

# Robert J Nemanich

## List of Publications by Year in descending order

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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	Demonstration and Analysis of Ultrahigh Forward Current Density Diamond Diodes. IEEE Transactions on Electron Devices, 2022, 69, 254-261.	1.6	11
2	Comparison of AlF3 thin films grown by thermal and plasma enhanced atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 012404.	0.9	0
3	Excess noise in high-current diamond diodes. Applied Physics Letters, 2022, 120, .	1.5	12
4	External charge compensation in etched gallium nitride measured by x-ray photoelectron spectroscopy. Journal of Applied Physics, 2022, 131, .	1.1	3
5	Surface transfer doping of MoO3 on hydrogen terminated diamond with an Al2O3 interfacial layer. Applied Physics Letters, 2022, 120, .	1.5	2
6	Cleaning diamond surfaces via oxygen plasma inhibits the formation of a TiC interface. Diamond and Related Materials, 2022, 126, 109058.	1.8	2
7	Space charge limited corrections to the power figure of merit for diamond. Applied Physics Letters, 2022, 120, .	1.5	3
8	Current Transient Spectroscopic Study of Vacancy Complexes in Diamond Schottky p-i-n Diode. IEEE Transactions on Electron Devices, 2022, 69, 4469-4473.	1.6	2
9	Plasma enhanced atomic layer deposition and atomic layer etching of gallium oxide using trimethylgallium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	0.9	5
10	AlGaN/GaN metal-insulator-semiconductor high electron mobility transistors (MISHEMTs) using plasma deposited BN as gate dielectric. Applied Physics Letters, 2021, 118, .	1.5	11
11	The impact of interfacial Si contamination on GaN-on-GaN regrowth for high power vertical devices. Applied Physics Letters, 2021, 118, .	1.5	14
12	Multilayer ultraviolet reflective coating based on atomic layer deposited aluminum oxide and fluoride. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	2
13	Diamond Schottky p-i-n diodes for high power RF receiver protectors. Solid-State Electronics, 2021, 186, 108154.	0.8	9
14	Commercialization of Diamond Semiconductor Devices. , 2021, , .		1
15	Electrical contact considerations for diamond electron emission diodes. Diamond and Related Materials, 2020, 101, 107607.	1.8	8
16	Schottky Barrier Height Analysis of Diamond SPIND Using High Temperature Operation up to 873 K. IEEE Journal of the Electron Devices Society, 2020, 8, 614-618.	1.2	16
17	Electronic Conductance Resonance in Non-Redox-Active Proteins. Journal of the American Chemical Society, 2020, 142, 6432-6438.	6.6	37
18	Stable, low-resistance, 1.5 to 3.5 kΩ <sup>-1</sup> , diamond surface conduction with a mixed metal-oxide protective film. Diamond and Related Materials, 2020, 106, 107819.	1.8	15

#	ARTICLE	IF	CITATIONS
19	Performance of 5- $\mu\text{m}$ PIN diamond diodes as thermal neutron detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 961, 163601.	0.7	9
20	RF Characterization of Diamond Schottky p-i-n Diodes for Receiver Protector Applications. IEEE Microwave and Wireless Components Letters, 2020, 30, 1141-1144.	2.0	15
21	Diamond photochemistry with visible light. Diamond and Related Materials, 2019, 96, 195-197.	1.8	4
22	Neutralizing the polarization effect of diamond diode detectors using periodic forward bias pulses. Diamond and Related Materials, 2019, 94, 162-165.	1.8	9
23	Band alignment at the CdTe/InSb (001) heterointerface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	6
24	Chemical and semiconducting properties of NO <sub>2</sub> -activated H-terminated diamond. Diamond and Related Materials, 2018, 84, 86-94.	1.8	20
25	Al <sub>2</sub> O <sub>3</sub> Insertion Layer for Improved PEALD SiO <sub>2</sub> /(Al)GaN Interfaces. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700498.	0.8	6
26	Determination of Minority Carrier Lifetime of Holes in Diamond p-i-n Diodes Using Reverse Recovery Method. IEEE Electron Device Letters, 2018, 39, 552-555.	2.2	11
27	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. Advanced Electronic Materials, 2018, 4, 1600501.	2.6	839
28	Electron sources based on diamond pin-diodes. , 2018, , .		0
29	A 4.5- $\mu\text{m}$ 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
30	Gold particle formation via photoenhanced deposition on lithium niobate. Applied Surface Science, 2017, 405, 178-182.	3.1	1
31	Effect of surface roughness and H-termination chemistry on diamond's semiconducting surface conductance. Diamond and Related Materials, 2017, 76, 79-85.	1.8	34
32	Al <sub>2</sub> O <sub>3</sub> and SiO <sub>2</sub> Atomic Layer Deposition Layers on ZnO Photoanodes and Degradation Mechanisms. ACS Applied Materials & Interfaces, 2017, 9, 16138-16147.	4.0	26
33	High Voltage Diodes in Diamond Using (100)- and (111)- Substrates. IEEE Electron Device Letters, 2017, 38, 600-603.	2.2	31
34	Band offsets of epitaxial cubic boron nitride deposited on polycrystalline diamond via plasma-enhanced chemical vapor deposition. Applied Physics Letters, 2017, 111, 171604.	1.5	20
35	Toward plasma enhanced atomic layer deposition of oxides on graphene: Understanding plasma effects. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	1
36	Analysis of the reverse I-V characteristics of diamond-based PIN diodes. Applied Physics Letters, 2017, 111, .	1.5	46

