

Roya Maboudian

List of Publications by Year in descending order

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253
papers

14,572
citations

18436

62
h-index

22764

112
g-index

254
all docs

254
docs citations

254
times ranked

16870
citing authors

#	ARTICLE	IF	CITATIONS
1	A new chemresistive NO ₂ sensing material: Hafnium diboride. <i>Ceramics International</i> , 2022, 48, 6835-6841.	2.3	1
2	In-situ synthesized N-doped ZnO for enhanced CO ₂ sensing: Experiments and DFT calculations. <i>Sensors and Actuators B: Chemical</i> , 2022, 357, 131359.	4.0	15
3	The nanomechanical properties of non-crosslinked calcium aluminosilicate hydrate: The influences of tetrahedral Al and curing age. <i>Cement and Concrete Research</i> , 2022, 159, 106900.	4.6	10
4	2021: A Year Starting Full of Hope. <i>ACS Sensors</i> , 2021, 6, 1-2.	4.0	0
5	Mutanofactin promotes adhesion and biofilm formation of cariogenic <i>Streptococcus mutans</i> . <i>Nature Chemical Biology</i> , 2021, 17, 576-584.	3.9	28
6	Facile synthesis of ZnO-SnO ₂ hetero-structured nanowires for high-performance NO ₂ sensing application. <i>Sensors and Actuators B: Chemical</i> , 2021, 333, 129613.	4.0	65
7	(Invited) Microfabricated Chemical Sensors for Industrial, Health and Environmental Monitoring. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 1588-1588.	0.0	0
8	Plastic deformation mechanism of calcium-silicate hydrates determined by deviatoric-stress Raman spectroscopy. <i>Cement and Concrete Research</i> , 2021, 146, 106476.	4.6	19
9	Pd Nanoclusters Confined in ZIF-8 Matrixes for Fluorescent Detection of Glucose and Cholesterol. <i>ACS Applied Nano Materials</i> , 2021, 4, 9132-9142.	2.4	30
10	Cobalt Oxide-Decorated Silicon Carbide Nano-Tree Array Electrode for Micro-Supercapacitor Application. <i>Materials</i> , 2021, 14, 4514.	1.3	7
11	Sequestration of solid carbon in concrete: A large-scale enabler of lower-carbon intensity hydrogen from natural gas. <i>MRS Bulletin</i> , 2021, 46, 680-686.	1.7	10
12	Well-connected ZnO nanoparticle network fabricated by in-situ annealing of ZIF-8 for enhanced sensitivity in gas sensing application. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130180.	4.0	12
13	Amine-functionalized metal-organic framework ZIF-8 toward colorimetric CO ₂ sensing in indoor air environment. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130313.	4.0	15
14	Synthesis and gas sensing properties of NiO/ZnO heterostructured nanowires. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160189.	2.8	30
15	Silicate Bond Characteristics in Calcium-Silicate Hydrates Determined by High Pressure Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18335-18345.	1.5	19
16	Atomically ordered intermetallic PdZn coupled with Co nanoparticles as a highly dispersed dual catalyst chemically bonded to N-doped carbon for boosting oxygen reduction reaction performance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21327-21338.	5.2	16
17	Reconstructing hydrophobic ZIF-8 crystal into hydrophilic hierarchically-porous nanoflowers as catalyst carrier for nonenzymatic glucose sensing. <i>Sensors and Actuators B: Chemical</i> , 2020, 313, 128031.	4.0	35
18	Remembering NJ. <i>ACS Sensors</i> , 2020, 5, 887-888.	4.0	0

