

Joel W Ager

List of Publications by Year in descending order

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papers

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340
docs citations

340
times ranked

32092
citing authors

#	ARTICLE	IF	CITATIONS
1	Above-bandgap voltages from ferroelectric photovoltaic devices. <i>Nature Nanotechnology</i> , 2010, 5, 143-147.	15.6	1,496
2	Unusual properties of the fundamental band gap of InN. <i>Applied Physics Letters</i> , 2002, 80, 3967-3969.	1.5	1,380
3	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. <i>Nature Materials</i> , 2009, 8, 648-653.	13.3	997
4	Near-unity photoluminescence quantum yield in MoS ₂ . <i>Science</i> , 2015, 350, 1065-1068.	6.0	993
5	Tailoring Copper Nanocrystals towards C ₂ Products in Electrochemical CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5789-5792.	7.2	667
6	Hydrolysis of Electrolyte Cations Enhances the Electrochemical Reduction of CO ₂ over Ag and Cu. <i>Journal of the American Chemical Society</i> , 2016, 138, 13006-13012.	6.6	640
7	Superior radiation resistance of In _{1-x} GaxN alloys: Full-solar-spectrum photovoltaic material system. <i>Journal of Applied Physics</i> , 2003, 94, 6477-6482.	1.1	572
8	Strain-Induced Indirect to Direct Bandgap Transition in Multilayer WSe ₂ . <i>Nano Letters</i> , 2014, 14, 4592-4597.	4.5	572
9	Small band gap bowing in In _{1-x} GaxN alloys. <i>Applied Physics Letters</i> , 2002, 80, 4741-4743.	1.5	563
10	Experimental demonstrations of spontaneous, solar-driven photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , 2015, 8, 2811-2824.	15.6	520
11	Photovoltaic effects in BiFeO ₃ . <i>Applied Physics Letters</i> , 2009, 95, .	1.5	460
12	The true toughness of human cortical bone measured with realistically short cracks. <i>Nature Materials</i> , 2008, 7, 672-677.	13.3	453
13	Temperature dependence of the fundamental band gap of InN. <i>Journal of Applied Physics</i> , 2003, 94, 4457-4460.	1.1	375
14	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> , 1993, 48, 2601-2607.	1.1	372
15	Electronic Structure of Monoclinic BiVO ₄ . <i>Chemistry of Materials</i> , 2014, 26, 5365-5373.	3.2	356
16	Solid-state quantum memory using the ³¹ P nuclear spin. <i>Nature</i> , 2008, 455, 1085-1088.	13.7	351
17	Efficient Photovoltaic Current Generation at Ferroelectric Domain Walls. <i>Physical Review Letters</i> , 2011, 107, 126805.	2.9	346
18	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> , 2011, 108, 14416-14421.	3.3	325

