Robert J Nemanich

List of Publications by Year
in descending order

381 papers	20,529 citations	13087 68 h-index	12585 132 g-index
383 all docs	383 docs citations	383 times ranked	17151 citing authors

#	Article	IF	Citations
1	First- and second-order Raman scattering from finite-size crystals of graphite. Physical Review B, 1979, 20, 392-401.	1.1	1,948
2	Ultrawideâ€Bandgap Semiconductors: Research Opportunities and Challenges. Advanced Electronic Materials, 2018, 4, 1600501.	2.6	839
3	Structural interpretation of the vibrational spectra ofa-Si: H alloys. Physical Review B, 1979, 19, 2064-2073.	1.1	766
4	Multi-walled carbon nanotube interactions with human epidermal keratinocytes. Toxicology Letters, 2005, 155, 377-384.	0.4	702
5	Analysis of the composite structures in diamond thin films by Raman spectroscopy. Physical Review B, 1990, 41, 3738-3745.	1.1	532
6	Light scattering study of boron nitride microcrystals. Physical Review B, 1981, 23, 6348-6356.	1.1	515
7	Raman spectroscopy of diamond and doped diamond. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2537-2565.	1.6	503
8	Defects in single-crystal silicon induced by hydrogenation. Physical Review B, 1987, 35, 4166-4169.	1.1	432
9	Gold Schottky contacts on oxygen plasma-treated,n-type ZnO(0001Ì„). Applied Physics Letters, 2003, 82, 400-402.	1.5	378
10	Negative-electron-affinity effects on the diamond (100) surface. Physical Review B, 1994, 50, 5803-5806.	1.1	369
11	Piezoelectric measurements with atomic force microscopy. Applied Physics Letters, 1998, 73, 3851-3853.	1.5	267
12	Infrared active optical vibrations of graphite. Solid State Communications, 1977, 23, 117-120.	0.9	248
13	Defects in plasma-deposited a-Si: H. Journal of Non-Crystalline Solids, 1979, 32, 393-403.	1.5	240
14	Thermally induced effects in evaporated chalcogenide films. I. Structure. Physical Review B, 1978, 18, 6900-6914.	1.1	233
15	Morphology and phase stability of TiSi2on Si. Journal of Applied Physics, 1992, 71, 4269-4276.	1.1	230
16	Mechanical stress effect on imprint behavior of integrated ferroelectric capacitors. Applied Physics Letters, 2003, 83, 728-730.	1.5	221
17	Observation of a negative electron affinity for heteroepitaxial AlN on Î±(6H)â€SiC(0001). Applied Physics Letters, 1994, 64, 3288-3290.	1.5	218
18	The structure and property characteristics of amorphous/nanocrystalline silicon produced by ball milling. Journal of Materials Research, 1995, 10, 139-148.	1.2	216

#	Article	IF	Citations
19	Direct studies of domain switching dynamics in thin film ferroelectric capacitors. Applied Physics Letters, 2005, 87, 082902.	1.5	210
20	Low-frequency inelastic light scattering from chalcogenide glasses and alloys. Physical Review B, 1977, 16, 1655-1674.	1.1	200
21	Hydrogen bonding in silicon-hydrogen alloys. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1978, 37, 467-475.	0.6	200
22	Domain growth kinetics in lithium niobate single crystals studied by piezoresponse force microscopy. Applied Physics Letters, 2005, 86, 012906.	1.5	196
23	Electronic surface and dielectric interface states on GaN and AlGaN. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	174
24	The IBEX-Lo Sensor. Space Science Reviews, 2009, 146, 117-147.	3.7	171
25	Observation of a negative electron affinity for boron nitride. Applied Physics Letters, 1995, 67, 3912-3914.	1.5	167
26	Raman analysis of phonon lifetimes in AlN and GaN of wurtzite structure. Physical Review B, 1999, 59, 12977-12982.	1.1	165
27	The surface oxidation potential of human neuromelanin reveals a spherical architecture with a pheomelanin core and a eumelanin surface. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14785-14789.	3.3	151
28	Argon and hydrogen plasma interactions on diamond (111) surfaces: Electronic states and structure. Applied Physics Letters, 1993, 62, 1878-1880.	1.5	141
29	Raman and photoluminescence analysis of stress state and impurity distribution in diamond thin films. Journal of Applied Physics, 1995, 78, 6709-6719.	1.1	137
30	First evidence for vibrational excitations of large atomic clusters in amorphous semiconductors. Solid State Communications, 1977, 21, 273-276.	0.9	136
31	Interference enhanced Raman scattering from very thin absorbing films. Applied Physics Letters, 1980, 36, 31-33.	1.5	134
32	Structural, microstructural, and electrical properties of gold films and Schottky contacts on remote plasma-cleaned, n-type ZnO{0001} surfaces. Journal of Applied Physics, 2005, 97, 103517.	1.1	131
33	The origin of the broadband luminescence and the effect of nitrogen doping on the optical properties of diamond films. Journal of Applied Physics, 1994, 76, 3020-3027.	1.1	129
34	Optical absorption spectra of surface or interface states in hydrogenated amorphous silicon. Applied Physics Letters, 1983, 42, 105-107.	1.5	121
35	Interference-Enhanced Raman Scattering of Very Thin Titanium and Titanium Oxide Films. Physical Review Letters, 1980, 44, 273-276.	2.9	120
36	Surfactant effects on carbon nanotube interactions with human keratinocytes. Nanomedicine: Nanotechnology, Biology, and Medicine, 2005, 1, 293-299.	1.7	120