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19	Improved Hydrogen Sensitivity and Selectivity in PdO with Metal-Organic Framework Membrane. Journal of the Electrochemical Society, 2020, 167, 147503.	1.3	5
20	<i>In situ</i> formation of metal-organic framework derived CuO polyhedrons on carbon cloth for highly sensitive non-enzymatic glucose sensing. Journal of Materials Chemistry B, 2019, 7, 4990-4996.	2.9	44
21	Transistor-Based Work-Function Measurement of Metal-Organic Frameworks for Ultra-Low-Power, Rationally Designed Chemical Sensors. Chemistry - A European Journal, 2019, 25, 13176-13183.	1.7	18
22	Hierarchical Co ₃ O ₄ /CuO nanorod array supported on carbon cloth for highly sensitive non-enzymatic glucose biosensing. Sensors and Actuators B: Chemical, 2019, 298, 126860.	4.0	89
23	W/TaC/SiC sandwich stack for high temperature applications. Ceramics International, 2019, 45, 22292-22297.	2.3	5
24	Scalable Ultra Low-Power Chemical Sensing with Metal-Organic Frameworks. , 2019, , .		0
25	Plasma assisted formation of 3D highly porous nanostructured metal oxide network on microheater platform for Low power gas sensing. Sensors and Actuators B: Chemical, 2019, 301, 127067.	4.0	25
26	TiN diffusion barrier for stable W/SiC(0001) interfaces in inert ambient at high temperature. Thin Solid Films, 2019, 670, 54-59.	0.8	11
27	Casting Nanoporous Platinum in Metal-Organic Frameworks. Advanced Materials, 2019, 31, e1807553.	11.1	13
28	Surface functionalization of carbon cloth with cobalt-porphyrin-based metal organic framework for enhanced electrochemical sensing. Carbon, 2019, 148, 64-71.	5.4	31
29	Synthesis and Electrochemical Stability of Ultrahigh Aspect Ratio Nanoporous Gold after Calixarene-Phosphine Ligand Removal. ACS Applied Materials & Interfaces, 2019, 11, 15189-15194.	4.0	0
30	Enhanced thermal stability by introducing TiN diffusion barrier layer between W and SiC. Journal of the American Ceramic Society, 2019, 102, 5613-5619.	1.9	3
31	The chemistry and structure of calcium (alumino) silicate hydrate: A study by XANES, ptychographic imaging, and wide- and small-angle scattering. Cement and Concrete Research, 2019, 115, 367-378.	4.6	104
32	Scalable Super-Resolution Synthesis of Core-Vest Composites Assisted by Surface Plasmons. Journal of Physical Chemistry Letters, 2018, 9, 717-723.	2.1	0
33	Hierarchical cobalt oxide-functionalized silicon carbide nanowire array for efficient and robust oxygen evolution electro-catalysis. Materials Today Energy, 2018, 7, 37-43.	2.5	12
34	Effects of ambient humidity and temperature on the NO ₂ sensing characteristics of WS ₂ /graphene aerogel. Applied Surface Science, 2018, 450, 372-379.	3.1	96
35	Atomic-Scale Electronic Characterization of Defects in Silicon Carbide Nanowires by Electron Energy-Loss Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 12047-12051.	1.5	6
36	Boron Doping and Defect Engineering of Graphene Aerogels for Ultrasensitive NO ₂ Detection. Journal of Physical Chemistry C, 2018, 122, 20358-20365.	1.5	41

