# 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 | Time-Resolved Dosimetry of Pulsed Photon Beams for Radiotherapy Based on Diamond Detector. IEEE Sensors Journal, 2022, 22, 12348-12356. | 2.4 | 17 |
| 2 | Charge Transport Mechanisms of Black Diamond at Cryogenic Temperatures. Nanomaterials, 2022, 12, 2253. | 1.9 | 2 |
| 3 | Accurate Signal Conditioning for Pulsed-Current Synchronous Measurements. Sensors, 2022, 22, 5360. | 2.1 | 10 |
| 4 | Fabry-Perot Pressure Sensors Based on Polycrystalline Diamond Membranes. Materials, 2021, 14, 1780. | 1.3 | 8 |
| 5 | Single-Pulse Measurement Electronics for Accurate Dosimetry in X-ray Radiation Therapy. , 2021, , . | | 4 |
| 6 | A Diamond-Based Dose-per-Pulse X-ray Detector for Radiation Therapy. Materials, 2021, 14, 5203. | 1.3 | 14 |
| 7 | Compact Current Reference Circuits with Low Temperature Drift and High Compliance Voltage. Sensors, 2020, 20, 4180. | 2.1 | 11 |
| 8 | Thin Diamond Film on Silicon Substrates for Pressure Sensor Fabrication. Materials, 2020, 13, 3697. | 1.3 | 11 |
| 9 | High-Pressure Sensors Based on Laser-Manufactured Sintered Silicon Carbide. Applied Sciences (Switzerland), 2020, 10, 7095. | 1.3 | 10 |
| 10 | A Compact Gated Integrator for Conditioning Pulsed Analog Signals. Lecture Notes in Electrical Engineering, 2020, , 33-39. | 0.3 | 4 |
| 11 | 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 |
| 12 | 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 |
| 13 | 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 |
| 14 | Electrical conductivity of double textured black diamond films from RT to 800â€¯K. Diamond and Related Materials, 2019, 93, 1-7. | 1.8 | 6 |
| 15 | A High-Precision Gated Integrator for Repetitive Pulsed Signals Acquisition. Electronics (Switzerland), 2019, 8, 1231. | 1.8 | 18 |
| 16 | Transport properties of photogenerated charge carriers in black diamond films. Ceramics International, 2019, 45, 9544-9547. | 2.3 | 7 |
| 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 | 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 |

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|---|---|---|---|
| 19 | Nano-carbon pixels array for ionizing particles monitoring. Diamond and Related Materials, 2017, 73, 132-136. | 1.8 | 16 |
| 20 | 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 |
| 21 | Diamond device architectures for UV laser monitoring. Laser Physics, 2016, 26, 084005. | 0.6 | 28 |
| 22 | BURIED GRAPHITE PILLARS IN SINGLE CRYSTAL CVD DIAMOND: SENSITIVITY TO ELECTRONS. RAD Association Journal, 2016, 1, . | 0.0 | 0 |
| 23 | 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 |
| 24 | Optimization of X-ray beam profilers based on CVD diamond detectors. Journal of Instrumentation, 2012, 7, C11005-C11005. | 0.5 | 15 |
| 25 | Polycrystalline diamond UV-triggered MESFET receivers. Nanotechnology, 2012, 23, 075202. | 1.3 | 9 |
| 26 | Diamond Detectors for UV and X-Ray Source Imaging. IEEE Electron Device Letters, 2012, 33, 224-226. | 2.2 | 69 |
| 27 | Pixel diamond detectors for excimer laser beam diagnostics. , 2011, , . | | 1 |
| 28 | Radiation hard imaging detectors based on diamond electronics. , 2011, , . | | 1 |
| 29 | Excimer Laser Beam Analyzer Based on CVD Diamond. , 2010, , . | | 0 |
| 30 | On the SCTC-OCTC Method for the Analysis and Design of Circuits. IEEE Transactions on Education, 2009, 52, 318-327. | 2.0 | 5 |
| 31 | Voltage Division Position Sensitive Detectors Based on Photoconductive Materialsâ€" Part I: Principle of Operation. IEEE Sensors Journal, 2008, 8, 188-193. | 2.4 | 10 |
| 32 | 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 |
| 33 | X-ray spectroscopy based on polycrystalline diamond. , 2008, , . | | 0 |
| 34 | CVD-diamond detectors for real-time beam profile measurements. , 2008, , . | | 6 |
| 35 | Diamond detectors for x-ray spectroscopy. , 2008, , . | | 2 |
| 36 | FAST SCINTILLATION READOUT BY MULTI-PIXEL PHOTON COUNTING. , 2008, , . | | 1 |

