Philippe Bergonzo

List of Publications by Year
in descending order

292 papers	6,941 citations	61857 43 h-index	102304 66 g-index
295 all docs	295 docs citations	295 times ranked	6309 citing authors

#	Article	IF	Citations
1	Strong Coupling of a Spin Ensemble to a Superconducting Resonator. Physical Review Letters, 2010, 105, 140502.	2.9	541
2	Surface-induced charge state conversion of nitrogen-vacancy defects in nanodiamonds. Physical Review B, 2010, 82, .	1.1	233
3	Surface properties of hydrogenated nanodiamonds: a chemical investigation. Physical Chemistry Chemical Physics, 2011, 13, 11517.	1.3	116
4	Early stages of surface graphitization on nanodiamond probed by x-ray photoelectron spectroscopy. Physical Review B, 2011, 84, .	1.1	116
5	Carboxylated nanodiamonds are neither cytotoxic nor genotoxic on liver, kidney, intestine and lung human cell lines. Nanotoxicology, 2014, 8, 46-56.	1.6	116
6	3D-nanostructured boron-doped diamond for microelectrode array neural interfacing. Biomaterials, 2015, 53, 173-183.	5.7	108
7	Charge transport in high mobility single crystal diamond. Diamond and Related Materials, 2008, 17, 1235-1240.	1.8	100
8	Fermi level on hydrogen terminated diamond surfaces. Applied Physics Letters, 2003, 82, 2266-2268.	1.5	99
9	Hydrogenation of nanodiamonds using MPCVD: A new route toward organic functionalization. Diamond and Related Materials, 2010, 19, 1117-1123.	1.8	98
10	Electrostatic Grafting of Diamond Nanoparticles: A Versatile Route to Nanocrystalline Diamond Thin Films. ACS Applied Materials & Interfaces, 2009, 1, 2738-2746.	4.0	96
11	Hydrogen-induced transport properties of holes in diamond surface layers. Applied Physics Letters, 2001, 79, 4541-4543.	1.5	77
12	Superconductive B-doped nanocrystalline diamond thin films: Electrical transport and Raman spectra. Applied Physics Letters, 2006, 88, 232111.	1.5	77
13	Porous diamond with high electrochemical performance. Carbon, 2015, 90, 102-109.	5.4	71
14	Improving diamond detectors: A device case. Diamond and Related Materials, 2007, 16, 1038-1043.	1.8	69
15	Boosting the electrochemical properties of diamond electrodes using carbon nanotube scaffolds. Carbon, 2014, 71, 27-33.	5.4	67
16	Solar blind chemically vapor deposited diamond detectors for vacuum ultraviolet pulsed light-source characterization. Journal of Applied Physics, 1998, 84, 5331-5336.	1.1	65
17	Stability of Hâ€terminated BDD electrodes: an insight into the influence of the surface preparation. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2931-2939.	0.8	65
18	Surface transfer doping can mediate both colloidal stability and self-assembly of nanodiamonds. Nanoscale, 2013, 5, 8958.	2.8	65

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19	Proton irradiation of CVD diamond detectors for high-luminosity experiments at the LHC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 426, 173-180.	0.7	61
20	Oxygen hole doping of nanodiamond. Nanoscale, 2012, 4, 6792.	2.8	61
21	Review of the development of diamond radiation sensors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 434, 131-145.	0.7	60
22	Enhanced control of diamond nanoparticle seeding using a polymer matrix. Journal of Applied Physics, 2009, 106, .	1.1	59
23	Low temperature properties of the p-type surface conductivity of diamond. Diamond and Related Materials, 2002, 11, 351-354.	1.8	57
24	Radiation detection devices made from CVD diamond. Semiconductor Science and Technology, 2003, 18, S105-S112.	1.0	53
25	Diamond nanoseeding on silicon: Stability under H2 MPCVD exposures and early stages of growth. Diamond and Related Materials, 2008, 17, 1143-1149.	1.8	53
26	Electrochemical diamond sensors for TNT detection in water. Electrochimica Acta, 2009, 54, 5688-5693.	2.6	53
27	3D shaped mechanically flexible diamond microelectrode arrays for eye implant applications: The MEDINAS project. Irbm, 2011, 32, 91-94.	3.7	53
28	Synthetic 3D diamond-based electrodes for flexible retinal neuroprostheses: Model, production and inÂvivo biocompatibility. Biomaterials, 2015, 67, 73-83.	5.7	53
29	Laser-processed three dimensional graphitic electrodes for diamond radiation detectors. Applied Physics Letters, 2013, 103, .	1.5	50
30	Direct photo-deposition of silicon dioxide films using a xenon excimer lamp. Applied Surface Science, 1993, 69, 393-397.	3.1	49
31	Three-dimensional electrode arrays for retinal prostheses: modeling, geometry optimization and experimental validation. Journal of Neural Engineering, 2011, 8, 046020.	1.8	49
32	Patterned neuronal networks using nanodiamonds and the effect of varying nanodiamond properties on neuronal adhesion and outgrowth. Journal of Neural Engineering, 2013, 10, 056022.	1.8	49
33	Influence of the environment on the surface conductivity of chemical vapor deposition diamond. Diamond and Related Materials, 2002, 11, 856-860.	1.8	47
34	A new single crystal diamond dosimeter for small beam: comparison with different commercial active detectors. Physics in Medicine and Biology, 2013, 58, 7647-7660.	1.6	47
35	Grafting odorant binding proteins on diamond bio-MEMS. Biosensors and Bioelectronics, 2014, 60, 311-317.	5.3	47
36	Efficient production of NV colour centres in nanodiamonds using high-energy electron irradiation. Journal of Luminescence, 2010, 130, 1655-1658.	1.5	46