#	ARTICLE	IF	CITATIONS
19	Transparent Electrodes for Efficient Optoelectronics. <i>Advanced Electronic Materials</i> , 2017, 3, 1600529.	2.6	310
20	Gold-Mediated Exfoliation of Ultralarge Optoelectronically-Perfect Monolayers. <i>Advanced Materials</i> , 2016, 28, 4053-4058.	11.1	307
21	Stability of Residual Oxides in Oxide-Derived Copper Catalysts for Electrochemical CO ₂ Reduction Investigated with ¹⁸ O Labeling. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 551-554.	7.2	300
22	Spatially resolved Raman studies of diamond films grown by chemical vapor deposition. <i>Physical Review B</i> , 1991, 43, 6491-6499.	1.1	288
23	Nature of room-temperature photoluminescence in ZnO. <i>Applied Physics Letters</i> , 2005, 86, 191911.	1.5	274
24	Photoactuators and motors based on carbon nanotubes with selective chirality distributions. <i>Nature Communications</i> , 2014, 5, 2983.	5.8	269
25	High Photoluminescence Quantum Yield in Band Gap Tunable Bromide Containing Mixed Halide Perovskites. <i>Nano Letters</i> , 2016, 16, 800-806.	4.5	269
26	Hardness, elastic modulus, and structure of very hard carbon films produced by cathodic-arc deposition with substrate pulse biasing. <i>Applied Physics Letters</i> , 1996, 68, 779-781.	1.5	255
27	Optimizing C-C Coupling on Oxide-Derived Copper Catalysts for Electrochemical CO ₂ Reduction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14191-14203.	1.5	254
28	Exceptionally active iridium evolved from a pseudo-cubic perovskite for oxygen evolution in acid. <i>Nature Communications</i> , 2019, 10, 572.	5.8	254
29	Strain-engineered growth of two-dimensional materials. <i>Nature Communications</i> , 2017, 8, 608.	5.8	253
30	p-Type InP Nanopillar Photocathodes for Efficient Solar-Driven Hydrogen Production. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10760-10764.	7.2	245
31	Thin-Film Materials for the Protection of Semiconducting Photoelectrodes in Solar-Fuel Generators. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24201-24228.	1.5	245
32	Electrical suppression of all nonradiative recombination pathways in monolayer semiconductors. <i>Science</i> , 2019, 364, 468-471.	6.0	243
33	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> , 2020, 142, 7765-7775.	6.6	234
34	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> , 2000, 87, 7745-7752.	1.1	233
35	Indirect Bandgap and Optical Properties of Monoclinic Bismuth Vanadate. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2969-2974.	1.5	233
36	Recombination Kinetics and Effects of Superacid Treatment in Sulfur- and Selenium-Based Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2016, 16, 2786-2791.	4.5	233

#	ARTICLE	IF	CITATIONS
37	Structure and electronic properties of InN and In-rich group III-nitride alloys. Journal Physics D: Applied Physics, 2006, 39, R83-R99.	1.3	229
38	Nature of the fundamental band gap in GaN _{1-x} P _x alloys. Applied Physics Letters, 2000, 76, 3251-3253.	1.5	228
39	Pressure Induced Deep Gap State of Oxygen in GaN. Physical Review Letters, 1997, 78, 3923-3926.	2.9	223
40	Evidence for product-specific active sites on oxide-derived Cu catalysts for electrochemical CO ₂ reduction. Nature Catalysis, 2019, 2, 86-93.	16.1	212
41	Investigating the Role of Copper Oxide in Electrochemical CO ₂ Reduction in Real Time. ACS Applied Materials & Interfaces, 2018, 10, 8574-8584.	4.0	207
42	Efficient and Sustained Photoelectrochemical Water Oxidation by Cobalt Oxide/Silicon Photoanodes with Nanotextured Interfaces. Journal of the American Chemical Society, 2014, 136, 6191-6194.	6.6	204
43	Air-Stable n-Doping of WSe ₂ by Anion Vacancy Formation with Mild Plasma Treatment. ACS Nano, 2016, 10, 6853-6860.	7.3	202
44	Photocatalytic Stability of Single- and Few-Layer MoS ₂ . ACS Nano, 2015, 9, 11302-11309.	7.3	197
45	Interaction of Localized Electronic States with the Conduction Band: Band Anticrossing in II-VI Semiconductor Ternaries. Physical Review Letters, 2000, 85, 1552-1555.	2.9	195
46	Life-cycle net energy assessment of large-scale hydrogen production via photoelectrochemical water splitting. Energy and Environmental Science, 2014, 7, 3264-3278.	15.6	195
47	Raman Spectroscopy and Time-Resolved Photoluminescence of BN and BxCyNz Nanotubes. Nano Letters, 2004, 4, 647-650.	4.5	194
48	Evidence for p-Type Doping of InN. Physical Review Letters, 2006, 96, 125505.	2.9	193
49	Spin pinning effect to reconstructed oxyhydroxide layer on ferromagnetic oxides for enhanced water oxidation. Nature Communications, 2021, 12, 3634.	5.8	186
50	Hardness and fracture toughness of bulk single crystal gallium nitride. Applied Physics Letters, 1996, 69, 4044-4046.	1.5	182
51	Measurement of the toughness of bone: A tutorial with special reference to small animal studies. Bone, 2008, 43, 798-812.	1.4	180
52	Fano interference of the Raman phonon in heavily boron-doped diamond films grown by chemical vapor deposition. Applied Physics Letters, 1995, 66, 616-618.	1.5	177
53	Synthetic Insertion of Gold Nanoparticles into Mesoporous Silica. Chemistry of Materials, 2003, 15, 1242-1248.	3.2	175
54	Wide bandgap BaSnO ₃ films with room temperature conductivity exceeding 10 ⁴ S cm ⁻¹ . Nature Communications, 2017, 8, 15167.	5.8	175

