Emanuela Esposito

List of Publications by Year
in descending order

98 papers	1,754 citations	331670 21 h-index	289244 40 g-index
99 all docs	99 docs citations	99 times ranked	1690 citing authors

#	Article	IF	Citations
1	Design and Optimization of All-Dielectric Fluorescence Enhancing Metasurfaces: Towards Advanced Metasurface-Assisted Optrodes. Biosensors, 2022, 12, 264.	4.7	6
2	Probing Denaturation of Protein A via Surface-Enhanced Infrared Absorption Spectroscopy. Biosensors, 2022, 12, 530.	4.7	5
3	Frontiers of light manipulation in natural, metallic, and dielectric nanostructures. Rivista Del Nuovo Cimento, 2021, 44, 1-68.	5.7	28
4	Advanced DNA Detection via Multispectral Plasmonic Metasurfaces. Frontiers in Bioengineering and Biotechnology, 2021, 9, 666121.	4.1	12
5	Pixeled metasurface for multiwavelength detection of vitamin D. Nanophotonics, 2020, 9, 3921-3930.	6.0	22
6	Metasurface based on cross-shaped plasmonic nanoantennas as chemical sensor for surface-enhanced infrared absorption spectroscopy. Sensors and Actuators B: Chemical, 2019, 286, 600-607.	7.8	32
7	Near-infrared modulation by means of GeTe/SOI-based metamaterial. Optics Letters, 2019, 44, 1508.	3.3	8
8	Innovative lab on fiber dosimeters for ionizing radiation monitoring at ultra-high doses. , 2019, , .		0
9	Bioderived Three-Dimensional Hierarchical Nanostructures as Efficient Surface-Enhanced Raman Scattering Substrates for Cell Membrane Probing. ACS Applied Materials & Interfaces, 2018, 10, 12406-12416.	8.0	44
10	A novel Lab-on-Fiber Radiation Dosimeter for Ultra-high Dose Monitoring. Scientific Reports, 2018, 8, 17841.	3.3	18
11	Resonant enhancement of plasmonic nanostructured fiber optic sensors. Sensors and Actuators B: Chemical, 2018, 273, 1587-1592.	7.8	16
12	Optical fiber meta-tips. Light: Science and Applications, 2017, 6, e16226-e16226.	16.6	122
13	NanoSQUIDs based on niobium nitride films. Superconductor Science and Technology, 2017, 30, 024009.	3.5	14
14	Optical fiber meta-tips: perspectives in sensing applications. Proceedings of SPIE, 2017, , .	0.8	1
15	Optical fiber meta-tips. Proceedings of SPIE, 2016, , .	0.8	0
16	Meta-tips for lab-on-fiber optrodes. , 2016, , .		2
17	Lab on Fiber Technology for biological sensing applications. Laser and Photonics Reviews, 2016, 10, 922-961.	8.7	217
18	Optical fiber meta-tips. , 2016, , .		1