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37	Quasi-Real Time Quantification of Uric Acid in Urine Using Boron Doped Diamond Microelectrode with in Situ Cleaning. Analytical Chemistry, 2012, 84, 10207-10213.	3.2	45
38	Boronâ€Doped Nanocrystalline Diamond Microelectrode Arrays Monitor Cardiac Action Potentials. Advanced Healthcare Materials, 2014, 3, 283-289.	3.9	45
39	Single crystal CVD diamond membranes for betavoltaic cells. Applied Physics Letters, 2016, 108, .	1.5	45
40	Requirements for synthetic diamond devices for radiotherapy dosimetry applications. Diamond and Related Materials, 2004, 13, 2046-2051.	1.8	44
41	Boron acceptor concentration in diamond from excitonic recombination intensities. Physical Review B, 2011, 83, .	1.1	44
42	Super-thin single crystal diamond membrane radiation detectors. Applied Physics Letters, 2013, 103, .	1.5	44
43	Low pressure photodeposition of silicon nitride films using a xenon excimer lamp. Applied Physics Letters, 1993, 63, 1757-1759.	1.5	43
44	High aspect ratio diamond microelectrode array for neuronal activity measurements. Diamond and Related Materials, 2008, 17, 1399-1404.	1.8	43
45	Multichannel Boron Doped Nanocrystalline Diamond Ultramicroelectrode Arrays: Design, Fabrication and Characterization. Sensors, 2012, 12, 7669-7681.	2.1	43
46	A 3D diamond detector for particle tracking. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 786, 97-104.	0.7	43
47	CVD diamond for radiation detection devices. Diamond and Related Materials, 2001, 10, 631-638.	1.8	42
48	Peptide nucleic acidâ€“nanodiamonds: covalent and stable conjugates for DNA targeting. RSC Advances, 2014, 4, 3566-3572.	1.7	42
49	Diamond detectors for high energy physics experiments. Journal of Instrumentation, 2018, 13, C01029-C01029.	0.5	42
50	Neutron Detectors Made From Chemically Vapour Deposited Semiconductors. Materials Research Society Symposia Proceedings, 1997, 487, 591.	0.1	41
51	The development of diamond tracking detectors for the LHC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 514, 79-86.	0.7	41
52	Surface electronic states of the partially hydrogenated diamondC(100)â˜(2Ã—1):Hsurface. Physical Review B, 2001, 63, .	1.1	40
53	Fabrication of in-plane gate transistors on hydrogenated diamond surfaces. Applied Physics Letters, 2003, 82, 988-990.	1.5	39
54	New sensitive coating based on modified diamond nanoparticles for chemical SAW sensors. Sensors and Actuators B: Chemical, 2011, 154, 238-244.	4.0	39

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55	Diamond porous membranes: A material toward analytical chemistry. Diamond and Related Materials, 2015, 55, 123-130.	1.8	39
56	Improved adhesion, growth and maturation of human boneâ€derived cells on nanocrystalline diamond films. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2146-2153.	0.8	38
57	Nanocrystalline diamond photonics platform with high quality factor photonic crystal cavities. Applied Physics Letters, 2012, 101, .	1.5	38
58	Biocompatibility of nanostructured boron doped diamond for the attachment and proliferation of human neural stem cells. Journal of Neural Engineering, 2015, 12, 066016.	1.8	38
59	Thermally stimulated current investigations on diamond x-ray detectors. Journal of Applied Physics, 2000, 87, 3360-3364.	1.1	37
60	Diamond UV detectors for future solar physics missions. Diamond and Related Materials, 2001, 10, 673-680.	1.8	37
61	Metalloporphyrin-functionalised diamond nano-particles as sensitive layer for nitroaromatic vapours detection at room-temperature. Sensors and Actuators B: Chemical, 2010, 151, 191-197.	4.0	37
62	Distinctive Glial and Neuronal Interfacing on Nanocrystalline Diamond. PLoS ONE, 2014, 9, e92562.	1.1	37
63	Pulse height distribution and radiation tolerance of CVD diamond detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 447, 244-250.	0.7	36
64	Resistivity of boron doped diamond. Physica Status Solidi - Rapid Research Letters, 2009, 3, 202-204.	1.2	36
65	Boron doped diamond biotechnology: from sensors to neurointerfaces. Faraday Discussions, 2014, 172, 47-59.	1.6	36
66	Influence of the growth parameters on the electrical properties of thin polycrystalline CVD diamond films. Diamond and Related Materials, 2000, 9, 1086-1090.	1.8	35
67	CVD diamond for nuclear detection applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 694-700.	0.7	34
68	CVD diamond-based semi-transparent beam-position monitors for synchrotron beamlines: preliminary studies and device developments at CEA/Saclay. Journal of Synchrotron Radiation, 2006, 13, 151-158.	1.0	34
69	High mobility single crystal diamond detectors for dosimetry: Application to radiotherapy. Diamond and Related Materials, 2008, 17, 1297-1301.	1.8	34
70	Development of a novel large area excimer lamp for direct photo deposition of thin films. Applied Surface Science, 1992, 54, 424-429.	3.1	33
71	Rapid photochemical deposition of silicon dioxide films using an excimer lamp. Journal of Applied Physics, 1994, 76, 4372-4376.	1.1	33
72	Diamond as a tool for synchrotron radiation monitoring: beam position, profile, and temporal distribution. Diamond and Related Materials, 2000, 9, 960-964.	1.8	32