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55	A spongy nickel-organic CO ₂ reduction photocatalyst for nearly 100% selective CO production. <i>Science Advances</i> , 2017, 3, e1700921.	4.7	175
56	On the effect of X-ray irradiation on the deformation and fracture behavior of human cortical bone. <i>Bone</i> , 2010, 46, 1475-1485.	1.4	171
57	Electrochemical CO Reduction Builds Solvent Water into Oxygenate Products. <i>Journal of the American Chemical Society</i> , 2018, 140, 9337-9340.	6.6	170
58	Osteopontin deficiency increases bone fragility but preserves bone mass. <i>Bone</i> , 2010, 46, 1564-1573.	1.4	169
59	Effect of Si doping on the dislocation structure of GaN grown on the c-face of sapphire. <i>Applied Physics Letters</i> , 1996, 69, 990-992.	1.5	166
60	Sequential catalysis controls selectivity in electrochemical CO ₂ reduction on Cu. <i>Energy and Environmental Science</i> , 2018, 11, 2935-2944.	15.6	165
61	Encapsulation of Metal (Au, Ag, Pt) Nanoparticles into the Mesoporous SBA-15 Structure. <i>Langmuir</i> , 2003, 19, 4396-4401.	1.6	163
62	Reactive Sputtering of Bismuth Vanadate Photoanodes for Solar Water Splitting. <i>Journal of Physical Chemistry C</i> , 2013, 117, 21635-21642.	1.5	162
63	Optical properties and electronic structure of InN and In-rich group III-nitride alloys. <i>Journal of Crystal Growth</i> , 2004, 269, 119-127.	0.7	157
64	Effect of nitrogen on the band structure of GaInNAs alloys. <i>Journal of Applied Physics</i> , 1999, 86, 2349-2351.	1.1	153
65	Amorphous Si Thin Film Based Photocathodes with High Photovoltage for Efficient Hydrogen Production. <i>Nano Letters</i> , 2013, 13, 5615-5618.	4.5	151
66	Chemical storage of renewable energy. <i>Science</i> , 2018, 360, 707-708.	6.0	150
67	The Technical and Energetic Challenges of Separating (Photo)Electrochemical Carbon Dioxide Reduction Products. <i>Joule</i> , 2018, 2, 381-420.	11.7	148
68	Vitamin D Deficiency Induces Early Signs of Aging in Human Bone, Increasing the Risk of Fracture. <i>Science Translational Medicine</i> , 2013, 5, 193ra88.	5.8	146
69	Large-area and bright pulsed electroluminescence in monolayer semiconductors. <i>Nature Communications</i> , 2018, 9, 1229.	5.8	146
70	Efficient solar-driven electrochemical CO ₂ reduction to hydrocarbons and oxygenates. <i>Energy and Environmental Science</i> , 2017, 10, 2222-2230.	15.6	145
71	Trace Levels of Copper in Carbon Materials Show Significant Electrochemical CO ₂ Reduction Activity. <i>ACS Catalysis</i> , 2016, 6, 202-209.	5.5	143
72	CO ₂ Electroreduction with Enhanced Ethylene and Ethanol Selectivity by Nanostructuring Polycrystalline Copper. <i>ChemElectroChem</i> , 2016, 3, 1012-1019.	1.7	142

