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	Lab on Fiber Technology for biological sensing applications. Laser and Photonics Reviews, 2016, 10, 922-961.	8.7	217
2	Lab-on-Fiber Technology: Toward Multifunctional Optical Nanoprobes. ACS Nano, 2012, 6, 3163-3170.	14.6	197
3	Lab-on-fiber technology: a new vision for chemical and biological sensing. Analyst, The, 2015, 140, 8068-8079.	3.5	168
4	Optical fiber meta-tips. Light: Science and Applications, 2017, 6, e16226-e16226.	16.6	122
5	An integrated superconductive magnetic nanosensor for high-sensitivity nanoscale applications. Nanotechnology, 2008, 19, 275501.	2.6	79
6	Versatile Optical Fiber Nanoprobes: From Plasmonic Biosensors to Polarization-Sensitive Devices. ACS Photonics, 2014, 1, 69-78.	6.6	64
7	Lab-on-Fiber devices as an all around platform for sensing. Optical Fiber Technology, 2013, 19, 772-784.	2.7	52
8	Evidence of midgap-state-mediated transport in 45Â° symmetric [001] tiltYBa2Cu3O7â^'xbicrystal grain-boundary junctions. Physical Review B, 2005, 71, .	3.2	46
9	Nanoparticle magnetization measurements by a high sensitive nano-superconducting quantum interference device. Applied Physics Letters, 2012, 101, .	3.3	44
10	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
11	Surface sensitivity of Rayleigh anomalies in metallic nanogratings. Optics Express, 2013, 21, 23531.	3.4	39
12	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
13	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
14	Nanostructured Metalloâ€Dielectric Quasiâ€Crystals: Towards Photonicâ€Plasmonic Resonance Engineering. Advanced Functional Materials, 2012, 22, 4389-4398.	14.9	28
15	Frontiers of light manipulation in natural, metallic, and dielectric nanostructures. Rivista Del Nuovo Cimento, 2021, 44, 1-68.	5.7	28
16	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
17	Transport properties in Tlâ€Baâ€Caâ€Cuâ€O grain boundary junctions on SrTiO3bicrystal substrates. Applied Physics Letters, 1994, 65, 362-364.	3.3	25
18	Midgap state-based Ï€-junctions for digital applications. Applied Physics Letters, 2004, 85, 1202-1204.	3.3	25

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19	Superconducting device with transistor-like properties including large current amplification. Applied Physics Letters, 2000, 77, 447-449.	3.3	24
20	Pixeled metasurface for multiwavelength detection of vitamin D. Nanophotonics, 2020, 9, 3921-3930.	6.0	22
21	Supercurrent decay in nano-superconducting quantum interference devices for intrinsic magnetic flux resolution. Applied Physics Letters, 2009, 94, .	3.3	21
22	NanoSQUID as magnetic sensor for magnetic nanoparticles characterization. Journal of Nanoparticle Research, 2011, 13, 5661-5668.	1.9	20
23	Magnetic properties of annular Josephson junctions for radiation detection: Experimental results. Applied Physics Letters, 1999, 74, 3389-3391.	3.3	19
24	Magnetic properties of iron oxide nanoparticles investigated by nanoSQUIDs. European Physical Journal B, 2013, 86, 1.	1.5	19
25	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
26	A novel Lab-on-Fiber Radiation Dosimeter for Ultra-high Dose Monitoring. Scientific Reports, 2018, 8, 17841.	3.3	18
27	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
28	Extremely underdamped Josephson junctions for low noise applications. Applied Physics Letters, 1999, 75, 121-123.	3.3	17
29	Performance of High-Sensitivity Nano-SQUIDs Based on Niobium Dayem Bridges. IEEE Transactions on Applied Superconductivity, 2009, 19, 702-705.	1.7	17
30	Resonant enhancement of plasmonic nanostructured fiber optic sensors. Sensors and Actuators B: Chemical, 2018, 273, 1587-1592.	7.8	16
31	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
32	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
33	NanoSQUIDs based on niobium nitride films. Superconductor Science and Technology, 2017, 30, 024009.	3.5	14
34	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
35	Advanced DNA Detection via Multispectral Plasmonic Metasurfaces. Frontiers in Bioengineering and Biotechnology, 2021, 9, 666121.	4.1	12
36	Magnetic Nanoparticle Characterization Using Nano-SQUID based on Niobium Dayem Bridges. Physics Procedia, 2012, 36, 293-299.	1.2	11

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37	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
38	Kinetic Inductance Detectors for Mass Spectroscopy. IEEE Transactions on Applied Superconductivity, 2005, 15, 940-943.	1.7	10
39	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
40	Performances of niobium planar nanointerferometers as a function of the temperature: a comparative study. Superconductor Science and Technology, 2014, 27, 044028.	3.5	8
41	Near-infrared modulation by means of GeTe/SOI-based metamaterial. Optics Letters, 2019, 44, 1508.	3.3	8
42	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
43	Macroscopic quantum effects in Josephson systems. IEEE Transactions on Applied Superconductivity, 2001, 11, 994-997.	1.7	7
44	Pulse-induced switches in a Josephson tunnel stacked device. Applied Physics Letters, 2001, 79, 2770-2772.	3.3	7
45	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
46	Fast Josephson cryodetector for time of flight mass spectrometry. Physica C: Superconductivity and Its Applications, 2002, 372-376, 423-426.	1.2	6
47	Josephson device for simultaneous time and energy detection. Applied Physics Letters, 2003, 82, 2109-2111.	3.3	6
48	Design and Optimization of All-Dielectric Fluorescence Enhancing Metasurfaces: Towards Advanced Metasurface-Assisted Optrodes. Biosensors, 2022, 12, 264.	4.7	6
49	X-ray detection by Nb STJs above 1.4 K. Journal of Low Temperature Physics, 1993, 93, 691-696.	1.4	5
50	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
51	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
52	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
53	MACROSCOPIC QUANTUM COHERENCE IN JOSEPHSON SYSTEMS. International Journal of Modern Physics B, 2000, 14, 3050-3055.	2.0	5
54	Lab-on-Fiber biosensing for cancer biomarker detection. Proceedings of SPIE, 2015, , .	0.8	5