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73	Chapter 6 Diamond-based radiation and photon detectors. Semiconductors and Semimetals, 2004, , 197-309.	0.4	32
74	Thermal stability and surface modifications of detonation diamond nanoparticles studied with X-ray photoelectron spectroscopy. Diamond and Related Materials, 2010, 19, 846-853.	1.8	32
75	Post-growth treatments and contact formation on CVD diamond films for electronic applications. Diamond and Related Materials, 1998, 7, 951-956.	1.8	31
76	Transparent diamondâ€onâ€glass microâ€electrode arrays for exâ€vivo neuronal study. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2126-2129.	0.8	31
77	Diamond-based semi-transparent beam-position monitor for synchrotron radiation applications. Journal of Synchrotron Radiation, 1999, 6, 1-5.	1.0	30
78	Influence of the postplasma process conditions on the surface conductivity of hydrogenated diamond surfaces. Journal of Applied Physics, 2003, 93, 2700-2704.	1.1	30
79	CVD diamond for thermoluminescence dosimetry: optimisation of the readout process and application. Diamond and Related Materials, 2004, 13, 796-801.	1.8	30
80	Recent improvements on the use of CVD diamond ionisation chambers for radiotherapy applications. Diamond and Related Materials, 2006, 15, 811-814.	1.8	30
81	Hydrogen diffusion and stability in polycrystalline CVD undoped diamond. Diamond and Related Materials, 2001, 10, 405-410.	1.8	29
82	Time of flight study of high performance CVD diamond detector devices. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3023-3029.	0.8	29
83	Tritium labeling of detonation nanodiamonds. Chemical Communications, 2014, 50, 2916-2918.	2.2	29
84	Corrosion hard CVD diamond alpha particle detectors for nuclear liquid source monitoring. Diamond and Related Materials, 2000, 9, 1003-1007.	1.8	28
85	Particle and Radiation Detectors Based on Diamond. Physica Status Solidi A, 2001, 185, 167-181.	1.7	28
86	Low Temperature Surface Conductivity of Hydrogenated Diamond. Physica Status Solidi A, 2001, 186, 241-247.	1.7	28
87	Clinical studies of optimised single crystal and polycrystalline diamonds for radiotherapy dosimetry. Radiation Measurements, 2008, 43, 933-938.	0.7	28
88	Selective nucleation in silicon moulds for diamond MEMS fabrication. Journal of Micromechanics and Microengineering, 2009, 19, 074015.	1.5	28
89	Future Diamond UV Imagers For Solar Physics. Physica Status Solidi A, 2000, 181, 141-149.	1.7	27
90	Radiation tolerance of CVD diamond detectors for pions and protons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 686-693.	0.7	27

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91	Effect of diamond nucleation process on propagation losses of AlN/diamond SAW filter. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2004, 51, 1704-1709.	1.7	27
92	High reactivity and stability of diamond electrodes: The influence of the Bâ€doping concentration. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2063-2069.	0.8	27
93	Silicon-On-Diamond layer integration by wafer bonding technology. Diamond and Related Materials, 2010, 19, 796-805.	1.8	27
94	Boron incorporation issues in diamond when TMB is used as precursor: Toward extreme doping levels. Diamond and Related Materials, 2012, 22, 136-141.	1.8	27
95	CVD diamond detectors for ionizing radiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 435, 194-201.	0.7	26
96	Thermoluminescence Characteristics of a New Production of Chemical Vapour Deposition Diamond. Radiation Protection Dosimetry, 1999, 84, 201-205.	0.4	26
97	Status of the R&D activity on diamond particle detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 511, 124-131.	0.7	26
98	Heteroepitaxial diamond on iridium: New insights on domain formation. Diamond and Related Materials, 2013, 36, 16-25.	1.8	26
99	Boron Doped Diamond Electrodes for Direct Measurement in Biological Fluids: An In Situ Regeneration Approach. Journal of the Electrochemical Society, 2013, 160, H67-H73.	1.3	26
100	Electrostatic grafting of diamond nanoparticles towards 3D diamond nanostructures. Diamond and Related Materials, 2012, 23, 83-87.	1.8	25
101	Low-temperature magnetoresistance study of electrical transport in N- and B-doped ultrananocrystalline and nanocrystalline diamond films. Diamond and Related Materials, 2006, 15, 607-613.	1.8	24
102	Thin film diamond alpha detectors for dosimetry applications. Diamond and Related Materials, 1999, 8, 952-955.	1.8	23
103	Nitrogen-doped diamond: Thermoluminescence and dosimetric applications. Diamond and Related Materials, 2006, 15, 833-837.	1.8	23
104	Deep hole traps in boron-doped diamond. Physical Review B, 2010, 81, .	1.1	23
105	High collection efficiency CVD diamond alpha detectors. IEEE Transactions on Nuclear Science, 1998, 45, 370-373.	1.2	22
106	Capacitanceâ€“voltage studies of Al-Schottky contacts on hydrogen-terminated diamond. Applied Physics Letters, 2002, 81, 637-639.	1.5	22
107	Single crystal CVD diamond detector for high resolution dose measurement for IMRT and novel radiation therapy needs. Diamond and Related Materials, 2010, 19, 1012-1016.	1.8	22
108	CVD diamond detectors for radiation pulse characterisation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 380, 42-45.	0.7	21

