

# Joel W Ager

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2076490/joel-w-ager-publications-by-year.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

316  
papers

25,708  
citations

89  
h-index

153  
g-index

340  
ext. papers

28,912  
ext. citations

8  
avg, IF

7.02  
L-index

#	Paper	IF	Citations
316	Electrocatalytic Oxygen Evolution Reaction <b>2022</b> , 35-85		
315	Minor Product Polymerization Causes Failure of High-Current CO <sub>2</sub> -to-Ethylene Electrolyzers. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 599-601	20.1	3
314	Reversible Photochromism in <110> Oriented Layered Halide Perovskite.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	2
313	Giant Isotope Effect of Thermal Conductivity in Silicon Nanowires.. <i>Physical Review Letters</i> , <b>2022</b> , 128, 085901	7.4	1
312	Effects of surface diffusion in electrocatalytic CO reduction on Cu revealed by kinetic Monte Carlo simulations. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 164701	3.9	1
311	Techno-economic assessment of emerging CO electrolysis technologies. <i>STAR Protocols</i> , <b>2021</b> , 2, 100889	1.4	0
310	Solar-Driven Gas-Phase Moisture to Hydrogen with Zero Bias. <i>ACS Nano</i> , <b>2021</b> ,	16.7	5
309	Photophysics of Localized Deep Defect States in Hybrid Organic-Inorganic Perovskites. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 6975-6982	3.8	2
308	A discussion on the possible involvement of singlet oxygen in oxygen electrocatalysis. <i>JPhys Energy</i> , <b>2021</b> , 3, 031004	4.9	8
307	Spin pinning effect to reconstructed oxyhydroxide layer on ferromagnetic oxides for enhanced water oxidation. <i>Nature Communications</i> , <b>2021</b> , 12, 3634	17.4	31
306	Carbon neutral manufacturing via on-site CO recycling. <i>IScience</i> , <b>2021</b> , 24, 102514	6.1	6
305	Copper sulfide as the cation exchange template for synthesis of bimetallic catalysts for CO electroreduction.. <i>RSC Advances</i> , <b>2021</b> , 11, 23948-23959	3.7	2
304	Tandem Electrocatalytic CO Reduction with Efficient Intermediate Conversion over Pyramid-Textured Cu-Ag Catalysts. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 40513-40521	9.5	9
303	Manipulating Intermediates at the Au  TiO <sub>2</sub> Interface over InP Nanopillar Array for Photoelectrochemical CO <sub>2</sub> Reduction. <i>ACS Catalysis</i> , <b>2021</b> , 11, 11416-11428	13.1	7
302	Economically viable CO <sub>2</sub> electroreduction embedded within ethylene oxide manufacturing. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1530-1543	35.4	6
301	Wetting-regulated gas-involving (photo)electrocatalysis: biomimetics in energy conversion. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 10674-10699	58.5	10
300	Active Phase on SrCo <sub>1-x</sub> Fe <sub>x</sub> O <sub>3-δ</sub> Perovskite for Water Oxidation: Reconstructed Surface versus Remaining Bulk. <i>Jacs Au</i> , <b>2021</b> , 1, 108-115		19

299	Lattice site-dependent metal leaching in perovskites toward a honeycomb-like water oxidation catalyst. <i>Science Advances</i> , <b>2021</b> , 7, eabk1788	14.3	6
298	The Bright Side and Dark Side of Hybrid Organic-Inorganic Perovskites. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 27340-27355	3.8	1
297	Heterogenized Pyridine-Substituted Cobalt(II) Phthalocyanine Yields Reduction of CO by Tuning the Electron Affinity of the Co Center. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 5251-5258	9.5	22
296	Enhancement of the photoelectrochemical water splitting by perovskite BiFeO <sub>3</sub> via interfacial engineering. <i>Solar Energy</i> , <b>2020</b> , 202, 198-203	6.8	23
295	Surface Composition Dependent Ligand Effect in Tuning the Activity of Nickel-Copper Bimetallic Electrocatalysts toward Hydrogen Evolution in Alkaline. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 7765-7775	16.4	99
294	Sequential Cascade Electrocatalytic Conversion of Carbon Dioxide to C <sub>2</sub> Coupled Products. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 4551-4559	6.1	36
293	Electrical suppression of all nonradiative recombination pathways in monolayer semiconductors. <i>Science</i> , <b>2019</b> , 364, 468-471	33.3	139
292	Si photocathode with Ag-supported dendritic Cu catalyst for CO <sub>2</sub> reduction. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 1068-1077	35.4	58
291	Exceptionally active iridium evolved from a pseudo-cubic perovskite for oxygen evolution in acid. <i>Nature Communications</i> , <b>2019</b> , 10, 572	17.4	142
290	Research advances towards large-scale solar hydrogen production from water. <i>EnergyChem</i> , <b>2019</b> , 1, 100014	36.9	82
289	Machine Learning Optimization of p-Type Transparent Conducting Films. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 7340-7350	9.6	20
288	Deterministic Assembly of Arrays of Lithographically Defined WS <sub>2</sub> and MoS <sub>2</sub> Monolayer Features Directly From Multilayer Sources Into Van Der Waals Heterostructures. <i>Journal of Micro and Nano-Manufacturing</i> , <b>2019</b> , 7,	1.3	7
287	Spatially Precise Transfer of Patterned Monolayer WS <sub>2</sub> and MoS <sub>2</sub> with Features Larger than 104 nm Directly from Multilayer Sources. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 407-416	4	13
286	Evidence for product-specific active sites on oxide-derived Cu catalysts for electrochemical CO <sub>2</sub> reduction. <i>Nature Catalysis</i> , <b>2019</b> , 2, 86-93	36.5	134
285	Synthetic WSe monolayers with high photoluminescence quantum yield. <i>Science Advances</i> , <b>2019</b> , 5, eaau4728	47.8	48
284	The Technical and Energetic Challenges of Separating (Photo)Electrochemical Carbon Dioxide Reduction Products. <i>Joule</i> , <b>2018</b> , 2, 381-420	27.8	96
283	Investigating the Role of Copper Oxide in Electrochemical CO Reduction in Real Time. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 8574-8584	9.5	132
282	Operando Investigation of Mn <sub>3</sub> O <sub>4</sub> -Co-catalyst on Fe <sub>2</sub> O <sub>3</sub> Photoanode: Manganese-Valency-Determined Enhancement at Varied Potentials. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 814-821	6.1	18

