James Butler

List of Publications by Year in Descending Order

294 papers	10,459 citations	56 h-index	92 g-index
316 ext. papers	11,016 ext. citations	3.5 avg, IF	5.71 L-index

#	Paper	IF	Citations
294	Analysis of doping anisotropy in multisectorial boron-doped HPHT diamonds. *Materials Today Communications*, **2020**, 24, 100995	2.5	4
293	The occupied electronic structure of ultrathin boron doped diamond. *Nanoscale Advances*, **2020**, 2, 1358-1364	5.1	1
292	Low temperature diamond growth arising from ultrafast pulsed-laser pretreatment. *Carbon*, **2018**, 131, 120-126	10.4	3
291	Investigation of boron incorporation in delta doped diamond layers by secondary ion mass spectrometry. *Thin Solid Films*, **2018**, 653, 215-222	2.2	12
290	Chameleon diamonds: Thermal processes governing luminescence and a model for the color change. *Diamond and Related Materials*, **2018**, 81, 45-53	3.5	2
289	Characterization of electronic properties of natural type IIb diamonds. *Diamond and Related Materials*, **2017**, 72, 87-93	3.5	3
288	Nanometric diamond delta doping with boron. *Physica Status Solidi - Rapid Research Letters*, **2017**, 11, 1600329	2.5	23
287	CVD diamond with boron-doped delta-layers deposited by microwave plasma. *EPJ Web of Conferences*, **2017**, 149, 01010	0.3	
286	Dependence of boron incorporation in delta layers on CVD diamond growth process and misorientation angle. *EPJ Web of Conferences*, **2017**, 149, 02014	0.3	
285	(Invited) High Power Diamond Devices with 2-D Transport Channels. *ECS Transactions*, **2017**, 80, 197-201	1	
284	Thin film ferroelectric structures on diamond for high power microwave applications. *Diamond and Related Materials*, **2017**, 75, 176-180	3.5	3
283	Large-surface-area diamond (111) crystal plates for applications in high-heat-load wavefront-preserving X-ray crystal optics. *Journal of Synchrotron Radiation*, **2016**, 23, 1118-23	2.4	7
282	Characterization of delta-doped diamond samples with a planar capacitor. *Journal of Physics: Conference Series*, **2016**, 769, 012092	0.3	
281	Novel microwave plasma-assisted CVD reactor for diamond delta doping. *Physica Status Solidi - Rapid Research Letters*, **2016**, 10, 324-327	2.5	39
280	Theoretical Model of the Stripline Measurement Cell for Doped Diamond Films. *Journal of Physics: Conference Series*, **2016**, 769, 012093	0.3	
279	Demonstration of a high repetition rate capillary discharge waveguide. *Journal of Applied Physics*, **2016**, 119, 033302	2.5	28
278	Single-crystal diamond refractive lens for focusing X-rays in two dimensions. *Journal of Synchrotron Radiation*, **2016**, 23, 163-8	2.4	16

277	Ferroelectric Varactor on Diamond for Elevated Power Microwave Applications. *IEEE Electron Device Letters*, **2016**, 1-1	4.4	2
276	A geometric model of growth for cubic crystals: Diamond. *Diamond and Related Materials*, **2015**, 53, 58-65	3.5	12
275	Study of the Blue Moon Diamond. *Gems & Gemology*, **2015**, 50, 280-286	1.8	6
274	Experimental study of hydrogen plasma etching of (100) single crystal diamond in a MPACVD reactor. *Materials Letters*, **2015**, 151, 115-118	3.3	26
273	RF breakdown test of diamond-loaded resonator for high gradient wakefield accelerator applications. *Diamond and Related Materials*, **2015**, 54, 15-18	3.5	3
272	Temperature admittance spectroscopy of boron doped chemical vapor deposition diamond. *Journal of Applied Physics*, **2015**, 118, 145703	2.5	15
271	Microwave filter based on Lamb modes for optoelectronic generator. *Journal of Physics: Conference Series*, **2015**, 661, 012049	0.3	0
270	Homoepitaxial growth of CVD diamond after ICP pretreatment. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 2572-2577	1.6	25
269	UV Sensor Based on Layered Ferrite-Diamond Structure. *Journal of Physics: Conference Series*, **2015**, 661, 012060	0.3	
268	Thermal conductivity changes upon neutron transmutation of 10B doped diamond. *Journal of Applied Physics*, **2014**, 116, 083706	2.5	1
267	Diamond Dielectrics for Advanced Wakefield Accelerators. *Materials Research Society Symposia Proceedings*, **2013**, 1549, 1		
266	Diamond Surfaces and Interfaces **2013**, 353-358		
265	. *IEEE Electron Device Letters*, **2012**, 33, 23-25	4.4	83
264	Boron in natural type IIb blue diamonds: Chemical and spectroscopic measurements. *American Mineralogist*, **2012**, 97, 1-18	2.9	35
263	Experimental demonstration of wakefield effects in a THz planar diamond accelerating structure. *Applied Physics Letters*, **2012**, 100, 132910	3.4	36
262	Cathodoluminescence of natural, plastically deformed pink diamonds. *Microscopy and Microanalysis*, **2012**, 18, 1292-302	0.5	11
261	Fabrication and Characterization of Single-crystal CVD Diamond Current Amplifier. *Materials Research Society Symposia Proceedings*, **2011**, 1282, 129		
260	Contribution of steps to optical properties of vicinal diamond (100):H surfaces. *Physical Review B*, **2011**, 83,	3.3	6