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109	The first bump-bonded pixel detectors on CVD diamond. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 436, 326-335.	0.7	21
110	Geometrical non-uniformities in the sensitivity of polycrystalline diamond radiation detectors. Diamond and Related Materials, 2000, 9, 1850-1855.	1.8	21
111	An insight into neutron detection from polycrystalline CVD diamond films. Diamond and Related Materials, 2004, 13, 791-795.	1.8	21
112	Local Oxidation of Hydrogenated Diamond Surfaces for Device Fabrication. Physica Status Solidi A, 2002, 193, 523-528.	1.7	20
113	Fabrication of Silicon on Diamond (SOD) substrates by either the Bonded and Etched-back SOI (BESOI) or the Smart-Cutâ„¢ technology. Solid-State Electronics, 2010, 54, 158-163.	0.8	20
114	Recent progresses of the BOLD investigation towards UV detectors for the ESA Solar Orbiter. Diamond and Related Materials, 2002, 11, 427-432.	1.8	19
115	Scribing into hydrogenated diamond surfaces using atomic force microscopy. Applied Physics Letters, 2003, 82, 3336-3338.	1.5	19
116	In situ study of the initial stages of diamond deposition on 3Câ€“SiC (100) surfaces: Towards the mechanisms of diamond nucleation. Diamond and Related Materials, 2007, 16, 690-694.	1.8	19
117	scCVD Diamond Membrane based Microdosimeter for Hadron Therapy. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800383.	0.8	19
118	Diamond ionisation chambers for dosimetry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 380, 446-449.	0.7	18
119	Thermally Stimulated Investigations on Diamond Based Radiation Detectors. Physica Status Solidi A, 1999, 174, 155-164.	1.7	18
120	Investigation of defects in CVD diamond: Influence for radiotherapy applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 552, 105-111.	0.7	18
121	Interfacing neurons on carbon nanotubes covered with diamond. RSC Advances, 2017, 7, 153-160.	1.7	18
122	Micro-strip sensors based on CVD diamond. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 453, 141-148.	0.7	17
123	Influence of temperature on the response of diamond radiation detectors. Journal of Applied Physics, 2001, 90, 1608-1611.	1.1	17
124	Surface Science Contribution to the BEN Control on Si(100) and 3Câ€SiC(100): Towards Ultrathin Nanocrystalline Diamond Films. Chemical Vapor Deposition, 2008, 14, 187-195.	1.4	17
125	Diamond-coated ATR prism for infrared absorption spectroscopy of surface-modified diamond nanoparticles. Applied Surface Science, 2013, 270, 411-417.	3.1	17
126	Optimization of Actinides Trace Precipitation on Diamond/Si PIN Sensor for Alpha-Spectrometry in Aqueous Solution. IEEE Transactions on Nuclear Science, 2014, 61, 2082-2089.	1.2	17

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127	Monitoring the evolution of boron doped porous diamond electrode on flexible retinal implant by OCT and in vivo impedance spectroscopy. Materials Science and Engineering C, 2016, 69, 77-84.	3.8	17
128	CVD diamond gamma dose rate monitor for harsh environment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 458, 220-226.	0.7	16
129	Surface characterisation of silicon substrates seeded with diamond nanoparticles under UHV annealing. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2108-2113.	0.8	16
130	Electronic properties of homoepitaxial (111) highly boron-doped diamond films. Journal of Applied Physics, 2008, 103, .	1.1	16
131	High Sensitivity of Diamond Resonant Microcantilevers for Direct Detection in Liquids As Probed by Molecular Electrostatic Surface Interactions. Langmuir, 2011, 27, 12226-12234.	1.6	16
132	Hydrogen-induced passivation of boron acceptors in monocrystalline and polycrystalline diamond. Physical Chemistry Chemical Physics, 2011, 13, 11511.	1.3	16
133	Simultaneous detection of indole and 3â€methylindole using boronâ€doped diamond electrodes. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2662-2671.	0.8	16
134	Tracking with CVD diamond radiation sensors at high luminosity colliders. IEEE Transactions on Nuclear Science, 1999, 46, 193-200.	1.2	15
135	Sensitivity of Raman spectra excited at 325 nm to surface treatments of undoped polycrystalline diamond films. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2397-2402.	0.8	15
136	Extreme insulating ultrathin diamond films for SOD applications: From coalescence modelling to synthesis. Diamond and Related Materials, 2010, 19, 413-417.	1.8	15
137	Major Urinary Proteins on Nanodiamond-Based Resonators Toward Artificial Olfaction. IEEE Sensors Journal, 2016, 16, 6543-6550.	2.4	15
138	Surface-sensitive diamond photonic crystals for high-performance gas detection. Optics Letters, 2016, 41, 4360.	1.7	15
139	Semitransparent CVD diamond detectors for in situ synchrotron radiation beam monitoring. Diamond and Related Materials, 1999, 8, 920-926.	1.8	14
140	Superconductivity and low temperature electrical transport in B-doped CVD nanocrystalline diamond. Science and Technology of Advanced Materials, 2006, 7, S41-S44.	2.8	14
141	Stability of Bâ€“H and Bâ€“D complexes in diamond under electron beam excitation. Applied Physics Letters, 2008, 93, 062108.	1.5	14
142	Real time investigation of diamond nucleation by laser scattering. Diamond and Related Materials, 2009, 18, 707-712.	1.8	14
143	Realisation and characterisation of mass-based diamond micro-transducers working in dynamic mode. Sensors and Actuators B: Chemical, 2011, 154, 142-149.	4.0	14
144	A passive pressure sensor for continuously measuring the intraocular pressure in glaucomatous patients. Irbm, 2012, 33, 117-122.	3.7	14