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37	Polarization-dependent electron affinity of LiNbO3 surfaces. Applied Physics Letters, 2004, 85, 2316-2318.	1.5	114
38	Raman scattering from intercalated donor compounds of graphite. Physical Review B, 1977, 16, 2965-2972.	1.1	113
39	Thermionic electron emission from low work-function phosphorus doped diamond films. Diamond and Related Materials, 2009, 18, 789-791.	1.8	112
40	Preparation and characterization of atomically clean, stoichiometric surfaces ofn- andp-type GaN(0001). Journal of Applied Physics, 2003, 94, 3163-3172.	1.1	111
41	Observation of an anomolously sharp feature in the 2nd order Raman spectrum of graphite. Solid State Communications, 1977, 23, 417-420.	0.9	108
42	CVD diamondâ€"Research, applications, and challenges. MRS Bulletin, 2014, 39, 490-494.	1.7	108
43	Influence of interfacial hydrogen and oxygen on the Schottky barrier height of nickel on (111) and (100) diamond surfaces. Physical Review B, 1994, 49, 13629-13637.	1.1	106
44	Light scattering from magnetic excitations in orthoferrites. Physical Review B, 1982, 25, 1822-1836.	1.1	103
45	Electrical and chemical characterization of the Schottky barrier formed between clean n-GaN(0001) surfaces and Pt, Au, and Ag. Journal of Applied Physics, 2003, 94, 3939-3948.	1.1	97
46	Fabrication of metallic nanowires on a ferroelectric template via photochemical reaction. Nanotechnology, 2006, 17, 4946-4949.	1.3	96
47	Optical probes of the lattice dynamics of graphite. Materials Science and Engineering, 1977, 31, 157-160.	0.1	95
48	Thermally induced effects in evaporated chalcogenide films. II. Optical absorption. Physical Review B, 1978, 18, 6915-6919.	1.1	93
49	Role of thin Fe catalyst in the synthesis of double- and single-wall carbon nanotubes via microwave chemical vapor deposition. Applied Physics Letters, 2004, 85, 2601-2603.	1.5	93
50	Boron doping of diamond thin films. Applied Physics Letters, 1989, 55, 1121-1123.	1.5	91
51	Field emission properties of nitrogen-doped diamond films. Journal of Applied Physics, 1999, 86, 3973-3982.	1.1	91
52	Ultrafast recombination and trapping in amorphous silicon. Physical Review B, 1990, 41, 2879-2884.	1.1	89
53	Microphotoluminescence and Raman scattering study of defect formation in diamond films. Journal of Applied Physics, 1993, 73, 3951-3957.	1.1	89
54	Coordination dependent vibrational properties of amorphous semiconductors alloys. Solid State Communications, 1975, 17, 1567-1572.	0.9	88

