

Gary W Rubloff

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

262
papers

14,539
citations

61
h-index

111
g-index

278
ext. papers

15,682
ext. citations

6.5
avg, IF

6.33
L-index

#	Paper	IF	Citations
262	Negating interfacial impedance in garnet-based solid-state Li metal batteries. <i>Nature Materials</i> , 2017 , 16, 572-579	27	1192
261	Biofabrication with chitosan. <i>Biomacromolecules</i> , 2005 , 6, 2881-94	6.9	593
260	Next-Generation Lithium Metal Anode Engineering via Atomic Layer Deposition. <i>ACS Nano</i> , 2015 , 9, 5884-62	10.7	573
259	Far-Ultraviolet Reflectance Spectra and the Electronic Structure of Ionic Crystals. <i>Physical Review B</i> , 1972 , 5, 662-684	3.3	334
258	Nanotubular metal-insulator-metal capacitor arrays for energy storage. <i>Nature Nanotechnology</i> , 2009 , 4, 292-6	28.7	307
257	High-temperature SiO ₂ decomposition at the SiO ₂ /Si interface. <i>Physical Review Letters</i> , 1985 , 55, 2332-2335	2.5	305
256	Structural, electrical, and optical properties of atomic layer deposition Al-doped ZnO films. <i>Journal of Applied Physics</i> , 2010 , 108, 043504	2.5	278
255	Natural cellulose fiber as substrate for supercapacitor. <i>ACS Nano</i> , 2013 , 7, 6037-46	16.7	267
254	Voltage-Dependent Assembly of the Polysaccharide Chitosan onto an Electrode Surface. <i>Langmuir</i> , 2002 , 18, 8620-8625	4	242
253	Ultrathin Surface Coating Enables the Stable Sodium Metal Anode. <i>Advanced Energy Materials</i> , 2017 , 7, 1601526	21.8	238
252	MWCNT/V ₂ O ₅ core/shell sponge for high areal capacity and power density Li-ion cathodes. <i>ACS Nano</i> , 2012 , 6, 7948-55	16.7	219
251	Enhancing the reversibility of Mg/S battery chemistry through Li(+) mediation. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12388-93	16.4	185
250	Atomic Layer Deposition of the Solid Electrolyte LiPON. <i>Chemistry of Materials</i> , 2015 , 27, 5324-5331	9.6	172
249	Chemical bonding and electronic structure of Pd ₂ Si. <i>Physical Review B</i> , 1980 , 22, 4784-4790	3.3	172
248	Simple SERS substrates: powerful, portable, and full of potential. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 2224-39	3.6	171
247	Transmission, photoconductivity, and the experimental band gap of thermally grown SiO ₂ films. <i>Physical Review B</i> , 1979 , 19, 3107-3117	3.3	171
246	Electrochemically Induced Deposition of a Polysaccharide Hydrogel onto a Patterned Surface. <i>Langmuir</i> , 2003 , 19, 4058-4062	4	170