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37	High Speed Epitaxial Perovskite Memory on Flexible Substrates. <i>Advanced Materials</i> , 2017, 29, 1605699.	11.1	74
38	In Situ Localized Growth of Ordered Metal Oxide Hollow Sphere Array on Microheater Platform for Sensitive, Ultra-Fast Gas Sensing. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 2634-2641.	4.0	81
39	Aluminum-induced dreierketten chain cross-links increase the mechanical properties of nanocrystalline calcium aluminosilicate hydrate. <i>Scientific Reports</i> , 2017, 7, 44032.	1.6	122
40	Low-power catalytic gas sensing using highly stable silicon carbide microheaters. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 045003.	1.5	16
41	MnO _x -decorated carbonized porous silicon nanowire electrodes for high performance supercapacitors. <i>Energy and Environmental Science</i> , 2017, 10, 1505-1516.	15.6	109
42	Frictional characteristics of stiff, high aspect ratio microfiber arrays based on cyclic olefin polymers. <i>Journal of Adhesion Science and Technology</i> , 2017, 31, 1017-1027.	1.4	4
43	Direct Organization of Morphology-Controllable Mesoporous SnO ₂ Using Amphiphilic Graft Copolymer for Gas-Sensing Applications. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 37246-37253.	4.0	24
44	Conductometric gas sensing behavior of WS ₂ aerogel. <i>FlatChem</i> , 2017, 5, 1-8.	2.8	36
45	3D MoS ₂ Aerogel for Ultrasensitive NO ₂ Detection and Its Tunable Sensing Behavior. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700217.	1.9	60
46	Effects of CO ₂ and temperature on the structure and chemistry of C ₆₀ (A _h)S ₆ H investigated by Raman spectroscopy. <i>RSC Advances</i> , 2017, 7, 48925-48933.	1.7	70
47	Platinum Nanoparticle Loading of Boron Nitride Aerogel and Its Use as a Novel Material for Low-Power Catalytic Gas Sensing. <i>Advanced Functional Materials</i> , 2016, 26, 433-439.	7.8	82
48	High Surface Area MoS ₂ /Graphene Hybrid Aerogel for Ultrasensitive NO ₂ Detection. <i>Advanced Functional Materials</i> , 2016, 26, 5158-5165.	7.8	357
49	3D Stretchable Arch Ribbon Array Fabricated via Grayscale Lithography. <i>Scientific Reports</i> , 2016, 6, 28552.	1.6	7
50	Gas Sensors: Platinum Nanoparticle Loading of Boron Nitride Aerogel and Its Use as a Novel Material for Low-Power Catalytic Gas Sensing (<i>Adv. Funct. Mater.</i> 3/2016). <i>Advanced Functional Materials</i> , 2016, 26, 314-314.	7.8	3
51	Nanowire-Assembled Hierarchical ZnCo ₂ O ₄ Microstructure Integrated with a Low-Power Microheater for Highly Sensitive Formaldehyde Detection. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31764-31771.	4.0	69
52	Increased Optoelectronic Quality and Uniformity of Hydrogenated p-InP Thin Films. <i>Chemistry of Materials</i> , 2016, 28, 4602-4607.	3.2	12
53	General Thermal Texturization Process of MoS ₂ for Efficient Electrocatalytic Hydrogen Evolution Reaction. <i>Nano Letters</i> , 2016, 16, 4047-4053.	4.5	106
54	Air-Stable n-Doping of WSe ₂ by Anion Vacancy Formation with Mild Plasma Treatment. <i>ACS Nano</i> , 2016, 10, 6853-6860.	7.3	202