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73	High Luminescence Efficiency in MoS ₂ Grown by Chemical Vapor Deposition. ACS Nano, 2016, 10, 6535-6541.	7.3	140
74	Effects of temperature and gas-liquid mass transfer on the operation of small electrochemical cells for the quantitative evaluation of CO ₂ reduction electrocatalysts. Physical Chemistry Chemical Physics, 2016, 18, 26777-26785.	1.3	138
75	Effects of substrate temperature on chemical structure of amorphous carbon films. Journal of Applied Physics, 1992, 71, 2243-2248.	1.1	133
76	Research advances towards large-scale solar hydrogen production from water. EnergyChem, 2019, 1, 100014.	10.1	130
77	Multiband GaNAsP quaternary alloys. Applied Physics Letters, 2006, 88, 092110.	1.5	128
78	Role of microstructure in the aging-related deterioration of the toughness of human cortical bone. Materials Science and Engineering C, 2006, 26, 1251-1260.	3.8	128
79	Role of TiO ₂ Surface Passivation on Improving the Performance of p-InP Photocathodes. Journal of Physical Chemistry C, 2015, 119, 2308-2313.	1.5	127
80	p-Type Transparent Conducting Oxide/n-Type Semiconductor Heterojunctions for Efficient and Stable Solar Water Oxidation. Journal of the American Chemical Society, 2015, 137, 9595-9603.	6.6	122
81	The effect of aging on crack-growth resistance and toughening mechanisms in human dentin. Biomaterials, 2008, 29, 1318-1328.	5.7	121
82	Band Anticrossing in III-N-V Alloys. Physica Status Solidi (B): Basic Research, 2001, 223, 75-85.	0.7	119
83	Dependence of the fundamental band gap of Al _x Ga _{1-x} N on alloy composition and pressure. Journal of Applied Physics, 1999, 85, 8505-8507.	1.1	112
84	Annealing studies of low-temperature-grown GaAs:Be. Journal of Applied Physics, 1992, 71, 1699-1707.	1.1	111
85	Large Melting-Point Hysteresis of Ge Nanocrystals Embedded in SiO ₂ . Physical Review Letters, 2006, 97, 155701.	2.9	108
86	Coherence of spin qubits in silicon. Journal of Physics Condensed Matter, 2006, 18, S783-S794.	0.7	107
87	General Thermal Texturization Process of MoS ₂ for Efficient Electrocatalytic Hydrogen Evolution Reaction. Nano Letters, 2016, 16, 4047-4053.	4.5	106
88	Thermal stability of amorphous hard carbon films produced by cathodic arc deposition. Applied Physics Letters, 1997, 71, 3367-3369.	1.5	104
89	Universal bandgap bowing in group-III nitride alloys. Solid State Communications, 2003, 127, 411-414.	0.9	104
90	On the crystalline structure, stoichiometry and band gap of InN thin films. Applied Physics Letters, 2005, 86, 071910.	1.5	103

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91	Effect of intrinsic growth stress on the Raman spectra of vacuum-deposited amorphous carbon films. Applied Physics Letters, 1995, 66, 3444-3446.	1.5	102
92	Reduction of band-gap energy in GaNAs and AlGaAs synthesized by N ⁺ implantation. Applied Physics Letters, 1999, 75, 1410-1412.	1.5	102
93	Mo-Doped BiVO ₄ Photoanodes Synthesized by Reactive Sputtering. ChemSusChem, 2015, 8, 1066-1071.	3.6	100
94	Light emission during fracture of a Zr-Ti-Ni-Cu-Be bulk metallic glass. Applied Physics Letters, 1999, 74, 3809-3811.	1.5	94
95	Si photocathode with Ag-supported dendritic Cu catalyst for CO ₂ reduction. Energy and Environmental Science, 2019, 12, 1068-1077.	15.6	93
96	Reduced size-independent mechanical properties of cortical bone in high-fat diet-induced obesity. Bone, 2010, 46, 217-225.	1.4	90
97	Tailoring Copper Nanocrystals towards C ₂ Products in Electrochemical CO ₂ Reduction. Angewandte Chemie, 2016, 128, 5883-5886.	1.6	90
98	Chemical Bath Deposition of p-Type Transparent, Highly Conducting (CuS) _x :(ZnS) _{1-x} Nanocomposite Thin Films and Fabrication of Si Heterojunction Solar Cells. Nano Letters, 2016, 16, 1925-1932.	4.5	89
99	Effects of polar solvents on the fracture resistance of dentin: role of water hydration. Acta Biomaterialia, 2005, 1, 31-43.	4.1	87
100	Local vibrational mode spectroscopy of nitrogen-hydrogen complex in ZnSe. Applied Physics Letters, 1993, 63, 2756-2758.	1.5	86
101	Highly Stable Near-Unity Photoluminescence Yield in Monolayer MoS ₂ by Fluoropolymer Encapsulation and Superacid Treatment. ACS Nano, 2017, 11, 5179-5185.	7.3	86
102	Aging and fracture of human cortical bone and tooth dentin. Jom, 2008, 60, 33-38.	0.9	85
103	Robust production of purified H ₂ in a stable, self-regulating, and continuously operating solar fuel generator. Energy and Environmental Science, 2014, 7, 297-301.	15.6	85
104	Investigation and mitigation of degradation mechanisms in Cu ₂ O photoelectrodes for CO ₂ reduction to ethylene. Nature Energy, 2021, 6, 1124-1132.	19.8	85
105	Size-Dependent Polar Ordering in Colloidal GeTe Nanocrystals. Nano Letters, 2011, 11, 1147-1152.	4.5	84
106	Pressure-dependent photoluminescence study of ZnO nanowires. Applied Physics Letters, 2005, 86, 1531-1537.	1.5	83
107	Synthetic WSe ₂ monolayers with high photoluminescence quantum yield. Science Advances, 2019, 5, eaau4728.	4.7	78
108	BiVO ₄ thin film photoanodes grown by chemical vapor deposition. Physical Chemistry Chemical Physics, 2014, 16, 1651-1657.	1.3	77

