

Edward H Sargent

List of Publications by Year in descending order

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711
papers

119,822
citations

79

171
h-index

162

323
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735
all docs

735
docs citations

735
times ranked

57282
citing authors

#	ARTICLE	IF	CITATIONS
1	Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. Science, 2015, 347, 519-522.	12.6	4,156
2	Perovskite light-emitting diodes with external quantum efficiency exceeding 20 per cent. Nature, 2018, 562, 245-248.	27.8	2,589
3	Efficient and stable solution-processed planar perovskite solar cells via contact passivation. Science, 2017, 355, 722-726.	12.6	2,019
4	Homogeneously dispersed multimetal oxygen-evolving catalysts. Science, 2016, 352, 333-337.	12.6	1,948
5	Perovskite energy funnels for efficient light-emitting diodes. Nature Nanotechnology, 2016, 11, 872-877.	31.5	1,868
6	Solution-processed PbS quantum dot infrared photodetectors and photovoltaics. Nature Materials, 2005, 4, 138-142.	27.5	1,793
7	CO ₂ electroreduction to ethylene via hydroxide-mediated copper catalysis at an abrupt interface. Science, 2018, 360, 783-787.	12.6	1,638
8	Ultrasensitive solution-cast quantum dot photodetectors. Nature, 2006, 442, 180-183.	27.8	1,634
9	What would it take for renewably powered electrosynthesis to displace petrochemical processes?. Science, 2019, 364, .	12.6	1,505
10	Efficient and stable emission of warm-white light from lead-free halide double perovskites. Nature, 2018, 563, 541-545.	27.8	1,451
11	Enhanced electrocatalytic CO ₂ reduction via field-induced reagent concentration. Nature, 2016, 537, 382-386.	27.8	1,429
12	Colloidal-quantum-dot photovoltaics using atomic-ligand passivation. Nature Materials, 2011, 10, 765-771.	27.5	1,375
13	Perovskite photonic sources. Nature Photonics, 2016, 10, 295-302.	31.4	1,369
14	Challenges for commercializing perovskite solar cells. Science, 2018, 361, .	12.6	1,327
15	Nanostructured materials for photon detection. Nature Nanotechnology, 2010, 5, 391-400.	31.5	1,215
16	Ligand-Stabilized Reduced-Dimensionality Perovskites. Journal of the American Chemical Society, 2016, 138, 2649-2655.	18.7	1,157
17	Hybrid passivated colloidal quantum dot solids. Nature Nanotechnology, 2012, 7, 577-582.	31.5	1,100
18	Materials interface engineering for solution-processed photovoltaics. Nature, 2012, 488, 304-312.	27.8	1,000

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19	Building devices from colloidal quantum dots. <i>Science</i> , 2016, 353, .	12.6	996
20	Solution-processed semiconductors for next-generation photodetectors. <i>Nature Reviews Materials</i> , 2017, 2, .	48.7	992
21	Colloidal Quantum Dot Solar Cells. <i>Chemical Reviews</i> , 2015, 115, 12732-12763.	47.7	987
22	What Should We Make with CO ₂ and How Can We Make It?. <i>Joule</i> , 2018, 2, 825-832.	24.0	975
23	Perovskite–fullerene hybrid materials suppress hysteresis in planar diodes. <i>Nature Communications</i> , 2015, 6, 7081.	12.8	948
24	Highly Efficient Perovskite–Quantum–Dot Light–Emitting Diodes by Surface Engineering. <i>Advanced Materials</i> , 2016, 28, 8718-8725.	21.0	917
25	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. <i>Nature Energy</i> , 2020, 5, 131-140.	39.5	894
26	CO ₂ electrolysis to multicarbon products at activities greater than 1 A cm ⁻² . <i>Science</i> , 2020, 367, 661-666.	12.6	860
27	Designing materials for electrochemical carbon dioxide recycling. <i>Nature Catalysis</i> , 2019, 2, 648-658.	34.4	838
28	Accelerated discovery of CO ₂ electrocatalysts using active machine learning. <i>Nature</i> , 2020, 581, 178-183.	27.8	807
29	Depleted-Heterojunction Colloidal Quantum Dot Solar Cells. <i>ACS Nano</i> , 2010, 4, 3374-3380.	14.6	781
30	Thin-film Sb ₂ Se ₃ photovoltaics with oriented one-dimensional ribbons and benign grain boundaries. <i>Nature Photonics</i> , 2015, 9, 409-415.	31.4	781
31	Dopant-induced electron localization drives CO ₂ reduction to C ₂ hydrocarbons. <i>Nature Chemistry</i> , 2018, 10, 974-980.	13.6	781
32	Electrochemical CO ₂ Reduction into Chemical Feedstocks: From Mechanistic Electrocatalysis Models to System Design. <i>Advanced Materials</i> , 2019, 31, e1807166.	21.0	769
33	Catalyst electro-redeposition controls morphology and oxidation state for selective carbon dioxide reduction. <i>Nature Catalysis</i> , 2018, 1, 103-110.	34.4	737
34	Monolithic all-perovskite tandem solar cells with 24.8% efficiency exploiting comproportionation to suppress Sn(II) oxidation in precursor ink. <i>Nature Energy</i> , 2019, 4, 864-873.	39.5	736
35	Highly Oriented Low-Dimensional Tin Halide Perovskites with Enhanced Stability and Photovoltaic Performance. <i>Journal of the American Chemical Society</i> , 2017, 139, 6693-6699.	13.7	723
36	Electrochemical Methods for the Analysis of Clinically Relevant Biomolecules. <i>Chemical Reviews</i> , 2016, 116, 9001-9090.	47.7	702

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37	Molecular tuning of CO ₂ -to-ethylene conversion. <i>Nature</i> , 2020, 577, 509-513.	27.8	682
38	Materials Processing Routes to Trap-Free Halide Perovskites. <i>Nano Letters</i> , 2014, 14, 6281-6286.	9.1	671
39	Ultra-bright and highly efficient inorganic based perovskite light-emitting diodes. <i>Nature Communications</i> , 2017, 8, 15640.	12.8	669
40	Perovskites for Next-Generation Optical Sources. <i>Chemical Reviews</i> , 2019, 119, 7444-7477.	47.7	640
41	Enhanced Nitrate-to-Ammonia Activity on Copper–Nickel Alloys via Tuning of Intermediate Adsorption. <i>Journal of the American Chemical Society</i> , 2020, 142, 5702-5708.	13.7	638
42	Planar-integrated single-crystalline perovskite photodetectors. <i>Nature Communications</i> , 2015, 6, 8724.	12.8	617
43	Semiconductor quantum dots: Technological progress and future challenges. <i>Science</i> , 2021, 373, .	12.6	600
44	Colloidal quantum dot solar cells. <i>Nature Photonics</i> , 2012, 6, 133-135.	31.4	571
45	Hybrid organic–inorganic inks flatten the energy landscape in colloidal quantum dot solids. <i>Nature Materials</i> , 2017, 16, 258-263.	27.5	563
46	Suppression of atomic vacancies via incorporation of isovalent small ions to increase the stability of halide perovskite solar cells in ambient air. <i>Nature Energy</i> , 2018, 3, 648-654.	39.5	552
47	All-perovskite tandem solar cells with improved grain surface passivation. <i>Nature</i> , 2022, 603, 73-78.	27.8	544
48	Colloidal Quantum-Dot Photodetectors Exploiting Multiexciton Generation. <i>Science</i> , 2009, 324, 1542-1544.	12.6	541
49	Bipolar-shell resurfacing for blue LEDs based on strongly confined perovskite quantum dots. <i>Nature Nanotechnology</i> , 2020, 15, 668-674.	31.5	541
50	CO ₂ electrolysis to multicarbon products in strong acid. <i>Science</i> , 2021, 372, 1074-1078.	12.6	541
51	Steering post-C coupling selectivity enables high efficiency electroreduction of carbon dioxide to multi-carbon alcohols. <i>Nature Catalysis</i> , 2018, 1, 421-428.	34.4	537
52	Color-stable highly luminescent sky-blue perovskite light-emitting diodes. <i>Nature Communications</i> , 2018, 9, 3541.	12.8	536
53	Air-stable n-type colloidal quantum dot solids. <i>Nature Materials</i> , 2014, 13, 822-828.	27.5	529
54	Efficient tandem solar cells with solution-processed perovskite on textured crystalline silicon. <i>Science</i> , 2020, 367, 1135-1140.	12.6	525