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55	Probing Denaturation of Protein A via Surface-Enhanced Infrared Absorption Spectroscopy. Biosensors, 2022, 12, 530.	4.7	5
56	Nano Superconducting QUantum Interference Device Sensors for Magnetic Nanoparticle Detection. Journal of Nanoscience and Nanotechnology, 2012, 12, 7468-7472.	0.9	4
57	Hysteretic NanoSQUID Sensors for Investigation of Iron Oxide Nanoparticles. IEEE Transactions on Applied Superconductivity, 2013, 23, 1602305-1602305.	1.7	4
58	Proportional regime of a double superconducting tunnel junction detector. Journal of Applied Physics, 1994, 76, 1291-1296.	2.5	3
59	Nonequilibrium in Josephson junctions: A possibility for low-energy radiation/particle detection. Physical Review B, 1999, 60, 13131-13134.	3.2	3
60	Quantum behavior of underdamped Josephson devices. Physical Review B, 2004, 70, .	3.2	3
61	Nonequilibrium superconducting detectors. Superconductor Science and Technology, 2006, 19, S152-S159.	3.5	3
62	NANO-SQUIDs based on niobium Dayem bridges for nanoscale applications. Journal of Physics: Conference Series, 2010, 234, 042010.	0.4	3
63	Parallel Superconducting Strip-Line Detectors for Time-of-flight Mass Spectrometry. Journal of Low Temperature Physics, 2012, 167, 979-984.	1.4	3
64	High Sensitive Magnetic Nanosensors Based on Superconducting Quantum Interference Device. IEEE Transactions on Magnetics, 2013, 49, 140-143.	2.1	3
65	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
66	Propagation of non-thermal phonons induced by Î±-particle bombardment in BaF2. Journal of Applied Physics, 1999, 85, 1302-1310.	2.5	2
67	NON-EQUILIBRIUM IN JOSEPHSON JUNCTIONS: POSSIBLE TRANSISTOR-LIKE APPLICATIONS. International Journal of Modern Physics B, 2000, 14, 3038-3043.	2.0	2
68	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
69	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
70	Meta-tips for lab-on-fiber optrodes. , 2016, , .		2
71	Set up of a nuclear radiation experiment with superconducting tunnel junctions in a compact3He cryostat. Cryogenics, 1994, 34, 243-246.	1.7	1
72	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

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73	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
74	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
75	A new superconducting device with transistor-like properties. IEEE Transactions on Applied Superconductivity, 2001, 11, 205-209.	1.7	1
76	Experimental characterization of NbN nanowire optical detectors with parallel stripline configuration. Journal of Physics: Conference Series, 2008, 97, 012265.	0.4	1
77	Two-dimensional hybrid metallo-dielectric nanostructures directly realized on the tip of optical fibers for sensing applications. Proceedings of SPIE, 2013, , .	0.8	1
78	Optical fiber meta-tips: perspectives in sensing applications. Proceedings of SPIE, 2017, , .	0.8	1
79	X-ray response of Nb-based superconducting tunnel junction. European Physical Journal Special Topics, 1998, 08, Pr3-275-Pr3-278.	0.2	1
80	Optical fiber meta-tips. , 2016, , .		1
81	Multifunctional Fiber Optic Plasmonic Nanoprobes. Springer Series in Surface Sciences, 2015, , 133-157.	0.3	1
82	Macroscopic Quantum Tunneling in Josephson Junctions and Squids. International Journal of Modern Physics B, 1999, 13, 1271-1276.	2.0	0
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	Macroscopic Quantum Phenomena in Underdamped Josephson Junctions. , 2001, , 61-71.		0
86	Achievements and potential of the Josephson effect in new superconducting devices. Physica B: Condensed Matter, 2002, 321, 241-248.	2.7	0
87	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
88	Advanced superconducting optical detectors. Journal of Physics: Conference Series, 2006, 43, 1338-1341.	0.4	0
89	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
90	Lab on fiber technology: a versatile fabrication path for optimized nanoprobes. Proceedings of SPIE, 2013, , .	0.8	0

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91	Lab-on-fiber technology for advanced plasmonic nano-optrodes. , 2014, , .		0
92	Lab on Fiber Technology Enables Nanophotonics Within Optical Fibers. Lecture Notes in Electrical Engineering, 2014, , 363-367.	0.4	0
93	Fiber optic nanoprobes as polarization sensitive devices. , 2014, , .		0
94	Optical fiber meta-tips. Proceedings of SPIE, 2016, , .	0.8	0
95	Squid Sensors for High Spatial Resolution Magnetic Imaging and for Nanoscale Applications. Lecture Notes in Electrical Engineering, 2010, , 251-255.	0.4	0
96	Nanosensors Based on Superconducting Quantum Interference Device for Nanomagnetism Investigations. Lecture Notes in Electrical Engineering, 2014, , 223-226.	0.4	0
97	Noise and Performance of Magnetic Nanosensor Based on Superconducting Quantum Interference Device. Lecture Notes in Electrical Engineering, 2014, , 13-17.	0.4	0
98	Innovative lab on fiber dosimeters for ionizing radiation monitoring at ultra-high doses. , 2019, , .		0