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55	Demonstration of Hexagonal Phase Silicon Carbide Nanowire Arrays with Vertical Alignment. <i>Crystal Growth and Design</i> , 2016, 16, 2887-2892.	1.4	7
56	In Situ Localized Growth of Porous Tin Oxide Films on Low Power Microheater Platform for Low Temperature CO Detection. <i>ACS Sensors</i> , 2016, 1, 339-343.	4.0	57
57	Comparative studies on electrochemical cycling behavior of two different silica-based ionogels. <i>Journal of Power Sources</i> , 2016, 301, 299-305.	4.0	25
58	High-Temperature All Solid-State Microsupercapacitors based on SiC Nanowire Electrode and YSZ Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26658-26665.	4.0	52
59	Highly crystalline MoS ₂ thin films grown by pulsed laser deposition. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	117
60	Tuning the Friction Characteristics of Gecko-Inspired Polydimethylsiloxane Micropillar Arrays by Embedding Fe ₃ O ₄ and SiO ₂ Particles. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 13232-13237.	4.0	14
61	Ni-induced graphitization for enhanced long-term stability of ohmic contact to polycrystalline 3C-SiC. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015, 33, .	0.9	2
62	Facile fabrication of flexible all solid-state micro-supercapacitor by direct laser writing of porous carbon in polyimide. <i>Carbon</i> , 2015, 83, 144-151.	5.4	229
63	Catalytic hydrogen sensing using microheated platinum nanoparticle-loaded graphene aerogel. <i>Sensors and Actuators B: Chemical</i> , 2015, 206, 399-406.	4.0	72
64	Microfabricated Thermally Isolated Low Work-Function Emitter. <i>Journal of Microelectromechanical Systems</i> , 2014, 23, 1182-1187.	1.7	83
65	Electropolishing of n-type 3C-polycrystalline silicon carbide. <i>Electrochemistry Communications</i> , 2014, 40, 17-19.	2.3	16
66	Highly flexible, all solid-state micro-supercapacitors from vertically aligned carbon nanotubes. <i>Nanotechnology</i> , 2014, 25, 055401.	1.3	191
67	Strong interlayer coupling in van der Waals heterostructures built from single-layer chalcogenides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6198-6202.	3.3	970
68	Hole Selective MoO _x Contact for Silicon Solar Cells. <i>Nano Letters</i> , 2014, 14, 967-971.	4.5	476
69	Electrodeposition of High-Purity Indium Thin Films and Its Application to Indium Phosphide Solar Cells. <i>Journal of the Electrochemical Society</i> , 2014, 161, D794-D800.	1.3	16
70	Flexible micro-supercapacitors from photoresist-derived carbon electrodes on flexible substrates. , 2014, , .		7
71	Two-Fluid Wetting Behavior of a Hydrophobic Silicon Nanowire Array. <i>Langmuir</i> , 2014, 30, 13330-13337.	1.6	7
72	Templated 3D Ultrathin CVD Graphite Networks with Controllable Geometry: Synthesis and Application As Supercapacitor Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 18413-18417.	4.0	24

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73	High-performance all solid-state micro-supercapacitor based on patterned photoresist-derived porous carbon electrodes and an ionogel electrolyte. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7997-8002.	5.2	135
74	Selective Ultrathin Carbon Sheath on Porous Silicon Nanowires: Materials for Extremely High Energy Density Planar Micro-Supercapacitors. <i>Nano Letters</i> , 2014, 14, 1843-1847.	4.5	96
75	Graphene Synthesis on Electrodeposited Substrates and Its Integration in MEMS for Sensor Applications. <i>ECS Transactions</i> , 2014, 64, 181-188.	0.3	2
76	Tuning Micropillar Tapering for Optimal Friction Performance of Thermoplastic Gecko-Inspired Adhesive. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 6936-6943.	4.0	11
77	Flexible micro-supercapacitors with high energy density from simple transfer of photoresist-derived porous carbon electrodes. <i>Carbon</i> , 2014, 74, 163-169.	5.4	71
78	Cycling characteristics of high energy density, electrochemically activated porous-carbon supercapacitor electrodes in aqueous electrolytes. <i>Journal of Materials Chemistry A</i> , 2013, 1, 10518.	5.2	30
79	Silicon carbide nanowires as highly robust electrodes for micro-supercapacitors. <i>Journal of Power Sources</i> , 2013, 230, 298-302.	4.0	144
80	Solvent-induced formation of unidirectionally curved and tilted Si nanowires during metal-assisted chemical etching. <i>Journal of Materials Chemistry C</i> , 2013, 1, 220-224.	2.7	26
81	Photoresist-derived porous carbon for on-chip micro-supercapacitors. <i>Carbon</i> , 2013, 57, 395-400.	5.4	107
82	Nitrate amperometric sensor in neutral pH based on Pd nanoparticles on epoxy-copper electrodes. <i>Electrochimica Acta</i> , 2013, 103, 38-43.	2.6	11
83	Semiconductor nanowires directly grown on graphene "towards wafer scale transferable nanowire arrays with improved electrical contact. <i>Nanoscale</i> , 2013, 5, 4114.	2.8	41
84	Friction Characteristics of Polymeric Nanofiber Arrays against Substrates with Tailored Geometry. <i>Langmuir</i> , 2013, 29, 8395-8401.	1.6	9
85	Advances in silicon carbide science and technology at the micro- and nanoscales. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013, 31, .	0.9	127
86	Laterally Actuated Platinum-Coated Polysilicon NEM Relays. <i>Journal of Microelectromechanical Systems</i> , 2013, 22, 768-778.	1.7	34
87	Lubrication of polycrystalline silicon MEMS via a thin silicon carbide coating. <i>Sensors and Actuators A: Physical</i> , 2013, 193, 238-245.	2.0	12
88	A direct thin-film path towards low-cost large-area III-V photovoltaics. <i>Scientific Reports</i> , 2013, 3, 2275.	1.6	65
89	Charging and discharging behavior in dielectric-coated MEMS electrodes probed by Kelvin probe force microscopy. <i>Journal of Micromechanics and Microengineering</i> , 2012, 22, 065031.	1.5	7
90	Single crystal silicon nanopillars, nanoneedles and nanoblades with precise positioning for massively parallel nanoscale device integration. <i>Nanotechnology</i> , 2012, 23, 225303.	1.3	4