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55	Infrared Quantum Dots. <i>Advanced Materials</i> , 2005, 17, 515-522.	21.0	510
56	All-perovskite tandem solar cells with 24.2% certified efficiency and area over 1â€%cm ² using surface-anchoring zwitterionic antioxidant. <i>Nature Energy</i> , 2020, 5, 870-880.	39.5	497
57	Efficient Luminescence from Perovskite Quantum Dot Solids. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 25007-25013.	8.0	481
58	Theory-driven design of high-valence metal sites for water oxidation confirmed using in situ soft X-ray absorption. <i>Nature Chemistry</i> , 2018, 10, 149-154.	13.6	476
59	Fast, sensitive and spectrally tuneable colloidal-quantum-dot photodetectors. <i>Nature Nanotechnology</i> , 2009, 4, 40-44.	31.5	475
60	Electronâ€“phonon interaction in efficient perovskite blue emitters. <i>Nature Materials</i> , 2018, 17, 550-556.	27.5	472
61	Multi-site electrocatalysts for hydrogen evolution in neutral media by destabilization of water molecules. <i>Nature Energy</i> , 2019, 4, 107-114.	39.5	470
62	Quantum-dot-in-perovskite solids. <i>Nature</i> , 2015, 523, 324-328.	27.8	468
63	Chiral-perovskite optoelectronics. <i>Nature Reviews Materials</i> , 2020, 5, 423-439.	48.7	445
64	The Architecture of Colloidal Quantum Dot Solar Cells: Materials to Devices. <i>Chemical Reviews</i> , 2014, 114, 863-882.	47.7	444
65	Thermal nonequilibrium of strained black CsPbI ₃ thin films. <i>Science</i> , 2019, 365, 679-684.	12.6	444
66	Infrared Colloidal Quantum Dots for Photovoltaics: Fundamentals and Recent Progress. <i>Advanced Materials</i> , 2011, 23, 12-29.	21.0	422
67	Efficient, Stable Infrared Photovoltaics Based on Solution-Cast Colloidal Quantum Dots. <i>ACS Nano</i> , 2008, 2, 833-840.	14.6	421
68	25th Anniversary Article: Colloidal Quantum Dot Materials and Devices: A Quarterâ€“Century of Advances. <i>Advanced Materials</i> , 2013, 25, 4986-5010.	21.0	419
69	Perovskites for Light Emission. <i>Advanced Materials</i> , 2018, 30, e1801996.	21.0	417
70	Molecular enhancement of heterogeneous CO ₂ reduction. <i>Nature Materials</i> , 2020, 19, 266-276.	27.5	416
71	Sensitive solution-processed visible-wavelength photodetectors. <i>Nature Photonics</i> , 2007, 1, 531-534.	31.4	411
72	Tailoring the Energy Landscape in Quasi-2D Halide Perovskites Enables Efficient Green-Light Emission. <i>Nano Letters</i> , 2017, 17, 3701-3709.	9.1	409

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73	Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO ₂ to Formate. <i>Joule</i> , 2017, 1, 794-805.	24.0	390
74	High-valence metals improve oxygen evolution reaction performance by modulating 3d metal oxidation cycle energetics. <i>Nature Catalysis</i> , 2020, 3, 985-992.	34.4	390
75	Cooperative CO ₂ -to-ethanol conversion via enriched intermediates at molecule-metal catalyst interfaces. <i>Nature Catalysis</i> , 2020, 3, 75-82.	34.4	390
76	Spin control in reduced-dimensional chiral perovskites. <i>Nature Photonics</i> , 2018, 12, 528-533.	31.4	371
77	Programming the detection limits of biosensors through controlled nanostructuring. <i>Nature Nanotechnology</i> , 2009, 4, 844-848.	31.5	370
78	Tandem colloidal quantum dot solar cells employing a graded recombination layer. <i>Nature Photonics</i> , 2011, 5, 480-484.	31.4	367
79	Efficient electrically powered CO ₂ -to-ethanol via suppression of deoxygenation. <i>Nature Energy</i> , 2020, 5, 478-486.	39.5	363
80	Highly efficient quantum dot near-infrared light-emitting diodes. <i>Nature Photonics</i> , 2016, 10, 253-257.	31.4	361
81	Distribution control enables efficient reduced-dimensional perovskite LEDs. <i>Nature</i> , 2021, 599, 594-598.	27.8	358
82	Size-tunable infrared (1000-1600 nm) electroluminescence from PbS quantum-dot nanocrystals in a semiconducting polymer. <i>Applied Physics Letters</i> , 2003, 82, 2895-2897.	3.3	356
83	Copper nanocavities confine intermediates for efficient electrosynthesis of C ₃ alcohol fuels from carbon monoxide. <i>Nature Catalysis</i> , 2018, 1, 946-951.	34.4	354
84	Compositional and orientational control in metal halide perovskites of reduced dimensionality. <i>Nature Materials</i> , 2018, 17, 900-907.	27.5	351
85	Continuous Carbon Dioxide Electroreduction to Concentrated Multi-carbon Products Using a Membrane Electrode Assembly. <i>Joule</i> , 2019, 3, 2777-2791.	24.0	350
86	Advancing the speed, sensitivity and accuracy of biomolecular detection using multi-length-scale engineering. <i>Nature Nanotechnology</i> , 2014, 9, 969-980.	31.5	349
87	Regulating strain in perovskite thin films through charge-transport layers. <i>Nature Communications</i> , 2020, 11, 1514.	12.8	346
88	A general phase-transfer protocol for metal ions and its application in nanocrystal synthesis. <i>Nature Materials</i> , 2009, 8, 683-689.	27.5	345
89	Quantum Dot Photovoltaics in the Extreme Quantum Confinement Regime: The Surface-Chemical Origins of Exceptional Air- and Light-Stability. <i>ACS Nano</i> , 2010, 4, 869-878.	14.6	345
90	Amine-Free Synthesis of Cesium Lead Halide Perovskite Quantum Dots for Efficient Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2016, 26, 8757-8763.	14.9	344

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91	Binding Site Diversity Promotes CO ₂ Electroreduction to Ethanol. <i>Journal of the American Chemical Society</i> , 2019, 141, 8584-8591.	13.7	338
92	N-heterocyclic carbene-functionalized magic-number gold nanoclusters. <i>Nature Chemistry</i> , 2019, 11, 419-425.	13.6	333
93	Heterovalent Dopant Incorporation for Bandgap and Type Engineering of Perovskite Crystals. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 295-301.	4.6	332
94	Conformal Organohalide Perovskites Enable Lasing on Spherical Resonators. <i>ACS Nano</i> , 2014, 8, 10947-10952.	14.6	330
95	Colloidal Quantum Dot Photovoltaics: A Path Forward. <i>ACS Nano</i> , 2011, 5, 8506-8514.	14.6	327
96	Infrared photovoltaics made by solution processing. <i>Nature Photonics</i> , 2009, 3, 325-331.	31.4	326
97	Metal-Organic Frameworks Mediate Cu Coordination for Selective CO ₂ Electroreduction. <i>Journal of the American Chemical Society</i> , 2018, 140, 11378-11386.	13.7	326
98	Catalyst synthesis under CO ₂ electroreduction favours faceting and promotes renewable fuels electrosynthesis. <i>Nature Catalysis</i> , 2020, 3, 98-106.	34.4	325
99	Continuous-wave lasing in colloidal quantum dot solids enabled by facet-selective epitaxy. <i>Nature</i> , 2017, 544, 75-79.	27.8	319
100	Physically Flexible, Rapid-Response Gas Sensor Based on Colloidal Quantum Dot Solids. <i>Advanced Materials</i> , 2014, 26, 2718-2724.	21.0	313
101	10.6% Certified Colloidal Quantum Dot Solar Cells via Solvent-Polarity-Engineered Halide Passivation. <i>Nano Letters</i> , 2016, 16, 4630-4634.	9.1	312
102	Passivation Using Molecular Halides Increases Quantum Dot Solar Cell Performance. <i>Advanced Materials</i> , 2016, 28, 299-304.	21.0	312
103	Highly Emissive Green Perovskite Nanocrystals in a Solid State Crystalline Matrix. <i>Advanced Materials</i> , 2017, 29, 1605945.	21.0	309
104	Perovskite seeding growth of formamidinium-lead-iodide-based perovskites for efficient and stable solar cells. <i>Nature Communications</i> , 2018, 9, 1607.	12.8	309
105	Halide-Dependent Electronic Structure of Organolead Perovskite Materials. <i>Chemistry of Materials</i> , 2015, 27, 4405-4412.	6.7	305
106	Bright colloidal quantum dot light-emitting diodes enabled by efficient chlorination. <i>Nature Photonics</i> , 2018, 12, 159-164.	31.4	303
107	Bright high-colour-purity deep-blue carbon dot light-emitting diodes via efficient edge amination. <i>Nature Photonics</i> , 2020, 14, 171-176.	31.4	303
108	Synthesis of Colloidal CuGaSe ₂ , CuInSe ₂ , and Cu(InGa)Se ₂ Nanoparticles. <i>Chemistry of Materials</i> , 2008, 20, 6906-6910.	6.7	298