281	Large-area and bright pulsed electroluminescence in monolayer semiconductors. <i>Nature Communications</i> , <b>2018</b> , 9, 1229	17.4	93
280	Ultrahigh thermal conductivity of isotopically enriched silicon. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 095113	13	15
279	Scientific and Technological Assessment of Iron Pyrite for Use in Solar Devices. <i>Energy Technology</i> , <b>2018</b> , 6, 8-20	3.5	16
278	Sequential catalysis controls selectivity in electrochemical CO <sub>2</sub> reduction on Cu. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2935-2944	35.4	103
277	Electrochemical CO Reduction Builds Solvent Water into Oxygenate Products. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 9337-9340	16.4	95
276	Theory of thin-film-mediated exfoliation of van der Waals bonded layered materials. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	13
275	Solution-Processed Transparent Self-Powered p-CuS-ZnS/n-ZnO UV Photodiode. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2018</b> , 12, 1700381	2.5	42
274	Stability of Residual Oxides in Oxide-Derived Copper Catalysts for Electrochemical CO Reduction Investigated with O Labeling. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 551-554	16.4	212
273	Initial Application of Selected-Ion Flow-Tube Mass Spectrometry to Real-Time Product Detection in Electrochemical CO <sub>2</sub> Reduction. <i>Energy Technology</i> , <b>2018</b> , 6, 110-121	3.5	9
272	Stability of Residual Oxides in Oxide-Derived Copper Catalysts for Electrochemical CO <sub>2</sub> Reduction Investigated with <sup>18</sup> O Labeling. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 560-563	3.6	34
271	Perovskite Solar Cells for Photoelectrochemical Water Splitting and CO <sub>2</sub> Reduction <b>2018</b> , 273-292		1
270	Metal-Oxygen Hybridization Determined Activity in Spinel-Based Oxygen Evolution Catalysts: A Case Study of ZnFe <sub>2</sub> Cr <sub>x</sub> O <sub>4</sub> . <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6839-6848	9.6	36
269	Chemical storage of renewable energy. <i>Science</i> , <b>2018</b> , 360, 707-708	33.3	98
268	Pressure-Temperature Phase Diagram of Vanadium Dioxide. <i>Nano Letters</i> , <b>2017</b> , 17, 2512-2516	11.5	43
267	Hydrogen evolution activity of individual mono-, bi-, and few-layer MoS <sub>2</sub> towards photocatalysis. <i>Applied Materials Today</i> , <b>2017</b> , 8, 132-140	6.6	27
266	Highly Stable Near-Unity Photoluminescence Yield in Monolayer MoS <sub>2</sub> by Fluoropolymer Encapsulation and Superacid Treatment. <i>ACS Nano</i> , <b>2017</b> , 11, 5179-5185	16.7	64
265	Wide bandgap BaSnO films with room temperature conductivity exceeding 10 S cm. <i>Nature Communications</i> , <b>2017</b> , 8, 15167	17.4	126
264	Optimizing CO <sub>2</sub> Coupling on Oxide-Derived Copper Catalysts for Electrochemical CO <sub>2</sub> Reduction. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 14191-14203	3.8	187

263	Phosphate tuned copper electrodeposition and promoted formic acid selectivity for carbon dioxide reduction. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11905-11916	13	29
262	Membraneless laminar flow cell for electrocatalytic CO <sub>2</sub> reduction with liquid product separation. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 154006	3	15
261	Transparent Electrodes for Efficient Optoelectronics. <i>Advanced Electronic Materials</i> , <b>2017</b> , 3, 1600529	6.4	224
260	Pressurizing Field-Effect Transistors of Few-Layer MoS <sub>2</sub> in a Diamond Anvil Cell. <i>Nano Letters</i> , <b>2017</b> , 17, 194-199	11.5	25
259	Al <sub>2</sub> O <sub>3</sub> Surface Complexation for Photocatalytic Organic Transformations. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 269-276	16.4	55
258	High figure-of-merit p-type transparent conductor, Cu alloyed ZnS via radio frequency magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 505107	3	14
257	A spongy nickel-organic CO reduction photocatalyst for nearly 100% selective CO production. <i>Science Advances</i> , <b>2017</b> , 3, e1700921	14.3	124
256	Efficient solar-driven electrochemical CO <sub>2</sub> reduction to hydrocarbons and oxygenates. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 2222-2230	35.4	104
255	Strain-engineered growth of two-dimensional materials. <i>Nature Communications</i> , <b>2017</b> , 8, 608	17.4	162
254	Nucleation of melting and solidification in confined high aspect ratio thin films. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 105304	2.5	2
253	Measuring the Edge Recombination Velocity of Monolayer Semiconductors. <i>Nano Letters</i> , <b>2017</b> , 17, 5356-5360	11.5	34
252	Quantifying van der Waals Interactions in Layered Transition Metal Dichalcogenides from Pressure-Enhanced Valence Band Splitting. <i>Nano Letters</i> , <b>2017</b> , 17, 4982-4988	11.5	34
251	Hydrolysis of Electrolyte Cations Enhances the Electrochemical Reduction of CO over Ag and Cu. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 13006-13012	16.4	412
250	Compliant substrate epitaxy: Au on MoS <sub>2</sub> . <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	15
249	Increased Optoelectronic Quality and Uniformity of Hydrogenated p-InP Thin Films. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 4602-4607	9.6	9
248	General Thermal Texturization Process of MoS <sub>2</sub> for Efficient Electrocatalytic Hydrogen Evolution Reaction. <i>Nano Letters</i> , <b>2016</b> , 16, 4047-53	11.5	84
247	Air-Stable n-Doping of WSe <sub>2</sub> by Anion Vacancy Formation with Mild Plasma Treatment. <i>ACS Nano</i> , <b>2016</b> , 10, 6853-60	16.7	147
246	Activation Effect of Electrochemical Cycling on Gold Nanoparticles towards the Hydrogen Evolution Reaction in Sulfuric Acid. <i>Electrochimica Acta</i> , <b>2016</b> , 209, 440-447	6.7	21