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91	Investigation of quaternary ammonium silane-coated sand filter for the removal of bacteria and viruses from drinking water. <i>Journal of Applied Microbiology</i> , 2012, 113, 1196-1207.	1.4	26
92	Gold-Coated Silver Dendrites as SERS Substrates with an Improved Lifetime. <i>Langmuir</i> , 2012, 28, 17846-17850.	1.6	47
93	Inline Measurement of Adhesion Force Using Electrostatic Actuation and Capacitive Readout. <i>Journal of Microelectromechanical Systems</i> , 2012, 21, 768-770.	1.7	9
94	Graphene decoration with metal nanoparticles: Towards easy integration for sensing applications. <i>Nanoscale</i> , 2012, 4, 438-440.	2.8	164
95	Role of Counter-substrate Surface Energy in Macroscale Friction of Nanofiber Arrays. <i>Langmuir</i> , 2012, 28, 2922-2927.	1.6	12
96	Raman Spectroscopy for Characterization of Semiconducting Nanowires. , 2012, , 477-506.		4
97	Characterization of Adhesion Force in MEMS at High Temperature Using Thermally Actuated Microstructures. <i>Journal of Microelectromechanical Systems</i> , 2012, 21, 541-548.	1.7	22
98	Silicon carbide nanowires as an electrode material for high temperature supercapacitors. , 2012, , .		7
99	A SiC metallization scheme using an ALD protective layer for harsh environment devices. , 2012, , .		2
100	Silicon carbide coated silicon nanowires as robust electrode material for aqueous micro-supercapacitor. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	136
101	Microfabricated silicon carbide thermionic energy converter for solar electricity generation. , 2012, , .		17
102	Application of principal component analysis to a full profile correlative analysis of FTIR spectra. <i>Surface and Interface Analysis</i> , 2012, 44, 365-371.	0.8	11
103	Single-layer CVD-grown graphene decorated with metal nanoparticles as a promising biosensing platform. <i>Biosensors and Bioelectronics</i> , 2012, 33, 56-59.	5.3	57
104	Low-Temperature, Ion Beam-Assisted SiC Thin Films With Antireflective ZnO Nanorod Arrays for High-Temperature Photodetection. <i>IEEE Electron Device Letters</i> , 2011, 32, 1564-1566.	2.2	31
105	Epitaxial Graphene Growth on 3C-SiC(111)/AlN(0001)/Si(100). <i>Electrochemical and Solid-State Letters</i> , 2011, 14, K13.	2.2	20
106	Ultrasoother Gold Thin Films by Self-Limiting Galvanic Displacement on Silicon. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 1581-1584.	4.0	35
107	A finite element technique for accurate determination of interfacial adhesion force in MEMS using electrostatic actuation. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 115025.	1.5	12
108	Effect of Fiber Geometry on Macroscale Friction of Ordered Low-Density Polyethylene Nanofiber Arrays. <i>Langmuir</i> , 2011, 27, 11008-11016.	1.6	31