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109	Colloidal quantum dot ligand engineering for high performance solar cells. Energy and Environmental Science, 2016, 9, 1130-1143.	30.8	297
110	Sensitive, Fast, and Stable Perovskite Photodetectors Exploiting Interface Engineering. ACS Photonics, 2015, 2, 1117-1123.	6.6	292
111	Synthetic Control over Quantum Well Width Distribution and Carrier Migration in Low-Dimensional Perovskite Photovoltaics. Journal of the American Chemical Society, 2018, 140, 2890-2896.	13.7	288
112	Sensitive Solution-Processed Bi ₂ S ₃ Nanocrystalline Photodetectors. Nano Letters, 2008, 8, 4002-4006.	9.1	282
113	One-Step Synthesis of SnI ₂ ·(DMSO) _x Adducts for High-Performance Tin Perovskite Solar Cells. Journal of the American Chemical Society, 2021, 143, 10970-10976.	13.7	280
114	Copper-on-nitride enhances the stable electrosynthesis of multi-carbon products from CO ₂ . Nature Communications, 2018, 9, 3828.	12.8	279
115	Rational Design of Efficient Palladium Catalysts for Electroreduction of Carbon Dioxide to Formate. ACS Catalysis, 2016, 6, 8115-8120.	11.2	277
116	Charge-extraction strategies for colloidal quantum dot photovoltaics. Nature Materials, 2014, 13, 233-240.	27.5	273
117	Tunable Cu Enrichment Enables Designer Syngas Electrosynthesis from CO ₂ . Journal of the American Chemical Society, 2017, 139, 9359-9363.	13.7	260
118	Colloidal quantum dot solids for solution-processed solar cells. Nature Energy, 2016, 1, .	39.5	255
119	Two-Photon Absorption in Organometallic Bromide Perovskites. ACS Nano, 2015, 9, 9340-9346.	14.6	254
120	2D matrix engineering for homogeneous quantum dot coupling in photovoltaic solids. Nature Nanotechnology, 2018, 13, 456-462.	31.5	252
121	Ultralow Self-Doping in Two-dimensional Hybrid Perovskite Single Crystals. Nano Letters, 2017, 17, 4759-4767.	9.1	251
122	Enhanced Mobility-Lifetime Products in PbS Colloidal Quantum Dot Photovoltaics. ACS Nano, 2012, 6, 89-99.	14.6	244
123	Photovoltaic concepts inspired by coherence effects in photosynthetic systems. Nature Materials, 2017, 16, 35-44.	27.5	243
124	Gold Nanoparticle Plasmonic Superlattices as Surface-Enhanced Raman Spectroscopy Substrates. ACS Nano, 2018, 12, 8531-8539.	14.6	239
125	Bifunctional Surface Engineering on SnO ₂ Reduces Energy Loss in Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2796-2801.	17.4	239
126	DNA-based programming of quantum dot valency, self-assembly and luminescence. Nature Nanotechnology, 2011, 6, 485-490.	31.5	237

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127	Dipolar cations confer defect tolerance in wide-bandgap metal halide perovskites. <i>Nature Communications</i> , 2018, 9, 3100.	12.8	237
128	Gas diffusion electrodes, reactor designs and key metrics of low-temperature CO ₂ electrolyzers. <i>Nature Energy</i> , 2022, 7, 130-143.	39.5	237
129	An electrochemical clamp assay for direct, rapid analysis of circulating nucleic acids in serum. <i>Nature Chemistry</i> , 2015, 7, 569-575.	13.6	234
130	Fast and Sensitive Solution-Processed Visible-Blind Perovskite UV Photodetectors. <i>Advanced Materials</i> , 2016, 28, 7264-7268.	21.0	234
131	Quantum-size-tuned heterostructures enable efficient and stable inverted perovskite solar cells. <i>Nature Photonics</i> , 2022, 16, 352-358.	31.4	233
132	High Rate, Selective, and Stable Electroreduction of CO ₂ to CO in Basic and Neutral Media. <i>ACS Energy Letters</i> , 2018, 3, 2835-2840.	17.4	230
133	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. <i>Joule</i> , 2019, 3, 1963-1976.	24.0	222
134	Schottky-quantum dot photovoltaics for efficient infrared power conversion. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	221
135	Engineering the Temporal Response of Photoconductive Photodetectors via Selective Introduction of Surface Trap States. <i>Nano Letters</i> , 2008, 8, 1446-1450.	9.1	219
136	Engineering colloidal quantum dot solids within and beyond the mobility-invariant regime. <i>Nature Communications</i> , 2014, 5, 3803.	12.8	214
137	Constraining CO coverage on copper promotes high-efficiency ethylene electroproduction. <i>Nature Catalysis</i> , 2019, 2, 1124-1131.	34.4	214
138	Combined high alkalinity and pressurization enable efficient CO ₂ electroreduction to CO. <i>Energy and Environmental Science</i> , 2018, 11, 2531-2539.	30.8	214
139	Photonic crystal heterostructures and interfaces. <i>Reviews of Modern Physics</i> , 2006, 78, 455-481.	45.6	210
140	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized CsPbI_3 Perovskite. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16164-16170.	13.8	210
141	Designing anion exchange membranes for CO ₂ electrolyzers. <i>Nature Energy</i> , 2021, 6, 339-348.	39.5	209
142	Thiols Passivate Recombination Centers in Colloidal Quantum Dots Leading to Enhanced Photovoltaic Device Efficiency. <i>ACS Nano</i> , 2008, 2, 2356-2362.	14.6	208
143	Lattice anchoring stabilizes solution-processed semiconductors. <i>Nature</i> , 2019, 570, 96-101.	27.8	208
144	Chlorine Vacancy Passivation in Mixed Halide Perovskite Quantum Dots by Organic Pseudohalides Enables Efficient Rec. 2020 Blue Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2020, 5, 793-798.	17.4	208

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145	Depleted Bulk Heterojunction Colloidal Quantum Dot Photovoltaics. <i>Advanced Materials</i> , 2011, 23, 3134-3138.	21.0	206
146	A Charge-Orbital Balance Picture of Doping in Colloidal Quantum Dot Solids. <i>ACS Nano</i> , 2012, 6, 8448-8455.	14.6	206
147	Perovskite Thin Films via Atomic Layer Deposition. <i>Advanced Materials</i> , 2015, 27, 53-58.	21.0	204
148	Photovoltage field-effect transistors. <i>Nature</i> , 2017, 542, 324-327.	27.8	204
149	Stabilizing Highly Active Ru Sites by Suppressing Lattice Oxygen Participation in Acidic Water Oxidation. <i>Journal of the American Chemical Society</i> , 2021, 143, 6482-6490.	13.7	204
150	One-step DNA-programmed growth of luminescent and biofunctionalized nanocrystals. <i>Nature Nanotechnology</i> , 2009, 4, 121-125.	31.5	203
151	Pure Cubic Phase Hybrid Iodobismuthates AgBi_2I_7 for Thin-Film Photovoltaics. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9586-9590.	13.8	201
152	Hydroxide promotes carbon dioxide electroreduction to ethanol on copper via tuning of adsorbed hydrogen. <i>Nature Communications</i> , 2019, 10, 5814.	12.8	201
153	Impact of dithiol treatment and air annealing on the conductivity, mobility, and hole density in PbS colloidal quantum dot solids. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	200
154	Photon management for augmented photosynthesis. <i>Nature Communications</i> , 2016, 7, 12699.	12.8	200
155	A Surface Reconstruction Route to High Productivity and Selectivity in CO_2 Electroreduction toward C_{2+} Hydrocarbons. <i>Advanced Materials</i> , 2018, 30, e1804867.	21.0	200
156	2D Metal Oxyhalide-Derived Catalysts for Efficient CO_2 Electroreduction. <i>Advanced Materials</i> , 2018, 30, e1802858.	21.0	200
157	Highly Efficient Visible Colloidal Lead-Halide Perovskite Nanocrystal Light-Emitting Diodes. <i>Nano Letters</i> , 2018, 18, 3157-3164.	9.1	199
158	High-Efficiency Colloidal Quantum Dot Photovoltaics via Robust Self-Assembled Monolayers. <i>Nano Letters</i> , 2015, 15, 7691-7696.	9.1	198
159	Tracking the dynamics of circulating tumour cell phenotypes using nanoparticle-mediated magnetic ranking. <i>Nature Nanotechnology</i> , 2017, 12, 274-281.	31.5	198
160	All-Inorganic Colloidal Quantum Dot Photovoltaics Employing Solution-Phase Halide Passivation. <i>Advanced Materials</i> , 2012, 24, 6295-6299.	21.0	197
161	High carbon utilization in CO_2 reduction to multi-carbon products in acidic media. <i>Nature Catalysis</i> , 2022, 5, 564-570.	34.4	197
162	Quantum Junction Solar Cells. <i>Nano Letters</i> , 2012, 12, 4889-4894.	9.1	196