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55	Nanoscale observation of photoinduced domain pinning and investigation of imprint behavior in ferroelectric thin films. Journal of Applied Physics, 2002, 92, 2734-2739.	1.1	88
56	Three-dimensional high-resolution reconstruction of polarization in ferroelectric capacitors by piezoresponse force microscopy. Journal of Applied Physics, 2004, 95, 1958-1962.	1.1	87
57	In situcleaning and characterization of oxygen- and zinc-terminated,n-type, ZnO{0001} surfaces. Journal of Applied Physics, 2004, 95, 5856-5864.	1.1	84
58	Measurement of the band offsets of SiO2 on cleann- andp-type GaN(0001). Journal of Applied Physics, 2003, 93, 3995-4004.	1.1	83
59	Comparison study of catalyst nanoparticle formation and carbon nanotube growth: Support effect. Journal of Applied Physics, 2007, 101, 124310.	1.1	83
60	Band offset measurements of the Si3N4/GaNâ€‰(0001) interface. Journal of Applied Physics, 2003, 94, 3949-3954.	1.1	82
61	Piezoresponse force microscopy for polarity imaging of GaN. Applied Physics Letters, 2002, 80, 4166-4168.	1.5	79
62	Raman analysis of the E1 and A1 quasi-longitudinal optical and quasi-transverse optical modes in wurtzite AlN. Journal of Applied Physics, 1999, 85, 3535-3539.	1.1	77
63	Photoionization Thresholds of Melanins Obtained from Free Electron Laserâ€“Photoelectron Emission Microscopy, Femtosecond Transient Absorption Spectroscopy and Electron Paramagnetic Resonance Measurements of Oxygen Photoconsumption. Photochemistry and Photobiology, 2006, 82, 733.	1.3	76
64	Bond-length relaxation inSi1â^'xGexalloys. Physical Review B, 1994, 50, 15026-15033.	1.1	74
65	Interference enhanced Raman scattering study of the interfacial reaction of Pd on aâ€‰Si:H. Journal of Vacuum Science and Technology, 1981, 19, 685-688.	1.9	71
66	Stability of C54 titanium germanosilicide on a siliconâ€‰germanium alloy substrate. Journal of Applied Physics, 1995, 77, 5107-5114.	1.1	71
67	Run-in behavior of nanocrystalline diamond coatings studied by in situ tribometry. Wear, 2008, 265, 477-489.	1.5	71
68	Raman analysis of the configurational disorder in AlxGa1â^'xN films. Applied Physics Letters, 1997, 71, 2157-2159.	1.5	69
69	Spatial inhomogeneity of imprint and switching behavior in ferroelectric capacitors. Applied Physics Letters, 2003, 82, 3071-3073.	1.5	69
70	Microstrain in laserâ€‰crystallized silicon islands on fused silica. Applied Physics Letters, 1982, 40, 316-318.	1.5	67
71	Process-dependent band structure changes of transition-metal (Ti,Zr,Hf) oxides on Si (100). Applied Physics Letters, 2004, 84, 580-582.	1.5	67
72	Oxidation Potentials of Human Eumelanosomes and PheomelanosomesÂ¶. Photochemistry and Photobiology, 2005, 81, 145.	1.3	67