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109	Effect of oxygen on the electronic band structure in ZnO _x Se _{1-x} alloys. Applied Physics Letters, 2003, 83, 299-301.	1.5	76
110	Electron spin coherence of phosphorus donors in silicon: Effect of environmental nuclei. Physical Review B, 2010, 82, .	1.1	76
111	Changes in cortical bone response to high-fat diet from adolescence to adulthood in mice. Osteoporosis International, 2011, 22, 2283-2293.	1.3	76
112	Opportunities to improve the net energy performance of photoelectrochemical water-splitting technology. Energy and Environmental Science, 2016, 9, 803-819.	15.6	75
113	Copper-alloyed ZnS as a p-type transparent conducting material. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2101-2107.	0.8	73
114	Structure Sensitivity of Vibrational Spectra of Mesoporous Silica SBA-15 and Pt/SBA-15. Journal of Physical Chemistry B, 2005, 109, 17386-17390.	1.2	71
115	Characterization of chemical bonding and physical characteristics of diamond-like amorphous carbon and diamond films. Journal of Materials Research, 1992, 7, 404-410.	1.2	70
116	Pressure dependence of the fundamental band-gap energy of CdSe. Applied Physics Letters, 2004, 84, 67-69.	1.5	70
117	Net primary energy balance of a solar-driven photoelectrochemical water-splitting device. Energy and Environmental Science, 2013, 6, 2380.	15.6	69
118	Particle and photoinduced conductivity in type IIa diamonds. Journal of Applied Physics, 1993, 74, 1086-1095.	1.1	68
119	Band gap bowing parameter of In _{1-x} Al _x N. Journal of Applied Physics, 2008, 104, .	1.1	67
120	Hole transport and photoluminescence in Mg-doped InN. Journal of Applied Physics, 2010, 107, .	1.1	67
121	Local vibrational modes in Mg-doped gallium nitride. Physical Review B, 1994, 49, 14758-14761.	1.1	65
122	A direct thin-film path towards low-cost large-area III-V photovoltaics. Scientific Reports, 2013, 3, 2275.	1.6	65
123	Pressure-Temperature Phase Diagram of Vanadium Dioxide. Nano Letters, 2017, 17, 2512-2516.	4.5	65
124	Metal-Oxygen Hybridization Determined Activity in Spinel-Based Oxygen Evolution Catalysts: A Case Study of ZnFe ₂ Cr ₂ O ₄ . Chemistry of Materials, 2018, 30, 6839-6848.	3.2	65
125	Hydrogen-induced platelets in silicon: Infrared absorption and Raman scattering. Physical Review B, 1992, 45, 13363-13366.	1.1	64
126	Demonstration of a III-Nitride/Silicon Tandem Solar Cell. Applied Physics Express, 2009, 2, 122202.	1.1	64