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37	Surface band bending and interface alignment of plasma-enhanced atomic layer deposited SiO <sub>2</sub> on Al <sub>x</sub> Ga <sub>1-x</sub> N. Journal of Applied Physics, 2017, 122, .	1.1	7
38	Al <sub>2</sub> O <sub>3</sub> dielectric layers on H-terminated diamond: Controlling surface conductivity. Journal of Applied Physics, 2017, 122, .	1.1	13
39	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
40	Advances in Thermionic Energy Conversion through Single-Crystal n-Type Diamond. Frontiers in Mechanical Engineering, 2017, 3, .	0.8	17
41	Manipulations with diamond nanoparticles in SPM: the effect of electric field of the conductive probe tip. Bulletin of the Lebedev Physics Institute, 2016, 43, 356-360.	0.1	1
42	Temperature dependent simulation of diamond depleted Schottky PIN diodes. Journal of Applied Physics, 2016, 119, .	1.1	21
43	The state and potential of diamond in efficient direct energy conversion. , 2016, , .		0
44	Band diagram for low-k/Cu interconnects: The starting point for understanding back-end-of-line (BEOL) electrical reliability. Microelectronics Reliability, 2016, 63, 201-213.	0.9	18
45	Demonstration of Diamond-Based Schottky p-i-n Diode With Blocking Voltage > 500 V. IEEE Electron Device Letters, 2016, 37, 1170-1173.	2.2	16
46	Photochemical Reaction Patterns on Heterostructures of ZnO on Periodically Poled Lithium Niobate. ACS Applied Materials & Interfaces, 2016, 8, 26365-26373.	4.0	5
47	Use of plasma enhanced ALD to construct efficient interference filters for astronomy in the FUV. Proceedings of SPIE, 2016, , .	0.8	1
48	Speckle Suppression by Decoherence in Fluctuation Electron Microscopy. Microscopy and Microanalysis, 2015, 21, 1455-1474.	0.2	26
49	Electron affinity of cubic boron nitride terminated with vanadium oxide. Journal of Applied Physics, 2015, 118, .	1.1	10
50	Photoemission investigation of the Schottky barrier at the Sc/3C-SiC (111) interface. Physica Status Solidi (B): Basic Research, 2015, 252, 391-396.	0.7	11
51	UV laser induced changes to morphological, optical and electrical properties of conductive nanocrystalline diamond films. Diamond and Related Materials, 2015, 58, 196-199.	1.8	3
52	Hydrogen desorption from hydrogen fluoride and remote hydrogen plasma cleaned silicon carbide (0001) surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	7
53	Modifying the chemistry of graphene with substrate selection: A study of gold nanoparticle formation. Applied Physics Letters, 2015, 106, .	1.5	10
54	In situ photoelectron spectroscopic characterization of c-BN films deposited via plasma enhanced chemical vapor deposition employing fluorine chemistry. Diamond and Related Materials, 2015, 56, 13-22.	1.8	13