245	High Luminescence Efficiency in MoS <sub>2</sub> Grown by Chemical Vapor Deposition. <i>ACS Nano</i> , <b>2016</b> , 10, 6535-416.7	11.7	115
244	Recombination Kinetics and Effects of Superacid Treatment in Sulfur- and Selenium-Based Transition Metal Dichalcogenides. <i>Nano Letters</i> , <b>2016</b> , 16, 2786-91	11.5	187
243	Opportunities to improve the net energy performance of photoelectrochemical water-splitting technology. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 803-819	35.4	54
242	Chemical Bath Deposition of p-Type Transparent, Highly Conducting (CuS) <sub>x</sub> :(ZnS) <sub>1-x</sub> Nanocomposite Thin Films and Fabrication of Si Heterojunction Solar Cells. <i>Nano Letters</i> , <b>2016</b> , 16, 1925-32	11.5	77
241	Direct growth of single-crystalline III-V semiconductors on amorphous substrates. <i>Nature Communications</i> , <b>2016</b> , 7, 10502	17.4	37
240	High Photoluminescence Quantum Yield in Band Gap Tunable Bromide Containing Mixed Halide Perovskites. <i>Nano Letters</i> , <b>2016</b> , 16, 800-6	11.5	218
239	Trace Levels of Copper in Carbon Materials Show Significant Electrochemical CO <sub>2</sub> Reduction Activity. <i>ACS Catalysis</i> , <b>2016</b> , 6, 202-209	13.1	118
238	Surface origin and control of resonance Raman scattering and surface band gap in indium nitride. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 255102	3	5
237	Tailoring Copper Nanocrystals towards C <sub>2</sub> Products in Electrochemical CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 5883-5886	3.6	77
236	Gold-Mediated Exfoliation of Ultralarge Optoelectronically-Perfect Monolayers. <i>Advanced Materials</i> , <b>2016</b> , 28, 4053-8	24	206
235	Tailoring Copper Nanocrystals towards C <sub>2</sub> Products in Electrochemical CO <sub>2</sub> Reduction. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5789-92	16.4	481
234	P-Type Transparent Cu-Alloyed ZnS Deposited at Room Temperature. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500396	6.4	35
233	CO <sub>2</sub> Electroreduction with Enhanced Ethylene and Ethanol Selectivity by Nanostructuring Polycrystalline Copper. <i>ChemElectroChem</i> , <b>2016</b> , 3, 1012-1019	4.3	110
232	Pressure-induced structural transition of Cd <sub>x</sub> Zn <sub>1-x</sub> O alloys. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 152105	3.4	9
231	Effects of temperature and gas-liquid mass transfer on the operation of small electrochemical cells for the quantitative evaluation of CO reduction electrocatalysts. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 26777-26785	3.6	93
230	Undoped and Ni-Doped CoO <sub>x</sub> Surface Modification of Porous BiVO <sub>4</sub> Photoelectrodes for Water Oxidation. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 23449-23457	3.8	40
229	Indirect Bandgap and Optical Properties of Monoclinic Bismuth Vanadate. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 2969-2974	3.8	176
228	Mo-doped BiVO <sub>4</sub> photoanodes synthesized by reactive sputtering. <i>ChemSusChem</i> , <b>2015</b> , 8, 1066-71	8.3	82

227	p-Type Transparent Conducting Oxide/n-Type Semiconductor Heterojunctions for Efficient and Stable Solar Water Oxidation. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 9595-603	16.4	98
226	Nonepitaxial Thin-Film InP for Scalable and Efficient Photocathodes. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2177-82	6.4	31
225	Experimental demonstrations of spontaneous, solar-driven photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2811-2824	35.4	411
224	Thin-Film Materials for the Protection of Semiconducting Photoelectrodes in Solar-Fuel Generators. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 24201-24228	3.8	207
223	Near-unity photoluminescence quantum yield in MoS <sub>2</sub> . <i>Science</i> , <b>2015</b> , 350, 1065-8	33.3	792
222	Photocatalytic Stability of Single- and Few-Layer MoS <sub>2</sub> . <i>ACS Nano</i> , <b>2015</b> , 9, 11302-9	16.7	161
221	Thin-Film Solar Cells with InP Absorber Layers Directly Grown on Nonepitaxial Metal Substrates. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1501337	21.8	11
220	<b>2015,</b>		1
219	Role of TiO <sub>2</sub> Surface Passivation on Improving the Performance of p-InP Photocathodes. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 2308-2313	3.8	109
218	Efficient and sustained photoelectrochemical water oxidation by cobalt oxide/silicon photoanodes with nanotextured interfaces. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 6191-4	16.4	171
217	Photoactuators and motors based on carbon nanotubes with selective chirality distributions. <i>Nature Communications</i> , <b>2014</b> , 5, 2983	17.4	223
216	Robust production of purified H <sub>2</sub> in a stable, self-regulating, and continuously operating solar fuel generator. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 297-301	35.4	74
215	BiVO <sub>4</sub> thin film photoanodes grown by chemical vapor deposition. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 1651-7	3.6	68
214	Strain-induced indirect to direct bandgap transition in multilayer WSe <sub>2</sub> . <i>Nano Letters</i> , <b>2014</b> , 14, 4592-7	11.5	415
213	Life-cycle net energy assessment of large-scale hydrogen production via photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 3264-3278	35.4	144
212	Electronic Structure of Monoclinic BiVO <sub>4</sub> . <i>Chemistry of Materials</i> , <b>2014</b> , 26, 5365-5373	9.6	274
211	Thermal conductivity of isotopically controlled silicon nanostructures. <i>New Journal of Physics</i> , <b>2014</b> , 16, 015021	2.9	17
210	Atomic and electronic structures of lattice mismatched Cu <sub>2</sub> O/TiO <sub>2</sub> interfaces. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 211605	3.4	4