245	Reactivation of dissolved polysulfides in LiS batteries based on atomic layer deposition of Al ₂ O ₃ in nanoporous carbon cloth. <i>Nano Energy</i> , 2013 , 2, 1197-1206	17.1	169
244	A Rechargeable Al/S Battery with an Ionic-Liquid Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 9898-901	16.4	168
243	An all-in-one nanopore battery array. <i>Nature Nanotechnology</i> , 2014 , 9, 1031-9	28.7	164
242	Microscopic properties and behavior of silicide interfaces. <i>Surface Science</i> , 1983 , 132, 268-314	1.8	161
241	Chitosan: an integrative biomaterial for lab-on-a-chip devices. <i>Lab on A Chip</i> , 2010 , 10, 3026-42	7.2	158
240	Chemical bonding and reaction at metal/polymer interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1985 , 3, 739-745	2.9	158
239	Towards an in vivo biologically inspired nanofactory. <i>Nature Nanotechnology</i> , 2007 , 2, 3-7	28.7	152
238	Kinetics of high-temperature thermal decomposition of SiO ₂ on Si(100). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987 , 5, 1559-1562	2.9	141
237	Patterned assembly of genetically modified viral nanotemplates via nucleic acid hybridization. <i>Nano Letters</i> , 2005 , 5, 1931-6	11.5	136
236	In situ quantitative visualization and characterization of chitosan electrodeposition with paired sidewall electrodes. <i>Soft Matter</i> , 2010 , 6, 3177	3.6	130
235	Chemical bonding and reactions at the Pd/Si interface. <i>Physical Review B</i> , 1981 , 23, 4183-4196	3.3	126
234	Stabilization of Lithium Metal Anodes by Hybrid Artificial Solid Electrolyte Interphase. <i>Chemistry of Materials</i> , 2017 , 29, 6298-6307	9.6	124
233	Microscopic Compound Formation at the Pd-Si(111) Interface. <i>Physical Review Letters</i> , 1979 , 43, 1836-1839	7.4	113
232	Ozone-Based Atomic Layer Deposition of Crystalline V ₂ O ₅ Films for High Performance Electrochemical Energy Storage. <i>Chemistry of Materials</i> , 2012 , 24, 1255-1261	9.6	110
231	High to ultra-high power electrical energy storage. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 20714-20736	3.6	109
230	Activation of a MnO ₂ cathode by water-stimulated Mg(2+) insertion for a magnesium ion battery. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 5256-64	3.6	105
229	Ultraviolet photoemission and flash-desorption studies of the chemisorption and decomposition of methanol on Ni(111). <i>Journal of Vacuum Science and Technology</i> , 1977 , 14, 419-423		104
228	Electroaddressing of Cell Populations by Co-Deposition with Calcium Alginate Hydrogels. <i>Advanced Functional Materials</i> , 2009 , 19, 2074-2080	15.6	101

227	Spatially Selective Deposition of a Reactive Polysaccharide Layer onto a Patterned Template. <i>Langmuir</i> , 2003 , 19, 519-524	4	101
226	Chemical and structural aspects of reaction at the Ti/Si interface. <i>Physical Review B</i> , 1984 , 30, 5421-5429	3.3	93
225	Electrochemical study of chitosan films deposited from solution at reducing potentials. <i>Electrochimica Acta</i> , 2006 , 51, 5324-5333	6.7	92
224	Nature-Inspired Creation of Protein-Polysaccharide Conjugate and Its Subsequent Assembly onto a Patterned Surface. <i>Langmuir</i> , 2003 , 19, 9382-9386	4	92
223	Chemisorption and decomposition reactions of oxygen-containing organic molecules on clean Pd surfaces studied by UV photoemission. <i>Surface Science</i> , 1977 , 63, 325-338	1.8	91
222	Nanoscale Solid State Batteries Enabled by Thermal Atomic Layer Deposition of a Lithium Polyphosphazene Solid State Electrolyte. <i>Chemistry of Materials</i> , 2017 , 29, 3740-3753	9.6	90
221	Mechanism of anodic electrodeposition of calcium alginate. <i>Soft Matter</i> , 2011 , 7, 5677	3.6	86
220	Chitosan to Connect Biology to Electronics: Fabricating the Bio-Device Interface and Communicating Across This Interface. <i>Polymers</i> , 2015 , 7, 1-46	4.5	74
219	Biofabrication to build the biology-device interface. <i>Biofabrication</i> , 2010 , 2, 022002	10.5	73
218	Biofabrication: programmable assembly of polysaccharide hydrogels in microfluidics as biocompatible scaffolds. <i>Journal of Materials Chemistry</i> , 2012 , 22, 7659		71
217	Coupling electrodeposition with layer-by-layer assembly to address proteins within microfluidic channels. <i>Advanced Materials</i> , 2011 , 23, 5817-21	24	71
216	Chemical bonding and reactions at Ti/Si and Ti/oxygen/Si interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1983 , 1, 771-775	2.9	70
215	High-capacity lithium sulfur battery and beyond: a review of metal anode protection layers and perspective of solid-state electrolytes. <i>Journal of Materials Science</i> , 2019 , 54, 3671-3693	4.3	70
214	In situ transmission electron microscopy study of electrochemical lithiation and delithiation cycling of the conversion anode RuO ₂ . <i>ACS Nano</i> , 2013 , 7, 6354-60	16.7	69
213	Anomalous diffusion of fluorine in silicon. <i>Applied Physics Letters</i> , 1992 , 61, 1310-1312	3.4	69
212	Three-Dimensional Solid-State Lithium-Ion Batteries Fabricated by Conformal Vapor-Phase Chemistry. <i>ACS Nano</i> , 2018 , 12, 4286-4294	16.7	68
211	Nanostructured Pseudocapacitors Based on Atomic Layer Deposition of V ₂ O ₅ onto Conductive Nanocrystal-based Mesoporous ITO Scaffolds. <i>Advanced Functional Materials</i> , 2014 , 24, 6717-6728	15.6	68
210	Electrodeposition of a biopolymeric hydrogel: potential for one-step protein electroaddressing. <i>Biomacromolecules</i> , 2012 , 13, 1181-9	6.9	68