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55	Cleaning of pyrolytic hexagonal boron nitride surfaces. <i>Surface and Interface Analysis</i> , 2015, 47, 798-803.	0.8	10
56	Band alignment at AlN/Si (111) and (001) interfaces. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	8
57	Hydrogen desorption kinetics for aqueous hydrogen fluoride and remote hydrogen plasma processed silicon (001) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015, 33, .	0.9	6
58	Band alignment of a HfO <sub>2</sub> -VO <sub>2</sub> -HfO <sub>2</sub> confined well structure on silicon. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014, 32, 011203.	0.6	5
59	Polarization Effects of GaN and AlGa <sub>N</sub> : Polarization Bound Charge, Band Bending, and Electronic Surface States. <i>Journal of Electronic Materials</i> , 2014, 43, 4560-4568.	1.0	44
60	Valence and conduction band alignment at ScN interfaces with 3C-SiC (111) and 2H-GaN (0001). <i>Applied Physics Letters</i> , 2014, 105, 081606.	1.5	14
61	Desorption and sublimation kinetics for fluorinated aluminum nitride surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, .	0.9	9
62	Thermally enhanced photoinduced electron emission from nitrogen-doped diamond films on silicon substrates. <i>Physical Review B</i> , 2014, 90, .	1.1	34
63	Dynamics of dysprosium silicide nanostructures on Si(001) and (111) surfaces. <i>Journal of Materials Science</i> , 2014, 49, 1812-1823.	1.7	2
64	Surface band bending and band alignment of plasma enhanced atomic layer deposited dielectrics on Ga- and N-face gallium nitride. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	62
65	Fixed-Gap Tunnel Junction for Reading DNA Nucleotides. <i>ACS Nano</i> , 2014, 8, 11994-12003.	7.3	48
66	CVD diamond—Research, applications, and challenges. <i>MRS Bulletin</i> , 2014, 39, 490-494.	1.7	108
67	Gas source molecular beam epitaxy of scandium nitride on silicon carbide and gallium nitride surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, .	0.9	38
68	In situ reactivation of low-temperature thermionic electron emission from nitrogen doped diamond films by hydrogen exposure. <i>Diamond and Related Materials</i> , 2014, 50, 151-156.	1.8	8
69	Characterization of plasma-enhanced atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> using dimethylaluminum isopropoxide. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, 021514.	0.9	21
70	Interface and interlayer barrier effects on photo-induced electron emission from low work function diamond films. <i>Diamond and Related Materials</i> , 2014, 44, 123-128.	1.8	9
71	Spatial correlation of photo-induced and thermionic electron emission from low work function diamond films. <i>Diamond and Related Materials</i> , 2013, 40, 12-16.	1.8	13
72	Doped diamond thin film electron sources for thermionic energy conversion. , 2013, , .		1

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73	Photo induced electron emission from nitrogen doped diamond films on silicon. , 2013, , .		1
74	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
75	Thermal stability of Ti, Pt, and Ru interfacial layers between seedless copper and a tantalum diffusion barrier. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	6
76	Cu film thermal stability on plasma cleaned polycrystalline Ru. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	5
77	Substrate-diamond interface considerations for enhanced thermionic electron emission from nitrogen doped diamond films. Journal of Applied Physics, 2012, 112, .	1.1	33
78	Band alignment of vanadium oxide as an interlayer in a hafnium oxide-silicon gate stack structure. Journal of Applied Physics, 2012, 112, .	1.1	7
79	Comparative band alignment of plasma-enhanced atomic layer deposited high-k dielectrics on gallium nitride. Journal of Applied Physics, 2012, 112, .	1.1	62
80	Low temperature growth of high-k Hf $\epsilon$ La oxides by remote-plasma atomic layer deposition: Morphology, stoichiometry, and dielectric properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	6
81	Remote H <sub>2</sub> /N <sub>2</sub> 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
82	TEM observation of nitrogen-doped diamond films.. Microscopy and Microanalysis, 2012, 18, 1558-1559.	0.2	0
83	Band alignment of zinc oxide as a channel layer in a gate stack structure grown by plasma enhanced atomic layer deposition. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	9
84	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
85	Photoinduced Ag deposition on periodically poled lithium niobate: Wavelength and polarization screening dependence. Journal of Applied Physics, 2011, 109, .	1.1	56
86	Ring-shaped field emission patterns from carbon nanotube films. Carbon, 2011, 49, 3332-3339.	5.4	9
87	Photo-induced Ag deposition on periodically poled lithium niobate: Concentration and intensity dependence. Journal of Applied Physics, 2011, 110, .	1.1	44
88	Shape transition and migration of TiSi <sub>2</sub> nanostructures embedded in a Si matrix. Journal of Applied Physics, 2011, 110, 094304.	1.1	1
89	Combined visible light photo-emission and low temperature thermionic emission from nitrogen doped diamond films. Applied Physics Letters, 2011, 99, .	1.5	45
90	Morphology of strained and relaxed SiGe layers grown on high-index Si substrates. Thin Solid Films, 2010, 518, 1990-1993.	0.8	3