209	High-Resolution Raman and Luminescence Spectroscopy of Isotope-Pure $^{28}\text{Si}^{12}\text{C}$ , Natural and $^{13}\text{C}$ Enriched $4\text{H-SiC}$ . <i>Materials Science Forum</i> , <b>2014</b> , 778-780, 471-474	0.4	9
208	Net primary energy balance of a solar-driven photoelectrochemical water-splitting device. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 2380	35.4	54
207	Reactive Sputtering of Bismuth Vanadate Photoanodes for Solar Water Splitting. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 21635-21642	3.8	140
206	Amorphous Si thin film based photocathodes with high photovoltage for efficient hydrogen production. <i>Nano Letters</i> , <b>2013</b> , 13, 5615-8	11.5	134
205	Quantum-coupled radial-breathing oscillations in double-walled carbon nanotubes. <i>Nature Communications</i> , <b>2013</b> , 4, 1375	17.4	52
204	Integrated microfluidic test-bed for energy conversion devices. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 7050-4	3.6	14
203	Self-consistent mean-field theory of size distribution narrowing during ramped temperature ion beam synthesis. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 234301	2.5	1
202	A direct thin-film path towards low-cost large-area III-V photovoltaics. <i>Scientific Reports</i> , <b>2013</b> , 3, 2275	4.9	52
201	Vitamin D deficiency induces early signs of aging in human bone, increasing the risk of fracture. <i>Science Translational Medicine</i> , <b>2013</b> , 5, 193ra88	17.5	114
200	P-type InGaN across the entire alloy composition range. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 102111	3.4	11
199	Interfacial free energies determined from binary embedded alloy nanocluster geometry. <i>APL Materials</i> , <b>2013</b> , 1, 052105	5.7	
198	Semiconductor thin films directly from minerals—study of structural, optical, and transport characteristics of $\text{Cu}_2\text{O}$ thin films from malachite mineral and synthetic $\text{CuO}$ . <i>Thin Solid Films</i> , <b>2012</b> , 520, 3914-3917	2.2	9
197	Nanoscale Probing of High Photovoltages at $109^\circ$ Domain Walls. <i>Ferroelectrics</i> , <b>2012</b> , 433, 123-126	0.6	22
196	High optical quality polycrystalline indium phosphide grown on metal substrates by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 123112	2.5	17
195	A direct comparison of non-destructive techniques for determining bridging stress distributions. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2012</b> , 60, 1462-1477	5	11
194	p-Type InP Nanopillar Photocathodes for Efficient Solar-Driven Hydrogen Production. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 10918-10922	3.6	34
193	p-Type InP nanopillar photocathodes for efficient solar-driven hydrogen production. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 10760-4	16.4	226
192	Copper-alloyed ZnS as a p-type transparent conducting material. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 2101-2107	1.6	62

191	Taming transport in InN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 83-86	1.6	7
190	Few electron double quantum dot in an isotopically purified 28Si quantum well. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 143110	3.4	24
189	Efficient photovoltaic current generation at ferroelectric domain walls. <i>Physical Review Letters</i> , <b>2011</b> , 107, 126805	7.4	309
188	Size-dependent polar ordering in colloidal GeTe nanocrystals. <i>Nano Letters</i> , <b>2011</b> , 11, 1147-52	11.5	77
187	Effect of charged dislocation scattering on electrical and electrothermal transport in n-type InN. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	53
186	Fatigue threshold R-curves predict small crack fatigue behavior of bridging toughened materials. <i>Acta Materialia</i> , <b>2011</b> , 59, 7654-7661	8.4	9
185	Limitations and Advantages of Raman Spectroscopy for the Determination of Oxidation Stresses. <i>Oxidation of Metals</i> , <b>2011</b> , 75, 229-245	1.6	26
184	Changes in cortical bone response to high-fat diet from adolescence to adulthood in mice. <i>Osteoporosis International</i> , <b>2011</b> , 22, 2283-93	5.3	68
183	Photovoltaic action from In <sub>x</sub> Ga <sub>1-x</sub> N p-n junctions with x > 0.2 grown on silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2466-2468		8
182	Rationally Designed, Three-Dimensional Carbon Nanotube Back-Contacts for Efficient Solar Devices. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 1040-1045	21.8	22
181	Age-related changes in the plasticity and toughness of human cortical bone at multiple length scales. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 14416-21	11.5	265
180	PN junction rectification in electrolyte gated Mg-doped InN. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 102106	3.4	16
179	Mg doped InN and confirmation of free holes in InN. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 042104	3.4	41
178	Modeling pulsed-laser melting of embedded semiconductor nanoparticles. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 094307	2.5	2
177	Reversible phase changes in Ge <sub>2</sub> Au nanoparticles. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 193101	3.4	7
176	Above-bandgap voltages from ferroelectric photovoltaic devices. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 143-728.7		1212
175	Hole transport and photoluminescence in Mg-doped InN. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 113712	2.5	62
174	Electron spin coherence of phosphorus donors in silicon: Effect of environmental nuclei. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	69

173	Progress on III-nitride/silicon hybrid multijunction solar cells <b>2010</b> ,		3
172	Embedded binary eutectic alloy nanostructures: a new class of phase change materials. <i>Nano Letters</i> , <b>2010</b> , 10, 2794-8	11.5	24
171	Reduced size-independent mechanical properties of cortical bone in high-fat diet-induced obesity. <i>Bone</i> , <b>2010</b> , 46, 217-25	4.7	72
170	Osteopontin deficiency increases bone fragility but preserves bone mass. <i>Bone</i> , <b>2010</b> , 46, 1564-73	4.7	147
169	On the effect of X-ray irradiation on the deformation and fracture behavior of human cortical bone. <i>Bone</i> , <b>2010</b> , 46, 1475-85	4.7	142
168	High quality In <sub>x</sub> Ga <sub>1-x</sub> N thin films with x > 0.2 grown on silicon. <i>Physica Status Solidi (B): Basic Research</i> , <b>2010</b> , 247, 1747-1749	1.3	13
167	Photoluminescence enhancement of Er-doped silica containing Ge nanoclusters. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 201904	3.4	6
166	Theory of nanocluster size distributions from ion beam synthesis. <i>Physical Review Letters</i> , <b>2009</b> , 102, 146101	7.4	17
165	Processing route for size distribution narrowing of ion beam synthesized nanoclusters. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 083120	3.4	5
164	Homogeneous linewidth of the P31 bound exciton transition in silicon. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 122113	3.4	8
163	Structural Characterization of GeSn Alloy Nanocrystals Embedded in SiO <sub>2</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1184, 154		1
162	My Modeling Nanocluster Formation During Ion Beam Synthesis. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1181, 60		
161	Highly luminescent In <sub>x</sub> Ga <sub>1-x</sub> N thin films grown over the entire composition range by energetic neutral atom beam lithography & epitaxy (ENABLE). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S409-S412		4
160	Electrical properties of InGaN-Si heterojunctions. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S413-S416		24
159	Stacking faults and phase changes in Mg-doped InGaN grown on Si. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S421-S424		4
158	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. <i>Nature Materials</i> , <b>2009</b> , 8, 648-53	27	909
157	Electrical and electrothermal transport in InN: The roles of defects. <i>Physica B: Condensed Matter</i> , <b>2009</b> , 404, 4862-4865	2.8	10
156	Molecular beam epitaxy of InGaN thin films on Si(111): Effect of substrate nitridation. <i>Thin Solid Films</i> , <b>2009</b> , 517, 6512-6515	2.2	15