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145	Diamond dosimeter for small beam stereotactic radiotherapy. Diamond and Related Materials, 2013, 33, 63-70.	1.8	14
146	Sharp interfaces for diamond delta-doping and SIMS profile modelling. Materials Letters, 2014, 115, 283-286.	1.3	14
147	Why diamond dimensions and electrode geometry are crucial for small photon beam dosimetry. Journal of Applied Physics, 2015, 118, 234507.	1.1	14
148	Diamond micro-cantilevers as transducers for olfactory receptors - based biosensors: Application to the receptors M71 and OR7D4. Sensors and Actuators B: Chemical, 2017, 238, 1199-1206.	4.0	14
149	CVD diamond photoconductors for picosecond radiation pulse characterisation. Diamond and Related Materials, 1996, 5, 732-736.	1.8	13
150	A new technique for the fabrication of thin silicon radiation detectors. IEEE Transactions on Nuclear Science, 1999, 46, 218-220.	1.2	13
151	Nuclear radiation detectors using thick amorphous-silicon MIS devices. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 456, 284-289.	0.7	13
152	Strong impact of x-ray radiation associated with electron beam metallization of diamond devices. Journal of Applied Physics, 2001, 90, 2533-2537.	1.1	13
153	Performance of irradiated CVD diamond micro-strip sensors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 706-712.	0.7	13
154	Study of the CVD process sequences for an improved control of the Bias Enhanced Nucleation step on silicon. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2854-2859.	0.8	13
155	Amplitude modulated step scan Fourier transform photocurrent spectroscopy of partly compensated Bâ€doped CVD diamond thin films. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2950-2956.	0.8	13
156	Investigations of high mobility single crystal chemical vapor deposition diamond for radiotherapy photon beam monitoring. Journal of Applied Physics, 2008, 103, 054512.	1.1	13
157	Electrochemical behaviour of (111) B-Doped Polycrystalline Diamond: Morphology/surface conductivity/activity assessed by EIS and CS-AFM. Diamond and Related Materials, 2011, 20, 1-10.	1.8	13
158	Design of an electrochemically assisted radiation sensor for Î±-spectrometry of actinides traces in water. Applied Radiation and Isotopes, 2013, 80, 32-41.	0.7	13
159	Boron Doped Diamond/Metal Nanoparticle Catalysts Hybrid Electrode Array for the Detection of Pesticides in Tap Water. Procedia Engineering, 2016, 168, 428-431.	1.2	13
160	Diamond devices as characterisation tools for novel photon sources. Applied Surface Science, 2000, 154-155, 179-185.	3.1	12
161	CVD diamond sensors for charged particle detection. Diamond and Related Materials, 2001, 10, 1778-1782.	1.8	12
162	Imaging of the sensitivity in detector grade polycrystalline diamonds using micro-focused X-ray beams. Diamond and Related Materials, 2002, 11, 418-422.	1.8	12

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163	Characterisation of CVD diamond detectors used for fast neutron flux monitoring. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 495-499.	0.7	12
164	Ultraâ€sharp boron interfaces for delta doped diamond structures. Physica Status Solidi - Rapid Research Letters, 2012, 6, 59-61.	1.2	12
165	Photo-Deposition of oxynitride and nitride films using excimer lamps. Microelectronic Engineering, 1994, 25, 345-350.	1.1	11
166	Rapid photo-deposition of silicon dioxide films using 172 nm VUV light. Electronics Letters, 1994, 30, 606-608.	0.5	11
167	Influence of the crystalline structure on the electrical properties of CVD diamond films. Diamond and Related Materials, 1996, 5, 741-746.	1.8	11
168	Influence of CVD diamond film textures on the electrical response of radiation detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 380, 107-111.	0.7	11
169	CVD diamond wafers as large-area thermoluminescence detectors for measuring the spatial distribution of dose. Physica Status Solidi A, 2003, 199, 119-124.	1.7	11
170	New UV detectors for solar observations. , 2003, 4853, 419.		11
171	Synthetic diamond devices for radio-oncology applications. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 3161-3166.	0.8	11
172	Stability of 3C-SiC surfaces under diamond growth conditions. Journal of Applied Physics, 2007, 101, 014904.	1.1	11
173	Effect of 3C-SiC(100) initial surface stoichiometry on bias enhanced diamond nucleation. Applied Physics Letters, 2007, 90, 044101.	1.5	11
174	Diamond Pixel Detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 465, 88-91.	0.7	10
175	Study of deep defects in polycrystalline CVD diamond from thermally stimulated current and below-gap photocurrent experiments. Diamond and Related Materials, 2003, 12, 546-549.	1.8	10
176	Investigations of high quality diamond detectors for neutron fluency monitoring in a nuclear reactor. Diamond and Related Materials, 2006, 15, 815-821.	1.8	10
177	Synthesis and characterisation of NCD films on 10 Ã— 10 mm‹sup›2‹/sup› and deposition on 2 inch wafer using rotating substrateâ€holder setâ€up. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2121-2125.	0.8	10
178	Ultra-thin nanocrystalline diamond films (‹100 nm) with high electrical resistivity. Physica Status Solidi - Rapid Research Letters, 2009, 3, 205-207.	1.2	10
179	Optical Analysis of pâ€Type Surface Conductivity in Diamond with Slotted Photonic Crystals. Advanced Optical Materials, 2013, 1, 963-970.	3.6	10
180	Electrical assessment of diamond MIM capacitors and modeling of MEMS capacitive switch discharging. Journal of Micromechanics and Microengineering, 2014, 24, 115017.	1.5	10