259	Secondary electron amplification using single-crystal CVD diamond film. *Diamond and Related Materials*, **2011**, 20, 798-802	3.5	14
258	Characterization of molecular and biomolecular layers on diamond thin films by infrared reflection□absorption spectroscopy. *Diamond and Related Materials*, **2011**, 20, 733-742	3.5	5
257	Laser annealing of neutron irradiated boron-10 isotope doped diamond. *Journal of Materials Science*, **2011**, 46, 2518-2528	4.3	2
256	Ultrathin single crystal diamond nanomechanical dome resonators. *Nano Letters*, **2011**, 11, 4304-8	11.5	37
255	Surface functionalization of thin-film diamond for highly stable and selective biological interfaces. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 983-8	11.5	80
254	Dissipation in single crystal diamond micromechanical annular plate resonators. *Diamond and Related Materials*, **2011**, 20, 1204-1207	3.5	9
253	Note: Laser ablation technique for electrically contacting a buried implant layer in single crystal diamond. *Review of Scientific Instruments*, **2011**, 82, 056105	1.7	4
252	Comparative Study of Ohmic Contact Metallizations to Nanocrystalline Diamond Films. *Materials Science Forum*, **2010**, 645-648, 733-735	0.4	4
251	Bunch characteristics of an electron beam generated by a diamond secondary emitter amplifier. *Journal of Applied Physics*, **2010**, 108, 044509	2.5	15
250	On the high curvature coefficient rectifying behavior of nanocrystalline diamond heterojunctions to 4H-SiC. *Applied Physics Letters*, **2010**, 97, 193510	3.4	6
249	Spectroscopic and microscopic characterizations of color lamellae in natural pink diamonds. *Diamond and Related Materials*, **2010**, 19, 1207-1220	3.5	56
248	Photochemical Grafting of Alkenes onto Carbon Surfaces: Identifying the Roles of Electrons and Holes. *Journal of Physical Chemistry C*, **2010**, 114, 4067-4074	3.8	34
247	11.6: Emission characterization of diamond current amplifier **2010**,		2
246	Nanocrystalline diamond as an electronic material: An impedance spectroscopic and Hall effect measurement study. *Journal of Applied Physics*, **2010**, 107, 033716	2.5	21
245	Ultrananocrystalline and Nanocrystalline Diamond Thin Films for MEMS/NEMS Applications. *MRS Bulletin*, **2010**, 35, 281-288	3.2	107
244	The Wittelsbach-Graff and Hope Diamonds: Not Cut from the Same Rough. *Gems & Gemology*, **2010**, 46, 80-89	1.8	10
243	Reflection anisotropy spectroscopy of the oxidized diamond (001) surface. *Journal of Physics Condensed Matter*, **2009**, 21, 364218	1.8	2
242	Detection of DNA hybridisation on a functionalised diamond surface using reflection anisotropy spectroscopy. *Europhysics Letters*, **2009**, 85, 18006	1.6	8