155	A Schottky top-gated two-dimensional electron system in a nuclear spin free Si/SiGe heterostructure. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2009</b> , 3, 61-63	2.5	12
154	Photovoltaic effects in BiFeO <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2009</b> , 95, 062909	3.4	429
153	Demonstration of a III-Nitride/Silicon Tandem Solar Cell. <i>Applied Physics Express</i> , <b>2009</b> , 2, 122202	2.4	54
152	Solid-state quantum memory using the <sup>31</sup> P nuclear spin. <i>Nature</i> , <b>2008</b> , 455, 1085-1088	50.4	295
151	The true toughness of human cortical bone measured with realistically short cracks. <i>Nature Materials</i> , <b>2008</b> , 7, 672-7	27	380
150	Measurement of the toughness of bone: a tutorial with special reference to small animal studies. <i>Bone</i> , <b>2008</b> , 43, 798-812	4.7	151
149	Band gap bowing parameter of In <sub>1-x</sub> Al <sub>x</sub> N. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 123501	2.5	62
148	Evaluation of exhaled nitric oxide measurements in the emergency department for patients with acute asthma. <i>Annals of Allergy, Asthma and Immunology</i> , <b>2008</b> , 100, 415-9	3.2	4
147	Probing and modulating surface electron accumulation in InN by the electrolyte gated Hall effect. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 262105	3.4	29
146	InGa <sub>N</sub> Thin Films Grown by ENABLE and MBE Techniques on Silicon Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1068, 1		8
145	Structure map for embedded binary alloy nanocrystals. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 193114	3.4	14
144	Aging and fracture of human cortical bone and tooth dentin. <i>Jom</i> , <b>2008</b> , 60, 33-38	2.1	85
143	Mg-doped InN and InGa <sub>N</sub> [Photoluminescence, capacitance]oltage and thermopower measurements. <i>Physica Status Solidi (B): Basic Research</i> , <b>2008</b> , 245, 873-877	1.3	53
142	Epitaxial growth of CdSexTe <sub>1-x</sub> thin films on Si(100) by molecular beam epitaxy using lattice mismatch graded structures. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 1081-1087	1.6	13
141	The effect of aging on crack-growth resistance and toughening mechanisms in human dentin. <i>Biomaterials</i> , <b>2008</b> , 29, 1318-28	15.6	103
140	Evidence for p-type InN. <i>AIP Conference Proceedings</i> , <b>2007</b> ,	0	2
139	The aminobisphosphonate risedronate preserves localized mineral and material properties of bone in the presence of glucocorticoids. <i>Arthritis and Rheumatism</i> , <b>2007</b> , 56, 3726-37		31
138	p-type InN and In-rich InGa <sub>N</sub> . <i>Physica Status Solidi (B): Basic Research</i> , <b>2007</b> , 244, 1820-1824	1.3	21

137	High electron mobility InN. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 162103	3.4	29
136	Direct observation of the donor nuclear spin in a near-gap bound exciton transition: P31 in highly enriched S28ia). <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 081724	2.5	32
135	Kinetics of visible light photo-oxidation of Ge nanocrystals: Theory and in situ measurement. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 163118	3.4	2
134	The degree of bone mineralization is maintained with single intravenous bisphosphonates in aged estrogen-deficient rats and is a strong predictor of bone strength. <i>Bone</i> , <b>2007</b> , 41, 804-12	4.7	44
133	Structural properties of Ge nanocrystals embedded in sapphire. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 114317	2.5	21
132	Al <sub>2</sub> O <sub>3</sub> scale development on iron aluminides. <i>Journal of Materials Research</i> , <b>2006</b> , 21, 1409-1419	2.5	27
131	Analysis of Nanoscale Stress in Strained Silicon Materials and Microelectronics Devices by Energy-Filtered Convergent Beam Electron Diffraction. <i>ECS Transactions</i> , <b>2006</b> , 2, 559-568	1	2
130	Control of defect concentrations within a semiconductor through adsorption. <i>Physical Review Letters</i> , <b>2006</b> , 97, 055503	7.4	36
129	Photoluminescence of energetic particle-irradiated In <sub>x</sub> Ga <sub>1-x</sub> N alloys. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 151101	3.4	12
128	Coherence of spin qubits in silicon. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, S783-S794	1.8	97
127	Optical bleaching effect in InN epitaxial layers. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 191109	3.4	20
126	Large melting-point hysteresis of Ge nanocrystals embedded in SiO <sub>2</sub> . <i>Physical Review Letters</i> , <b>2006</b> , 97, 155701	7.4	102
125	Structure and electronic properties of InN and In-rich group III-nitride alloys. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, R83-R99	3	211
124	Optical detection and ionization of donors in specific electronic and nuclear spin States. <i>Physical Review Letters</i> , <b>2006</b> , 97, 227401	7.4	57
123	Evidence for p-type doping of InN. <i>Physical Review Letters</i> , <b>2006</b> , 96, 125505	7.4	176
122	Multiband GaNAsP quaternary alloys. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 092110	3.4	112
121	Analysis of Nano-scale Strain Near Shallow Trench Isolation Structures by Energy-filtered Convergent Beam Electron Diffraction. <i>Microscopy and Microanalysis</i> , <b>2006</b> , 12, 938-939	0.5	
120	Isotopically engineered semiconductors: from the bulk to nanostructures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2006</b> , 203, 3550-3558	1.6	18