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|---|---|---|---|
| 37 | DIAMOND DETECTORS FOR X-RAY BEAM MONITORING. , 2008, , . | | 0 |
| 38 | ENERGY-RESOLVING DIAMOND DETECTORS FOR X-RAY SPECTROSCOPY. , 2008, , . | | 0 |
| 39 | X-ray diamond detectors with energy resolution. Applied Physics Letters, 2007, 91, . | 1.5 | 29 |
| 40 | Defects density and carrier lifetime in nitrogen-doped ultrananocrystalline and polycrystalline diamond films. , 2007, , . | | 1 |
| 41 | Electronic performance of 2D-UV detectors. Diamond and Related Materials, 2007, 16, 1053-1057. | 1.8 | 13 |
| 42 | Diamond deep-UV position sensitive detectors. , 2006, 6189, 254. | | 1 |
| 43 | Compact front-end electronics for low-level current sensor measurements. Electronics Letters, 2006, 42, 682. | 0.5 | 9 |
| 44 | 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 |
| 45 | 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 |
| 46 | A NEW APPROACH TO UV IMAGING BY CVD-DIAMOND DEVICES. , 2005, , . | | 0 |
| 47 | Thin polycrystalline diamond for low-energy x-ray detection. Journal of Applied Physics, 2004, 96, 6415-6420. | 1.1 | 9 |
| 48 | Transport properties of CVD diamond elucidated by DC and AC conductivity measurements. Diamond and Related Materials, 2004, 13, 277-281. | 1.8 | 5 |
| 49 | Temporal response of CVD diamond detectors to modulated low energy X-ray beams. Physica Status Solidi A, 2004, 201, 249-252. | 1.7 | 14 |
| 50 | 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 |
| 51 | Deep UV pulsed laser monitoring by CVD diamond sensors. Sensors and Actuators A: Physical, 2004, 113, 277-281. | 2.0 | 21 |
| 52 | AC conductance and impedance spectroscopy of polycrystalline diamond films. Diamond and Related Materials, 2004, 13, 891-895. | 1.8 | 8 |
| 53 | Polycrystalline diamond position sensitive detector for excimer laser UV radiation. Diamond and Related Materials, 2004, 13, 948-953. | 1.8 | 18 |
| 54 | Efficient deep UV detection in polycrystalline diamond by double collection mechanism. Diamond and Related Materials, 2004, 13, 814-818. | 1.8 | 6 |

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| 55 | OPTICAL POSITION SENSITIVE DETECTORS BASED ON CVD-DIAMOND SAMPLES. , 2004, , . | | 1 |
| 56 | Electronic properties of hydrogen and oxygen terminated surfaces of polycrystalline diamond films. Physica Status Solidi A, 2003, 199, 71-76. | 1.7 | 17 |
| 57 | Radiation-induced modification of trap occupancy in polycrystalline diamond detectors. Diamond and Related Materials, 2003, 12, 696-700. | 1.8 | 6 |
| 58 | Charge injection and transport in tetra-phenyl-porphyrin. Synthetic Metals, 2003, 138, 255-260. | 2.1 | 4 |
| 59 | Tetra-phenyl porphyrin based thin film transistors. Synthetic Metals, 2003, 138, 261-266. | 2.1 | 55 |
| 60 | Grain boundary transport in x-ray irradiated polycrystalline diamond. Journal of Applied Physics, 2003, 93, 6078-6083. | 1.1 | 14 |
| 61 | Nonuniform current distribution in metal/diamond/metal vertical structures. Applied Physics Letters, 2003, 82, 4459-4461. | 1.5 | 11 |
| 62 | 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 |
| 63 | Microcrystalline CVD-diamond samples as storage media for ultraviolet images. Electronics Letters, 2003, 39, 107. | 0.5 | 0 |
| 64 | Optimised contact-structures for metalâ€“diamondâ€“metal UV-detectors. Diamond and Related Materials, 2002, 11, 458-462. | 1.8 | 22 |
| 65 | 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 |
| 66 | 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 |
| 67 | Amorphous carbon deposited by pulsed laser ablation as material for cold cathode flat emitters. Applied Surface Science, 2002, 186, 423-428. | 3.1 | 4 |
| 68 | Secondary electron emission from diamond: Physical modeling and application to scanning electron microscopy. Journal of Applied Physics, 2001, 89, 689-696. | 1.1 | 40 |
| 69 | Field- and photo-emission properties of CVD-diamond with different microcrystalline structure. Diamond and Related Materials, 2001, 10, 852-857. | 1.8 | 13 |
| 70 | 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 |
| 71 | Position-sensing CVD-diamond-based UV detectors. Electronics Letters, 2001, 37, 519. | 0.5 | 4 |
| 72 | 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 |