241	Understanding the chemical vapor deposition of diamond: recent progress. *Journal of Physics Condensed Matter*, **2009**, 21, 364201	1.8	122
240	Controlled synthesis of high quality micro/nano-diamonds by microwave plasma chemical vapor deposition. *Diamond and Related Materials*, **2009**, 18, 51-55	3.5	58
239	The structural and electrochemical properties of boron-doped nanocrystalline diamond thin-film electrodes grown from Ar-rich and H2-rich source gases. *Diamond and Related Materials*, **2009**, 18, 669-677	3.5	86
238	Recent Progress in the Understanding of CVD Growth of Diamond **2009**, 103-124		10
237	Using phosphorescence as a fingerprint for the Hope and other blue diamonds. *Geology*, **2008**, 36, 83	5	17
236	Reactive ion etching of waveguide structures in diamond. *Diamond and Related Materials*, **2008**, 17, 1831-1834	3.5	32
235	CVD-diamond external cavity Raman laser at 573 nm. *Optics Express*, **2008**, 16, 18950-5	3.3	85
234	A mechanism for crystal twinning in the growth of diamond by chemical vapour deposition. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2008**, 366, 295-311; discussion 311	3	80
233	Thermal quenching investigation in chemical vapor deposited diamond by simultaneous detection of thermally stimulated luminescence and conductivity. *Journal of Applied Physics*, **2008**, 103, 114908	2.5	11
232	The CVD of Nanodiamond Materials. *Chemical Vapor Deposition*, **2008**, 14, 145-160		272
231	Direct electrical detection of antigen-antibody binding on diamond and silicon substrates using electrical impedance spectroscopy. *Analyst, The*, **2007**, 132, 296-306	5	53
230	Observation of whispering gallery modes in nanocrystalline diamond microdisks. *Applied Physics Letters*, **2007**, 90, 081110	3.4	59
229	Direct photopatterning and SEM imaging of molecular monolayers on diamond surfaces: mechanistic insights into UV-initiated molecular grafting. *Langmuir*, **2007**, 23, 11623-30	4	28
228	Covalent molecular functionalization of diamond thin-film transistors. *Diamond and Related Materials*, **2007**, 16, 1608-1615	3.5	17
227	Characterization of B-doped polycrystalline diamond films using thermally stimulated luminescence. *Diamond and Related Materials*, **2007**, 16, 805-808	3.5	4
226	Neutron transmutation of 10B doped diamond. *Diamond and Related Materials*, **2007**, 16, 50-62	3.5	7
225	Atomic layer deposition of ZnO thin films on boron-doped nanocrystalline diamond. *Diamond and Related Materials*, **2007**, 16, 983-986	3.5	17
224	Diamond synthesis using an oxygen-acetylene torch. *Materials Letters*, **2007**, 61, 2847-2850	3.3	2

223	Mössbauer study of 57Fe in CVD diamond following 57Mn implantation. *Hyperfine Interactions*, **2007**, 179, 17-22	0.8	3
222	Fabrication of suspended single crystal diamond devices by electrochemical etch. *Journal of Vacuum Science & Technology B*, **2007**, 25, 730		31
221	Optical absorption, depolarization, and scatter of epitaxial single-crystal chemical-vapor-deposited diamond at 1.064μm. *Optical Engineering*, **2007**, 46, 064002	1.1	24
220	Optical properties of epitaxial single-crystal chemical-vapor-deposited diamond **2007**,		2
219	Nanocrystalline diamond films as UV-semitransparent Schottky contacts to 4H-SiC. *Applied Physics Letters*, **2007**, 91, 163508	3.4	18
218	Fabrication and characterization of two-dimensional photonic crystal microcavities in nanocrystalline diamond. *Applied Physics Letters*, **2007**, 91, 201112	3.4	124
217	Nanocrystalline Diamond as a Dielectric for SOD Applications. *Materials Research Society Symposia Proceedings*, **2007**, 1039, 1		1
216	Role of TL thermal quenching in CVD diamond for medical applications. *Diamond and Related Materials*, **2007**, 16, 1062-1065	3.5	7
215	Diamond merged diode. *Diamond and Related Materials*, **2007**, 16, 1033-1037	3.5	22
214	ZNO-on-nanocrystalline diamond lateral bulk acoustic resonators **2007**,		17
213	Surface composition, bonding, and morphology in the nucleation and growth of ultra-thin, high quality nanocrystalline diamond films. *Diamond and Related Materials*, **2007**, 16, 718-724	3.5	101
212	Fluorescence Spectra of Colored Diamonds Using A Rapid, Mobile Spectrometer. *Gems & Gemology*, **2007**, 43, 332-351	1.8	16
211	Optical bleaching, TSL and OSL features of CVD diamond. *Radiation Protection Dosimetry*, **2006**, 119, 390-3	0.9	2
210	Lift -Off Process to get Free-Standing High Quality Single Crystal Diamond Films and Suspended Single Crystal Diamond Devices. *Materials Research Society Symposia Proceedings*, **2006**, 956, 1		3
209	The role of charge trapping at grain boundaries on charge transport in polycrystalline chemical vapor deposited diamond based detectors. *Journal of Applied Physics*, **2006**, 99, 113703	2.5	11
208	Thermoluminescence properties of CVD diamond for clinical dosimetry use. *Radiation Protection Dosimetry*, **2006**, 120, 87-90	0.9	13
207	Fabrication of short-wavelength photonic crystals in wide-band-gap nanocrystalline diamond films. *Journal of Vacuum Science & Technology B*, **2006**, 24, 50		25
206	Nanocrystalline diamond resonator array for RF signal processing. *Diamond and Related Materials*, **2006**, 15, 2061-2067	3.5	34

