John J Boland

List of Publications by Year in descending order

		47409	8433
183	23,594	49	152
papers	citations	h-index	g-index

188	188	188	32259
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Real-world natural passivation phenomena can limit microplastic generation in water. Chemical Engineering Journal, 2022, 428, 132466.	6.6	8
2	The influence of drinking water constituents on the level of microplastic release from plastic kettles. Journal of Hazardous Materials, 2022, 425, 127997.	6.5	15
3	Tuning the electro-optical properties of nanowire networks. Nanoscale, 2021, 13, 15369-15379.	2.8	6
4	Stretching the Equilibrium Limit of Sn in Ge_{1â€“x}Sn_x Nanowires: Implications for Field Effect Transistors. ACS Applied Nano Materials, 2021, 4, 1048-1056.	2.4	6
5	Sampling, Identification and Characterization of Microplastics Release from Polypropylene Baby Feeding Bottle during Daily Use. Journal of Visualized Experiments, 2021, , .	0.2	5
6	Emulating synaptic response in n- and p-channel MoS2 transistors by utilizing charge trapping dynamics. Scientific Reports, 2020, 10, 12178.	1.6	21
7	Extra lithium-ion storage capacity enabled by liquid-phase exfoliated indium selenide nanosheets conductive network. Energy and Environmental Science, 2020, 13, 2124-2133.	15.6	35
8	Crystallographically Controlled Synthesis of SnSe Nanowires: Potential in Resistive Memory Devices. Advanced Materials Interfaces, 2020, 7, 2000474.	1.9	19
9	Nonlinear ion drift-diffusion memristance description of TiO₂RRAM devices. Nanoscale Advances, 2020, 2, 2514-2524.	2.2	5
10	The resistance of Cu nanowireâ€“nanowire junctions and electro-optical modeling of Cu nanowire networks. Applied Physics Letters, 2020, 116, .	1.5	9
11	Microplastic release from the degradation of polypropylene feeding bottles during infant formula preparation. Nature Food, 2020, 1, 746-754.	6.2	270
12	The Electro-Optical Performance of Silver Nanowire Networks. Scientific Reports, 2019, 9, 11550.	1.6	23
13	Synthesis of centimeter-size free-standing perovskite nanosheets from single-crystal lead bromide for optoelectronic devices. Scientific Reports, 2019, 9, 11738.	1.6	9
14	Correction for Position Controlled Growth of Single Crystal Cu₃Si Nanostructures. Crystal Growth and Design, 2019, 19, 4202-4202.	1.4	0
15	Correction to Metal Nanostructure Synthesis via Surface Energy Driven Growth. Crystal Growth and Design, 2019, 19, 4203-4203.	1.4	0
16	Switching at the contacts in Ge₉Sb₁Te₅ phase-change nanowire devices. Nanotechnology, 2019, 30, 335706.	1.3	5
17	Mapping Conformational Changes in a Self-Assembled Two-Dimensional Molecular Network by Statistical Analysis of Conductance Images. Physical Review Applied, 2019, 11, .	1.5	1
18	MoS₂ Memtransistors Fabricated by Localized Helium Ion Beam Irradiation. ACS Nano, 2019, 13, 14262-14273.	7.3	99