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|---|---|---|---|
| 73 | UV SENSORS BASED ON POLYCRYSTALLINE DIAMOND. , 2000, , . | | 0 |
| 74 | Photocurrent and Photoelectron Yield Spectroscopies of Defect States in CVD Diamond Films. Physica Status Solidi A, 2000, 181, 29-35. | 1.7 | 5 |
| 75 | 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 |
| 76 | Dynamic performance of UV photodetectors based on polycrystalline diamond. IEEE Transactions on Electron Devices, 2000, 47, 1334-1340. | 1.6 | 17 |
| 77 | High-temperature performances of diamond-based UV-photodetectors. Diamond and Related Materials, 2000, 9, 982-986. | 1.8 | 20 |
| 78 | Diamond-based UV photodetectors for high-temperature applications. Electronics Letters, 1999, 35, 1768. | 0.5 | 8 |
| 79 | Minority-carrier transport parameters in CVD diamond. Carbon, 1999, 37, 811-816. | 5.4 | 9 |
| 80 | Surface Distribution of Stress State and Diamond Phases in [100] Oriented Diamond Films. Physica Status Solidi A, 1999, 172, 97-103. | 1.7 | 4 |
| 81 | 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 |
| 82 | a-SiOx:H thin film light emitting devices for Si-based optoelectronics. Journal of Luminescence, 1998, 80, 405-409. | 1.5 | 5 |
| 83 | 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 |
| 84 | Performance of diamond-based photoconductive devices in the UV range. Diamond and Related Materials, 1998, 7, 811-816. | 1.8 | 20 |
| 85 | Diamond photoluminescence spectra: Dependence on excitation energy and microstructure. Diamond and Related Materials, 1998, 7, 255-260. | 1.8 | 22 |
| 86 | 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 |
| 87 | <title>Impurity and stress distribution in diamond films investigated by laser-excited Raman and luminescence spectroscopy</title>. , 1998, , . | | 1 |
| 88 | Photoelectrical characteristics of diamond UV detectors: Dependence on device design and film quality. Diamond and Related Materials, 1997, 6, 361-366. | 1.8 | 68 |
| 89 | 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 |
| 90 | Gap density of states in CVD diamond films from photoconductivity and photoluminescence data. Diamond and Related Materials, 1997, 6, 712-716. | 1.8 | 12 |

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| 91 | 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 |
| 92 | 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 |
| 93 | Metal-semiconductor-metal photodiodes based on CVD diamond films. Diamond and Related Materials, 1996, 5, 775-778. | 1.8 | 18 |
| 94 | Electrical and photoelectrical characterization of diamond-on-silicon structures. Applied Surface Science, 1996, 102, 125-129. | 3.1 | 2 |
| 95 | On the electrical properties of polycrystalline diamond films on silicon. Diamond and Related Materials, 1995, 4, 628-631. | 1.8 | 22 |
| 96 | AC module based on stacked a-Si-alloy and c-Si solar cells: design, technology and performance evaluation. , 0, , . | | 0 |
| 97 | Design and test of deep-UV position sensitive detectors. , 0, , . | | 3 |