205	Electrical bias dependent photochemical functionalization of diamond surfaces. *Journal of Physical Chemistry B*, **2006**, 110, 16535-43	3.4	23
204	Semiconductor surface-induced 1,3-hydrogen shift: the role of covalent vs zwitterionic character. *Journal of the American Chemical Society*, **2006**, 128, 11054-61	16.4	12
203	An investigation of structural and electrical properties of boron doped and undoped nanocrystalline diamond films. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 3021-3027	1.6	10
202	The initial stages of graphite formation on the diamond (1 0 0) 2 □1 surface. *Journal of Electron Spectroscopy and Related Phenomena*, **2006**, 152, 33-36	1.7	5
201	Role of film□substrate interface in the internal friction of nanocrystalline diamond films. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 442, 332-335	5.3	0
200	Excitonic recombinations and energy levels of highly boron doped homoepitaxial diamond films before and after hydrogenation. *Diamond and Related Materials*, **2005**, 14, 350-354	3.5	6
199	Molecular and biomolecular monolayers on diamond as an interface to biology. *Diamond and Related Materials*, **2005**, 14, 661-668	3.5	84
198	Electrically Addressable Biomolecular Functionalization of Conductive Nanocrystalline Diamond Thin Films. *Chemistry of Materials*, **2005**, 17, 938-940	9.6	68
197	Electrical properties of diamond surfaces functionalized with molecular monolayers. *Journal of Physical Chemistry B*, **2005**, 109, 8523-32	3.4	59
196	Adsorption of acrylonitrile on diamond and silicon (001)-(2 x 1) surfaces: effects of dimer structure on reaction pathways and product distributions. *Journal of the American Chemical Society*, **2005**, 127, 8348-54	16.4	20
195	Photochemical functionalization of hydrogen-terminated diamond surfaces: a structural and mechanistic study. *Journal of Physical Chemistry B*, **2005**, 109, 20938-47	3.4	119
194	2D photonic crystals fabricated in wide bandgap nanocrystalline diamond **2005**,		2
193	Free-standing Diamond Single Crystal Film for Electronics Applications. *Materials Research Society Symposia Proceedings*, **2005**, 905, 1		1
192	Mercury detection at boron doped diamond electrodes using a rotating disk technique. *Journal of Electroanalytical Chemistry*, **2005**, 577, 287-293	4.1	32
191	Direct evidence of interaction between dislocations and point defects in diamond. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, R69-R71	1.6	5
190	New direct evidence of point defects interacting with dislocations and grain boundaries in diamond. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, 2943-2949	1.6	9
189	Some Recent Advances on the n-Type Doping of Diamond. *Solid State Phenomena*, **2005**, 108-109, 703-708	0.4	
188	Charge trap levels in sulfur-doped chemical-vapor-deposited diamond with applications to ultraviolet dosimetry. *Journal of Applied Physics*, **2005**, 98, 023704	2.5	9