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181	Steadyâ€State Electrocatalytic Activity Evaluation with the Redox Competition Mode of Scanning Electrochemical Microscopy: A Gold Probe and a Boronâ€Doped Diamond Substrate. ChemElectroChem, 2020, 7, 4633-4640.	1.7	10
182	On the metastability of the surface conductivity in hydrogen-terminated polycrystalline CVD diamond. Diamond and Related Materials, 2004, 13, 751-754.	1.8	9
183	Integration of diamond in fully-depleted silicon-on-insulator technology as buried insulator: A theoretical analysis. Diamond and Related Materials, 2008, 17, 1248-1251.	1.8	9
184	Modified diamond nanoparticles as sensitive coatings for chemical SAW sensors. Procedia Chemistry, 2009, 1, 943-946.	0.7	9
185	Boron-deuterium complexes in diamond: How inhomogeneity leads to incorrect carrier type identification. Journal of Applied Physics, 2011, 110, 033718.	1.1	9
186	Characterization of the chargeâ€carrier transport properties of IIaâ€Tech SC diamond for radiation detection applications. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2553-2558.	0.8	9
187	Diamond Particle Detectors for High Energy Physics. Nuclear and Particle Physics Proceedings, 2016, 273-275, 1023-1028.	0.2	9
188	A 3D diamond detector for particle tracking. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 402-405.	0.7	9
189	Diamond detector technology, status and perspectives. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 924, 297-300.	0.7	9
190	Evaluation of chronically implanted subdural boron doped diamond/CNT recording electrodes in miniature swine brain. Bioelectrochemistry, 2019, 129, 79-89.	2.4	9
191	One-Step Fabrication of Nickel-Electrochemically Reduced Graphene Oxide Nanocomposites Modified Electrodes and Application to the Detection of Sunset Yellow in Drinks. Applied Sciences (Switzerland), 2022, 12, 2614.	1.3	9
192	Comparison of various GaAs materials used for gamma-ray pulses characterisation. IEEE Transactions on Nuclear Science, 1996, 43, 1372-1375.	1.2	8
193	Electrically active defects in boron doped diamond homoepitaxial layers studied from deep level transient spectroscopies and other techniques. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2016-2021.	0.8	8
194	Positionâ€sensitive radiation detectors made of single crystal CVD diamond. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2109-2114.	0.8	8
195	Encapsulated nanodiamonds in smart microgels toward self-assembled diamond nanoarrays. Diamond and Related Materials, 2013, 33, 32-37.	1.8	8
196	Comparing Silicon and Diamond Micro-cantilevers Based Sensors for Detection of Added Mass and Stiffness Changes. Procedia Engineering, 2015, 120, 1115-1119.	1.2	8
197	Results on radiation tolerance of diamond detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 924, 241-244.	0.7	8
198	Thin CVD diamond detectors with high charge collection efficiency. IEEE Transactions on Nuclear Science, 2002, 49, 277-280.	1.2	7

#	Article	IF	Citations
199	New results on diamond pixel sensors using ATLAS frontend electronics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 501, 153-159.	0.7	7
200	New developments in CVD diamond for detector applications. European Physical Journal C, 2004, 33, s1014-s1016.	1.4	7
201	High surface smoothening of diamond HPHT (100) substrates. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1955-1959.	0.8	7
202	First demonstration of heat dissipation improvement in CMOS technology using Silicon-On-Diamond (SOD) substrates. , 2009, , .		7
203	Measurement of DNA denaturation on Bâ€NCD coated diamond microâ€cantilevers. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2078-2083.	0.8	7
204	Enhanced thermal performances of silicon-on-diamond wafers incorporating ultrathin nanocrystalline diamond and silicon layers: Raman and micro-Raman analysis. Journal of Applied Physics, 2011, 110, 084901.	1.1	7
205	Diamond electrodes for trace alpha pollutant sequestration via covalent grafting of nitrilotriacetic acid (NTA) ligand. Electrochimica Acta, 2014, 136, 430-434.	2.6	7
206	Nanofocus diamond X-ray windows: Thermal modeling of nano-sized heat source systems. Diamond and Related Materials, 2015, 59, 104-115.	1.8	7
207	High frequency photoconductivity of CVD diamond films. Diamond and Related Materials, 1998, 7, 1338-1341.	1.8	6
208	Parameterisation of radiation effects on CVD diamond for proton irradiation. Nuclear Physics, Section B, Proceedings Supplements, 1999, 78, 675-682.	0.5	6
209	Influence of electrical defects on diamond detection properties. Diamond and Related Materials, 2000, 9, 1091-1095.	1.8	6
210	Relaxation in undoped polycrystalline CVD diamond films under red illumination. Diamond and Related Materials, 2002, 11, 635-639.	1.8	6
211	2D mapping of the response of CVD diamond X-ray detectors: defects and device dynamics. Physica Status Solidi A, 2004, 201, 2529-2535.	1.7	6
212	Very high UV-visible selectivity in polycrystalline CVD diamond films. Diamond and Related Materials, 2004, 13, 881-885.	1.8	6
213	Substrate influence on MPCVD boronâ€doped homoepitaxial diamond. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2169-2172.	0.8	6
214	Fabrication and micromechanical characterization of polycrystalline diamond microcantilevers. Microsystem Technologies, 2016, 22, 609-615.	1.2	6
215	Front and back side SIMS analysis of boron-doped delta-layer in diamond. Applied Surface Science, 2017, 410, 464-469.	3.1	6
216	Electro-Precipitation of Actinides on Boron-Doped Diamond Thin Films for Solid Sources Preparation for High-Resolution Alpha-Particle Spectrometry. Applied Sciences (Switzerland), 2019, 9, 1473.	1.3	6