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19	Oxide-mediated recovery of field-effect mobility in plasma-treated MoS ₂. Science Advances, 2018, 4, eaao5031.	4.7	82
20	Transparent, Flexible Silicon Nanostructured Wire Networks with Seamless Junctions for High-Performance Photodetector Applications. ACS Nano, 2018, 12, 4727-4735.	7.3	51
21	A Raman spectroscopy based optical fibre system for detecting carbonation profile of cementitious materials. Sensors and Actuators B: Chemical, 2018, 257, 635-649.	4.0	20
22	Neuromorphic- Inspired Behaviour in Core-Shell Nanowire Networks. , 2018, , .		0
23	Solvent-Engineered Stress in Nanoscale Materials. ACS Applied Materials & Interfaces, 2018, 10, 44183-44189.	4.0	1
24	Non-resonant light scattering in dispersions of 2D nanosheets. Nature Communications, 2018, 9, 4553.	5.8	51
25	Collective capacitive and memristive responses in random nanowire networks: Emergence of critical connectivity pathways. Journal of Applied Physics, 2018, 124, .	1.1	28
26	Emergence of winner-takes-all connectivity paths in random nanowire networks. Nature Communications, 2018, 9, 3219.	5.8	88
27	Self-Assembled Two-Dimensional Supramolecular Networks Characterized by Scanning Tunneling Microscopy and Spectroscopy in Air and under Vacuum. Langmuir, 2018, 34, 7698-7707.	1.6	4
28	Characterisation of carbonated Portland cement paste with optical fibre excitation Raman spectroscopy. Construction and Building Materials, 2017, 135, 369-376.	3.2	18
29	Nonpolar Resistive Switching in Ag@TiO₂ Coreâ€“Shell Nanowires. ACS Applied Materials & Interfaces, 2017, 9, 38959-38966.	4.0	44
30	Material characterisation of nanowires with intrinsic stress. Nanotechnology, 2017, 28, 355706.	1.3	4
31	Nanocrystalline copper films are never flat. Science, 2017, 357, 397-400.	6.0	46
32	Ordering and interactions between Cl adatoms on Cu(111) and their influence on the local electronic properties as measured by STM and STS. Physical Review B, 2017, 96, .	1.1	0
33	Spreading resistance at the nano-scale studied by scanning tunneling and field emission spectroscopy. Applied Physics Letters, 2017, 110, 263111.	1.5	7
34	Exploring the Effect of Ligand Structural Isomerism in Langmuirâ€“Blodgett Films of Chiral Luminescent Eu^{III} Selfâ€Assemblies. Chemistry - A European Journal, 2016, 22, 9709-9723.	1.7	19
35	Multilevel resistance in ZnO nanowire memristors enabled by hydrogen annealing treatment. AIP Advances, 2016, 6, 125010.	0.6	19
36	Quantum point contacts and resistive switching in Ni/NiO nanowire junctions. Applied Physics Letters, 2016, 109, .	1.5	12

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37	Adhesion Limits and Design Criteria for Nanorelays. IEEE Transactions on Electron Devices, 2016, 63, 465-470.	1.6	1
38	Effective medium theory for the conductivity of disordered metallic nanowire networks. Physical Chemistry Chemical Physics, 2016, 18, 27564-27571.	1.3	50
39	Co-percolation to tune conductive behaviour in dynamical metallic nanowire networks. Nanoscale, 2016, 8, 18516-18523.	2.8	11
40	Metal Nanostructure Synthesis via Surface Energy Driven Growth. Crystal Growth and Design, 2016, 16, 7318-7324.	1.4	2
41	Study of the effect of thermal treatment on morphology and chemical composition of silicon-on-insulator. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 041806.	0.6	2
42	Associative Enhancement of Time Correlated Response to Heterogeneous Stimuli in a Neuromorphic Nanowire Device. Advanced Electronic Materials, 2016, 2, 1500458.	2.6	37
43	Taming Self-Organization Dynamics to Dramatically Control Porous Architectures. ACS Nano, 2016, 10, 3087-3092.	7.3	17
44	The effect of device fabrication on quasi-static elastic behaviour of silicon nanocantilever arrays. Journal of Micromechanics and Microengineering, 2015, 25, 125007.	1.5	0
45	Amyloid Oligomers and Mature Fibrils Prepared from an Innocuous Protein Cause Diverging Cellular Death Mechanisms. Journal of Biological Chemistry, 2015, 290, 28343-28352.	1.6	24
46	Position Controlled Growth of Single Crystal Cu₃Si Nanostructures. Crystal Growth and Design, 2015, 15, 5355-5359.	1.4	9
47	Healable Luminescent Self-Assembly Supramolecular Metallogels Possessing Lanthanide (Eu/Tb) Dependent Rheological and Morphological Properties. Journal of the American Chemical Society, 2015, 137, 1983-1992.	6.6	206
48	Cross-Linking the Fibers of Supramolecular Gels Formed from a Tripodal Terpyridine Derived Ligand with d-Block Metal Ions. Inorganic Chemistry, 2015, 54, 7735-7741.	1.9	38
49	Ultimate conductivity performance in metallic nanowire networks. Nanoscale, 2015, 7, 13011-13016.	2.8	55
50	Quantitative Study of the Photothermal Properties of Metallic Nanowire Networks. ACS Nano, 2015, 9, 5551-5558.	7.3	53
51	Single-Atom Based Coherent Quantum Interference Device Structure. Nano Letters, 2015, 15, 2881-2886.	4.5	10
52	Resistance of Single Ag Nanowire Junctions and Their Role in the Conductivity of Nanowire Networks. ACS Nano, 2015, 9, 11422-11429.	7.3	145
53	Synthesis, structural, photophysical and electrochemical studies of various d-metal complexes of btp [2,6-bis(1,2,3-triazol-4-yl)pyridine] ligands that give rise to the formation of metallo-supramolecular gels. Dalton Transactions, 2014, 43, 196-209.	1.6	45
54	Programmability of nanowire networks. Nanoscale, 2014, 6, 9632-9639.	2.8	33