187	1/f noise in semiconducting and just-metallic boron-implanted diamond. *Physical Review B*, **2005**, 71,	3.3	7
186	Reflectance anisotropy spectra of the diamond (100)-(2x1) surface: evidence of strongly bound surface state excitons. *Physical Review Letters*, **2005**, 94, 087404	7.4	34
185	Effect of material properties on low-energy electron transmission in thin chemical-vapor deposited diamond films. *Journal of Applied Physics*, **2005**, 97, 093717	2.5	6
184	Low temperature internal friction in nanocrystalline diamond films. *Applied Physics Letters*, **2005**, 86, 081910	3.4	17
183	Dissipation in nanocrystalline-diamond nanomechanical resonators. *Applied Physics Letters*, **2004**, 84, 972-974	3.4	79
182	Temperature-dependent emptying of grain-boundary charge traps in chemical vapor deposited diamond. *Applied Physics Letters*, **2004**, 84, 4493-4495	3.4	15
181	Electrical characterization of 10B doped diamond irradiated with low thermal neutron fluence. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 1191-1194	2.9	4
180	High Quality MPCVD Epitaxial Diamond Film for Power Device Application. *Materials Research Society Symposia Proceedings*, **2004**, 829, 29		6
179	HIGH-VOLTAGE DIAMOND SCHOTTKY RECTIFIERS. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 872-878	0.5	14
178	Observation of Substitutional Fe in CEMS Measurements on Synthetic CVD Diamond. *Hyperfine Interactions*, **2004**, 156/157, 129-135	0.8	1
177	Characterization of nitrogen doped chemical vapor deposited single crystal diamond before and after high pressure, high temperature annealing. *Physica Status Solidi A*, **2004**, 201, 2473-2485		59
176	Shallow donor induced n-type conductivity in deuterated boron-doped diamond. *Physica Status Solidi A*, **2004**, 201, 2444-2450		18
175	Loss due to transverse thermoelastic currents in microscale resonators. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 370, 407-411	5.3	39
174	Optically switched conductivity of epitaxial diamond on nitrogen doped diamond substrates. *Applied Physics Letters*, **2004**, 84, 4620-4622	3.4	5
173	Interfacial electrical properties of DNA-modified diamond thin films: intrinsic response and hybridization-induced field effects. *Langmuir*, **2004**, 20, 6778-87	4	137
172	n-type diamond with high room temperature electrical conductivity by deuteration of boron doped diamond layers. *Diamond and Related Materials*, **2004**, 13, 700-704	3.5	19
171	Electron transport mechanisms in thin boron-doped diamond films. *Journal of Applied Physics*, **2004**, 96, 446-453	2.5	19
170	Conversion of p-type to n-type diamond by exposure to a deuterium plasma. *Journal of Applied Physics*, **2004**, 96, 7060-7065	2.5	23

169	Formation of deuterium-related shallow donors in boron-doped diamond. *Materials Research Society Symposia Proceedings*, **2004**, 813, 821		1
168	Observation of Substitutional Fe in CEMS Measurements on Synthetic CVD Diamond **2004**, 129-135		
167	Measuring strain in polycrystalline CVD diamond films. *Journal Physics D: Applied Physics*, **2003**, 36, A153-A156	3	2
166	Observation of monolayer steps on {111}, Σ 3 twin boundaries in chemically vapour-deposited polycrystalline diamond. *Philosophical Magazine Letters*, **2003**, 83, 297-302	1	1
165	Grain clusters and the geometrical origin of stress in CVD polycrystalline diamond. *Materials Chemistry and Physics*, **2003**, 81, 281-285	4.4	9
164	Spectroelectrochemical responsiveness of a freestanding, boron-doped diamond, optically transparent electrode toward ferrocene. *Analytica Chimica Acta*, **2003**, 500, 137-144	6.6	29
163	Shallow donors with high n-type electrical conductivity in homoepitaxial deuterated boron-doped diamond layers. *Nature Materials*, **2003**, 2, 482-6	27	116
162	TL characterisation of a CVD diamond wafer for ionising radiation dosimetry. *Diamond and Related Materials*, **2003**, 12, 1750-1754	3.5	26
161	Relationship between grain boundaries and broad luminescence peaks in CVD diamond films. *Diamond and Related Materials*, **2003**, 12, 310-317	3.5	14
160	Photoluminescence and positron annihilation measurements of nitrogen doped CVD diamond. *Diamond and Related Materials*, **2003**, 12, 652-657	3.5	19
159	DNA-Modified Diamond Surfaces. *Langmuir*, **2003**, 19, 1938-1942	4	130
158	Exceptionally high voltage Schottky diamond diodes and low boron doping. *Semiconductor Science and Technology*, **2003**, 18, S67-S71	1.8	146
157	Long coherence times at 300 K for nitrogen-vacancy center spins in diamond grown by chemical vapor deposition. *Applied Physics Letters*, **2003**, 83, 4190-4192	3.4	134
156	Real and apparent grain sizes in chemical vapor deposited diamond. *Materials Letters*, **2003**, 57, 3690-3693	3	8
155	Transmission of low-energy electrons in boron-doped nanocrystalline diamond films. *Journal of Applied Physics*, **2003**, 93, 3082-3089	2.5	22
154	Elastic, mechanical, and thermal properties of nanocrystalline diamond films. *Journal of Applied Physics*, **2003**, 93, 2164-2171	2.5	248
153	Mass spectrometry sampling method for characterizing high-density plasma etching mechanisms. *Applied Physics Letters*, **2003**, 82, 3626-3628	3.4	1
152	Optical centers introduced in boron-doped synthetic diamond by near-threshold electron irradiation. *Journal of Applied Physics*, **2003**, 94, 3091-3100	2.5	7