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73	Band offset measurements of the GaNâ€‰(0001)/HfO2 interface. Journal of Applied Physics, 2003, 94, 7155-7158.	1.1	65
74	Conduction band-edge States associated with the removal of d-state degeneracies by the Jahn-Teller effect. IEEE Transactions on Device and Materials Reliability, 2005, 5, 65-83.	1.5	63
75	Comparative band alignment of plasma-enhanced atomic layer deposited high-k dielectrics on gallium nitride. Journal of Applied Physics, 2012, 112, .	1.1	62
76	Surface band bending and band alignment of plasma enhanced atomic layer deposited dielectrics on Ga- and N-face gallium nitride. Journal of Applied Physics, 2014, 116, .	1.1	62
77	Experimental studies of the formation process and morphologies of carbon nanotubes with bamboo mode structures. Diamond and Related Materials, 2004, 13, 1287-1291.	1.8	61
78	Electronic properties of the Zrâ€“ZrO2â€“SiO2â€“Si(100) gate stack structure. Journal of Applied Physics, 2006, 99, 063708.	1.1	56
79	Temperature Dependence of Single-Asperity Diamondâ^'Diamond Friction Elucidated Using AFM and MD Simulations. Journal of Physical Chemistry C, 2008, 112, 9358-9369.	1.5	56
80	Photoinduced Ag deposition on periodically poled lithium niobate: Wavelength and polarization screening dependence. Journal of Applied Physics, 2011, 109, .	1.1	56
81	Wet Chemical Processing of (0001)Si 6Hâ€SiC Hydrophobic and Hydrophilic Surfaces. Journal of the Electrochemical Society, 1999, 146, 1910-1917.	1.3	54
82	Silicide formation in Pdâ€aâ€Si:H Schottky barriers. Applied Physics Letters, 1981, 39, 274-276.	1.5	53
83	Effects of boron doping on the surface morphology and structural imperfections of diamond films. Diamond and Related Materials, 1992, 1, 828-835.	1.8	53
84	Vapor deposition of diamond thin films on various substrates. Applied Physics Letters, 1990, 57, 1916-1918.	1.5	52
85	Silicide formation and stability of. Thin Solid Films, 1995, 270, 555-560.	0.8	52
86	Structural and electronic properties of boron nitride thin films containing silicon. Journal of Applied Physics, 1998, 84, 5046-5051.	1.1	52
87	Emission characterization from nitrogen-doped diamond with respect to energy conversion. Diamond and Related Materials, 2006, 15, 217-220.	1.8	52
88	Physical adsorption on ferroelectric surfaces: photoinduced and thermal effects. Nanotechnology, 2008, 19, 495303.	1.3	52
89	Chemical vapor deposition of diamond films from water vapor rfâ€plasma discharges. Applied Physics Letters, 1992, 60, 329-331.	1.5	50
90	Piezoresponse force microscopy for piezoelectric measurements of III-nitride materials. Journal of Crystal Growth, 2002, 246, 252-258.	0.7	50

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91	Energy dependence of the carrier mobility-lifetime product in hydrogenated amorphous silicon. Physical Review B, 1983, 27, 4861-4871.	1.1	49
92	Ultraviolet Raman study of A1(LO) and E2 phonons in InxGa1â^'xN alloys. Journal of Applied Physics, 2001, 89, 798-800.	1.1	49
93	AlN bulk crystals grown on SiC seeds. Journal of Crystal Growth, 2005, 281, 68-74.	0.7	49
94	Fixed-Gap Tunnel Junction for Reading DNA Nucleotides. ACS Nano, 2014, 8, 11994-12003.	7.3	48
95	Spatial variation of ferroelectric properties in Pb(Zr0.3,â€šTi0.7)O3 thin films studied by atomic force microscopy. Journal of Applied Physics, 2000, 87, 8031-8034.	1.1	47
96	Electronic states at the interface of Tiâ€“Si oxide on Si(100). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1726.	1.6	47
97	Attractive Migration and Coalescence: A Significant Process in the Coarsening ofTiSi2Islands on the Si(111) Surface. Physical Review Letters, 2003, 90, 136102.	2.9	47
98	A novel approach for determining the effective tunneling mass of electrons in HfO2 and other high-K alternative gate dielectrics for advanced CMOS devices. Microelectronic Engineering, 2004, 72, 257-262.	1.1	47
99	Enhanced low-temperature thermionic field emission from surface-treated N-doped diamond films. Diamond and Related Materials, 2002, 11, 774-779.	1.8	46
100	Applications of Free-Electron Lasers in the Biological and Material SciencesÂ¶. Photochemistry and Photobiology, 2005, 81, 711.	1.3	46
101	Analysis of the reverse I-V characteristics of diamond-based PIN diodes. Applied Physics Letters, 2017, 111, .	1.5	46
102	Photoluminescence and recombination mechanisms in GaN/Al0.2Ga0.8N superlattice. Applied Physics Letters, 2000, 76, 1969-1971.	1.5	45
103	Combined visible light photo-emission and low temperature thermionic emission from nitrogen doped diamond films. Applied Physics Letters, 2011, 99, .	1.5	45
104	Schottky barrier amorphous-crystalline interface formation. Surface Science, 1983, 132, 250-263.	0.8	44
105	Fibrinogen adsorption onto microwave plasma chemical vapor deposited diamond films. Diamond and Related Materials, 2004, 13, 595-599.	1.8	44
106	Atomic force microscopy-based experimental setup for studying domain switching dynamics in ferroelectric capacitors. Review of Scientific Instruments, 2005, 76, 023708.	0.6	44
107	Photo-induced Ag deposition on periodically poled lithium niobate: Concentration and intensity dependence. Journal of Applied Physics, 2011, 110, .	1.1	44
108	Polarization Effects of GaN and AlGaN: Polarization Bound Charge, Band Bending, and Electronic Surface States. Journal of Electronic Materials, 2014, 43, 4560-4568.	1.0	44