#	Article	IF	Citations
217	Local electrical characterization of Schottky diodes on H-terminated diamond surfaces by conducting probe atomic force microscopy. Diamond and Related Materials, 2006, 15, 618-621.	1.8	5
218	Evidence of deuterium re-trapping by boron after electron beam dissociation of Bâ€“D pairs in diamond. Diamond and Related Materials, 2009, 18, 839-842.	1.8	5
219	Electrical characterization of undoped diamond films for RF MEMS application. , 2013, , .		5
220	Diamond Biosensors. , 2015, , 227-264.		5
221	Surface Treatment of Diamond Films Grown on Glass by Different Microwave Plasma Systems. Advanced Science, Engineering and Medicine, 2014, 6, 802-808.	0.3	5
222	CVD diamond pixel detectors for LHC experiments. Nuclear Physics, Section B, Proceedings Supplements, 1999, 78, 497-504.	0.5	4
223	Diamond In-Line Monitors for Synchrotron Experiments. Materials Research Society Symposia Proceedings, 1999, 590, 125.	0.1	4
224	Gallium arsenide fast photodetectors: Selection criteria and predicted response. Journal of Applied Physics, 2000, 88, 3634-3644.	1.1	4
225	Electronic properties of CVD polycrystalline diamond films. Diamond and Related Materials, 2001, 10, 588-592.	1.8	4
226	Characterization of Sub-Micron In-Plane Devices in H-Terminated Diamond. Physica Status Solidi A, 2002, 193, 517-522.	1.7	4
227	Local Bio-Sensitization of Nanocrystalline Boron Doped Diamond Surfaces with Biotin Using Electrospotting. Sensor Letters, 2009, 7, 872-879.	0.4	4
228	Single crystal chemical vapor deposited diamond detectors for intensity-modulated radiation therapy applications. Journal of Applied Physics, 2009, 106, 084509.	1.1	4
229	Deuterium-induced passivation of boron acceptors in polycrystalline diamond. Journal of Applied Physics, 2010, 108, 123701.	1.1	4
230	Growth optimization of columnar nanostructured diamond films with high electrical performances for SOD applications. AIP Conference Proceedings, 2010, , .	0.3	4
231	The many faces of carbon in electrochemistry: general discussion. Faraday Discussions, 2014, 172, 117-137.	1.6	4
232	Photoemission properties of nanocrystalline diamond thin films on silicon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	0.6	4
233	<title>Photo-CVD of dielectric materials by pseudo-continuous excimer sources</title>. , 1994, , .		3
234	Influence of defect inhomogeneities in high quality natural diamond detectors. Diamond and Related Materials, 2001, 10, 469-473.	1.8	3

#	Article	IF	Citations
235	Photoemission properties and hydrogen surface coverage of CVD diamond films. Diamond and Related Materials, 2004, 13, 969-974.	1.8	3
236	Behaviour of the 3C-SiC(100) c(2 Ã— 2) (C-terminated) and 3 Ã— 2 (Si-rich) surface reconstructions upon initial H2/CH4 microwave plasma exposures. Physica Status Solidi A, 2005, 202, 2234-2239.	1.7	3
237	Diamond detectors for alpha monitoring in corrosive media for nuclear waste activity monitoring. , 2009, , .		3
238	Soft 3D retinal implants with diamond electrode a way for focal stimulation. , 2013, , .		3
239	<title>Diamond: a material for laser spectroscopy</title>. , 1998, , .		2
240	Recent results with CVD diamond trackers. Nuclear Physics, Section B, Proceedings Supplements, 1999, 78, 329-334.	0.5	2
241	Diamond Detectors for Alpha Monitoring in Corrosive Media for Nuclear Fuel Assembly Reprocessing. Materials Research Society Symposia Proceedings, 1999, 608, 511.	0.1	2
242	Diamond gamma dose rate monitor. , 0, , .		2
243	A CVD diamond beam telescope for charged particle tracking. IEEE Transactions on Nuclear Science, 2002, 49, 1857-1862.	1.2	2
244	Evidence of localised charge build-up mechanisms in CVD diamond as observed using micro-X-ray beam analysis. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 514, 100-105.	0.7	2
245	Study of the passivation mechanisms of boron doped diamond using the Amplitude Modulated Step Scan Fourier Transform Photocurrent Spectroscopy. Diamond and Related Materials, 2009, 18, 827-830.	1.8	2
246	Fabrication and micromechanical characterization of polycrystalline diamond microcantilevers. , 2014, , .		2
247	Dielectric charging phenomena in diamond films used in RF MEMS capacitive switches: The effect of film thickness. Microelectronics Reliability, 2016, 64, 660-664.	0.9	2
248	Metal Nanoparticles/BDD Hybrid Electrodes for Analytical Detection of Pollutants in Water. MRS Advances, 2016, 1, 1131-1136.	0.5	2
249	Continuous Intra Ocular Pressure Measurement Sensor for Glaucoma Diagnostic. IFMBE Proceedings, 2010, , 1282-1285.	0.2	2
250	Characterization of excimer lamp photo-deposited ultrathin oxynitride films. , 1995, , .		1
251	High Collection Efficiency Thin Film Diamond Particle Detectors. Materials Research Society Symposia Proceedings, 1997, 487, 441.	0.1	1
252	Spontaneous low frequency oscillation studies in gallium arsenide fast photoconductors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 430, 377-381.	0.7	1