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127	Al ₂ O ₃ Surface Complexation for Photocatalytic Organic Transformations. Journal of the American Chemical Society, 2017, 139, 269-276.	6.6	64
128	Sequential Cascade Electrocatalytic Conversion of Carbon Dioxide to C-C Coupled Products. ACS Applied Energy Materials, 2019, 2, 4551-4559.	2.5	64
129	Optical Detection and Ionization of Donors in Specific Electronic and Nuclear Spin States. Physical Review Letters, 2006, 97, 227401.	2.9	63
130	Wetting-regulated gas-involving (photo)electrocatalysis: biomimetics in energy conversion. Chemical Society Reviews, 2021, 50, 10674-10699.	18.7	63
131	Interface characterization of chemically vapor deposited diamond on titanium and TiAl ₄ V. Journal of Applied Physics, 1993, 74, 7542-7550.	1.1	61
132	Current status of research and development of III-V semiconductor alloys. Semiconductor Science and Technology, 2002, 17, 741-745.	1.0	61
133	Temperature dependent mobility in single-crystal and chemical vapor-deposited diamond. Journal of Applied Physics, 1993, 73, 2888-2894.	1.1	60
134	Effect of charged dislocation scattering on electrical and electrothermal transport in $\ln N$. Physical Review B, 2011, 84, .	1.1	59
135	The 2022 solar fuels roadmap. Journal Physics D: Applied Physics, 2022, 55, 323003.	1.3	58
136	Mg-doped InN and InGaN Photoluminescence, capacitance-voltage and thermopower measurements. Physica Status Solidi (B): Basic Research, 2008, 245, 873-877.	0.7	55
137	Locus of pairing interaction in YBa ₂ Cu ₃ O ₇ by site-selective oxygen isotope shift: O ¹⁸ in CuO ₂ plane layers. Physical Review Letters, 1993, 70, 81-84.	2.9	54
138	Quantum-coupled radial-breathing oscillations in double-walled carbon nanotubes. Nature Communications, 2013, 4, 1375.	5.8	54
139	Solution-Processed Transparent Self-Powered CuZnS/ZnO UV Photodiode. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700381.	1.2	54
140	Structure and mechanical properties of hydrogenated carbon films prepared by magnetron sputtering (for magnetic discs). IEEE Transactions on Magnetics, 1991, 27, 5160-5162.	1.2	53
141	Heat treatment of cathodic arc deposited amorphous hard carbon films. Thin Solid Films, 1997, 308-309, 186-190.	0.8	53
142	Electron emission from films of carbon nanotubes and ta-C coated nanotubes. Applied Physics Letters, 1999, 75, 2680-2682.	1.5	53
143	Quantifying van der Waals Interactions in Layered Transition Metal Dichalcogenides from Pressure-Enhanced Valence Band Splitting. Nano Letters, 2017, 17, 4982-4988.	4.5	53
144	Fatigue threshold R-curves for predicting reliability of ceramics under cyclic loading. Acta Materialia, 2005, 53, 2595-2605.	3.8	52