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91	Titanium silicide islands on atomically clean Si(100): Identifying single electron tunneling effects. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	9
92	Thermionic electron emission from nitrogen-doped homoepitaxial diamond. <i>Diamond and Related Materials</i> , 2010, 19, 110-113.	1.8	39
93	Thermionic and field electron emission devices from diamond and carbon nanostructures. , 2010, , .		3
94	9.1: Negative electron affinity ultra-nano crystalline diamond based thermionic electron emitters for low to moderate temperature operation. , 2010, , .		0
95	Conducting atomic force microscopy studies of nanoscale cobalt silicide Schottky barriers on Si(111) and Si(100). <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	26
96	Theory of space charge limited regime of thermionic energy converter with negative electron affinity emitter. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, 1132-1141.	1.3	35
97	The IBEX-Lo Sensor. <i>Space Science Reviews</i> , 2009, 146, 117-147.	3.7	171
98	Neuromelanins Isolated from Different Regions of the Human Brain Exhibit a Common Surface Photoionization Threshold. <i>Photochemistry and Photobiology</i> , 2009, 85, 387-390.	1.3	8
99	Hydrogen desorption kinetics and band bending for 6H $\alpha$ €“SiC(0 0 0 1) surfaces. <i>Surface Science</i> , 2009, 603, 3104-3118.	0.8	27
100	Human Iridal Stroma Melanosomes of Varying Pheomelanin Contents Possess a Common Eumelanin Outer Surface. <i>Journal of Physical Chemistry B</i> , 2009, 113, 11346-11351.	1.2	33
101	Low temperature onset for thermionic emitters based on nitrogen incorporated UNCD films. <i>Diamond and Related Materials</i> , 2009, 18, 232-234.	1.8	37
102	Fluorescence quenching effects of nanocrystalline diamond surfaces. <i>Diamond and Related Materials</i> , 2009, 18, 82-87.	1.8	6
103	Thermionic electron emission from low work-function phosphorus doped diamond films. <i>Diamond and Related Materials</i> , 2009, 18, 789-791.	1.8	112
104	Kinetics of Ga and In desorption from (7 $\text{Å}$ –7) Si(111) and (3 $\text{Å}$ –3) 6H-SiC(0001) surfaces. <i>Surface Science</i> , 2008, 602, 405-415.	0.8	13
105	Run-in behavior of nanocrystalline diamond coatings studied by in situ tribometry. <i>Wear</i> , 2008, 265, 477-489.	1.5	71
106	Titanium Interlayer Mediated Epitaxy of CoSi <sub>2</sub> on Si1 $\hat{a}$ ~xGe <sub>x</sub> . <i>Thin Solid Films</i> , 2008, 516, 1809-1817.	0.8	2
107	Electrical and photoelectrical characterization of undoped and S-doped nanocrystalline diamond films. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	12
108	Temperature Dependence of Single-Asperity Diamond $\hat{a}$ ~Diamond Friction Elucidated Using AFM and MD Simulations. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9358-9369.	1.5	56