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19	Lab-on-Fiber biosensing for cancer biomarker detection. Proceedings of SPIE, 2015, , .	0.8	5
20	Lab-on-fiber technology: a new vision for chemical and biological sensing. Analyst, The, 2015, 140, 8068-8079.	3.5	168
21	Multifunctional Fiber Optic Plasmonic Nanoprobes. Springer Series in Surface Sciences, 2015, , 133-157.	0.3	1
22	Lab-on-fiber technology for advanced plasmonic nano-optrodes. , 2014, , .		0
23	Performances of niobium planar nanointerferometers as a function of the temperature: a comparative study. Superconductor Science and Technology, 2014, 27, 044028.	3.5	8
24	Lab on Fiber Technology Enables Nanophotonics Within Optical Fibers. Lecture Notes in Electrical Engineering, 2014, , 363-367.	0.4	0
25	Versatile Optical Fiber Nanoprobes: From Plasmonic Biosensors to Polarization-Sensitive Devices. ACS Photonics, 2014, 1, 69-78.	6.6	64
26	Fiber optic nanoprobes as polarization sensitive devices. , 2014, , .		0
27	Nanosensors Based on Superconducting Quantum Interference Device for Nanomagnetism Investigations. Lecture Notes in Electrical Engineering, 2014, , 223-226.	0.4	0
28	Noise and Performance of Magnetic Nanosensor Based on Superconducting Quantum Interference Device. Lecture Notes in Electrical Engineering, 2014, , 13-17.	0.4	0
29	Two-dimensional hybrid metallo-dielectric nanostructures directly realized on the tip of optical fibers for sensing applications. Proceedings of SPIE, 2013, , .	0.8	1
30	Lab on fiber technology: a versatile fabrication path for optimized nanoprobes. Proceedings of SPIE, 2013, , .	0.8	0
31	Magnetic properties of iron oxide nanoparticles investigated by nanoSQUIDs. European Physical Journal B, 2013, 86, 1.	1.5	19
32	Hysteretic NanoSQUID Sensors for Investigation of Iron Oxide Nanoparticles. IEEE Transactions on Applied Superconductivity, 2013, 23, 1602305-1602305.	1.7	4
33	Lab-on-Fiber devices as an all around platform for sensing. Optical Fiber Technology, 2013, 19, 772-784.	2.7	52
34	High Sensitive Magnetic Nanosensors Based on Superconducting Quantum Interference Device. IEEE Transactions on Magnetics, 2013, 49, 140-143.	2.1	3
35	Surface sensitivity of Rayleigh anomalies in metallic nanogratings. Optics Express, 2013, 21, 23531.	3.4	39
36	A 2 Ã— 2 mm²superconducting strip-line detector for high-performance time-of-flight mass spectrometry. Superconductor Science and Technology, 2012, 25, 115004.	3.5	14

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37	Nano Superconducting QUantum Interference Device Sensors for Magnetic Nanoparticle Detection. Journal of Nanoscience and Nanotechnology, 2012, 12, 7468-7472.	0.9	4
38	Lab-on-Fiber Technology: Toward Multifunctional Optical Nanoprobes. ACS Nano, 2012, 6, 3163-3170.	14.6	197
39	Nanoparticle magnetization measurements by a high sensitive nano-superconducting quantum interference device. Applied Physics Letters, 2012, 101, .	3.3	44
40	Magnetic Nanoparticle Characterization Using Nano-SQUID based on Niobium Dayem Bridges. Physics Procedia, 2012, 36, 293-299.	1.2	11
41	Parallel Superconducting Strip-Line Detectors for Time-of-flight Mass Spectrometry. Journal of Low Temperature Physics, 2012, 167, 979-984.	1.4	3
42	Nanostructured Metalloâ€Dielectric Quasiâ€Crystals: Towards Photonicâ€Plasmonic Resonance Engineering. Advanced Functional Materials, 2012, 22, 4389-4398.	14.9	28
43	NanoSQUID as magnetic sensor for magnetic nanoparticles characterization. Journal of Nanoparticle Research, 2011, 13, 5661-5668.	1.9	20
44	Lab on fiber technology and related devices, part I: a new technological scenario; Lab on fiber technology and related devices, part II: the impact of the nanotechnologies. Proceedings of SPIE, 2011, , .	0.8	10
45	NANO-SQUIDs based on niobium Dayem bridges for nanoscale applications. Journal of Physics: Conference Series, 2010, 234, 042010.	0.4	3
46	Squid Sensors for High Spatial Resolution Magnetic Imaging and for Nanoscale Applications. Lecture Notes in Electrical Engineering, 2010, , 251-255.	0.4	0
47	Supercurrent decay in nano-superconducting quantum interference devices for intrinsic magnetic flux resolution. Applied Physics Letters, 2009, 94, .	3.3	21
48	Performance of High-Sensitivity Nano-SQUIDs Based on Niobium Dayem Bridges. IEEE Transactions on Applied Superconductivity, 2009, 19, 702-705.	1.7	17
49	An integrated superconductive magnetic nanosensor for high-sensitivity nanoscale applications. Nanotechnology, 2008, 19, 275501.	2.6	79
50	Experimental characterization of NbN nanowire optical detectors with parallel stripline configuration. Journal of Physics: Conference Series, 2008, 97, 012265.	0.4	1
51	Injection-Detection Experiments in All Aluminum 1-D Imaging Spectrometers Based on Superconducting Tunnel Junctions. IEEE Transactions on Applied Superconductivity, 2007, 17, 302-305.	1.7	0
52	Advanced superconducting optical detectors. Journal of Physics: Conference Series, 2006, 43, 1338-1341.	0.4	0
53	Superconductive radiation detectors: challenges and some recent achievements. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3104-3109.	0.8	2
54	Fabrication and test of Superconducting Single Photon Detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 559, 564-566.	1.6	26