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109	Micellar block copolymer templated galvanic displacement for epitaxial nanowire device integration. <i>Journal of Materials Chemistry</i> , 2011, 21, 8807.	6.7	12
110	Strategies for controlling Si nanowire formation during Au-assisted electroless etching. <i>Journal of Materials Chemistry</i> , 2011, 21, 10359.	6.7	36
111	Morphological, Electrical, and Chemical Changes in Cyclically Contacting Polycrystalline Silicon Surfaces Coated with Perfluoroalkylsilane Self-Assembled Monolayer. <i>Tribology Letters</i> , 2011, 44, 13-17.	1.2	6
112	Nonenzymatic glucose sensing based on deposited palladium nanoparticles on epoxy-silver electrodes. <i>Electrochimica Acta</i> , 2011, 56, 5855-5859.	2.6	43
113	Corrosion mechanism and surface passivation strategies of polycrystalline silicon electrodes. <i>Sensors and Actuators A: Physical</i> , 2011, 166, 201-206.	2.0	8
114	Determination of substrate pinning in epitaxial and supported graphene layers via Raman scattering. <i>Physical Review B</i> , 2011, 83, .	1.1	21
115	Nanocrystalline SiC metal-semiconductor-metal photodetector with ZnO nanorod arrays for high-temperature applications. , 2011, , .		2
116	Graphitization of n-type polycrystalline silicon carbide for on-chip supercapacitor application. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	41
117	Strain engineering of epitaxially transferred, ultrathin layers of III-V semiconductor on insulator. <i>Applied Physics Letters</i> , 2011, 98, 012111.	1.5	23
118	Surface Treatment and Planarization. <i>MEMS Reference Shelf</i> , 2011, , 925-1044.	0.6	0
119	Interfacial Adhesion between Rough Surfaces of Polycrystalline Silicon and Its Implications for M/NEMS Technology. , 2011, , 211-222.		0
120	Palladium nanostructures from galvanic displacement as hydrogen peroxide sensor. <i>Sensors and Actuators B: Chemical</i> , 2010, 147, 681-686.	4.0	39
121	Adhesion Characteristics of PDMS Surfaces During Repeated Pull-Off Force Measurements. <i>Advanced Engineering Materials</i> , 2010, 12, 398-404.	1.6	93
122	Enhanced Ohmic contact via graphitization of polycrystalline silicon carbide. <i>Applied Physics Letters</i> , 2010, 97, 262107.	1.5	21
123	Low-energy ion bombardment to tailor the interfacial and mechanical properties of polycrystalline 3C-silicon carbide. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010, 28, 1259-1262.	0.9	5
124	Growth and characterization of nitrogen-doped polycrystalline 3C-SiC thin films for harsh environment MEMS applications. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 035011.	1.5	32
125	Magnetic micromechanical structures based on CoNi electrodeposited alloys. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 125017.	1.5	9
126	A Simple Soft Lithographic Nanopatterning of Gold on Gallium Arsenide via Galvanic Displacement. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 5020-5026.	0.9	6