209	Defect microchemistry at the SiO ₂ /Si interface. <i>Physical Review Letters</i> , 1987 , 58, 2379-2382	7.4	66
208	Surface reflectance spectroscopy studies of chemisorption on W(100). <i>Physical Review B</i> , 1974 , 10, 2401-2415	3.5	66
207	Electrochemical performance of the nanostructured biotemplated V ₂ O ₅ cathode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2012 , 206, 282-287	8.9	65
206	A beaded-string silicon anode. <i>ACS Nano</i> , 2013 , 7, 2717-24	16.7	65
205	Defect microchemistry in SiO ₂ /Si structures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1990 , 8, 1857-1863	2.9	65
204	Confined propagation of covalent chemical reactions on single-walled carbon nanotubes. <i>Nature Communications</i> , 2011 , 2, 382	17.4	63
203	Chitosan-mediated in situ biomolecule assembly in completely packaged microfluidic devices. <i>Lab on A Chip</i> , 2006 , 6, 1315-21	7.2	63
202	Direct SERS detection of contaminants in a complex mixture: rapid, single step screening for melamine in liquid infant formula. <i>Analyst, The</i> , 2012 , 137, 826-8	5	62
201	TEM-based metrology for HfO ₂ layers and nanotubes formed in anodic aluminum oxide nanopore structures. <i>Small</i> , 2008 , 4, 1223-32	11	60
200	Atomic Layer Deposition and in Situ Characterization of Ultraclean Lithium Oxide and Lithium Hydroxide. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 27749-27753	3.8	58
199	Piezo-optical Evidence for Γ Transitions at the 3.4-eV Optical Structure of Silicon. <i>Physical Review Letters</i> , 1972 , 29, 789-792	7.4	58
198	DMSO-Li ₂ O ₂ Interface in the Rechargeable Li-O ₂ Battery Cathode: Theoretical and Experimental Perspectives on Stability. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 11402-11	9.5	57
197	Nanoengineering strategies for metal-insulator-metal electrostatic nanocapacitors. <i>ACS Nano</i> , 2012 , 6, 3528-36	16.7	57
196	Fabrication of 3D core-shell multiwalled carbon nanotube@RuO ₂ lithium-ion battery electrodes through a RuO ₂ atomic layer deposition process. <i>ACS Nano</i> , 2015 , 9, 464-73	16.7	56
195	Autonomous bacterial localization and gene expression based on nearby cell receptor density. <i>Molecular Systems Biology</i> , 2013 , 9, 636	12.2	56
194	Biocompatible multi-address 3D cell assembly in microfluidic devices using spatially programmable gel formation. <i>Lab on A Chip</i> , 2011 , 11, 2316-8	7.2	56
193	TMV microarrays: hybridization-based assembly of DNA-programmed viral nanotemplates. <i>Langmuir</i> , 2007 , 23, 2663-7	4	54
192	Chemical and structural properties of the Pd/Si interface during the initial stages of silicide formation. <i>Journal of Vacuum Science and Technology</i> , 1979 , 16, 1120-1124		54

