inclusion of gold nanoparticles in meso-porous silicon for the SERS analysis of cell adhesion on nano-structured surfaces. <i>Microelectronic Engineering</i> , 2016, 158, 102-106.	2.4	13

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55	Relating the rate of growth of metal nanoparticles to cluster size distribution in electroless deposition. <i>Nanoscale Advances</i> , 2019, 1, 228-240.	4.6	13
56	Fabrication of 3D micro and nanostructures for MEMS and MOEMS: an approach based on combined lithographies.. <i>Journal of Physics: Conference Series</i> , 2006, 34, 904-911.	0.4	10
57	Raman spectroscopy for detection of stretched DNAs on superhydrophobic surfaces. <i>Microelectronic Engineering</i> , 2014, 119, 151-154.	2.4	10
58	Suitable photo-resists for two-photon polymerization using femtosecond fiber lasers. <i>Microelectronic Engineering</i> , 2014, 121, 135-138.	2.4	10
59	Electron-beam lithography patterning of magnetic nickel films. <i>Microelectronic Engineering</i> , 2001, 57-58, 931-937.	2.4	8
60	Shaping X-rays by diffractive coded nano-optics. <i>Microelectronic Engineering</i> , 2003, 67-68, 87-95.	2.4	8
61	Optimization of surface plasmon polariton generation in a nanocone through linearly polarized laser beams. <i>Microelectronic Engineering</i> , 2012, 97, 204-207.	2.4	8
62	AFM characterization of biomolecules in physiological environment by an advanced nanofabricated probe. <i>Microscopy Research and Technique</i> , 2012, 75, 1723-1731.	2.2	7
63	Combined effect of surface nano-topography and delivery of therapeutics on the adhesion of tumor cells on porous silicon substrates. <i>Microelectronic Engineering</i> , 2016, 158, 6-10.	2.4	7
64	Electroless formation of silver nanoaggregates: an experimental and molecular dynamics approach. <i>Molecular Physics</i> , 2014, 112, 1375-1388.	1.7	6
65	TwinMic: Combined scanning and full-field imaging microscopy with novel contrast mechanisms. <i>Synchrotron Radiation News</i> , 2003, 16, 49-52.	0.8	5
66	Design and Fabrication of Diffractive Optical Element-Microlens with Continuous Relief Fabricated On-Top of Optical Fibre by Focused Ion Beam for Fibre-to-Waveguide Coupling. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 3772-3778.	1.5	5
67	Micropatterned non-invasive dry electrodes for Brain-Computer Interface. , 2006, , .		5
68	Probing droplets with biological colloidal suspensions on smart surfaces by synchrotron radiation micro- and nano-beams. <i>Optics and Lasers in Engineering</i> , 2016, 76, 57-63.	3.8	5
69	Fresnel zone plates as neutron optical elements. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 529, 148-151.	1.6	4
70	Dark and bright modes manipulation for plasmon-triggered photonic devices. <i>Proceedings of SPIE</i> , 2014, , .	0.8	3
71	Magnetic properties of rectangular permalloy prisms: a combined magnetic force microscopy and magneto-optic Kerr study. <i>Surface Science</i> , 2004, 566-568, 291-296.	1.9	2
72	3D Micro- and Nanofabrication and Their Medical Application. , 2006, , 97-143.		2

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73	Fresnel zone plates as neutron optical elements for neutron imaging. <i>Physica B: Condensed Matter</i> , 2004, 350, E447-E450.	2.7	1
74	The use of scanning electron microscopy and energy dispersive X-ray spectroscopy in a case of occupational death. <i>Medico-Legal Journal</i> , 2020, 88, 163-168.	0.5	1
75	Plasmonics and Super-Hydrophobicity: A New Class of Nano-Bio-Devices. <i>Challenges and Advances in Computational Chemistry and Physics</i> , 2013, , 501-524.	0.6	1
76	The magic of nanoplasmonics: from superhydrophobic and 3D suspended devices for SERS/TERS-like applications to hot-electrons based nanoscopy. , 2014, , .		0
77	3D plasmonic nanostructures as building blocks for ultrasensitive Raman spectroscopy. , 2014, , .		0
78	Optical micromanipulation and force spectroscopy of ultrasound contrast microbubbles for targeted molecular imaging. , 2007, , .		0