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109	Raman scattering characterization of titanium silicide formation. IEEE Journal of Quantum Electronics, 1989, 25, 997-1002.	1.0	43
110	Morphology of TiSi₂ and ZrSi₂ on Si(100) and (111) surfaces. Journal of Materials Research, 1994, 9, 1214-1227.	1.2	43
111	Spectroscopic evidence for bonding coordination defects in amorphous as. Solid State Communications, 1978, 26, 137-139.	0.9	42
112	Negative electron affinity effects on H plasma exposed diamond (100) surfaces. Diamond and Related Materials, 1995, 4, 802-805.	1.8	41
113	Reactions of thinâ€film titanium on silicon studied by Raman spectroscopy. Applied Physics Letters, 1985, 46, 670-672.	1.5	40
114	Scanning probe investigation of surface charge and surface potential of GaN-based heterostructures. Applied Physics Letters, 2005, 86, 112115.	1.5	40
115	Investigation of the effect of the total pressure and methane concentration on the growth rate and quality of diamond thin films grown by MPCVD. Diamond and Related Materials, 2006, 15, 1784-1788.	1.8	40
116	Thermionic Energy Conversion in the Twenty-first Century: Advances and Opportunities for Space and Terrestrial Applications. Frontiers in Mechanical Engineering, 2017, 3, .	0.8	40
117	Optical characterization of wide band gap amorphous semiconductors (a-Si:C:H): Effect of hydrogen dilution. Journal of Applied Physics, 2001, 89, 1130-1137.	1.1	39
118	Thermionic electron emission from nitrogen-doped homoepitaxial diamond. Diamond and Related Materials, 2010, 19, 110-113.	1.8	39
119	Enhanced thermionic energy conversion and thermionic emission from doped diamond films through methane exposure. Diamond and Related Materials, 2011, 20, 1229-1233.	1.8	39
120	Photoelectron emission microscopy observation of inversion domain boundaries of GaN-based lateral polarity heterostructures. Journal of Applied Physics, 2003, 94, 5720-5725.	1.1	38
121	On the thermionic emission from nitrogen-doped diamond films with respect to energy conversion. Diamond and Related Materials, 2004, 13, 2052-2055.	1.8	38
122	Gas source molecular beam epitaxy of scandium nitride on silicon carbide and gallium nitride surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	38
123	Pd growth and subsequent Schottky barrier formation on chemical vapor cleanedp-type GaN surfaces. Journal of Applied Physics, 2002, 91, 732-738.	1.1	37
124	Micro-Raman study of electronic properties of inversion domains in GaN-based lateral polarity heterostructures. Journal of Applied Physics, 2003, 93, 9542-9547.	1.1	37
125	Low temperature onset for thermionic emitters based on nitrogen incorporated UNCD films. Diamond and Related Materials, 2009, 18, 232-234.	1.8	37
126	Electronic Conductance Resonance in Non-Redox-Active Proteins. Journal of the American Chemical Society, 2020, 142, 6432-6438.	6.6	37