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127	Silver Dendrites from Galvanic Displacement on Commercial Aluminum Foil As an Effective SERS Substrate. <i>Journal of the American Chemical Society</i> , 2010, 132, 1476-1477.	6.6	230
128	Growth of Epitaxial 3C-SiC Films on Si(100) via Low Temperature SiC Buffer Layer. <i>Crystal Growth and Design</i> , 2010, 10, 36-39.	1.4	32
129	Single Nanowire Thermal Conductivity Measurements by Raman Thermography. <i>ACS Nano</i> , 2010, 4, 4908-4914.	7.3	107
130	Galvanic Deposition of Pt Clusters on Silicon: Effect of HF Concentration and Application as Catalyst for Silicon Nanowire Growth. <i>Langmuir</i> , 2010, 26, 432-437.	1.6	21
131	Metal-catalyzed crystallization of amorphous carbon to graphene. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	234
132	Growth of 3C-SiC Thin Film on AlN/Si(100) with Atomically Abrupt Interface via Tailored Precursor Feeding Procedure. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, D53.	2.2	5
133	Branching induced faceting of Si nanotrees. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	12
134	Ex situ vapor phase boron doping of silicon nanowires using BBr ₃ . <i>Nanoscale</i> , 2010, 2, 1165.	2.8	9
135	Characterization of Encapsulated Micromechanical Resonators Sealed and Coated With Polycrystalline SiC. <i>Journal of Microelectromechanical Systems</i> , 2010, 19, 357-366.	1.7	19
136	Interfacial Adhesion between Rough Surfaces of Polycrystalline Silicon and Its Implications for M/NEMS Technology. <i>Journal of Adhesion Science and Technology</i> , 2010, 24, 2545-2556.	1.4	11
137	Infrared and Ultraviolet Spectra of Fullerenes: HREELS Studies and Implications for the Interstellar Medium. <i>Carbon Materials</i> , 2010, , 27-37.	0.2	0
138	Tunable in situ growth of porous cubic silicon carbide thin films via methyltrichlorosilane-based chemical vapor deposition. <i>Applied Physics Letters</i> , 2009, 95, 101901.	1.5	5
139	Real-Time Observation of Reactive Spreading of Gold on Silicon. <i>Physical Review Letters</i> , 2009, 103, 256102.	2.9	19
140	In situ studies of interfacial contact evolution via a two-axis deflecting cantilever microinstrument. <i>Applied Physics Letters</i> , 2009, 95, 131902.	1.5	9
141	Residual stress characterization of polycrystalline 3C-SiC films on Si(100) deposited from methylsilane. <i>Journal of Applied Physics</i> , 2009, 106, 013505.	1.1	27
142	Room-Temperature Wet Etching of Polycrystalline and Nanocrystalline Silicon Carbide Thin Films with HF and HNO ₃ . <i>Journal of the Electrochemical Society</i> , 2009, 156, D104.	1.3	9
143	Experimental Investigation of Silicon Surface Migration in Low Pressure Nonreducing Gas Environments. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, H437.	2.2	12
144	Electrical and Mechanical Characterization of Doped and Annealed Polycrystalline 3C-SiC Thin Films. <i>Journal of the Electrochemical Society</i> , 2009, 156, D5.	1.3	8

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145	Copper deposition onto silicon by galvanic displacement: Effect of Cu complex formation in NH ₄ F solutions. <i>Electrochimica Acta</i> , 2009, 54, 3270-3277.	2.6	9
146	Resolving sub-nm steps with a low-voltage miniature scanning electron microscope. <i>Microelectronic Engineering</i> , 2009, 86, 1004-1008.	1.1	3
147	Gecko-Inspired Combined Lamellar and Nanofibrillar Array for Adhesion on Nonplanar Surface. <i>Langmuir</i> , 2009, 25, 12449-12453.	1.6	84
148	Temperature dependence of Raman spectra for individual silicon nanowires. <i>Physical Review B</i> , 2009, 80, .	1.1	58
149	Silver Nanodesert Rose as a Substrate for Surface-Enhanced Raman Spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 2551-2555.	4.0	46
150	Silver Nanostructures on Silicon Based on Galvanic Displacement Process. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16939-16944.	1.5	48
151	Polymer-Oligopeptide Composite Coating for Selective Detection of Explosives in Water. <i>Analytical Chemistry</i> , 2009, 81, 4192-4199.	3.2	77
152	Cathodic corrosion of polycrystalline silicon MEMS. <i>Sensors and Actuators A: Physical</i> , 2008, 145-146, 323-329.	2.0	17
153	Poly(ethylene glycol) Monolayer Formation and Stability on Gold and Silicon Nitride Substrates. <i>Langmuir</i> , 2008, 24, 10646-10653.	1.6	56
154	Covalent Attachment of Organic Monolayers to Silicon Carbide Surfaces. <i>Langmuir</i> , 2008, 24, 4007-4012.	1.6	104
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