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109	Physical adsorption on ferroelectric surfaces: photoinduced and thermal effects. <i>Nanotechnology</i> , 2008, 19, 495303.	1.3	52
110	Single molecule measurements with photoelectron emission microscopy. <i>Journal of Vacuum Science &amp; Technology B</i> , 2008, 26, 1461-1465.	1.3	8
111	Considerations for a high-performance thermionic energy conversion device based on a negative electron affinity emitter. <i>Physical Review B</i> , 2007, 76, .	1.1	28
112	Comparison study of catalyst nanoparticle formation and carbon nanotube growth: Support effect. <i>Journal of Applied Physics</i> , 2007, 101, 124310.	1.1	83
113	The Surface Oxidation Potential of Melanosomes Measured by Free Electron Laser-Photoelectron Emission Microscopy. <i>Photochemistry and Photobiology</i> , 2007, 83, 692-697.	1.3	8
114	Dynamics of Vapor-phase Organophosphates on Silicon and OTS. <i>Tribology Letters</i> , 2007, 27, 269-276.	1.2	5
115	Coarsening Dynamics of Nanoscale Ti-Silicide Islands on Si Surfaces. <i>Journal of the Korean Physical Society</i> , 2007, 50, 575.	0.3	2
116	Field penetration and its contribution to field enhanced thermionic electron emission from nanocrystalline diamond films. <i>Diamond and Related Materials</i> , 2006, 15, 2006-2009.	1.8	11
117	Using negative electron affinity diamond emitters to mitigate space charge in vacuum thermionic energy conversion devices. <i>Diamond and Related Materials</i> , 2006, 15, 2082-2085.	1.8	13
118	Investigation of the effect of the total pressure and methane concentration on the growth rate and quality of diamond thin films grown by MPCVD. <i>Diamond and Related Materials</i> , 2006, 15, 1784-1788.	1.8	40
119	The effect of Schottky barrier lowering and nonplanar emitter geometry on the performance of a thermionic energy converter. <i>Diamond and Related Materials</i> , 2006, 15, 870-874.	1.8	10
120	Photo and field electron emission microscopy, from sulfur doped nanocrystalline diamond films. <i>Diamond and Related Materials</i> , 2006, 15, 880-883.	1.8	11
121	Localized emission from flat diamond cathodes. <i>Diamond and Related Materials</i> , 2006, 15, 1418-1423.	1.8	0
122	Emission characterization from nitrogen-doped diamond with respect to energy conversion. <i>Diamond and Related Materials</i> , 2006, 15, 217-220.	1.8	52
123	Electron emission microscopy of nano-crystal graphitic films as high current density electron sources. <i>Diamond and Related Materials</i> , 2006, 15, 875-879.	1.8	9
124	The surface oxidation potential of human neuromelanin reveals a spherical architecture with a pheomelanin core and a eumelanin surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 14785-14789.	3.3	151
125	Ohmic Contacts to GaN. , 2006, , 489-527.		0
126	Age-dependent Photoionization Thresholds of Melanosomes and Lipofuscin Isolated from Human Retinal Pigment Epithelium Cells. <i>Photochemistry and Photobiology</i> , 2006, 82, 1475.	1.3	6



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127	Thermionic Converters Based on Nanostructured Carbon Materials. AIP Conference Proceedings, 2006, , .	0.3	3
128	Age-dependent Photoionization Thresholds of Melanosomes and Lipofuscin Isolated from Human Retinal Pigment Epithelium Cells. Photochemistry and Photobiology, 2006, 82, 1475-1481.	1.3	13
129	Conversion surfaces for neutral particle imaging detectors. Advances in Space Research, 2006, 38, 664-671.	1.2	22
130	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
131	A Systematic Approach of Understanding and Retaining Pmos Compatible Work Function of Metal Electrodes On HfO2 Gate Dielectrics. Materials Research Society Symposia Proceedings, 2006, 917, 1.	0.1	1
132	Materials and Processes for High k Gate Stacks: Results from the FEP Transition Center. ECS Transactions, 2006, 3, 389-415.	0.3	2
133	Fabrication of metallic nanowires on a ferroelectric template via photochemical reaction. Nanotechnology, 2006, 17, 4946-4949.	1.3	96
134	Vacuum Thermionic Energy Conversion Based on Nanocrystalline Diamond Films. Advances in Science and Technology, 2006, 48, 83.	0.2	1
135	Electronic properties of the Zrâ€“ZrO2â€“SiO2â€“Si(100) gate stack structure. Journal of Applied Physics, 2006, 99, 063708.	1.1	56
136	Thermal stability of TiO2, ZrO2, or HfO2 on Si(100) by photoelectron emission microscopy. Journal of Applied Physics, 2006, 99, 023519.	1.1	26
137	Photo-electron emission and atomic force microscopies of the hydrogen etched 6H-SiC(0001) surface and the initial growth of GaN and AlN. Applied Surface Science, 2005, 242, 428-436.	3.1	6
138	AlN bulk crystals grown on SiC seeds. Journal of Crystal Growth, 2005, 281, 68-74.	0.7	49
139	Conduction band states of transition metal (TM) high-k gate dielectrics as determined from X-ray absorption spectra. Microelectronics Reliability, 2005, 45, 827-830.	0.9	2
140	Surfactant effects on carbon nanotube interactions with human keratinocytes. Nanomedicine: Nanotechnology, Biology, and Medicine, 2005, 1, 293-299.	1.7	120
141	High negative ion yield from light molecule scattering. Nuclear Instruments & Methods in Physics Research B, 2005, 230, 330-339.	0.6	31
142	Studies of the coupling of final d*-states in mixed Hf and Ti oxides (HfO2)x(TiOx)1âˆ“x and other complex oxides. Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 913-916.	0.8	3
143	Final state effects in VUV and soft X-ray absorption spectra of transition metal oxides and silicate alloys: comparisons between experiment and ab initio calculations. Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 917-919.	0.8	1
144	Conduction band-edge d-states in high-k dielectrics due to Jahnâ€“Teller term splittings. Thin Solid Films, 2005, 486, 129-135.	0.8	4