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163	Chloride-mediated selective electrosynthesis of ethylene and propylene oxides at high current density. <i>Science</i> , 2020, 368, 1228-1233.	12.6	196
164	Colloidal quantum dot electronics. <i>Nature Electronics</i> , 2021, 4, 548-558.	26.0	192
165	Efficient Biexciton Interaction in Perovskite Quantum Dots Under Weak and Strong Confinement. <i>ACS Nano</i> , 2016, 10, 8603-8609.	14.6	190
166	Efficient electrocatalytic conversion of carbon monoxide to propanol using fragmented copper. <i>Nature Catalysis</i> , 2019, 2, 251-258.	34.4	188
167	The In ϵ Gap Electronic State Spectrum of Methylammonium Lead Iodide Single ϵ Crystal Perovskites. <i>Advanced Materials</i> , 2016, 28, 3406-3410.	21.0	187
168	Profiling circulating tumour cells and other biomarkers of invasive cancers. <i>Nature Biomedical Engineering</i> , 2018, 2, 72-84.	22.5	187
169	N ϵ Type Colloidal ϵ Quantum ϵ Dot Solids for Photovoltaics. <i>Advanced Materials</i> , 2012, 24, 6181-6185.	21.0	181
170	Cascade surface modification of colloidal quantum dot inks enables efficient bulk homojunction photovoltaics. <i>Nature Communications</i> , 2020, 11, 103.	12.8	181
171	An ultrasensitive universal detector based on neutralizer displacement. <i>Nature Chemistry</i> , 2012, 4, 642-648.	13.6	180
172	Enhanced optical path and electron diffusion length enable high-efficiency perovskite tandems. <i>Nature Communications</i> , 2020, 11, 1257.	12.8	180
173	Measuring Charge Carrier Diffusion in Coupled Colloidal Quantum Dot Solids. <i>ACS Nano</i> , 2013, 7, 5282-5290.	14.6	178
174	Colloidal Quantum Dot Photovoltaics Enhanced by Perovskite Shelling. <i>Nano Letters</i> , 2015, 15, 7539-7543.	9.1	173
175	Graphdiyne: An Efficient Hole Transporter for Stable High ϵ Performance Colloidal Quantum Dot Solar Cells. <i>Advanced Functional Materials</i> , 2016, 26, 5284-5289.	14.9	172
176	DNA Clutch Probes for Circulating Tumor DNA Analysis. <i>Journal of the American Chemical Society</i> , 2016, 138, 11009-11016.	13.7	169
177	PbS colloidal quantum dot photoconductive photodetectors: Transport, traps, and gain. <i>Applied Physics Letters</i> , 2007, 91, 173505.	3.3	164
178	Graded Doping for Enhanced Colloidal Quantum Dot Photovoltaics. <i>Advanced Materials</i> , 2013, 25, 1719-1723.	21.0	164
179	Efficient bifacial monolithic perovskite/silicon tandem solar cells via bandgap engineering. <i>Nature Energy</i> , 2021, 6, 167-175.	39.5	164
180	Solar Cells, Photodetectors, and Optical Sources from Infrared Colloidal Quantum Dots. <i>Advanced Materials</i> , 2008, 20, 3958-3964.	21.0	163

#	ARTICLE	IF	CITATIONS
181	Schottky Quantum Dot Solar Cells Stable in Air under Solar Illumination. <i>Advanced Materials</i> , 2010, 22, 1398-1402.	21.0	162
182	Reducing Defects in Halide Perovskite Nanocrystals for Light-Emitting Applications. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 2629-2640.	4.6	162
183	Can sustainable ammonia synthesis pathways compete with fossil-fuel based Haber-Bosch processes?. <i>Energy and Environmental Science</i> , 2021, 14, 2535-2548.	30.8	162
184	Structural, optical, and electronic studies of wide-bandgap lead halide perovskites. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8839-8843.	5.5	161
185	Self-Cleaning CO ₂ Reduction Systems: Unsteady Electrochemical Forcing Enables Stability. <i>ACS Energy Letters</i> , 2021, 6, 809-815.	17.4	159
186	Solar Cells Based on Inks of n-Type Colloidal Quantum Dots. <i>ACS Nano</i> , 2014, 8, 10321-10327.	14.6	158
187	High-Density Nanosharp Microstructures Enable Efficient CO ₂ Electroreduction. <i>Nano Letters</i> , 2016, 16, 7224-7228.	9.1	158
188	Cascade CO ₂ electroreduction enables efficient carbonate-free production of ethylene. <i>Joule</i> , 2021, 5, 706-719.	24.0	158
189	Detection of SARS-CoV-2 Viral Particles Using Direct, Reagent-Free Electrochemical Sensing. <i>Journal of the American Chemical Society</i> , 2021, 143, 1722-1727.	13.7	156
190	Efficient Schottky-quantum-dot photovoltaics: The roles of depletion, drift, and diffusion. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	155
191	Single Pass CO ₂ Conversion Exceeding 85% in the Electrosynthesis of Multicarbon Products via Local CO ₂ Regeneration. <i>ACS Energy Letters</i> , 2021, 6, 2952-2959.	17.4	155
192	Efficient Methane Electrosynthesis Enabled by Tuning Local CO ₂ Availability. <i>Journal of the American Chemical Society</i> , 2020, 142, 3525-3531.	13.7	154
193	Copper adparticle enabled selective electrosynthesis of n-propanol. <i>Nature Communications</i> , 2018, 9, 4614.	12.8	153
194	Engineering of CH ₃ NH ₃ Pb ₃ Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10686-10690.	13.8	152
195	Mixed-quantum-dot solar cells. <i>Nature Communications</i> , 2017, 8, 1325.	12.8	148
196	Combining Efficiency and Stability in Mixed Tin-Lead Perovskite Solar Cells by Capping Grains with an Ultrathin 2D Layer. <i>Advanced Materials</i> , 2020, 32, e1907058.	21.0	148
197	Edge stabilization in reduced-dimensional perovskites. <i>Nature Communications</i> , 2020, 11, 170.	12.8	147
198	High Color Purity Lead-Free Perovskite Light-Emitting Diodes via Sn Stabilization. <i>Advanced Science</i> , 2020, 7, 1903213.	11.2	146