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55	A Single Nanoscale Junction with Programmable Multilevel Memory. ACS Nano, 2014, 8, 11724-11729.	7.3	53
56	Effective Electrode Length Enhances Electrical Activation of Nanowire Networks: Experiment and Simulation. ACS Nano, 2014, 8, 9542-9549.	7.3	29
57	Poissonâ€™s ratio of individual metal nanowires. Nature Communications, 2014, 5, 4336.	5.8	28
58	Engineering the Growth of Germanium Nanowires by Tuning the Supersaturation of Au/Ge Binary Alloy Catalysts. Chemistry of Materials, 2013, 25, 3096-3104.	3.2	22
59	The dominant role of the solventâ€“water interface in water droplet templating of polymers. Soft Matter, 2013, 9, 7960.	1.2	23
60	Chemical Nano-Gardens: Growth of Salt Nanowires from Supramolecular Self-Assembly Gels. ACS Nano, 2013, 7, 4838-4845.	7.3	50
61	Monitoring the cementitious materials subjected to sulfate attack with optical fiber excitation Raman spectroscopy. Optical Engineering, 2013, 52, 104107.	0.5	14
62	Engineering the electronic structure of surface dangling bond nanowires of different size and dimensionality. Nanotechnology, 2013, 24, 275202.	1.3	18
63	Preliminary research on monitoring the durability of concrete subjected to sulfate attack with optical fibre Raman spectroscopy. Proceedings of SPIE, 2013, , .	0.8	0
64	Single crystal iron nanocube synthesis via the surface energy driven growth method. Nanotechnology, 2012, 23, 435604.	1.3	7
65	Manipulating connectivity in random nanowire networks to create evolutionary materials and devices. , 2012, , .		0
66	Manipulating Connectivity and Electrical Conductivity in Metallic Nanowire Networks. Nano Letters, 2012, 12, 5966-5971.	4.5	76
67	Existence of Micrometer-Scale Water Droplets at Solvent/Air Interfaces. Langmuir, 2012, 28, 13218-13223.	1.6	8
68	Free-Standing, Single-Crystal Cu₃Si Nanowires. Crystal Growth and Design, 2012, 12, 3076-3081.	1.4	24
69	Self-Assembly of LiMo₃Se₃ Nanowire Networks from Nanoscale Building-Blocks in Solution. Langmuir, 2012, 28, 15344-15349.	1.6	5
70	Modelling of Atomic Imaging and Evaporation in the Field Ion Microscope. Journal of Sensors, 2012, 2012, 1-8.	0.6	3
71	Spectroscopic characterization of a single dangling bond on a bare Si(100)-c(4Ã—2) surface forn-andp-type doping. Physical Review B, 2012, 86, .	1.1	8
72	Europiumâ€Directed Selfâ€Assembly of a Luminescent Supramolecular Gel from a Tripodal Terpyridineâ€Based Ligand. Angewandte Chemie - International Edition, 2012, 51, 7208-7212.	7.2	180