#	Article	IF	Citations
253	Dynamical aspects of the surface layer build up on diamond and improvement of the conductivity stability. Diamond and Related Materials, 2004, 13, 761-764.	1.8	1
254	Single Crystal CVD Diamond growth and characterizations. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	1
255	Synthesis of sub-micron diamond films on Si(100) for thermal applications by BEN-MPCVD. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	1
256	Synthetic diamond devices for radiotherapy applications: Passive and active dosimetry. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	1
257	Single Crystal CVD Diamond Growth for Detection Device Fabrication. Materials Research Society Symposia Proceedings, 2007, 1039, 1.	0.1	1
258	Monitoring fast neutron sources for accelerator driven subcritical reactor experiments. , 2009, , .		1
259	Realization and characterization of diamond micro-transducers for bio-chemical sensing. Procedia Chemistry, 2009, 1, 754-757.	0.7	1
260	Fabrication of GHz range oscillators stabilized by nano-carbon-diamond-based surface acoustic wave resonators. , 2009, , .		1
261	Fabrication of a 3GHz oscillator based on Nano-Carbon-Diamond-film-based guided wave resonators. Microelectronic Engineering, 2013, 112, 133-138.	1.1	1
262	Optimization of the efficiency of diamond based α-sensors for spectrometry in aqueous solutions. , 2013, , .		1
263	Nanograss Boron Doped Diamond microelectrode arrays for recording and stimulating neuronal tissues. , 2013, , .		1
264	Nanodiamond as a multimodal platform for drug delivery and radiosensitization of tumor cells. , 2013, , .		1
265	Frequency profile measurement system for microcantilever-array based gas sensor. , 2015, , .		1
266	Boron doped diamond/metal nanocatalyst hybrid electrode arrays for analytical applications. , 2017, , .		1
267	New excimer ultraviolet sources for photo-assisted deposition of thin films: an alternative to excimer-laser-induced deposition. , 1995, , .		1
268	Photo Induced Deposition of Thin Silicon Dioxide Films Using a Novel Large Area Excimer Lamp. Materials Research Society Symposia Proceedings, 1991, 224, 299.	0.1	0
269	Comparison of various GaAs materials used for gamma-ray pulses characterisation. , 0, , .		0
270	A new technique for the fabrication of thin silicon radiation detectors. , 0, , .		0

#	Article	IF	Citations
271	PhotodÃ©tecteurs ultra-rapides pour la mÃ©trologie d'impulsions UV-X. European Physical Journal Special Topics, 1999, 09, Pr5-63-Pr5-66.	0.2	0
272	Thin CVD diamond detectors with high charge collection efficiency. , 0, , .		0
273	Large area thin film semiconductor detectors using multichannel counting Castor readout chip. IEEE Transactions on Nuclear Science, 2000, 47, 1802-1806.	1.2	0
274	Preface: phys. stat. sol. (a) 199/1. Physica Status Solidi A, 2003, 199, 7-7.	1.7	0
275	Preface: phys. stat. sol. (a) 201/11. Physica Status Solidi A, 2004, 201, 2403-2403.	1.7	0
276	Preface: phys. stat. sol. (a) 202/11. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 2049-2049.	0.8	0
277	Surface Bio-functionalization of boron doped diamond. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	0
278	Improving Diamond Device Performances for Pulsed Mode Detection. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	0
279	The effects of Methane Concentration on diamond nucleation and growth during bias enhanced nucleation on 3C-SiC(100) surfaces. Materials Research Society Symposia Proceedings, 2006, 956, 1.	0.1	0
280	Probing The Transient Response To Improve The Stability Of Diamond Devices Under Pulsed Periodic Excitation. Materials Research Society Symposia Proceedings, 2007, 1039, 1.	0.1	0
281	Concept of novel CVD diamond high voltage, high power and study of ohmic contacts on diamond. , 2007, , .		0
282	Surface behavior of heterosubstrates during BEN-MPCVD: a key for diamond heteroepitaxy. Materials Research Society Symposia Proceedings, 2007, 1039, 1.	0.1	0
283	Study and Optimization of Silicon-CVD Diamond Interface for SOD Applications. Materials Research Society Symposia Proceedings, 2009, 1203, 1.	0.1	0
284	Fabrication of a 3 GHz oscillator based on nano-carbon-diamond-film-based guided wave resonators. , 2010, , .		0
285	Diamond for actinide traces detection and spectrometry in liquids. , 2013, , .		0
286	Diamond delta doped structures exhibiting ultra-sharp interfaces. , 2014, , .		0
287	CVD nanodiamond thin films as high yield photocathodes driven by UV laser pulses. , 2014, , .		0
288	High frequency-low loss SAW resonators built on NanoCrystalline Diamond-based substrate. , 2014, , .		0

#	Article	IF	Citations
289	A novel technique for trace actinides spectrometry directly in water samples. , 2015, , .		0
290	DÃ©veloppement de dÃ©tecteurs en diamant CVD pour la caractÃ©risation de sources impulsionnelles UV-X. European Physical Journal Special Topics, 2001, 11, Pr7-183-Pr7-184.	0.2	0
291	Imaging the sensitivity inhomogeneities ofÂdiamond detectors. European Physical Journal Special Topics, 2003, 104, 491-494.	0.2	0
292	High collection efficiency CVD diamond alpha detectors. , 0, , .		0