191	Electroaddressing Functionalized Polysaccharides as Model Biofilms for Interrogating Cell Signaling. <i>Advanced Functional Materials</i> , 2012 , 22, 519-528	15.6	52
190	Electrodeposition of a weak polyelectrolyte hydrogel: remarkable effects of salt on kinetics, structure and properties. <i>Soft Matter</i> , 2013 , 9, 2703	3.6	51
189	Electronic states and atomic structure at the Pd ₂ SiBi interface. <i>Journal of Vacuum Science and Technology</i> , 1981 , 18, 937-943		51
188	A Rechargeable Al/S Battery with an Ionic-Liquid Electrolyte. <i>Angewandte Chemie</i> , 2016 , 128, 10052-10055	5.5	50
187	Biofabricating Multifunctional Soft Matter with Enzymes and Stimuli-Responsive Materials. <i>Advanced Functional Materials</i> , 2012 , 22, 3004-3012	15.6	50
186	In situ generation of pH gradients in microfluidic devices for biofabrication of freestanding, semi-permeable chitosan membranes. <i>Lab on A Chip</i> , 2010 , 10, 59-65	7.2	50
185	A robust technique for assembly of nucleic acid hybridization chips based on electrochemically templated chitosan. <i>Analytical Chemistry</i> , 2004 , 76, 365-72	7.8	50
184	Noninvasive picosecond ultrasonic detection of ultrathin interfacial layers: CF _x at the Al/Si interface. <i>Applied Physics Letters</i> , 1992 , 61, 1787-1789	3.4	50
183	Exciton or hydrogen diffusion in SiO ₂ ?. <i>Journal of Applied Physics</i> , 1979 , 50, 5757-5760	2.5	50
182	A normal incidence scanning reflectometer of high precision. <i>Applied Optics</i> , 1969 , 8, 305-8	1.7	50
181	Cathodic ALD V ₂ O ₅ thin films for high-rate electrochemical energy storage. <i>RSC Advances</i> , 2013 , 3, 42943-7	3.7	49
180	Programmable assembly of a metabolic pathway enzyme in a pre-packaged reusable bioMEMS device. <i>Lab on A Chip</i> , 2008 , 8, 420-30	7.2	49
179	Chemical bonding at the polyimide surface. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1984 , 2, 756-760	2.9	49
178	Orbital energy shifts associated with chemical bonding of organic molecules on ZnO nonpolar surfaces. <i>Chemical Physics Letters</i> , 1976 , 39, 493-496	2.5	49
177	Chemical reactions at Pt/oxide/Si and Ti/oxide/Si interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1985 , 3, 983-986	2.9	48
176	Ultraviolet-photoemission studies of formic acid decomposition on ZnO nonpolar surfaces. <i>Solid State Communications</i> , 1976 , 18, 1427-1430	1.6	48
175	Investigation of the Cathode/Catalyst/Electrolyte Interface in Aprotic LiD ₂ Batteries. <i>Chemistry of Materials</i> , 2015 , 27, 5305-5313	9.6	47
174	MnO ₂ /TiN heterogeneous nanostructure design for electrochemical energy storage. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 15221-6	3.6	47