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73	Stereoselective Cycloaddition of 1,3-Cyclohexadiene on Si(100): A Simple Algorithm for Product Identification Based on Secondary Orbital Interactions. Journal of the American Chemical Society, 2011, 133, 14287-14292.	6.6	2
74	Nanoscale Mapping of Electrical Resistivity and Connectivity in Graphene Strips and Networks. Nano Letters, 2011, 11, 16-22.	4.5	170
75	Surface Energy Driven Agglomeration and Growth of Single Crystal Metal Wires. Nano Letters, 2011, 11, 1294-1299.	4.5	22
76	High-Performance Transparent Conductors from Networks of Gold Nanowires. Journal of Physical Chemistry Letters, 2011, 2, 3058-3062.	2.1	84
77	Defect Transfer from Nanoparticles to Nanowires. Nano Letters, 2011, 11, 1550-1555.	4.5	52
78	Graphene Dispersion and Exfoliation in Low Boiling Point Solvents. Journal of Physical Chemistry C, 2011, 115, 5422-5428.	1.5	440
79	Two-Dimensional Nanosheets Produced by Liquid Exfoliation of Layered Materials. Science, 2011, 331, 568-571.	6.0	6,190
80	Imaging of human colon cancer cells using Heâ€ion scanning microscopy. Journal of Microscopy, 2011, 242, 290-294.	0.8	41
81	Scattered surface charge density: A tool for surface characterization. Physical Review B, 2011, 84, .	1.1	7
82	Anisotropic etching induced by surface energy driven agglomeration. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, 051403.	0.9	9
83	Within touch of artificial skin. Nature Materials, 2010, 9, 790-792.	13.3	155
84	Variable-height scanning tunneling spectroscopy for local density of states recovery based on the one-dimensional WKB approximation. Physical Review B, 2010, 82, .	1.1	13
85	Site-Specific Evolution of Surface Stress during the Room-Temperature Oxidation of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Si</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>111</mml:mn><mml:mo stretchy="false">)</mml:mo><mml:mtext mathvariant="normal">â”</mml:mtext><mml:mo stretchy="false">(</mml:mo><mml:mn>7</mml:mn><mml:mo>Ã—</mml:mo><mml:mn>7</mml:mn><mml:mo) Ti ETQq1 1 0.784314	2.9	7
86	Optimization of multi-walled carbon nanotubeâ€“metal contacts by electrical stressing. Nanotechnology, 2010, 21, 045705.	1.3	13
87	Selective Tuning and Optimization of the Contacts to Metallic and Semiconducting Single-Walled Carbon Nanotubes. ACS Nano, 2010, 4, 3801-3806.	7.3	9
88	Alkane and Alkanethiol Passivation of Halogenated Ge Nanowires. Chemistry of Materials, 2010, 22, 6370-6377.	3.2	42
89	Effect of sample bias on backscattered ion spectroscopy in the helium ion microscope. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 1377-1380.	0.9	6
90	Mechanical properties of individual electrospun polymer-nanotube composite nanofibers. Carbon, 2009, 47, 2253-2258.	5.4	49

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91	The spatial uniformity and electromechanical stability of transparent, conductive films of single walled nanotubes. Carbon, 2009, 47, 2466-2473.	5.4	165
92	Two-Terminal Nanoelectromechanical Devices Based on Germanium Nanowires. Nano Letters, 2009, 9, 1824-1829.	4.5	63
93	Silver Nanowire Networks as Flexible, Transparent, Conducting Films: Extremely High DC to Optical Conductivity Ratios. ACS Nano, 2009, 3, 1767-1774.	7.3	1,472
94	Electrical Connectivity in Single-Walled Carbon Nanotube Networks. Nano Letters, 2009, 9, 3890-3895.	4.5	425
95	Frontier Orbital Description of the Si(100) Surface: A Route to Symmetry-Allowed and Concerted [2 + 2] Cycloadditions. Journal of the American Chemical Society, 2009, 131, 6768-6774.	6.6	10
96	Transparent, Flexible, and Highly Conductive Thin Films Based on Polymerâ^'Nanotube Composites. ACS Nano, 2009, 3, 714-720.	7.3	271
97	The best of both worlds â€“ A novel approach to macromolecular STM studies. Surface Science, 2008, 602, 1-2.	0.8	9
98	Towards Solutions of Singleâ€Walled Carbon Nanotubes in Common Solvents. Advanced Materials, 2008, 20, 1876-1881.	11.1	333
99	Synthesis and Electrical and Mechanical Properties of Silicon and Germanium Nanowires. Chemistry of Materials, 2008, 20, 5954-5967.	3.2	89
100	High-yield production of graphene by liquid-phase exfoliation of graphite. Nature Nanotechnology, 2008, 3, 563-568.	15.6	5,431
101	Controllable Growth of ZnO Nanostructures by a Simple Solvothermal Process. Journal of Physical Chemistry C, 2008, 112, 106-111.	1.5	132
102	Mechanical Properties of ZnO Nanowires. Physical Review Letters, 2008, 101, 175502.	2.9	226
103	A simple solvothermal route to controlled diameter germanium nanowires. Journal of Materials Chemistry, 2008, 18, 2011.	6.7	4
104	Electrical Characterization of Bismuth Sulfide Nanowire Arrays by Conductive Atomic Force Microscopy. Journal of Physical Chemistry C, 2008, 112, 19680-19685.	1.5	16
105	A solid-liquid-vapor mechanism for anisotropic silicon etching. Applied Physics Letters, 2008, 93, .	1.5	11
106	Emergence and Visualization of an Interface State during Contact Formation with a Single Molecule. Physical Review Letters, 2008, 101, 096801.	2.9	3
107	Simultaneous scanning tunneling microscopy and stress measurements to elucidate the origins of surface forces. Review of Scientific Instruments, 2007, 78, 053903.	0.6	2
108	Microstructure-Hardened Silver Nanowires. Nano Letters, 2006, 6, 468-472.	4.5	268