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145	Mechanism of stress relaxation in Ge nanocrystals embedded in SiO ₂ . Applied Physics Letters, 2005, 86, 063107.	1.5	52
146	Undoped and Ni-Doped CoO Surface Modification of Porous BiVO ₄ Photoelectrodes for Water Oxidation. Journal of Physical Chemistry C, 2016, 120, 23449-23457.	1.5	52
147	Mapping materials properties with Raman spectroscopy utilizing a 2-D detector. Applied Optics, 1990, 29, 4969.	2.1	50
148	Enhancement of the photoelectrochemical water splitting by perovskite BiFeO ₃ via interfacial engineering. Solar Energy, 2020, 202, 198-203.	2.9	49
149	Raman and resistivity investigations of carbon overcoats of thin film media: Correlations with tribological properties. Journal of Applied Physics, 1991, 69, 5748-5750.	1.1	48
150	Annealing of nonhydrogenated amorphous carbon films prepared by filtered cathodic arc deposition. Journal of Applied Physics, 2000, 88, 2395-2399.	1.1	48
151	Structural and electronic properties of amorphous and polycrystalline In ₂ Se ₃ films. Journal of Applied Physics, 2003, 94, 2390-2397.	1.1	48
152	Manipulating Intermediates at the Au/TiO ₂ Interface over InP Nanopillar Array for Photoelectrochemical CO ₂ Reduction. ACS Catalysis, 2021, 11, 11416-11428.	5.5	48
153	On the Increasing Fragility of Human Teeth With Age: A Deep-UV Resonance Raman Study. Journal of Bone and Mineral Research, 2006, 21, 1879-1887.	3.1	47
154	Active Phase on SrCo _{1-x} Fe _x O _{3-δ} (0 ≤ x ≤ 0.5) Perovskite for Water Oxidation: Reconstructed Surface versus Remaining Bulk. JACS, 2021, 143, 108-115.	3.6	47
155	Synthesis of In _{Nx} P _{1-x} thin films by N ion implantation. Applied Physics Letters, 2001, 78, 1077-1079.	1.5	46
156	Phosphate tuned copper electrodeposition and promoted formic acid selectivity for carbon dioxide reduction. Journal of Materials Chemistry A, 2017, 5, 11905-11916.	5.2	46
157	The degree of bone mineralization is maintained with single intravenous bisphosphonates in aged estrogen-deficient rats and is a strong predictor of bone strength. Bone, 2007, 41, 804-812.	1.4	45
158	Direct growth of single-crystalline III-V semiconductors on amorphous substrates. Nature Communications, 2016, 7, 10502.	5.8	45
159	Control of Defect Concentrations within a Semiconductor through Adsorption. Physical Review Letters, 2006, 97, 055503.	2.9	44
160	Mg doped InN and confirmation of free holes in InN. Applied Physics Letters, 2011, 98, 042104.	1.5	44
161	Stability of Residual Oxides in Oxide-Derived Copper Catalysts for Electrochemical CO ₂ Reduction Investigated with ¹⁸ O Labeling. Angewandte Chemie, 2018, 130, 560-563.	1.6	43
162	Formation of diluted III-V nitride thin films by N ion implantation. Journal of Applied Physics, 2001, 90, 2227-2234.	1.1	42

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163	Optical characterization of sputtered carbon films (magnetic media overlayers). IEEE Transactions on Magnetics, 1993, 29, 259-263.	1.2	41
164	Heterogenized Pyridine-Substituted Cobalt(II) Phthalocyanine Yields Reduction of CO ₂ by Tuning the Electron Affinity of the Co Center. ACS Applied Materials & Interfaces, 2020, 12, 5251-5258.	4.0	41
165	Lattice site-dependent metal leaching in perovskites toward a honeycomb-like water oxidation catalyst. Science Advances, 2021, 7, eabk1788.	4.7	41
166	P-type Transparent Cu-Alloyed ZnS Deposited at Room Temperature. Advanced Electronic Materials, 2016, 2, 1500396.	2.6	40
167	Fracture and Ageing in Bone: Toughness and Structural Characterization. Strain, 2006, 42, 225-232.	1.4	39
168	Alkali Additives Enable Efficient Large Area (>55 cm ²) Slot-Die Coated Perovskite Solar Modules. Advanced Functional Materials, 2022, 32, .	7.8	39
169	Band-gap bowing effects in B _x Ga _{1-x} As alloys. Journal of Applied Physics, 2003, 93, 2696-2699.	1.1	38
170	Stable, freestanding Ge nanocrystals. Journal of Applied Physics, 2005, 97, 124316.	1.1	38
171	Optimization of Ge/C ratio for compensation of misfit strain in solid phase epitaxial growth of SiGe layers. Applied Physics Letters, 1993, 63, 2682-2684.	1.5	36
172	Band anticrossing in dilute nitrides. Journal of Physics Condensed Matter, 2004, 16, S3355-S3372.	0.7	34
173	High-Purity, Isotopically Enriched Bulk Silicon. Journal of the Electrochemical Society, 2005, 152, G448.	1.3	34
174	Direct observation of the donor nuclear spin in a near-gap bound exciton transition: P31 in highly enriched S28i. Journal of Applied Physics, 2007, 101, 081724.	1.1	34
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