#	ARTICLE	IF	CITATIONS
199	Photoconductivity from PbS-nanocrystal ⁺ semiconducting polymer composites for solution-processible, quantum-size tunableinfrared photodetectors. Applied Physics Letters, 2004, 85, 2089-2091.	3.3	145
200	Stable, active CO ₂ reduction to formate via redox-modulated stabilization of active sites. Nature Communications, 2021, 12, 5223.	12.8	145
201	Interrogating Circulating Microsomes and Exosomes Using Metal Nanoparticles. Small, 2016, 12, 727-732.	10.0	144
202	Hydronium-Induced Switching between CO ₂ Electroreduction Pathways. Journal of the American Chemical Society, 2018, 140, 3833-3837.	13.7	144
203	In Situ Back ⁺ Contact Passivation Improves Photovoltage and Fill Factor in Perovskite Solar Cells. Advanced Materials, 2019, 31, e1807435.	21.0	143
204	Monolayer Perovskite Bridges Enable Strong Quantum Dot Coupling for Efficient Solar Cells. Joule, 2020, 4, 1542-1556.	24.0	143
205	The Electrical and Optical Properties of Organometal Halide Perovskites Relevant to Optoelectronic Performance. Advanced Materials, 2018, 30, 1700764.	21.0	141
206	CO ₂ Electroreduction from Carbonate Electrolyte. ACS Energy Letters, 2019, 4, 1427-1431.	17.4	141
207	Efficient Spray ⁺ Coated Colloidal Quantum Dot Solar Cells. Advanced Materials, 2015, 27, 116-121.	21.0	139
208	Chemically Addressable Perovskite Nanocrystals for Light ⁺ Emitting Applications. Advanced Materials, 2017, 29, 1701153.	21.0	139
209	Colloidal Quantum Dot Solar Cells Exploiting Hierarchical Structuring. Nano Letters, 2015, 15, 1101-1108.	9.1	137
210	Bioinspiration in light harvesting and catalysis. Nature Reviews Materials, 2020, 5, 828-846.	48.7	136
211	Efficient near-infrared light-emitting diodes based on quantum dots in layered perovskite. Nature Photonics, 2020, 14, 227-233.	31.4	136
212	Advances in solution-processed near-infrared light-emitting diodes. Nature Photonics, 2021, 15, 656-669.	31.4	136
213	Direct, Electronic MicroRNA Detection for the Rapid Determination of Differential Expression Profiles. Angewandte Chemie - International Edition, 2009, 48, 8461-8464.	13.8	135
214	Nanomorphology-Enhanced Gas-Evolution Intensifies CO ₂ Reduction Electrochemistry. ACS Sustainable Chemistry and Engineering, 2017, 5, 4031-4040.	6.7	135
215	Color-pure red light-emitting diodes based on two-dimensional lead-free perovskites. Science Advances, 2020, 6, .	10.3	135
216	Solution-processed upconversion photodetectors based on quantum dots. Nature Electronics, 2020, 3, 251-258.	26.0	135

#	ARTICLE	IF	CITATIONS
217	Ambient-Processed Colloidal Quantum Dot Solar Cells via Individual Pre-Encapsulation of Nanoparticles. <i>Journal of the American Chemical Society</i> , 2010, 132, 5952-5953.	13.7	134
218	High-Performance Perovskite Single-Junction and Textured Perovskite/Silicon Tandem Solar Cells via Slot-Die-Coating. <i>ACS Energy Letters</i> , 2020, 5, 3034-3040.	17.4	134
219	Intermediate Binding Control Using Metal-Organic Frameworks Enhances Electrochemical CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2020, 142, 21513-21521.	13.7	133
220	Ultrafast narrowband exciton routing within layered perovskite nanoplatelets enables low-loss luminescent solar concentrators. <i>Nature Energy</i> , 2019, 4, 197-205.	39.5	132
221	Suppressed Ion Migration in Reduced-Dimensional Perovskites Improves Operating Stability. <i>ACS Energy Letters</i> , 2019, 4, 1521-1527.	17.4	130
222	Electrochemical upgrade of CO ₂ from amine capture solution. <i>Nature Energy</i> , 2021, 6, 46-53.	39.5	129
223	Ethylene Electrosynthesis: A Comparative Techno-economic Analysis of Alkaline vs Membrane Electrode Assembly vs CO ₂ -to-C ₂ H ₄ Tandems. <i>ACS Energy Letters</i> , 2021, 6, 997-1002.	17.4	129
224	High-Throughput Screening of Lead-Free Perovskite-like Materials for Optoelectronic Applications. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7183-7187.	3.1	128
225	Efficient and Stable Inverted Perovskite Solar Cells Incorporating Secondary Amines. <i>Advanced Materials</i> , 2019, 31, e1903559.	21.0	128
226	A solution-processed 1.53 μm quantum dot laser with temperature-invariant emission wavelength. <i>Optics Express</i> , 2006, 14, 3273.	3.4	127
227	Solution-Processed Quantum Dot Photodetectors. <i>Proceedings of the IEEE</i> , 2009, 97, 1666-1683.	21.3	127
228	Efficient upgrading of CO to C ₃ fuel using asymmetric C-C coupling active sites. <i>Nature Communications</i> , 2019, 10, 5186.	12.8	127
229	Conventional Solvent Oxidizes Sn(II) in Perovskite Inks. <i>ACS Energy Letters</i> , 2020, 5, 1153-1155.	17.4	127
230	Schottky barriers to colloidal quantum dot films. <i>Applied Physics Letters</i> , 2007, 91, 253117.	3.3	126
231	Nanostructuring of Sensors Determines the Efficiency of Biomolecular Capture. <i>Analytical Chemistry</i> , 2010, 82, 5928-5931.	6.5	126
232	Chloride Passivation of ZnO Electrodes Improves Charge Extraction in Colloidal Quantum Dot Photovoltaics. <i>Advanced Materials</i> , 2017, 29, 1702350.	21.0	126
233	Efficient solution-processed infrared photovoltaic cells: Planarized all-inorganic bulk heterojunction devices via inter-quantum-dot bridging during growth from solution. <i>Applied Physics Letters</i> , 2007, 90, 183113.	3.3	125
234	Ordered Nanopillar Structured Electrodes for Depleted Bulk Heterojunction Colloidal Quantum Dot Solar Cells. <i>Advanced Materials</i> , 2012, 24, 2315-2319.	21.0	124

#	ARTICLE	IF	CITATIONS
235	Nanoparticle-Mediated Binning and Profiling of Heterogeneous Circulating Tumor Cell Subpopulations. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 139-143.	13.8	123
236	Solar Cells Using Quantum Funnel. <i>Nano Letters</i> , 2011, 11, 3701-3706.	9.1	121
237	Double-Sided Junctions Enable High-Performance Colloidal-Quantum-Dot Photovoltaics. <i>Advanced Materials</i> , 2016, 28, 4142-4148.	21.0	121
238	Enhanced infrared photovoltaic efficiency in PbS nanocrystal/semiconducting polymer composites: 600-fold increase in maximum power output via control of the ligand barrier. <i>Applied Physics Letters</i> , 2005, 87, 233101.	3.3	120
239	Efficient hybrid colloidal quantum dot/organic solar cells mediated by near-infrared sensitizing small molecules. <i>Nature Energy</i> , 2019, 4, 969-976.	39.5	120
240	Tuning OH binding energy enables selective electrochemical oxidation of ethylene to ethylene glycol. <i>Nature Catalysis</i> , 2020, 3, 14-22.	34.4	120
241	Autonomous atmospheric water seeping MOF matrix. <i>Science Advances</i> , 2020, 6, .	10.3	120
242	Aptamer and Antisense-Mediated Two-Dimensional Isolation of Specific Cancer Cell Subpopulations. <i>Journal of the American Chemical Society</i> , 2016, 138, 2476-2479.	13.7	119
243	Record Charge Carrier Diffusion Length in Colloidal Quantum Dot Solids via Mutual Dot-Dot Surface Passivation. <i>Advanced Materials</i> , 2015, 27, 3325-3330.	21.0	118
244	Aluminum doped zinc oxide for organic photovoltaics. <i>Applied Physics Letters</i> , 2009, 94, 213301.	3.3	117
245	Interface Recombination in Depleted Heterojunction Photovoltaics based on Colloidal Quantum Dots. <i>Advanced Energy Materials</i> , 2013, 3, 917-922.	19.5	117
246	Mobile-Ion-Induced Degradation of Organic Hole-Selective Layers in Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14517-14523.	3.1	117
247	Hierarchical Nanotextured Microelectrodes Overcome the Molecular Transport Barrier To Achieve Rapid, Direct Bacterial Detection. <i>ACS Nano</i> , 2011, 5, 3360-3366.	14.6	116
248	Chloride Insertion-Immobilization Enables Bright, Narrowband, and Stable Blue-Emitting Perovskite Diodes. <i>Journal of the American Chemical Society</i> , 2020, 142, 5126-5134.	13.7	116
249	Dynamic Trap Formation and Elimination in Colloidal Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 987-992.	4.6	115
250	Colloidal quantum dot photodetectors. <i>Infrared Physics and Technology</i> , 2011, 54, 278-282.	2.9	114
251	Colloidal CdSe Nanoplatelets with Narrow and Continuously-Tunable Electroluminescence. <i>Nano Letters</i> , 2015, 15, 4611-4615.	9.1	114
252	The Donor-Supply Electrode Enhances Performance in Colloidal Quantum Dot Solar Cells. <i>ACS Nano</i> , 2013, 7, 6111-6116.	14.6	113