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109	Ultimate-Strength Germanium Nanowires. Nano Letters, 2006, 6, 2964-2968.	4.5	135
110	Contact Formation Dynamics:â€‰ Mapping Chemical Bond Formation between a Molecule and a Metallic Probe. Nano Letters, 2006, 6, 1752-1756.	4.5	40
111	Transport news. Nature, 2006, 439, 671-673.	13.7	12
112	nan'oÂ·techÂ·nol'oÂ·gy n.. Nature Nanotechnology, 2006, 1, 8-10.	15.6	52
113	Synthesis and dispersion of isolated high aspect ratio gold nanowires. Journal of Colloid and Interface Science, 2006, 303, 611-616.	5.0	30
114	High Density Germanium Nanowire Assemblies:Â Contact Challenges and Electrical Characterization. Journal of Physical Chemistry B, 2006, 110, 820-826.	1.2	55
115	A Generalized Description of the Elastic Properties of Nanowires. Nano Letters, 2006, 6, 1101-1106.	4.5	193
116	Measuring the Force of Interaction between a Metallic Probe and a Single Molecule. Physical Review Letters, 2006, 97, 098304.	2.9	42
117	Real-time STM study of inter-nanowire reactions: GdSi2 nanowires on Si(100). Surface Science, 2005, 594, 93-98.	0.8	18
118	Modification of Photon States in Photonic Molecules with Semiconductor Nanocrystals. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2005, 99, 493.	0.2	1
119	Mechanical properties of ultrahigh-strength gold nanowires. Nature Materials, 2005, 4, 525-529.	13.3	887
120	STM and DFT study of the Gd wetting layer reconstructions on the Si(001)-2Ã—1 surface. Surface Science, 2005, 582, 79-89.	0.8	15
121	Simple controlled heating method for a free-standing sample using bimetallic strips. Review of Scientific Instruments, 2005, 76, 095113.	0.6	3
122	Exponential decay of local conductance in single-wall carbon nanotubes. Physical Review B, 2005, 72, .	1.1	14
123	Probing the magnetic properties of cobaltâ€“germanium nanocable arrays. Journal of Materials Chemistry, 2005, 15, 2408.	6.7	28
124	Tunable photon lifetime in photonic molecules: a concept for delaying an optical signal. Optics Letters, 2005, 30, 2775.	1.7	11
125	Spontaneous roughening of low-coverageSi(100)â˜’2Ã—1:Clsurfaces:â€ƒPatch formation on submonolayer halogenated surface. Physical Review B, 2004, 70, .	1.1	8
126	Dimer-Anticorrelation-Induced Stabilization of Adsorbate Clustering on theSi(100)â˜’(2Ã—1)Surface. Physical Review Letters, 2004, 92, 096103.	2.9	25