173	Role of implantation-induced defects in surface-oriented diffusion of fluorine in silicon. <i>Journal of Applied Physics</i> , 1994 , 76, 3403-3409	2.5	46
172	Unusual extramolecular relaxation-polarization shifts of low-lying orbitals in the uv photoemission spectra of adsorbed organic molecules. <i>Physical Review B</i> , 1976 , 14, 1450-1457	3.3	46
171	Highly Conductive, Light Weight, Robust, Corrosion-Resistant, Scalable, All-Fiber Based Current Collectors for Aqueous Acidic Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1702615	21.8	46
170	Optical Reflectance Spectroscopy of Surface States in H ₂ Chemisorption on W(100). <i>Physical Review Letters</i> , 1974 , 32, 667-670	7.4	45
169	Atomic Layer Deposition of Ruthenium Using the Novel Precursor bis(2,6,6-trimethyl-cyclohexadienyl)ruthenium. <i>Chemistry of Materials</i> , 2011 , 23, 2650-2656	9.6	44
168	Microvoids at the SiO ₂ /Si interface. <i>Physical Review B</i> , 1989 , 40, 1434-1437	3.3	44
167	Surface optical excitations associated with CO chemisorption on Ni(111). <i>Physical Review B</i> , 1978 , 17, 4680-4688	3.3	44
166	ALD Protection of Li-Metal Anode Surfaces [Quantifying and Preventing Chemical and Electrochemical Corrosion in Organic Solvent. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600426	4.6	43
165	Solid Electrolyte Lithium Phosphous Oxynitride as a Protective Nanocladding Layer for 3D High-Capacity Conversion Electrodes. <i>ACS Nano</i> , 2016 , 10, 2693-701	16.7	43
164	Electronic modulation of biochemical signal generation. <i>Nature Nanotechnology</i> , 2014 , 9, 605-10	28.7	43
163	Signal-directed sequential assembly of biomolecules on patterned surfaces. <i>Langmuir</i> , 2005 , 21, 2104-7	4	42
162	Surface analysis of realistic semiconductor microstructures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1989 , 7, 1030-1034	2.9	42
161	Chemical reaction and silicide formation at the Pt/Si interface. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1984 , 2, 253-258	2.9	41
160	Material reaction and silicide formation at the refractory metal/silicon interface. <i>Applied Physics Letters</i> , 1986 , 48, 1600-1602	3.4	41
159	Mechano-transduction of DNA hybridization and dopamine oxidation through electrodeposited chitosan network. <i>Lab on A Chip</i> , 2007 , 7, 103-11	7.2	40
158	Chemical reaction and Schottky-barrier formation at V/Si interfaces. <i>Physical Review B</i> , 1984 , 29, 1540-1550	3.9	40
157	Biofabrication of stratified biofilm mimics for observation and control of bacterial signaling. <i>Biomaterials</i> , 2012 , 33, 5136-43	15.6	39
156	Defect formation in thermal SiO ₂ by high-temperature annealing. <i>Applied Physics Letters</i> , 1986 , 49, 1525-1527	3.5	38