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145	Investigation of the mechanism of polarization switching in ferroelectric capacitors by three-dimensional piezoresponse force microscopy. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 80, 99-103.	1.1	26
146	Atomic force microscopy-based experimental setup for studying domain switching dynamics in ferroelectric capacitors. <i>Review of Scientific Instruments</i> , 2005, 76, 023708.	0.6	44
147	Applications of Free-Electron Lasers in the Biological and Material Sciences. <i>Photochemistry and Photobiology</i> , 2005, 81, 711.	1.3	46
148	Photo electron emission microscopy of polarity-patterned materials. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S1415-S1426.	0.7	26
149	NICE: an instrument for direct mass spectrometric measurement of interstellar neutral gas. <i>Measurement Science and Technology</i> , 2005, 16, 1667-1676.	1.4	7
150	Self-organized nanoscale Ge dots and dashes on SiGe/Si superlattices. <i>Journal of Applied Physics</i> , 2005, 98, 024317.	1.1	3
151	Direct studies of domain switching dynamics in thin film ferroelectric capacitors. <i>Applied Physics Letters</i> , 2005, 87, 082902.	1.5	210
152	Thermionic field emission from nanocrystalline diamond-coated silicon tip arrays. <i>Physical Review B</i> , 2005, 72, .	1.1	35
153	Secondary electron emission of chemical-vapor-deposited diamond by impact of slow H+, D+, H2+, C+, O+, and O2+ ions. <i>Journal of Applied Physics</i> , 2005, 98, 034906.	1.1	6
154	Imaging temperature-dependent field emission from carbon nanotube films: Single versus multiwalled. <i>Applied Physics Letters</i> , 2005, 86, 063109.	1.5	20
155	Increased field-emission site density from regrown carbon nanotube films. <i>Journal of Applied Physics</i> , 2005, 97, 104309.	1.1	13
156	Preparation and characterization of atomically clean, stoichiometric surfaces of AlN(0001). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005, 23, 72-77.	0.9	8
157	Synchrotron x-ray studies of vitreous SiO2 over Si(001). Anisotropic glass contribution. <i>Physical Review B</i> , 2005, 71, .	1.1	10
158	Formation of stable titanium germanosilicide thin films on Si1-xGex. <i>Journal of Applied Physics</i> , 2005, 97, 113521.	1.1	2
159	Multi-walled carbon nanotube interactions with human epidermal keratinocytes. <i>Toxicology Letters</i> , 2005, 155, 377-384.	0.4	702
160	Scanning probe investigation of surface charge and surface potential of GaN-based heterostructures. <i>Applied Physics Letters</i> , 2005, 86, 112115.	1.5	40
161	Thermionic and field electron emission from nanostructured carbon materials for energy conversion and vacuum electronics. , 2005, , .		0
162	Conduction band-edge States associated with the removal of d-state degeneracies by the Jahn-Teller effect. <i>IEEE Transactions on Device and Materials Reliability</i> , 2005, 5, 65-83.	1.5	63

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163	Sulfur doped nanocrystalline diamond films as field enhancement based thermionic emitters and their role in energy conversion. <i>Diamond and Related Materials</i> , 2005, 14, 2051-2054.	1.8	23
164	Growth and field emission properties of small diameter carbon nanotube films. <i>Diamond and Related Materials</i> , 2005, 14, 714-718.	1.8	16
165	Field enhanced thermionic electron emission from sulfur doped nanocrystalline diamond films. <i>Diamond and Related Materials</i> , 2005, 14, 704-708.	1.8	14
166	Domain growth kinetics in lithium niobate single crystals studied by piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2005, 86, 012906.	1.5	196
167	Hollow to bamboolike internal structure transition observed in carbon nanotube films. <i>Journal of Applied Physics</i> , 2005, 98, 014312.	1.1	26
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