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127	Kinetically controlled reaction of 1,3-cyclohexadiene on Si(100). Thin Solid Films, 2004, 464-465, 1-4.	0.8	9
128	Confined optical modes in small photonic molecules with semiconductor nanocrystals. Journal of Applied Physics, 2004, 96, 6761-6765.	1.1	22
129	DFT Investigation of Product Distribution Following Reaction of 1,3-Cyclohexadiene on the Si(100)-2Ã—1 Surface. Journal of Physical Chemistry B, 2004, 108, 7827-7830.	1.2	16
130	Nanoscale study of conduction through carbon nanotube networks. Physical Review B, 2004, 69, .	1.1	135
131	Fine structure of coupled optical modes in photonic molecules. Physical Review A, 2004, 70, .	1.0	94
132	STM Study of Multiple Bonding Configurations and Mechanism of 1,3-Cyclohexadiene Attachment on Si(100)-2 Ã— 1. Journal of Physical Chemistry B, 2003, 107, 3820-3823.	1.2	48
133	Simultaneous atomic force microscopy measurement of topography and contact resistance of metal films and carbon nanotubes. Review of Scientific Instruments, 2003, 74, 3653-3655.	0.6	11
134	Steric interaction model of roughening and vacancy reorganization on halogen-terminatedSi(100)â˜2Ã—1surfaces. Physical Review B, 2003, 67, .	1.1	12
135	Electronic Properties of LiMo3Se3-Nanowires and Mo3Se3-Nanowire-Networks for Nanoscale Electronic Devices. Zeitschrift Fur Physikalische Chemie, 2003, 217, 573-586.	1.4	6
136	Spontaneous Roughening: Fundamental Limits in Si(100) Halogen Etch Processing. Physical Review Letters, 2002, 89, 096102.	2.9	32
137	Chemisorption-induced disruption of surface electronic structure: Hydrogen adsorption on theSi(100)â˜2Ã—1surface. Physical Review B, 2002, 65, .	1.1	32
138	Spontaneous roughening and vacancy dynamics on Si()-2Ã—1:Cl. Surface Science, 2002, 518, L583-L587.	0.8	6
139	Stability, resolution, and tipâ€“tip imaging by a dual-probe scanning tunneling microscope. Review of Scientific Instruments, 2001, 72, 4388-4392.	0.6	43
140	Vacancy Dynamics and Reorganization on Bromine-EtchedSi(100)â˜(2Ã—1)Surfaces. Physical Review Letters, 2001, 87, 115503.	2.9	12
141	The role of repulsive interactions in molecular bromine adsorption and patterning of Si(100)-2Ã—1. Surface Science, 2000, 460, 223-228.	0.8	17
142	Dimer Preparation That Mimics the Transition State for the Adsorption of H2 on the Si(100)-2 x 1 Surface. Science, 2000, 290, 506-509.	6.0	41
143	Probing Repulsive Interactions on the Si(100)-2 Ã— 1 Surface by Local Tip-Induced Excitation. Journal of Physical Chemistry B, 1999, 103, 4207-4211.	1.2	13
144	Identification and characterization of a novel silicon hydride species on the Si(100) surface. Surface Science, 1999, 425, L363-L368.	0.8	11

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145	Origin of homoepitaxial faulted island growth on the Si(111) surface. Surface Science, 1998, 407, 152-161.	0.8	12
146	Dangling Bond Dynamics on the Silicon (100)-2Ã—1 Surface: Dissociation, Diffusion, and Recombination. Science, 1998, 279, 545-548.	6.0	60
147	Energy of Si(111) dimer-stacking-fault structures. Physical Review B, 1998, 57, 8997-9002.	1.1	13
148	Abstraction of chemisorbed bromine from the Si(111) surface by incident hydrogen atoms. Journal of Chemical Physics, 1998, 108, 7384-7390.	1.2	12
149	A Surface View of Etching. Physics Today, 1998, 51, 34-40.	0.3	30
150	Equivalent Step Structures along Inequivalent Crystallographic Directions on Halogen-Terminated Si(111)-(1Ã—1)Surfaces. Physical Review Letters, 1997, 78, 98-101.	2.9	40
151	Role of dimer stacking-fault structures in Si(111) growth and etching. Surface Science, 1997, 385, 281-293.	0.8	15
152	Novel adatom-terminated step structure on the Ge(111)-(1Ã—1):Br surface. Surface Science, 1997, 385, l905-l910.	0.8	10
153	Scanning tunneling microscopy of semiconductor surfaces. Surface Science Reports, 1996, 26, 61-204.	3.8	199
154	Manipulating Chlorine Atom Bonding on the Si(100)-(2 x 1) Surface with the STM. Science, 1993, 262, 1703-1706.	6.0	109
155	Scanning tunnelling microscopy of the interaction of hydrogen with silicon surfaces. Advances in Physics, 1993, 42, 129-171.	35.9	288
156	Selective Deposition and Bond Strain Relaxation in Silicon PECVD Using Time Modulated Silane Flow. Japanese Journal of Applied Physics, 1992, 31, 1943-1947.	0.8	35
157	Scanning tunneling microscopy study of the adsorption and recombinative desorption of hydrogen from the Si(100)â€2Ã—1 surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 2458-2464.	0.9	137
158	Hydrogen as a Probe of Semiconductor Surface Structure: The Ge(111)-c(2 x 8) Surface. Science, 1992, 255, 186-188.	6.0	48
159	Bond Selectivity in Silicon Film Growth. Science, 1992, 256, 1304-1306.	6.0	80
160	Role of bond-strain in the chemistry of hydrogen on the Si(100) surface. Surface Science, 1992, 261, 17-28.	0.8	254
161	The importance of structure and bonding in semiconductor surface chemistry: hydrogen on the Si(111)-7 Ã— 7 surface. Surface Science, 1991, 244, 1-14.	0.8	195
162	Evidence of pairing and its role in the recombinative desorption of hydrogen from the Si(100)-2Ã—1 surface. Physical Review Letters, 1991, 67, 1539-1542.	2.9	286