155	Electronic states and microstructure at the silicide-silicon interface. <i>Thin Solid Films</i> , 1982 , 89, 433-446	2.2	38
154	Characterization of the cathodic electrodeposition of semicrystalline chitosan hydrogel. <i>Materials Letters</i> , 2012 , 87, 97-100	3.3	37
153	Data management and visualization of x-ray diffraction spectra from thin film ternary composition spreads. <i>Review of Scientific Instruments</i> , 2005 , 76, 062223	1.7	37
152	Bonding and adhesion of polymer interfaces. <i>Materials Science and Engineering</i> , 1986 , 83, 213-226		37
151	Surface etching and roughening in integrated processing of thermal oxides. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1991 , 9, 1058-1065	2.9	36
150	Epitaxial Welding of Carbon Nanotube Networks for Aqueous Battery Current Collectors. <i>ACS Nano</i> , 2018 , 12, 5266-5273	16.7	36
149	Exciton transport in SiO ₂ as a possible cause of surface-state generation in MOS structures. <i>Applied Physics Letters</i> , 1978 , 32, 184-186	3.4	34
148	Optically clear alginate hydrogels for spatially controlled cell entrapment and culture at microfluidic electrode surfaces. <i>Lab on A Chip</i> , 2013 , 13, 1854-8	7.2	33
147	The formation of the Schottky barrier at the V/Si interface. <i>Journal of Vacuum Science and Technology</i> , 1982 , 20, 684-687		33
146	In-Film Bioprocessing and Immunoanalysis with Electroaddressable Stimuli-Responsive Polysaccharides. <i>Advanced Functional Materials</i> , 2010 , 20, 1645-1652	15.6	32
145	Subatmospheric chemical vapor deposition ozone/TEOS process for SiO ₂ trench filling. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1995 , 13, 1888		32
144	Selection rule effects in electronic excitations of chemisorbed molecules as studied by energy loss spectroscopy. <i>Solid State Communications</i> , 1978 , 26, 523-525	1.6	32
143	Profile evolution for conformal atomic layer deposition over nanotopography. <i>ACS Nano</i> , 2010 , 4, 4637-4646	16.7	31
142	Biological nanofactories facilitate spatially selective capture and manipulation of quorum sensing bacteria in a bioMEMS device. <i>Lab on A Chip</i> , 2010 , 10, 1128-34	7.2	31
141	Protein assembly onto patterned microfabricated devices through enzymatic activation of fusion pro-tag. <i>Biotechnology and Bioengineering</i> , 2008 , 99, 499-507	4.9	31
140	Low temperature material reaction at the Ti/Si(111) interface. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986 , 4, 865-868	2.9	31
139	Role of oxygen in defect-related breakdown in thin SiO ₂ films on Si (100). <i>Journal of Applied Physics</i> , 1987 , 61, 4584-4588	2.5	31
138	Accessing biology@ toolbox for the mesoscale biofabrication of soft matter. <i>Soft Matter</i> , 2013 , 9, 6019	3.6	30

137	Ultraclean, integrated processing of thermal oxide structures. <i>Applied Physics Letters</i> , 1990 , 57, 1254-1256	3.0	30
136	Highly Reversible Conversion-Type FeOF Composite Electrode with Extended Lithium Insertion by Atomic Layer Deposition LiPON Protection. <i>Chemistry of Materials</i> , 2017 , 29, 8780-8791	9.6	29
135	Electrochemically Controlled Solid Electrolyte Interphase Layers Enable Superior Li-S Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 24554-24563	9.5	29
134	Perspective: hybrid systems combining electrostatic and electrochemical nanostructures for ultrahigh power energy storage. <i>Energy and Environmental Science</i> , 2013 , 6, 2578	35.4	29
133	Solid flexible electrochemical supercapacitor using Tobacco mosaic virus nanostructures and ALD ruthenium oxide. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 114014	2	29
132	Electronic structure of silicide-silicon interfaces. <i>Thin Solid Films</i> , 1982 , 93, 21-40	2.2	29
131	Hole trapping in SiO ₂ films annealed in low-pressure oxygen atmosphere. <i>Journal of Applied Physics</i> , 1987 , 62, 925-930	2.5	28
130	Schottky barrier formation at Pd, Pt, and Ni/Si(111) interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1983 , 1, 566-569	2.9	28
129	Photoemission studies of time-resolved surface reactions: Isothermal desorption of CO from Ni(111). <i>Surface Science</i> , 1979 , 89, 566-574	1.8	28
128	Far Ultraviolet Spectroscopy of Solids in the Range 6B6 eV Using Synchrotron Radiation from an Electron Storage Ring. <i>Review of Scientific Instruments</i> , 1971 , 42, 1507-1513	1.7	28
127	Real-time process and product diagnostics in rapid thermal chemical vapor deposition using in situ mass spectrometric sampling. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1995 , 13, 1924		27
126	Influence of thin SiO ₂ interlayers on chemical reaction and microstructure at the Ni/Si(111) interface. <i>Physical Review B</i> , 1986 , 33, 5517-5525	3.3	27
125	Reactive Schottky barrier formation: The Pd/Si interface. <i>Journal of Vacuum Science and Technology</i> , 1980 , 17, 916-919		27
124	Distal modulation of bacterial cell-cell signalling in a synthetic ecosystem using partitioned microfluidics. <i>Lab on A Chip</i> , 2015 , 15, 1842-51	7.2	26
123	Nanoscale Protection Layers To Mitigate Degradation in High-Energy Electrochemical Energy Storage Systems. <i>Accounts of Chemical Research</i> , 2018 , 51, 97-106	24.3	25
122	Interface states at the Pt silicide/Si interface. <i>Physical Review B</i> , 1982 , 25, 4307-4309	3.3	25
121	Local-Field Effects in the Optical Properties of Solids: The Far-Ultraviolet Spectra of Ionic Crystals. <i>Physical Review Letters</i> , 1973 , 30, 794-797	7.4	25
120	Surface/Interface Effects on High-Performance Thin-Film All-Solid-State Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 26007-11	9.5	24