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55	Nonequilibrium superconducting detectors. Superconductor Science and Technology, 2006, 19, S152-S159.	3.5	3
56	Evidence of midgap-state-mediated transport in 45Â° symmetric [001] tiltYBa2Cu3O7â^’xbicrystal grain-boundary junctions. Physical Review B, 2005, 71, .	3.2	46
57	Kinetic Inductance Detectors for Mass Spectroscopy. IEEE Transactions on Applied Superconductivity, 2005, 15, 940-943.	1.7	10
58	Midgap state-based Ï€-junctions for digital applications. Applied Physics Letters, 2004, 85, 1202-1204.	3.3	25
59	Quantum behavior of underdamped Josephson devices. Physical Review B, 2004, 70, .	3.2	3
60	Dual-detector for simultaneous time and energy measurements with superconductive detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 520, 41-43.	1.6	2
61	Josephson device for simultaneous time and energy detection. Applied Physics Letters, 2003, 82, 2109-2111.	3.3	6
62	Achievements and potential of the Josephson effect in new superconducting devices. Physica B: Condensed Matter, 2002, 321, 241-248.	2.7	0
63	Double stacked superconducting junctions for investigating the proximity effect in Nb/Al bilayers. Physica C: Superconductivity and Its Applications, 2002, 372-376, 351-354.	1.2	0
64	Fast Josephson cryodetector for time of flight mass spectrometry. Physica C: Superconductivity and Its Applications, 2002, 372-376, 423-426.	1.2	6
65	Macroscopic Quantum Phenomena in Underdamped Josephson Junctions. , 2001, , 61-71.		0
66	Macroscopic quantum effects in Josephson systems. IEEE Transactions on Applied Superconductivity, 2001, 11, 994-997.	1.7	7
67	A new superconducting device with transistor-like properties. IEEE Transactions on Applied Superconductivity, 2001, 11, 205-209.	1.7	1
68	Pulse-induced switches in a Josephson tunnel stacked device. Applied Physics Letters, 2001, 79, 2770-2772.	3.3	7
69	Supercurrent decay of Josephson junctions in non-stationary conditions: experimental evidence of macroscopic quantum effects. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 267, 45-51.	2.1	15
70	Quasiparticle diffusion and edge losses in superconducting tunnel junction detectors with two active electrodes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 444, 15-18.	1.6	7
71	Annular Josephson junctions for radiation detection: fabrication and investigation of the magnetic behaviour. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 444, 476-479.	1.6	1
72	MACROSCOPIC QUANTUM COHERENCE IN JOSEPHSON SYSTEMS. International Journal of Modern Physics B, 2000, 14, 3050-3055.	2.0	5