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163	Nature of the hydride species on the hydrogenated silicon (111)-(7 .times. 7) surface. The Journal of Physical Chemistry, 1991, 95, 1521-1524.	2.9	30
164	Platinum erosion during the growth of sillï¿½nite-type crystals. Journal of Materials Science Letters, 1991, 10, 972-974.	0.5	8
165	The driving force behind the chemistry of hydrogen on the Si(111)-7Ã—7 surface. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 764.	1.6	42
166	Role of hydrogen desorption in the chemical-vapor deposition of Si(100) epitaxial films using disilane. Physical Review B, 1991, 44, 1383-1386.	1.1	164
167	Evidence of Pairing and Its Role in the Recombinative Desorption of Hydrogen from the Si(100)-2Ã—1 Surface. Physical Review Letters, 1991, 67, 2591-2591.	2.9	4
168	Formation of Si(111)-(1Ã—1)Cl. Physical Review B, 1990, 41, 9865-9870.	1.1	137
169	Structure of the H-saturated Si(100) surface. Physical Review Letters, 1990, 65, 3325-3328.	2.9	303
170	Controlled levitation of a large magnet above superconductors. Review of Scientific Instruments, 1990, 61, 1984-1986.	0.6	0
171	Identification of the Products from the Reaction of Chlorine with the Silicon(111)-(7x7) Surface. Science, 1990, 248, 838-840.	6.0	97
172	Magnetic field controlled levitation and suspension of a magnet above and below type II superconductors. Applied Physics Letters, 1989, 55, 1454-1456.	1.5	11
173	Scanning-tunneling-microscopy study of the Si(111)-7Ã—7 rest-atom layer following adatom removal by reaction with Cl. Physical Review Letters, 1989, 63, 306-309.	2.9	118
174	Thermal decomposition mechanism of triple carbonate (Ba,Sr,Ca)CO3. Journal of Applied Physics, 1988, 64, 2130-2133.	1.1	6
175	Characterization of the photoresist residue in integrated thermionic devices. Journal of Applied Physics, 1988, 64, 2725-2728.	1.1	1
176	Voltage contrast XPSâ€”a novel scheme for spatially resolved XPS studies. Surface and Interface Analysis, 1987, 10, 149-152.	0.8	6
177	A novel scheme for structure determination in EXAFS. Chemical Physics Letters, 1986, 129, 1-4.	1.2	3
178	Spatially resolved x-ray photoelectron spectroscopy studies for device-type applications. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1986, 4, 1256.	1.6	1
179	The effect of thermal vibrations on extended xâ€ray absorption fine structure. II. Journal of Chemical Physics, 1984, 81, 1145-1159.	1.2	5
180	The effect of thermal vibrations on extended xâ€ray absorption fine structure. I. Journal of Chemical Physics, 1984, 80, 3005-3015.	1.2	18

#	Article	IF	Citations
181	Identification of neighboring atoms in extended x-ray absorption fine structure. Journal of the American Chemical Society, 1984, 106, 5408-5413.	6.6	15
182	Data analysis in extended x-ray-absorption fine structure: Determination of the background absorption and the threshold energy. Physical Review B, 1983, 28, 2921-2926.	1.1	17
183	Theory of extended xâ€ray absorption fine structure: Single and multiple scattering formalisms. Journal of Chemical Physics, 1982, 77, 142-153.	1.2	67