119	Fracture and Ageing in Bone: Toughness and Structural Characterization. <i>Strain</i> , <b>2006</b> , 42, 225-232	1.7	30
118	Strategies for integration of donor electron spin qubits in silicon. <i>Microelectronic Engineering</i> , <b>2006</b> , 83, 1814-1817	2.5	9
117	Role of microstructure in the aging-related deterioration of the toughness of human cortical bone. <i>Materials Science and Engineering C</i> , <b>2006</b> , 26, 1251-1260	8.3	110
116	Dopants and defects in InN and InGaN alloys. <i>Journal of Crystal Growth</i> , <b>2006</b> , 288, 278-282	1.6	12
115	On the increasing fragility of human teeth with age: a deep-UV resonance Raman study. <i>Journal of Bone and Mineral Research</i> , <b>2006</b> , 21, 1879-87	6.3	38
114	Mechanism of stress relaxation in Ge nanocrystals embedded in SiO <sub>2</sub> . <i>Applied Physics Letters</i> , <b>2005</b> , 86, 063107	3.4	51
113	High-Purity, Isotopically Enriched Bulk Silicon. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, G448	3.9	33
112	Pressure-dependent photoluminescence study of ZnO nanowires. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 153137	3.7	80
111	Stable, freestanding Ge nanocrystals. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 124316	2.5	35
110	Nature of room-temperature photoluminescence in ZnO. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 191911	3.4	237
109	Structure sensitivity of vibrational spectra of mesoporous silica SBA-15 and Pt/SBA-15. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 17386-90	3.4	59
108	Fatigue threshold R-curves for predicting reliability of ceramics under cyclic loading. <i>Acta Materialia</i> , <b>2005</b> , 53, 2595-2605	8.4	46
107	Effects of polar solvents on the fracture resistance of dentin: role of water hydration. <i>Acta Biomaterialia</i> , <b>2005</b> , 1, 31-43	10.8	78
106	Progress in Semiconductor Spectroscopy Using Isotopically Enriched Si. <i>AIP Conference Proceedings</i> , <b>2005</b> ,	0	2
105	Electron Transport Properties of InN. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 892, 91		5
104	A Chemical Approach to 3-D Lithographic Patterning of Si and Ge Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 901, 1		
103	Effect of native defects on optical properties of In <sub>x</sub> Ga <sub>1-x</sub> N alloys. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 161905	3.4	18
102	On the crystalline structure, stoichiometry and band gap of InN thin films. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 071910	3.4	97

101	Compositional modulation in In(x)Ga(1-x)N: TEM and X-ray studies. <i>Microscopy (Oxford, England)</i> , <b>2005</b> , 54, 243-50	1.3	17
100	Effects of pressure on the band structure of highly mismatched Zn <sub>1-x</sub> MnyOxTe <sub>1-x</sub> alloys. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 924-926	3.4	10
99	Group III-nitride alloys as photovoltaic materials <b>2004</b> ,		5
98	Oxygen induced band-gap reduction in ZnOxSe <sub>1-x</sub> alloys. <i>Physica Status Solidi (B): Basic Research</i> , <b>2004</b> , 241, 603-606	1.3	6
97	Pressure-dependent photoluminescence study of CuGaSe <sub>2</sub> . <i>Physica Status Solidi (B): Basic Research</i> , <b>2004</b> , 241, 3117-3122	1.3	4
96	Pressure dependence of optical transitions in semiconducting single-walled carbon nanotubes. <i>Physica Status Solidi (B): Basic Research</i> , <b>2004</b> , 241, 3367-3373	1.3	6
95	Optical properties and electronic structure of InN and In-rich group III-nitride alloys. <i>Journal of Crystal Growth</i> , <b>2004</b> , 269, 119-127	1.6	145
94	Band anticrossing in dilute nitrides. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S3355-S3372	1.8	26
93	Pressure dependence of the fundamental band-gap energy of CdSe. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 67-69	3.4	58
92	Raman Spectroscopy and Time-Resolved Photoluminescence of BN and BxCyNz Nanotubes. <i>Nano Letters</i> , <b>2004</b> , 4, 647-650	11.5	175
91	Synthetic Insertion of Gold Nanoparticles into Mesoporous Silica. <i>Chemistry of Materials</i> , <b>2003</b> , 15, 1242-1248	1.4	157
90	Universal bandgap bowing in group-III nitride alloys. <i>Solid State Communications</i> , <b>2003</b> , 127, 411-414	1.6	92
89	Narrow bandgap group III-nitride alloys. <i>Physica Status Solidi (B): Basic Research</i> , <b>2003</b> , 240, 412-416	1.3	20
88	Temperature dependence of the fundamental band gap of InN. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 4457-4460	2.5	337
87	Superior radiation resistance of In <sub>1-x</sub> GaxN alloys: Full-solar-spectrum photovoltaic material system. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 6477-6482	2.5	503
86	Band-gap bowing effects in BxGa <sub>1-x</sub> As alloys. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 2696-2699	2.5	35
85	Effect of oxygen on the electronic band structure in ZnOxSe <sub>1-x</sub> alloys. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 299-301	3.4	70
84	Encapsulation of Metal (Au, Ag, Pt) Nanoparticles into the Mesoporous SBA-15 Structure. <i>Langmuir</i> , <b>2003</b> , 19, 4396-4401	4	154