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73	NON-EQUILIBRIUM IN JOSEPHSON JUNCTIONS: POSSIBLE TRANSISTOR-LIKE APPLICATIONS. International Journal of Modern Physics B, 2000, 14, 3038-3043.	2.0	2
74	Superconducting device with transistor-like properties including large current amplification. Applied Physics Letters, 2000, 77, 447-449.	3.3	24
75	Energy level quantization in underdamped niobium Josephson junctions [Nb/AlO/sub x//Nb]. IEEE Transactions on Applied Superconductivity, 1999, 9, 3978-3981.	1.7	2
76	Magnetic properties of annular Josephson junctions for radiation detection: Experimental results. Applied Physics Letters, 1999, 74, 3389-3391.	3.3	19
77	Quasiparticle diffusion, edge losses, and back-tunneling in superconducting tunnel junctions under x-ray irradiation. Journal of Applied Physics, 1999, 86, 4580-4587.	2.5	18
78	Non-equilibrium experiments in LTS Josephson double tunnel devices [Nb/Al/AlO/sub x//Nb]. IEEE Transactions on Applied Superconductivity, 1999, 9, 3974-3977.	1.7	5
79	Nonequilibrium in Josephson junctions: A possibility for low-energy radiation/particle detection. Physical Review B, 1999, 60, 13131-13134.	3.2	3
80	Extremely underdamped Josephson junctions for low noise applications. Applied Physics Letters, 1999, 75, 121-123.	3.3	17
81	Macroscopic Quantum Tunneling in Josephson Junctions and Squids. International Journal of Modern Physics B, 1999, 13, 1271-1276.	2.0	0
82	Abrikosov Monopole Vortices and Their Images in a Circular Josephson Tunnel Junction. International Journal of Modern Physics B, 1999, 13, 1265-1270.	2.0	1
83	Effects of Quasiparticle Diffusion in Nb-Based Superconducting Tunnel Junctions Under X-Rays Irradiation. International Journal of Modern Physics B, 1999, 13, 1247-1252.	2.0	0
84	Direct Evidence of Macroscopic Quantum Effects at High Temperature. Journal of Superconductivity and Novel Magnetism, 1999, 12, 727-733.	0.5	0
85	Propagation of non-thermal phonons induced by Î±-particle bombardment in BaF2. Journal of Applied Physics, 1999, 85, 1302-1310.	2.5	2
86	Injection-Detection Experiments to Study Diffusion Processes in Nb film using a Three Terminalin-planeSuperconducting Double-Tunnel Junctions. Japanese Journal of Applied Physics, 1998, 37, 57.	1.5	5
87	X-ray response of Nb-based superconducting tunnel junction. European Physical Journal Special Topics, 1998, 08, Pr3-275-Pr3-278.	0.2	1
88	Superconductive tunnel junction detectors: ten years ago, ten years from now. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 370, 26-30.	1.6	10
89	X ray response of STJs detectors with different trapping layers: Preliminary results. Nuclear Physics, Section B, Proceedings Supplements, 1995, 44, 682-687.	0.4	1
90	Influence of a NbN overlayer on Nb/Alâ€"AlOx/Nb high quality Josephson tunnel junctions for xâ€ray detection. Applied Physics Letters, 1995, 67, 3340-3342.	3.3	6

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91	A two channel model as a possible microscopic configuration of the ?barrier? in high-T c grain boundary junctions. Journal of Superconductivity and Novel Magnetism, 1994, 7, 387-390.	0.5	13
92	The relaxation times of an STJ detector: Role of the proximity effect. Journal of Superconductivity and Novel Magnetism, 1994, 7, 951-958.	0.5	5
93	Set up of a nuclear radiation experiment with superconducting tunnel junctions in a compact3He cryostat. Cryogenics, 1994, 34, 243-246.	1.7	1
94	Nbâ€based Josephson junction devices for nuclear radiation detection: Design and preliminary experimental results. Journal of Applied Physics, 1994, 75, 5210-5217.	2.5	17
95	Proportional regime of a double superconducting tunnel junction detector. Journal of Applied Physics, 1994, 76, 1291-1296.	2.5	3
96	Transport properties in Tlâ€Baâ€Caâ€Cuâ€O grain boundary junctions on SrTiO3bicrystal substrates. Applied Physics Letters, 1994, 65, 362-364.	3.3	25
97	X-ray detection by Nb STJs above 1.4 K. Journal of Low Temperature Physics, 1993, 93, 691-696.	1.4	5
98	A New Fabrication Process of Superconducting Nb Tunnel Junctions with Ultralow Leakage Current for X-Ray Detection. Japanese Journal of Applied Physics, 1993, 32, 4535-4537.	1.5	33