151	Gem-Quality Synthetic Diamonds Grown by a Chemical Vapor Deposition (CVD) Method. *Gems & Gemology*, **2003**, 39, 268-283	1.8	40
150	Chemical Vapor Deposited Diamond: Maturity and Diversity. *Electrochemical Society Interface*, **2003**, 12, 22-26	3.6	17
149	Electron transmission studies of diamond films. *Applied Surface Science*, **2002**, 191, 52-60	6.7	15
148	DNA-modified nanocrystalline diamond thin-films as stable, biologically active substrates. *Nature Materials*, **2002**, 1, 253-7	27	744
147	The Inverted p-Diamond/n-CdTe Heterojunction Solar Cell. *Journal of the Electrochemical Society*, **2002**, 149, G55	3.9	4
146	Transmission electron microscopy investigation of boron-doped polycrystalline chemically vapour-deposited diamond. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2002**, 82, 1741-1768		4
145	Loss mechanisms in MEMS oscillators **2002**, 4827, 466		0
144	A Confocal Raman Imaging Study of an Optically Transparent Boron-Doped Diamond Electrode. *Journal of Physical Chemistry B*, **2002**, 106, 10816-10827	3.4	55
143	Nanomechanical resonant structures in nanocrystalline diamond. *Applied Physics Letters*, **2002**, 81, 4455-4457	3.4	157
142	Photochemical Functionalization of Diamond Films. *Langmuir*, **2002**, 18, 968-971	4	229
141	Characterisation of electron irradiated boron-doped diamond. *Diamond and Related Materials*, **2002** , 11, 681-685	3.5	9
140	Grain boundaries in boron-doped CVD diamond films. *Diamond and Related Materials*, **2002**, 11, 697-702	3.5	10
139	Photoluminescence studies of type IIa and nitrogen doped CVD diamond. *Diamond and Related Materials*, **2002**, 11, 692-696	3.5	19
138	Dislocations in diamond: Electron energy-loss spectroscopy. *Physical Review B*, **2002**, 65,	3.3	45
137	Preparation and Electrochemical Characterization of DNA-modified Nanocrystalline Diamond Films. *Materials Research Society Symposia Proceedings*, **2002**, 737, 569		1
136	Transmission electron microscopy investigation of borondoped polycrystalline chemically vapour-deposited diamond. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2002**, 82, 1741-1768		4
135	Summary of Recent Progress with Diamond Electrodes in Electroanalysis, Spectroelectrochemistry and Electrocatalysis. *Journal of Wide Bandgap Materials*, **2001**, 8, 171-188		8
134	Characterization of the CH4/H2/Ar high density plasma etching process for ZnSe. *Journal of Electronic Materials*, **2001**, 30, 538-542	1.9	5