83	Structural and electronic properties of amorphous and polycrystalline In <sub>2</sub> Se <sub>3</sub> films. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 2390-2397	2.5	42
82	Electrical and optical properties of GaN/Al <sub>2</sub> O <sub>3</sub> interfaces. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 13337-13344	1.8	17
81	An Ultraviolet Raman Spectroscopic Investigation of Magnesium Chloride Ethanol Solids with a 0.47 to 6 Molar Ratio of C <sub>2</sub> H <sub>5</sub> OH to MgCl <sub>2</sub> . <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 2946-2949	3.4	33
80	Current status of research and development of III-N semiconductor alloys. <i>Semiconductor Science and Technology</i> , <b>2002</b> , 17, 741-745	1.8	57
79	Small band gap bowing in In <sub>1-x</sub> Ga <sub>x</sub> N alloys. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 4741-4743	3.4	498
78	Unusual properties of the fundamental band gap of InN. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 3967-3969	3.4	1254
77	Band anticrossing in group II-Ox <sub>1-x</sub> highly mismatched alloys: Cd <sub>1-x</sub> MnyOxTe <sub>1-x</sub> quaternaries synthesized by O ion implantation. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 1571-1573	3.4	30
76	Band anticrossing effects in MgyZn <sub>1-y</sub> Te <sub>1-x</sub> Sex alloys. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 34-36	3.4	13
75	DX-like behavior of oxygen in GaN. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 302-303, 23-38	2.8	12
74	Band Anticrossing in III-N Alloys. <i>Physica Status Solidi (B): Basic Research</i> , <b>2001</b> , 223, 75-85	1.3	107
73	Evolution of crystallinity of GaN layers grown at low temperature on sapphire with dimethylhydrazine and triethylgallium. <i>Journal of Crystal Growth</i> , <b>2001</b> , 231, 89-94	1.6	4
72	Formation of diluted III-N nitride thin films by N ion implantation. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 2227-2234	2.5	37
71	Synthesis of InN <sub>x</sub> P <sub>1-x</sub> thin films by N ion implantation. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1077-1079	3.4	39
70	Annealing of nonhydrogenated amorphous carbon films prepared by filtered cathodic arc deposition. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 2395-2399	2.5	44
69	Nitrogen-induced enhancement of the free electron concentration in sulfur implanted GaN <sub>x</sub> As <sub>1-x</sub> . <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2858-2860	3.4	27
68	Effect of Si doping on strain, cracking, and microstructure in GaN thin films grown by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 7745-7752	2.5	211
67	Increased electrical activation in the near-surface region of sulfur and nitrogen coimplanted GaAs. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 3607-3609	3.4	12
66	Interaction of localized electronic states with the conduction band: band anticrossing in II-VI semiconductor ternaries. <i>Physical Review Letters</i> , <b>2000</b> , 85, 1552-5	7.4	162

65	Nature of the fundamental band gap in GaN <sub>x</sub> P <sub>1-x</sub> alloys. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 3251-3253	3.4	211
64	Electron emission from films of carbon nanotubes and ta-C coated nanotubes. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 2680-2682	3.4	50
63	Dependence of the fundamental band gap of Al <sub>x</sub> Ga <sub>1-x</sub> N on alloy composition and pressure. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 8505-8507	2.5	100
62	Reduction of band-gap energy in GaNAs and AlGa <sub>x</sub> NAs synthesized by N <sup>+</sup> implantation. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 1410-1412	3.4	90
61	Light emission during fracture of a ZrTiNiCuBe bulk metallic glass. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 3809-3811	3.4	82
60	Effect of nitrogen on the band structure of GaInNAs alloys. <i>Journal of Applied Physics</i> , <b>1999</b> , 86, 2349-2351	3.5	130
59	Near-band-edge photoluminescence emission in Al <sub>x</sub> Ga <sub>1-x</sub> N under high pressure. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2274-2276	3.4	12
58	Comparison study of photoluminescence from InGa <sub>x</sub> N/GaN multiple quantum wells and InGa <sub>x</sub> N epitaxial layers under large hydrostatic pressure. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 1613-1615	3.4	9
57	Performance of Ultra Hard Carbon Wear Coatings on Microgears Fabricated by Liga. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 546, 115		2
56	Pressure Induced Deep Gap State of Oxygen in GaN. <i>Physical Review Letters</i> , <b>1997</b> , 78, 3923-3926	7.4	208
55	Thermal stability of amorphous hard carbon films produced by cathodic arc deposition. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 3367-3369	3.4	94
54	Heat treatment of cathodic arc deposited amorphous hard carbon films. <i>Thin Solid Films</i> , <b>1997</b> , 308-309, 186-190	2.2	49
53	Multilayer hard carbon films with low wear rates. <i>Surface and Coatings Technology</i> , <b>1997</b> , 91, 91-94	4.4	22
52	Diamond growth on hard carbon films. <i>Diamond and Related Materials</i> , <b>1996</b> , 5, 1080-1086	3.5	5
51	Hardness, elastic modulus, and structure of very hard carbon films produced by cathodic-arc deposition with substrate pulse biasing. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 779-781	3.4	231
50	Effect of Si doping on the dislocation structure of GaN grown on the A-face of sapphire. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 990-992	3.4	151
49	Hardness and fracture toughness of bulk single crystal gallium nitride. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 4044-4046	3.4	138
48	Quantitative stress mapping in alumina composites by optical fluorescence imaging. <i>Acta Materialia</i> , <b>1996</b> , 44, 625-641	8.4	18

47	Si in GaN □ On the Nature of the Background Donor. <i>Physica Status Solidi (B): Basic Research</i> , <b>1996</b> , 198, 243-249	1.3	12
46	Effect of pretreatment process parameters on diamond nucleation on unscratched silicon substrates coated with amorphous carbon films. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 485-492	2.5	16
45	Site dependence of large oxygen isotope effect in Y <sub>0.7</sub> Pr <sub>0.3</sub> Ba <sub>2</sub> Cu <sub>3</sub> O <sub>6.97</sub> . <i>Physical Review B</i> , <b>1996</b> , 54, 14982-14985	3.3	21
44	Fano interference of the Raman phonon in heavily boron-doped diamond films grown by chemical vapor deposition. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 616-618	3.4	161
43	Residual Stress in Diamond and Amorphous Carbon Films. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 383, 143		18
42	Effect of intrinsic growth stress on the Raman spectra of vacuum-arc-deposited amorphous carbon films. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 3444-3446	3.4	93
41	Mechanical Properties of Amorphous Hard Carbon Films Prepared by Cathodic ARC Deposition. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 383, 453		16
40	Nickel, Morris, and Ager reply. <i>Physical Review Letters</i> , <b>1994</b> , 72, 1389	7.4	
39	High dose Cl implantation in ZnSe: Impurity incorporation and radiation damage. <i>Journal of Applied Physics</i> , <b>1994</b> , 75, 1378-1383	2.5	9
38	The nitrogen-hydrogen complex in ZnSe. <i>Journal of Crystal Growth</i> , <b>1994</b> , 138, 1071-1072	1.6	2
37	Spatially resolved measurement of lattice damage in alpha-particle-irradiated type IIa natural diamond by confocal photoluminescence microscopy. <i>Journal of Applied Physics</i> , <b>1994</b> , 76, 4050-4053	2.5	6
36	Local vibrational modes in Mg-doped gallium nitride. <i>Physical Review B</i> , <b>1994</b> , 49, 14758-14761	3.3	61
35	Direct evidence of carbon precipitates in GaAs and InP. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 1145-1147	3.4	23
34	Local vibrational mode spectroscopy of nitrogen-hydrogen complex in ZnSe. <i>Applied Physics Letters</i> , <b>1993</b> , 63, 2756-2758	3.4	77
33	Temperature dependent mobility in single-crystal and chemical vapor-deposited diamond. <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 2888-2894	2.5	48
32	. <i>IEEE Transactions on Magnetism</i> , <b>1993</b> , 29, 259-263	2	40
31	Quantitative measurement of residual biaxial stress by Raman spectroscopy in diamond grown on a Ti alloy by chemical vapor deposition. <i>Physical Review B</i> , <b>1993</b> , 48, 2601-2607	3.3	347
30	Particle- and photoinduced conductivity in type-IIa diamonds. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 1086-1095	3.5	60