119	Kinetics-Controlled Degradation Reactions at Crystalline LiPON/Li CoO and Crystalline LiPON/Li-Metal Interfaces. <i>ChemSusChem</i> , 2018 , 11, 1956-1969	8.3	24
118	Examining the role of hydrogen in the electrical performance of in situ fabricated metal-insulator-metal trilayers using an atomic layer deposited Al ₂ O ₃ dielectric. <i>Applied Physics Letters</i> , 2013 , 102, 173501	3.4	24
117	Impact of parasitic reactions on wafer-scale uniformity in water-based and ozone-based atomic layer deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 051509	2.9	24
116	A fabrication platform for electrically mediated optically active biofunctionalized sites in BioMEMS. <i>Lab on A Chip</i> , 2005 , 5, 583-6	7.2	24
115	X-ray reflectivity study of SiO ₂ on Si. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1990 , 8, 2046-2048	2.9	24
114	Role of mesoporosity in cellulose fibers for paper-based fast electrochemical energy storage. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 8201	13	23
113	Chitosan biotinylation and electrodeposition for selective protein assembly. <i>Macromolecular Bioscience</i> , 2008 , 8, 451-7	5.5	23
112	Thermo-biolithography: a technique for patterning nucleic acids and proteins. <i>Langmuir</i> , 2004 , 20, 906-13	13	23
111	Raman spectroscopy of PtSi formation at the Pt/Si(100) interface. <i>Applied Physics Letters</i> , 1984 , 44, 430-432	3.4	23
110	Resonance Raman scattering in InAs near the E ₁ gap. <i>Solid State Communications</i> , 1973 , 13, 1755-1759	1.6	23
109	Real-time sensing and metrology for atomic layer deposition processes and manufacturing. <i>Journal of Vacuum Science & Technology B</i> , 2007 , 25, 130		22
108	Enabling high performance all-solid-state lithium metal batteries using solid polymer electrolytes plasticized with ionic liquid. <i>Electrochimica Acta</i> , 2020 , 345, 136156	6.7	21
107	Protocols for Evaluating and Reporting Li-O ₂ Cell Performance. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 211-5	6.4	21
106	Normal-Incidence Reflectance, Optical Properties, and Electronic Structure of Zn. <i>Physical Review B</i> , 1971 , 3, 285-292	3.3	21
105	Optical spectroscopy of surfaces: Reflectance studies of chemisorption. <i>Surface Science</i> , 1973 , 37, 75-81	1.8	21
104	Electrochemical Thin Layers in Nanostructures for Energy Storage. <i>Accounts of Chemical Research</i> , 2016 , 49, 2336-2346	24.3	20
103	Electroaddressing agarose using Fmoc-phenylalanine as a temporary scaffold. <i>Langmuir</i> , 2011 , 27, 7380-4	4	20
102	Real-time observation and optimization of tungsten atomic layer deposition process cycle. <i>Journal of Vacuum Science & Technology B</i> , 2006 , 24, 780		20

101	Far-Ultraviolet Reflectance Spectra of Ionic Crystals. <i>Physical Review Letters</i> , 1971 , 26, 1317-1320	7.4	20
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