Stefano Salvatori

List of Publications by Year in descending order

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97 papers	1,164 citations	430442 18 h-index	525886 27 g-index
99 all docs	99 docs citations	99 times ranked	904 citing authors

#	Article	IF	Citations
1	Diamond Detectors for UV and X-Ray Source Imaging. IEEE Electron Device Letters, 2012, 33, 224-226.	2.2	69
2	Photoelectrical characteristics of diamond UV detectors: Dependence on device design and film quality. Diamond and Related Materials, 1997, 6, 361-366.	1.8	68
3	Tetra-phenyl porphyrin based thin film transistors. Synthetic Metals, 2003, 138, 261-266.	2.1	55
4	Secondary electron emission from diamond: Physical modeling and application to scanning electron microscopy. Journal of Applied Physics, 2001, 89, 689-696.	1.1	40
5	Optimized spectral collection efficiency obtained in diamond-based ultraviolet detectors using a three-electrode structure. Applied Physics Letters, 2003, 82, 3785-3787.	1.5	37
6	Solar-blind UV-photodetector based on polycrystalline diamond films: basic design principle and comparison with experimental results. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 46, 105-111.	1.7	30
7	X-ray diamond detectors with energy resolution. Applied Physics Letters, 2007, 91, .	1.5	29
8	Diamond device architectures for UV laser monitoring. Laser Physics, 2016, 26, 084005.	0.6	28
9	Diamond detectors with laser induced surface graphite electrodes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 837, 136-142.	0.7	24
10	On the electrical properties of polycrystalline diamond films on silicon. Diamond and Related Materials, 1995, 4, 628-631.	1.8	22
11	Diamond photoluminescence spectra: Dependence on excitation energy and microstructure. Diamond and Related Materials, 1998, 7, 255-260.	1.8	22
12	Optimised contact-structures for metalâ€“diamondâ€“metal UV-detectors. Diamond and Related Materials, 2002, 11, 458-462.	1.8	22
13	Three-dimensional graphite electrodes in CVD single crystal diamond detectors: Charge collection dependence on impinging Î²-particles geometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 799, 10-16.	0.7	22
14	Deep UV pulsed laser monitoring by CVD diamond sensors. Sensors and Actuators A: Physical, 2004, 113, 277-281.	2.0	21
15	Performance of diamond-based photoconductive devices in the UV range. Diamond and Related Materials, 1998, 7, 811-816.	1.8	20
16	High-temperature performances of diamond-based UV-photodetectors. Diamond and Related Materials, 2000, 9, 982-986.	1.8	20
17	Investigation with Î²-particles and protons of buried graphite pillars in single-crystal CVD diamond. Diamond and Related Materials, 2018, 84, 1-10.	1.8	19
18	Metal-semiconductor-metal photodiodes based on CVD diamond films. Diamond and Related Materials, 1996, 5, 775-778.	1.8	18

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19	Defect structure, distribution, and dynamics in diamond-on-silicon optoelectronic devices. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 1725.	1.6	18
20	Effect of nanostructure and back contact material on the field emission properties of carbon films. Diamond and Related Materials, 2002, 11, 819-823.	1.8	18
21	Polycrystalline diamond position sensitive detector for excimer laser UV radiation. Diamond and Related Materials, 2004, 13, 948-953.	1.8	18
22	Very long laser-induced graphitic pillars buried in single-crystal CVD-diamond for 3D detectors realization. Diamond and Related Materials, 2018, 90, 84-92.	1.8	18
23	Diamond Detector With Laser-Formed Buried Graphitic Electrodes: Micron-Scale Mapping of Stress and Charge Collection Efficiency. IEEE Sensors Journal, 2019, 19, 11908-11917.	2.4	18
24	A High-Precision Gated Integrator for Repetitive Pulsed Signals Acquisition. Electronics (Switzerland), 2019, 8, 1231.	1.8	18
25	Transient photoresponse of CVD diamond-based detectors in the time domain 10â^'9sâ€“103s. Diamond and Related Materials, 1999, 8, 871-876.	1.8	17
26	Dynamic performance of UV photodetectors based on polycrystalline diamond. IEEE Transactions on Electron Devices, 2000, 47, 1334-1340.	1.6	17
27	Electronic properties of hydrogen and oxygen terminated surfaces of polycrystalline diamond films. Physica Status Solidi A, 2003, 199, 71-76.	1.7	17
28	Time-Resolved Dosimetry of Pulsed Photon Beams for Radiotherapy Based on Diamond Detector. IEEE Sensors Journal, 2022, 22, 12348-12356.	2.4	17
29	Laser-induced nanocrystalline silicon formation in a-SiO matrices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 69-70, 299-302.	1.7	16
30	Nano-carbon pixels array for ionizing particles monitoring. Diamond and Related Materials, 2017, 73, 132-136.	1.8	16
31	Electro-optical properties of diamond thin films as UV photodetectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 387, 255-258.	0.7	15
32	Optimization of X-ray beam profilers based on CVD diamond detectors. Journal of Instrumentation, 2012, 7, C11005-C11005.	0.5	15
33	Grain boundary transport in x-ray irradiated polycrystalline diamond. Journal of Applied Physics, 2003, 93, 6078-6083.	1.1	14
34	Temporal response of CVD diamond detectors to modulated low energy X-ray beams. Physica Status Solidi A, 2004, 201, 249-252.	1.7	14
35	A Diamond-Based Dose-per-Pulse X-ray Detector for Radiation Therapy. Materials, 2021, 14, 5203.	1.3	14
36	Field- and photo-emission properties of CVD-diamond with different microcrystalline structure. Diamond and Related Materials, 2001, 10, 852-857.	1.8	13