29	Optimization of Ge/C ratio for compensation of misfit strain in solid phase epitaxial growth of SiGe layers. <i>Applied Physics Letters</i> , <b>1993</b> , 63, 2682-2684	3.4	30
28	Locus of pairing interaction in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> by site-selective oxygen isotope shift: <sup>18</sup> O in CuO <sub>2</sub> plane layers. <i>Physical Review Letters</i> , <b>1993</b> , 70, 81-84	7.4	53
27	Interface characterization of chemically vapor deposited diamond on titanium and Ti-6Al-4V. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 7542-7550	2.5	58
26	The effect of coimplantation on the electrical activity of implanted carbon in GaAs. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 7118-7123	2.5	5
25	Combined surface characterization and tribological (friction and wear) studies of CVD diamond films. <i>Journal of Materials Research</i> , <b>1993</b> , 8, 2577-2586	2.5	17
24	Reducing Dislocation Density by Sequential Implantation of Ge and C in Si. <i>Materials Research Society Symposia Proceedings</i> , <b>1993</b> , 298, 139		
23	Electrical Properties of Natural I <sub>IIa</sub> Diamonds Using Photo- and Particle Excitation. <i>Materials Research Society Symposia Proceedings</i> , <b>1993</b> , 302, 245		3
22	Characterization of CVD Diamond Films by Optical Spectroscopies. <i>Materials Research Society Symposia Proceedings</i> , <b>1993</b> , 302, 275		
21	Hydrogen-induced platelets in silicon: Infrared absorption and Raman scattering. <i>Physical Review B</i> , <b>1992</b> , 45, 13363-13366	3.3	61
20	Characterization of chemical bonding and physical characteristics of diamond-like amorphous carbon and diamond films. <i>Journal of Materials Research</i> , <b>1992</b> , 7, 404-410	2.5	61
19	Effects of substrate temperature on chemical structure of amorphous carbon films. <i>Journal of Applied Physics</i> , <b>1992</b> , 71, 2243-2248	2.5	127
18	Diamond growth on silicon nitride by microwave plasma chemical vapor deposition. <i>Diamond and Related Materials</i> , <b>1992</b> , 1, 818-823	3.5	8
17	Annealing studies of low-temperature-grown GaAs:Be. <i>Journal of Applied Physics</i> , <b>1992</b> , 71, 1699-1707	2.5	98
16	Raman and resistivity investigations of carbon overcoats of thin-film media: Correlations with tribological properties. <i>Journal of Applied Physics</i> , <b>1991</b> , 69, 5748-5750	2.5	44
15	Diamond synthesis by microwave plasma chemical vapor deposition using graphite as the carbon source. <i>Applied Physics Letters</i> , <b>1991</b> , 59, 2386-2388	3.4	32
14	. <i>IEEE Transactions on Magnetism</i> , <b>1991</b> , 27, 5160-5162	2	50
13	Spatially resolved Raman studies of diamond films grown by chemical vapor deposition. <i>Physical Review B</i> , <b>1991</b> , 43, 6491-6499	3.3	270
12	Laser heating effects in the characterization of carbon fibers by Raman spectroscopy. <i>Journal of Applied Physics</i> , <b>1990</b> , 68, 3598-3608	2.5	20

11	Raman intensities and interference effects for thin films adsorbed on metals. <i>Journal of Chemical Physics</i> , <b>1990</b> , 92, 2067-2076	3.9	17
10	Mapping materials properties with Raman spectroscopy utilizing a 2-D detector. <i>Applied Optics</i> , <b>1990</b> , 29, 4969-80	1.7	43
9	Gas phase kinetics of the reactions of NaO with H <sub>2</sub> , D <sub>2</sub> , H <sub>2</sub> O, and D <sub>2</sub> O. <i>Journal of Chemical Physics</i> , <b>1987</b> , 87, 921-925	3.9	23
8	Gas phase studies of Na diffusion in He and Ar and kinetics of Na+Cl <sub>2</sub> and Na+SF <sub>6</sub> . <i>Journal of Chemical Physics</i> , <b>1986</b> , 84, 6161-6169	3.9	22
7	Gas phase kinetics of the reactions of Na and NaO with O <sub>3</sub> and N <sub>2</sub> O. <i>Journal of Chemical Physics</i> , <b>1986</b> , 85, 5584-5592	3.9	28
6	Laboratory studies of gas phase sodium diffusion. <i>Journal of Chemical Physics</i> , <b>1986</b> , 85, 3469-3475	3.9	6
5	The kinetics of NaO + O <sub>2</sub> + M and NaO + CO <sub>2</sub> + M and their role in atmospheric sodium chemistry. <i>Geophysical Research Letters</i> , <b>1986</b> , 13, 1395-1398	4.9	17
4	Investigation and mitigation of degradation mechanisms in Cu <sub>2</sub> O photoelectrodes for CO <sub>2</sub> reduction to ethylene. <i>Nature Energy</i> ,	62.3	16
3	Surface Reconstruction of Perovskites for Water Oxidation: The Role of Initial Oxides Bulk Chemistry. <i>Small Science</i> ,2100048		7
2	Design principles of tandem cascade photoelectrochemical devices. <i>Sustainable Energy and Fuels</i> ,	5.8	2
1	Alkali Additives Enable Efficient Large Area (>55 cm <sup>2</sup> ) Slot-Die Coated Perovskite Solar Modules. <i>Advanced Functional Materials</i> ,2113026	15.6	3