133	Diamond/CdTe: a new inverted heterojunction CdTe thin film solar cell. *Solar Energy Materials and Solar Cells*, **2001**, 69, 381-388	6.4	8
132	bond versus radical character of the diamond (1 0 0)-2 1 surface. *Materials Chemistry and Physics*, **2001**, 72, 147-151	4.4	10
131	Three-dimensional reciprocal-space mapping of chemical vapour deposited diamond. *Journal Physics D: Applied Physics*, **2001**, 34, A44-A46	3	2
130	Formation of shallow acceptor states in the surface region of thin film diamond. *Applied Physics Letters*, **2001**, 78, 3460-3462	3.4	35
129	Neutron transmutation of 10B isotope-doped diamond. *Applied Physics Letters*, **2001**, 78, 446-447	3.4	6
128	Carrier generation within the surface region of hydrogenated thin film polycrystalline diamond. *Diamond and Related Materials*, **2001**, 10, 423-428	3.5	26
127	Thermoluminescence properties of nitrogen containing chemical vapour deposited diamond films. *Diamond and Related Materials*, **2001**, 10, 2084-2091	3.5	13
126	HgCdTe photodetectors with negative luminescent efficiencies >80%. *Applied Physics Letters*, **2001**, 78, 3082-3084	3.4	29
125	Oxygen Adsorption on the (110)-Oriented Diamond Surface *Journal of Physical Chemistry B*, **2001**, 105, 3803-3812	3.4	21
124	Diamond optically transparent electrodes: demonstration of concept with ferri/ferrocyanide and methyl viologen. *Analytical Chemistry*, **2001**, 73, 908-14	7.8	49
123	Extended and Point Defects in Diamond Studied with the Aid of Various Forms of Microscopy. *Microscopy and Microanalysis*, **2000**, 6, 285-290	0.5	4
122	Diamond CVD Growth Mechanisms and Reaction Rates From First-Principles. *Materials Research Society Symposia Proceedings*, **2000**, 616, 123		1
121	Functionalization of Diamond(100) by Diels Alder Chemistry. *Journal of the American Chemical Society*, **2000**, 122, 744-745	16.4	86
120	Extended and Point Defects in Diamond Studied with the Aid of Various Forms of Microscopy. *Microscopy and Microanalysis*, **2000**, 6, 285-290	0.5	
119	Cycloaddition Chemistry at Surfaces: Reaction of Alkenes with the Diamond(001)-2 1 Surface. *Journal of the American Chemical Society*, **2000**, 122, 732-733	16.4	91
118	Performance of CVD diamond as a thermoluminescent dosemeter. *Diamond and Related Materials*, **2000**, 9, 1013-1016	3.5	20
117	Theoretical study of chemical reactions on CVD diamond surfaces. *Diamond and Related Materials*, **2000**, 9, 241-245	3.5	19
116	Standard electrochemical behavior of high-quality, boron-doped polycrystalline diamond thin-film electrodes. *Analytical Chemistry*, **2000**, 72, 3793-804	7.8	361

115	Point defect incorporation during diamond chemical vapor deposition. *Journal of Materials Research*, **1999**, 14, 3439-3446	2.5	10
114	Etching effects during the chemical vapor deposition of (100) diamond. *Journal of Chemical Physics*, **1999**, 111, 4291-4299	3.9	64
113	Characterization of high density CH4/H2/Ar plasmas for compound semiconductor etching. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 780-792	2.9	12
112	Characterization of Cl2/Ar high density plasmas for semiconductor etching. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 38-51	2.9	40
111	Simulation of faceted film growth in two-dimensions: microstructure, morphology and texture. *Acta Materialia*, **1999**, 47, 2269-2281	8.4	89
110	Use of novel methods for the investigation of the boron distribution in CVD diamond. *Acta Materialia*, **1999**, 47, 4025-4030	8.4	31
109	Morphological and synchrotron X-ray microdiffraction studies of large columnar CVD diamond crystallites. *Journal of Applied Crystallography*, **1999**, 32, 924-933	3.8	2
108	Optical microscopic, synchrotron X-ray topographic and reticulographic study of homoepitaxial CVD diamond. *Journal of Crystal Growth*, **1999**, 200, 446-457	1.6	5
107	Characterization of the CH4/H2/Ar high density plasma etching process for HgCdTe. *Journal of Electronic Materials*, **1999**, 28, 347-354	1.9	28
106	Oxygen surface studies in ultra-thin diamond using a resonance reaction and transmission channelled Rutherford forward scattering. *Nuclear Instruments & Methods in Physics Research B*, **1999**, 158, 701-705	1.2	10
105	Creation and mobility of self-interstitials in diamond by use of a transmission electron microscope and their subsequent study by photoluminescence microscopy. *Diamond and Related Materials*, **1999**, 8, 94-100	3.5	48
104	Growth of diamond films using an enclosed methyl-acetylene and propadiene combustion flame. *Diamond and Related Materials*, **1998**, 7, 1491-1502	3.5	2
103	Underpotential Deposition of Cu on Boron-Doped Diamond Thin Films. *Journal of Physical Chemistry B*, **1998**, 102, 134-140	3.4	30
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