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37	Electronic performance of 2D-UV detectors. Diamond and Related Materials, 2007, 16, 1053-1057.	1.8	13
38	Gap density of states in CVD diamond films from photoconductivity and photoluminescence data. Diamond and Related Materials, 1997, 6, 712-716.	1.8	12
39	Optical and electrical properties of silicon nanocrystals formed by CW laser irradiation of amorphous silicon oxides. Thin Solid Films, 2001, 383, 267-270.	0.8	12
40	Nonuniform current distribution in metal/diamond/metal vertical structures. Applied Physics Letters, 2003, 82, 4459-4461.	1.5	11
41	Compact Current Reference Circuits with Low Temperature Drift and High Compliance Voltage. Sensors, 2020, 20, 4180.	2.1	11
42	Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. Materials, 2020, 13, 3697.	1.3	11
43	CVD diamond films as photon detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 409, 423-425.	0.7	10
44	Voltage Division Position Sensitive Detectors Based on Photoconductive Materialsâ€" Part I: Principle of Operation. IEEE Sensors Journal, 2008, 8, 188-193.	2.4	10
45	High-Pressure Sensors Based on Laser-Manufactured Sintered Silicon Carbide. Applied Sciences (Switzerland), 2020, 10, 7095.	1.3	10
46	Accurate Signal Conditioning for Pulsed-Current Synchronous Measurements. Sensors, 2022, 22, 5360.	2.1	10
47	Minority-carrier transport parameters in CVD diamond. Carbon, 1999, 37, 811-816.	5.4	9
48	Thin polycrystalline diamond for low-energy x-ray detection. Journal of Applied Physics, 2004, 96, 6415-6420.	1.1	9
49	Compact front-end electronics for low-level current sensor measurements. Electronics Letters, 2006, 42, 682.	0.5	9
50	Polycrystalline diamond UV-triggered MESFET receivers. Nanotechnology, 2012, 23, 075202.	1.3	9
51	Phase transition, structural defects and stress development in superficial and buried regions of femtosecond laser modified diamond. Optical Materials, 2019, 96, 109214.	1.7	9
52	Diamond-based UV photodetectors for high-temperature applications. Electronics Letters, 1999, 35, 1768.	0.5	8
53	AC conductance and impedance spectroscopy of polycrystalline diamond films. Diamond and Related Materials, 2004, 13, 891-895.	1.8	8
54	Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. Materials, 2021, 14, 1780.	1.3	8