#	ARTICLE	IF	CITATIONS
253	Oxygen-tolerant electroproduction of C ₂ products from simulated flue gas. <i>Energy and Environmental Science</i> , 2020, 13, 554-561.	30.8	113
254	Efficient Infrared Electroluminescent Devices Using Solution-Processed Colloidal Quantum Dots. <i>Advanced Functional Materials</i> , 2005, 15, 1865-1869.	14.9	112
255	Chelating-agent-assisted control of CsPbBr ₃ quantum well growth enables stable blue perovskite emitters. <i>Nature Communications</i> , 2020, 11, 3674.	12.8	112
256	A Multi-functional Molecular Modifier Enabling Efficient Large-Area Perovskite Light-Emitting Diodes. <i>Joule</i> , 2020, 4, 1977-1987.	24.0	111
257	Ultrasensitive Electrochemical Biomolecular Detection Using Nanostructured Microelectrodes. <i>Accounts of Chemical Research</i> , 2014, 47, 2417-2425.	15.6	110
258	Microsecond-sustained lasing from colloidal quantum dot solids. <i>Nature Communications</i> , 2015, 6, 8694.	12.8	109
259	Crosslinked Remote-Doped Hole-Extracting Contacts Enhance Stability under Accelerated Lifetime Testing in Perovskite Solar Cells. <i>Advanced Materials</i> , 2016, 28, 2807-2815.	21.0	108
260	Machine Learning Accelerates Discovery of Optimal Colloidal Quantum Dot Synthesis. <i>ACS Nano</i> , 2019, 13, 11122-11128.	14.6	108
261	Photochemically Cross-Linked Quantum Well Ligands for 2D/3D Perovskite Photovoltaics with Improved Photovoltage and Stability. <i>Journal of the American Chemical Society</i> , 2019, 141, 14180-14189.	13.7	107
262	Solution-based circuits enable rapid and multiplexed pathogen detection. <i>Nature Communications</i> , 2013, 4, 2001.	12.8	106
263	Quantum-Dot-Derived Catalysts for CO ₂ Reduction Reaction. <i>Joule</i> , 2019, 3, 1703-1718.	24.0	106
264	High-Rate and Efficient Ethylene Electrosynthesis Using a Catalyst/Promoter/Transport Layer. <i>ACS Energy Letters</i> , 2020, 5, 2811-2818.	17.4	106
265	Engineering charge transport by heterostructuring solution-processed semiconductors. <i>Nature Reviews Materials</i> , 2017, 2, .	48.7	105
266	Colloidal Quantum Dot Photovoltaics: The Effect of Polydispersity. <i>Nano Letters</i> , 2012, 12, 1007-1012.	9.1	104
267	Multifunctional quantum dot DNA hydrogels. <i>Nature Communications</i> , 2017, 8, 381.	12.8	104
268	Electron Acceptor Materials Engineering in Colloidal Quantum Dot Solar Cells. <i>Advanced Materials</i> , 2011, 23, 3832-3837.	21.0	102
269	Self-Assembled, Nanowire Network Electrodes for Depleted Bulk Heterojunction Solar Cells. <i>Advanced Materials</i> , 2013, 25, 1769-1773.	21.0	102
270	Crystal symmetry breaking and vacancies in colloidal lead chalcogenide quantum dots. <i>Nature Materials</i> , 2016, 15, 987-994.	27.5	101

#	ARTICLE	IF	CITATIONS
271	Multi-cation perovskites prevent carrier reflection from grain surfaces. <i>Nature Materials</i> , 2020, 19, 412-418.	27.5	100
272	CO ₂ Electroreduction to Formate at a Partial Current Density of 930 mA cm ⁻² with InP Colloidal Quantum Dot Derived Catalysts. <i>ACS Energy Letters</i> , 2021, 6, 79-84.	17.4	100
273	Light emission efficiency and dynamics in silicon-rich silicon nitride films. <i>Applied Physics Letters</i> , 2006, 88, 233109.	3.3	99
274	Directly Deposited Quantum Dot Solids Using a Colloidally Stable Nanoparticle Ink. <i>Advanced Materials</i> , 2013, 25, 5742-5749.	21.0	99
275	Highly Specific Electrochemical Analysis of Cancer Cells using Multi-Nanoparticle Labeling. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 13145-13149.	13.8	99
276	Stable Colloidal Quantum Dot Inks Enable Inkjet-Printed High-Sensitivity Infrared Photodetectors. <i>ACS Nano</i> , 2019, 13, 11988-11995.	14.6	99
277	Passivation of the Buried Interface via Preferential Crystallization of 2D Perovskite on Metal Oxide Transport Layers. <i>Advanced Materials</i> , 2021, 33, e2103394.	21.0	99
278	Automated Synthesis of Photovoltaic-Quality Colloidal Quantum Dots Using Separate Nucleation and Growth Stages. <i>ACS Nano</i> , 2013, 7, 10158-10166.	14.6	97
279	Low coordination number copper catalysts for electrochemical CO ₂ methanation in a membrane electrode assembly. <i>Nature Communications</i> , 2021, 12, 2932.	12.8	97
280	Photonic pseudo-gap-based modification of photoluminescence from CdS nanocrystal satellites around polymer microspheres in a photonic crystal. <i>Applied Physics Letters</i> , 2002, 81, 3134-3136.	3.3	96
281	Infrared Colloidal Quantum Dot Photovoltaics via Coupling Enhancement and Agglomeration Suppression. <i>ACS Nano</i> , 2015, 9, 8833-8842.	14.6	96
282	Efficient electrosynthesis of n-propanol from carbon monoxide using a Ag-Ru-Cu catalyst. <i>Nature Energy</i> , 2022, 7, 170-176.	39.5	96
283	Synthesis and Optical Properties of Thiol-Stabilized PbS Nanocrystals. <i>Langmuir</i> , 2005, 21, 1086-1090.	3.5	95
284	Carbon-efficient carbon dioxide electrolyzers. <i>Nature Sustainability</i> , 2022, 5, 563-573.	23.7	95
285	Highly Luminescent Lead Sulfide Nanocrystals in Organic Solvents and Water through Ligand Exchange with Poly(acrylic acid). <i>Langmuir</i> , 2008, 24, 8215-8219.	3.5	94
286	Bright and Stable Light-Emitting Diodes Based on Perovskite Quantum Dots in Perovskite Matrix. <i>Journal of the American Chemical Society</i> , 2021, 143, 15606-15615.	13.7	94
287	Jointly Tuned Plasmonic-Excitonic Photovoltaics Using Nanoshells. <i>Nano Letters</i> , 2013, 13, 1502-1508.	9.1	93
288	Promoting CO ₂ methanation via ligand-stabilized metal oxide clusters as hydrogen-donating motifs. <i>Nature Communications</i> , 2020, 11, 6190.	12.8	93