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127	X-ray photoelectron spectroscopy analysis of GaN/(0001)AlN and AlN/(0001)GaN growth mechanisms. Journal of Applied Physics, 1999, 86, 5584-5593.	1.1	36
128	Schottky barriers on phosphorus-doped hydrogenated amorphous silicon: The effects of tunneling. Physical Review B, 1986, 33, 6936-6945.	1.1	35
129	Observation of surface modification and nucleation during deposition of diamond on silicon by scanning tunneling microscopy. Journal of Applied Physics, 1991, 69, 6400-6405.	1.1	35
130	Interface instabilities and electronic properties of ZrO2 on silicon (100). Journal of Applied Physics, 2004, 96, 2665-2673.	1.1	35
131	Thermionic field emission from nanocrystalline diamond-coated silicon tip arrays. Physical Review B, 2005, 72, .	1.1	35
132	Theory of space charge limited regime of thermionic energy converter with negative electron affinity emitter. Journal of Vacuum Science & Technology B, 2009, 27, 1132-1141.	1.3	35
133	Effect of composition on phase formation and morphology in Tiâ€“Si_{1â^’x}Ge_x solid phase reactions. Journal of Materials Research, 1995, 10, 2849-2863.	1.2	34
134	Valence band discontinuity, surface reconstruction, and chemistry of (0001), (0001Ì„), and (11Ì„00) 2Hâ€“AlN/6Hâ€“SiC interfaces. Journal of Applied Physics, 1999, 86, 4483-4490.	1.1	34
135	Currentâ€“voltage and imaging of TiSi2 islands on Si(001) surfaces using conductive-tip atomic force microscopy. Journal of Applied Physics, 2002, 92, 3326-3331.	1.1	34
136	Thermally enhanced photoinduced electron emission from nitrogen-doped diamond films on silicon substrates. Physical Review B, 2014, 90, .	1.1	34
137	Effect of surface roughness and Hâ€“termination chemistry on diamond's semiconducting surface conductance. Diamond and Related Materials, 2017, 76, 79-85.	1.8	34
138	Human Iridal Stroma Melanosomes of Varying Pheomelanin Contents Possess a Common Eumelanic Outer Surface. Journal of Physical Chemistry B, 2009, 113, 11346-11351.	1.2	33
139	Substrate-diamond interface considerations for enhanced thermionic electron emission from nitrogen doped diamond films. Journal of Applied Physics, 2012, 112, .	1.1	33
140	Single electron tunneling of nanoscale TiSi2 islands on Si. Journal of Applied Physics, 2002, 92, 3332-3337.	1.1	32
141	R&D of diamond films in the Frontier Carbon Technology Project and related topics. Diamond and Related Materials, 2003, 12, 233-240.	1.8	31
142	High negative ion yield from light molecule scattering. Nuclear Instruments & Methods in Physics Research B, 2005, 230, 330-339.	0.6	31
143	High Voltage Diodes in Diamond Using (100)- and (111)- Substrates. IEEE Electron Device Letters, 2017, 38, 600-603.	2.2	31
144	Aligned, coexisting liquid and solid regions in laser-annealed Si. Physical Review B, 1983, 27, 7817-7819.	1.1	30

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145	Film thickness effects in the Tiâ€“Si1â^'xGexsolid phase reaction. Journal of Applied Physics, 1995, 78, 4958-4965.	1.1	30
146	Growth and characterization of GaN single crystals. Journal of Crystal Growth, 2000, 208, 100-106.	0.7	30
147	X-ray and Raman analyses of GaN produced by ultrahigh-rate magnetron sputter epitaxy. Applied Physics Letters, 2002, 81, 1797-1799.	1.5	30
148	Electron-spin-resonance study of boron-doped amorphousSixGe1â^'x: H alloys. Physical Review B, 1984, 30, 3595-3602.	1.1	29
149	Surface morphology of TiSi2 on silicon. Thin Solid Films, 1990, 184, 357-363.	0.8	29
150	Raman scattering from solid silicon at the melting temperature. Physical Review B, 1984, 29, 6005-6007.	1.1	28
151	Considerations for a high-performance thermionic energy conversion device based on a negative electron affinity emitter. Physical Review B, 2007, 76, .	1.1	28
152	High Temperature Rectifying Contacts Using Heteroepitaxial Ni Films on Semiconducting Diamond. Japanese Journal of Applied Physics, 1991, 30, L1409-L1411.	0.8	27
153	Spectroscopic studies of metal high-k dielectrics: transition metal oxides and silicates, and complex rare earth/transition metal oxides. Physica Status Solidi (B): Basic Research, 2004, 241, 2221-2235.	0.7	27
154	Hydrogen desorption kinetics and band bending for 6Hâ€“SiC(0 0 0 1) surfaces. Surface Science, 2009, 603, 3104-3118.	0.8	27
155	Investigation of the mechanism of polarization switching in ferroelectric capacitors by three-dimensional piezoresponse force microscopy. Applied Physics A: Materials Science and Processing, 2005, 80, 99-103.	1.1	26
156	Photo electron emission microscopy of polarity-patterned materials. Journal of Physics Condensed Matter, 2005, 17, S1415-S1426.	0.7	26
157	Hollow to bamboolike internal structure transition observed in carbon nanotube films. Journal of Applied Physics, 2005, 98, 014312.	1.1	26
158	Thermal stability of TiO2, ZrO2, or HfO2 on Si(100) by photoelectron emission microscopy. Journal of Applied Physics, 2006, 99, 023519.	1.1	26
159	Conducting atomic force microscopy studies of nanoscale cobalt silicide Schottky barriers on Si(111) and Si(100). Journal of Applied Physics, 2009, 105, .	1.1	26
160	Remote H2/N2 plasma processes for simultaneous preparation of low-k interlayer dielectric and interconnect copper surfaces. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 031212.	0.6	26
161	Speckle Suppression by Decoherence in Fluctuation Electron Microscopy. Microscopy and Microanalysis, 2015, 21, 1455-1474.	0.2	26
162	Al₂O₃ and SiO₂ Atomic Layer Deposition Layers on ZnO Photoanodes and Degradation Mechanisms. ACS Applied Materials & Interfaces, 2017, 9, 16138-16147.	4.0	26