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55	Emission and excitation spectra of silicon-related luminescent centers in CVD-grown diamond films. Diamond and Related Materials, 1997, 6, 1564-1567.	1.8	7
56	Transport properties of photogenerated charge carriers in black diamond films. Ceramics International, 2019, 45, 9544-9547.	2.3	7
57	Radiation-induced modification of trap occupancy in polycrystalline diamond detectors. Diamond and Related Materials, 2003, 12, 696-700.	1.8	6
58	Deep UV detection by CVD diamond position sensitive devices. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 261-264.	0.8	6
59	Efficient deep UV detection in polycrystalline diamond by double collection mechanism. Diamond and Related Materials, 2004, 13, 814-818.	1.8	6
60	CVD-diamond detectors for real-time beam profile measurements. , 2008, , .		6
61	Electrical conductivity of double textured black diamond films from RT to 800â€¯K. Diamond and Related Materials, 2019, 93, 1-7.	1.8	6
62	a-SiOx:H thin film light emitting devices for Si-based optoelectronics. Journal of Luminescence, 1998, 80, 405-409.	1.5	5
63	Photocurrent and Photoelectron Yield Spectroscopies of Defect States in CVD Diamond Films. Physica Status Solidi A, 2000, 181, 29-35.	1.7	5
64	Transport properties of CVD diamond elucidated by DC and AC conductivity measurements. Diamond and Related Materials, 2004, 13, 277-281.	1.8	5
65	On the SCTC-OCTC Method for the Analysis and Design of Circuits. IEEE Transactions on Education, 2009, 52, 318-327.	2.0	5
66	Surface Distribution of Stress State and Diamond Phases in [100] Oriented Diamond Films. Physica Status Solidi A, 1999, 172, 97-103.	1.7	4
67	Position-sensing CVD-diamond-based UV detectors. Electronics Letters, 2001, 37, 519.	0.5	4
68	Functional properties of silicon nanocrystals in oxygen-rich amorphous matrices formed by laser irradiation of substoichiometric silicon oxides. Materials Science and Engineering C, 2002, 19, 175-179.	3.8	4
69	Amorphous carbon deposited by pulsed laser ablation as material for cold cathode flat emitters. Applied Surface Science, 2002, 186, 423-428.	3.1	4
70	Charge injection and transport in tetra-phenyl-porphyrin. Synthetic Metals, 2003, 138, 255-260.	2.1	4
71	Metal-diamond-metal planar structures for off-angle UV beam positioning with high lateral resolution. Sensors and Actuators A: Physical, 2005, 123-124, 199-203.	2.0	4
72	Diamond photoconductive structures for positioning of X-ray beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 551, 83-87.	0.7	4

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73	Voltage Division Position Sensitive Detectors Based on Photoconductive Materials Part II: Device Performances and Experimental Results. IEEE Sensors Journal, 2008, 8, 218-224.	2.4	4
74	High-precision voltage-to-current converters based on single-chip gain-selectable amplifiers. Analog Integrated Circuits and Signal Processing, 2019, 99, 491-495.	0.9	4
75	Single-Pulse Measurement Electronics for Accurate Dosimetry in X-ray Radiation Therapy. , 2021, , .		4
76	A Compact Gated Integrator for Conditioning Pulsed Analog Signals. Lecture Notes in Electrical Engineering, 2020, , 33-39.	0.3	4
77	Design and test of deep-UV position sensitive detectors. , 0, , .		3
78	Electrical and photoelectrical characterization of diamond-on-silicon structures. Applied Surface Science, 1996, 102, 125-129.	3.1	2
79	Wide-band gap semiconductors for noncontact thermometry. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 219.	1.6	2
80	Diamond detectors for x-ray spectroscopy. , 2008, , .		2
81	Charge Transport Mechanisms of Black Diamond at Cryogenic Temperatures. Nanomaterials, 2022, 12, 2253.	1.9	2
82	<title>Impurity and stress distribution in diamond films investigated by laser-excited Raman and luminescence spectroscopy</title>. , 1998, , .		1
83	Diamond deep-UV position sensitive detectors. , 2006, 6189, 254.		1
84	Defects density and carrier lifetime in nitrogen-doped ultrananocrystalline and polycrystalline diamond films. , 2007, , .		1
85	Pixel diamond detectors for excimer laser beam diagnostics. , 2011, , .		1
86	Radiation hard imaging detectors based on diamond electronics. , 2011, , .		1
87	OPTICAL POSITION SENSITIVE DETECTORS BASED ON CVD-DIAMOND SAMPLES. , 2004, , .		1
88	FAST SCINTILLATION READOUT BY MULTI-PIXEL PHOTON COUNTING. , 2008, , .		1
89	UV SENSORS BASED ON POLYCRYSTALLINE DIAMOND. , 2000, , .		0
90	AC module based on stacked a-Si-alloy and c-Si solar cells: design, technology and performance evaluation. , 0, , .		0

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91	Microcrystalline CVD-diamond samples as storage media for ultraviolet images. Electronics Letters, 2003, 39, 107.	0.5	0
92	X-ray spectroscopy based on polycrystalline diamond. , 2008, , .		0
93	Excimer Laser Beam Analyzer Based on CVD Diamond. , 2010, , .		0
94	A NEW APPROACH TO UV IMAGING BY CVD-DIAMOND DEVICES. , 2005, , .		0
95	DIAMOND DETECTORS FOR X-RAY BEAM MONITORING. , 2008, , .		0
96	ENERGY-RESOLVING DIAMOND DETECTORS FOR X-RAY SPECTROSCOPY. , 2008, , .		0
97	BURIED GRAPHITE PILLARS IN SINGLE CRYSTAL CVD DIAMOND: SENSITIVITY TO ELECTRONS. RAD Association Journal, 2016, 1, .	0.0	0