#	ARTICLE	IF	CITATIONS
289	Wide-Bandgap Perovskite Quantum Dots in Perovskite Matrix for Sky-Blue Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2022, 144, 4009-4016.	13.7	92
290	NIR-Emitting Colloidal Quantum Dots Having 26% Luminescence Quantum Yield in Buffer Solution. <i>Journal of the American Chemical Society</i> , 2007, 129, 7218-7219.	13.7	91
291	Machine-Learning-Accelerated Perovskite Crystallization. <i>Matter</i> , 2020, 2, 938-947.	10.0	91
292	Silica-copper catalyst interfaces enable carbon-carbon coupling towards ethylene electrosynthesis. <i>Nature Communications</i> , 2021, 12, 2808.	12.8	91
293	Nanostructuring of Patterned Microelectrodes To Enhance the Sensitivity of Electrochemical Nucleic Acids Detection. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8457-8460.	13.8	90
294	Rapid electrochemical phenotypic profiling of antibiotic-resistant bacteria. <i>Lab on A Chip</i> , 2015, 15, 2799-2807.	6.0	90
295	Suppressing the liquid product crossover in electrochemical CO ₂ reduction. <i>SmartMat</i> , 2021, 2, 12-16.	10.7	90
296	Grain Transformation and Degradation Mechanism of Formamidinium and Cesium Lead Iodide Perovskite under Humidity and Light. <i>ACS Energy Letters</i> , 2021, 6, 934-940.	17.4	90
297	Room-temperature amplified spontaneous emission at 1300 nm in solution-processed PbS quantum-dot films. <i>Optics Letters</i> , 2005, 30, 171.	3.3	89
298	0D 2D Quantum Dot: Metal Dichalcogenide Nanocomposite Photocatalyst Achieves Efficient Hydrogen Generation. <i>Advanced Materials</i> , 2017, 29, 1605646.	21.0	89
299	Biofunctionalized conductive polymers enable efficient CO ₂ electroreduction. <i>Science Advances</i> , 2017, 3, e1700686.	10.3	89
300	Multication perovskite 2D/3D interfaces form via progressive dimensional reduction. <i>Nature Communications</i> , 2021, 12, 3472.	12.8	89
301	Efficient excitation transfer from polymer to nanocrystals. <i>Applied Physics Letters</i> , 2004, 84, 4295-4297.	3.3	88
302	Colloidal quantum dot photodetectors with 10-ns response time and 80% quantum efficiency at 1,550 nm. <i>Matter</i> , 2021, 4, 1042-1053.	10.0	88
303	A Facet-Specific Quantum Dot Passivation Strategy for Colloid Management and Efficient Infrared Photovoltaics. <i>Advanced Materials</i> , 2019, 31, e1805580.	21.0	87
304	Effect of Solvent Environment on Colloidal Quantum Dot Solar Cell Manufacturability and Performance. <i>Advanced Materials</i> , 2014, 26, 4717-4723.	21.0	86
305	Azobenzenes for photonic network applications: Third-order nonlinear optical properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2001, 12, 483-489.	2.2	85
306	Increasing Polymer Solar Cell Fill Factor by Trap-Filling with F4TCNQ at Parts Per Thousand Concentration. <i>Advanced Materials</i> , 2016, 28, 6491-6496.	21.0	85

#	ARTICLE	IF	CITATIONS
307	Profiling Functional and Biochemical Phenotypes of Circulating Tumor Cells Using a Two-Dimensional Sorting Device. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 163-168.	13.8	85
308	Use machine learning to find energy materials. <i>Nature</i> , 2017, 552, 23-27.	27.8	85
309	Nucleotide-Directed Growth of Semiconductor Nanocrystals. <i>Journal of the American Chemical Society</i> , 2006, 128, 64-65.	13.7	84
310	Field-emission from quantum-dot-in-perovskite solids. <i>Nature Communications</i> , 2017, 8, 14757.	12.8	83
311	A metal-supported single-atom catalytic site enables carbon dioxide hydrogenation. <i>Nature Communications</i> , 2022, 13, 819.	12.8	83
312	Direct Profiling of Cancer Biomarkers in Tumor Tissue Using a Multiplexed Nanostructured Microelectrode Integrated Circuit. <i>ACS Nano</i> , 2009, 3, 3207-3213.	14.6	82
313	Solution-processed colloidal quantum dot photovoltaics: A perspective. <i>Energy and Environmental Science</i> , 2011, 4, 4870.	30.8	82
314	In Situ Inorganic Ligand Replenishment Enables Bandgap Stability in Mixed-Halide Perovskite Quantum Dot Solids. <i>Advanced Materials</i> , 2022, 34, e2200854.	21.0	82
315	Solution-processed infrared photovoltaic devices with >10% monochromatic internal quantum efficiency. <i>Applied Physics Letters</i> , 2005, 87, 213112.	3.3	81
316	Mixed Lead Halide Passivation of Quantum Dots. <i>Advanced Materials</i> , 2019, 31, e1904304.	21.0	81
317	Bipolar membrane electrolyzers enable high single-pass CO ₂ electroreduction to multicarbon products. <i>Nature Communications</i> , 2022, 13, .	12.8	81
318	A two-step route to planar perovskite cells exhibiting reduced hysteresis. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	80
319	Amide-Catalyzed Phase-Selective Crystallization Reduces Defect Density in Wide-Bandgap Perovskites. <i>Advanced Materials</i> , 2018, 30, e1706275.	21.0	80
320	Pseudohalide-Exchanged Quantum Dot Solids Achieve Record Quantum Efficiency in Infrared Photovoltaics. <i>Advanced Materials</i> , 2017, 29, 1700749.	21.0	79
321	Overcoming the Ambient Manufacturability-Scalability-Performance Bottleneck in Colloidal Quantum Dot Photovoltaics. <i>Advanced Materials</i> , 2018, 30, e1801661.	21.0	79
322	Multiple Self-Trapped Emissions in the Lead-Free Halide Cs ₃ Cu ₂ I ₅ . <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4326-4330.	4.6	79
323	Ligand-bridged charge extraction and enhanced quantum efficiency enable efficient n-i-p perovskite/silicon tandem solar cells. <i>Energy and Environmental Science</i> , 2021, 14, 4377-4390.	30.8	79
324	[60] Fullerene-Containing Polyurethane Films with Large Ultrafast Nonresonant Third-Order Nonlinearity at Telecommunication Wavelengths. <i>Journal of the American Chemical Society</i> , 2003, 125, 13648-13649.	13.7	78

#	ARTICLE	IF	CITATIONS
325	In Situ Formation of Nano Ni-Co Oxyhydroxide Enables Water Oxidation Electrocatalysts Durable at High Current Densities. <i>Advanced Materials</i> , 2021, 33, e2103812.	21.0	78
326	Discovery of temperature-induced stability reversal in perovskites using high-throughput robotic learning. <i>Nature Communications</i> , 2021, 12, 2191.	12.8	77
327	Heavy-Metal-Free Solution-Processed Nanoparticle-Based Photodetectors: Doping of Intrinsic Vacancies Enables Engineering of Sensitivity and Speed. <i>ACS Nano</i> , 2009, 3, 331-338.	14.6	76
328	Synergistic Doping of Fullerene Electron Transport Layer and Colloidal Quantum Dot Solids Enhances Solar Cell Performance. <i>Advanced Materials</i> , 2015, 27, 917-921.	21.0	75
329	Spectrally Resolved Ultrafast Exciton Transfer in Mixed Perovskite Quantum Wells. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 419-426.	4.6	74
330	Optimization of Band Structure and Quantum-Size-Effect Tuning for Two-Photon Absorption Enhancement in Quantum Dots. <i>Nano Letters</i> , 2011, 11, 1227-1231.	9.1	73
331	Atomistic Model of Fluorescence Intermittency of Colloidal Quantum Dots. <i>Physical Review Letters</i> , 2014, 112, 157401.	7.8	73
332	Photojunction Field-Effect Transistor Based on a Colloidal Quantum Dot Absorber Channel Layer. <i>ACS Nano</i> , 2015, 9, 356-362.	14.6	73
333	Biotemplated nanostructures: directed assembly of electronic and optical materials using nanoscale complementarity. <i>Journal of Materials Chemistry</i> , 2008, 18, 954-964.	6.7	72
334	Origins of Stokes Shift in PbS Nanocrystals. <i>Nano Letters</i> , 2017, 17, 7191-7195.	9.1	72
335	Enhanced multi-carbon alcohol electroproduction from CO via modulated hydrogen adsorption. <i>Nature Communications</i> , 2020, 11, 3685.	12.8	72
336	Templated Assembly of CsPbBr ₃ Perovskite Nanocrystals into 2D Photonic Supercrystals with Amplified Spontaneous Emission. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17750-17756.	13.8	72
337	Giant Alloyed Hot Injection Shells Enable Ultralow Optical Gain Threshold in Colloidal Quantum Wells. <i>ACS Nano</i> , 2019, 13, 10662-10670.	14.6	71
338	Enhanced Electrochemical Reduction of CO ₂ Catalyzed by Cobalt and Iron Amino Porphyrin Complexes. <i>ACS Applied Energy Materials</i> , 2019, 2, 1330-1335.	5.1	71
339	Efficient Photon Recycling and Radiation Trapping in Cesium Lead Halide Perovskite Waveguides. <i>ACS Energy Letters</i> , 2018, 3, 1492-1498.	17.4	70
340	Reagentless biomolecular analysis using a molecular pendulum. <i>Nature Chemistry</i> , 2021, 13, 428-434.	13.6	70
341	Gold-in-copper at low *CO coverage enables efficient electromethanation of CO ₂ . <i>Nature Communications</i> , 2021, 12, 3387.	12.8	70
342	Role of Bond Adaptability in the Passivation of Colloidal Quantum Dot Solids. <i>ACS Nano</i> , 2013, 7, 7680-7688.	14.6	69