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163	A 4.5Â<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml11" display="inline" overflow="scroll" altimg="si2.gif"><mml:mi mathvariant="normal">Î¼</mml:mi></mml:math>m PIN diamond diode for detecting slow neutrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 903, 297-301.	0.7	26
164	Ultrafast recombination and trapping in amorphous silicon. Journal of Non-Crystalline Solids, 1989, 114, 573-575.	1.5	25
165	Properties of interfaces of diamond. Physica B: Condensed Matter, 1993, 185, 528-538.	1.3	25
166	X-ray photoelectron diffraction from (3Ã—3) and (â3Ã—â3)Râ€Š30Â° (0001)Si 6Hâ€“SiC surfaces. Journal of Applied Physics, 1998, 84, 6042-6048.	1.1	25
167	Valence band discontinuity of the (0001) 2H-GaN / (111) 3C-SiC interface. Journal of Electronic Materials, 1999, 28, L34-L37.	1.0	25
168	Spatial distribution of electron emission sites for sulfur doped and intrinsic nanocrystalline diamond films. Diamond and Related Materials, 2003, 12, 474-480.	1.8	25
169	Effect of surface hydrogen on metalâ€diamond interface properties. Journal of Applied Physics, 1993, 73, 835-842.	1.1	24
170	Chemical, electrical, and structural properties of Ni/Au contacts on chemical vapor cleanedp-type GaN. Journal of Applied Physics, 2002, 91, 9151-9160.	1.1	24
171	Fibrous structures on diamond and carbon surfaces formed by hydrogen plasma under direct-current bias and field electron-emission properties. Journal of Materials Research, 2003, 18, 305-326.	1.2	24
172	X-ray absorption spectra for transition metal high-Îº dielectrics: Final state differences for intra- and inter-atomic transitions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2132.	1.6	23
173	Photoionization Threshold of Eumelanosomes Determined Using UV Free Electron Laserâ^'Photoelectron Emission Microscopy. Journal of Physical Chemistry B, 2004, 108, 16334-16338.	1.2	23
174	Sulfur doped nanocrystalline diamond films as field enhancement based thermionic emitters and their role in energy conversion. Diamond and Related Materials, 2005, 14, 2051-2054.	1.8	23
175	In Situ Remote Hâ€Plasma Cleaning of Patterned Siâ€‰â€â€‰SiO2 Surfaces. Journal of the Electrochemical Society, 1994, 141, 3136-3140.	1.3	22
176	Role of the substrate strain in the sheet resistance stability of NiSi deposited on Si(100). Journal of Applied Physics, 1999, 85, 3614-3618.	1.1	22
177	High-pressure phase transformation of silicon nitride. Applied Physics Letters, 2003, 83, 4740-4742.	1.5	22
178	Conversion surfaces for neutral particle imaging detectors. Advances in Space Research, 2006, 38, 664-671.	1.2	22
179	Heteroepitaxial growth and characterization of GaAs on siliconâ€onâ€sapphire and sapphire substrates. Applied Physics Letters, 1989, 54, 1687-1689.	1.5	21
180	Imaging electron emission from diamond film surfaces: N-doped diamond vs. nanostructured diamond. Diamond and Related Materials, 2001, 10, 1714-1718.	1.8	21

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