#	ARTICLE	IF	CITATIONS
343	Broadband solar absorption enhancement via periodic nanostructuring of electrodes. Scientific Reports, 2013, 3, 2928.	3.3	69
344	Single-step fabrication of quantum funnels via centrifugal colloidal casting of nanoparticle films. Nature Communications, 2015, 6, 7772.	12.8	68
345	Single-cell mRNA cytometry via sequence-specific nanoparticle clustering and trapping. Nature Chemistry, 2018, 10, 489-495.	13.6	68
346	Direct Genetic Analysis of Ten Cancer Cells: Tuning Sensor Structure and Molecular Probe Design for Efficient mRNA Capture. Angewandte Chemie - International Edition, 2011, 50, 4137-4141.	13.8	67
347	Butylamine-Catalyzed Synthesis of Nanocrystal Inks Enables Efficient Infrared CQD Solar Cells. Advanced Materials, 2018, 30, e1803830.	21.0	67
348	Quantum Dot-Plasmon Lasing with Controlled Polarization Patterns. ACS Nano, 2020, 14, 3426-3433.	14.6	66
349	Heterogeneous deposition of noble metals on semiconductor nanoparticles in organic or aqueous solvents. Journal of Materials Chemistry, 2006, 16, 4025.	6.7	65
350	Colloidal quantum dot solar cells on curved and flexible substrates. Applied Physics Letters, 2014, 105, .	3.3	65
351	Efficient electrocatalytic conversion of carbon dioxide in a low-resistance pressurized alkaline electrolyzer. Applied Energy, 2020, 261, 114305.	10.1	65
352	3D-Printable Fluoropolymer Gas Diffusion Layers for CO ₂ Electroreduction. Advanced Materials, 2021, 33, e2003855.	21.0	65
353	Solution Processed Photovoltaic Devices with 2% Infrared Monochromatic Power Conversion Efficiency: Performance Optimization and Oxide Formation. Advanced Materials, 2008, 20, 3433-3439.	21.0	64
354	High-Curvature Nanostructuring Enhances Probe Display for Biomolecular Detection. Nano Letters, 2017, 17, 1289-1295.	9.1	64
355	Doping Control Via Molecularly Engineered Surface Ligand Coordination. Advanced Materials, 2013, 25, 5586-5592.	21.0	62
356	Ligand-Induced Surface Charge Density Modulation Generates Local Type-II Band Alignment in Reduced-Dimensional Perovskites. Journal of the American Chemical Society, 2019, 141, 13459-13467.	13.7	62
357	Electrocatalytic Rate Alignment Enhances Syngas Generation. Joule, 2019, 3, 257-264.	24.0	62
358	Hydration-Effect-Promoting Ni-Fe Oxyhydroxide Catalysts for Neutral Water Oxidation. Advanced Materials, 2020, 32, e1906806.	21.0	62
359	All-Quantum-Dot Infrared Light-Emitting Diodes. ACS Nano, 2015, 9, 12327-12333.	14.6	61
360	The quantum-confined Stark effect in layered hybrid perovskites mediated by orientational polarizability of confined dipoles. Nature Communications, 2018, 9, 4214.	12.8	61

#	ARTICLE	IF	CITATIONS
361	Polymerase Chain Reaction-Free, Sample-to-Answer Bacterial Detection in 30 Minutes with Integrated Cell Lysis. <i>Analytical Chemistry</i> , 2012, 84, 21-25.	6.5	60
362	Inverted Colloidal Quantum Dot Solar Cells. <i>Advanced Materials</i> , 2014, 26, 3321-3327.	21.0	59
363	Combinatorial Probes for High-Throughput Electrochemical Analysis of Circulating Nucleic Acids in Clinical Samples. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3711-3716.	13.8	59
364	A Chemically Orthogonal Hole Transport Layer for Efficient Colloidal Quantum Dot Solar Cells. <i>Advanced Materials</i> , 2020, 32, e1906199.	21.0	59
365	In Situ Electrochemical ELISA for Specific Identification of Captured Cancer Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 14165-14169.	8.0	58
366	Enhanced electrocatalytic performance of palladium nanoparticles with high energy surfaces in formic acid oxidation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11582-11585.	10.3	58
367	Joint tuning of nanostructured Cu-oxide morphology and local electrolyte programs high-rate CO ₂ reduction to C ₂ H ₄ . <i>Green Chemistry</i> , 2017, 19, 4023-4030.	9.0	58
368	An antibonding valence band maximum enables defect-tolerant and stable GeSe photovoltaics. <i>Nature Communications</i> , 2021, 12, 670.	12.8	58
369	Flexible Filter-Free Narrowband Photodetector with High Gain and Customized Responsive Spectrum. <i>Advanced Functional Materials</i> , 2017, 27, 1702360.	14.9	57
370	Activated Electron-Transport Layers for Infrared Quantum Dot Optoelectronics. <i>Advanced Materials</i> , 2018, 30, e1801720.	21.0	57
371	Metal-Organic Framework Thin Films on High-Curvature Nanostructures Toward Tandem Electrocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31225-31232.	8.0	57
372	Acid-Assisted Ligand Exchange Enhances Coupling in Colloidal Quantum Dot Solids. <i>Nano Letters</i> , 2018, 18, 4417-4423.	9.1	57
373	All-Perovskite Tandem Solar Cells: A Roadmap to Uniting High Efficiency with High Stability. <i>Accounts of Materials Research</i> , 2020, 1, 63-76.	11.7	57
374	Selective contacts drive charge extraction in quantum dot solids via asymmetry in carrier transfer kinetics. <i>Nature Communications</i> , 2013, 4, 2272.	12.8	56
375	ZnFe ₂ O ₄ Leaves Grown on TiO ₂ Trees Enhance Photoelectrochemical Water Splitting. <i>Small</i> , 2016, 12, 3181-3188.	10.0	56
376	Multibandgap quantum dot ensembles for solar-matched infrared energy harvesting. <i>Nature Communications</i> , 2018, 9, 4003.	12.8	56
377	A Tuned Alternating D-A Copolymer Hole-Transport Layer Enables Colloidal Quantum Dot Solar Cells with Superior Fill Factor and Efficiency. <i>Advanced Materials</i> , 2020, 32, e2004985.	21.0	56
378	PbS quantum dot electroabsorption modulation across the extended communications band 1200-1700nm. <i>Applied Physics Letters</i> , 2005, 87, 053101.	3.3	55

#	ARTICLE	IF	CITATIONS
379	The Silicon:Colloidal Quantum Dot Heterojunction. <i>Advanced Materials</i> , 2015, 27, 7445-7450.	21.0	55
380	Contactless measurements of photocarrier transport properties in perovskite single crystals. <i>Nature Communications</i> , 2019, 10, 1591.	12.8	55
381	The Complete In ϵ Gap Electronic Structure of Colloidal Quantum Dot Solids and Its Correlation with Electronic Transport and Photovoltaic Performance. <i>Advanced Materials</i> , 2014, 26, 937-942.	21.0	54
382	Controlled Steric Hindrance Enables Efficient Ligand Exchange for Stable, Infrared-Bandgap Quantum Dot Inks. <i>ACS Energy Letters</i> , 2019, 4, 1225-1230.	17.4	54
383	High-throughput genome-wide phenotypic screening via immunomagnetic cell sorting. <i>Nature Biomedical Engineering</i> , 2019, 3, 796-805.	22.5	53
384	Anchored Ligands Facilitate Efficient B-Site Doping in Metal Halide Perovskites. <i>Journal of the American Chemical Society</i> , 2019, 141, 8296-8305.	13.7	53
385	Solvent-Solute Coordination Engineering for Efficient Perovskite Luminescent Solar Concentrators. <i>Joule</i> , 2020, 4, 631-643.	24.0	53
386	Downstream of the CO ₂ Electrolyzer: Assessing the Energy Intensity of Product Separation. <i>ACS Energy Letters</i> , 2021, 6, 4405-4412.	17.4	53
387	Size dependence of carrier dynamics and carrier multiplication in PbS quantum dots. <i>Physical Review B</i> , 2011, 83, .	3.2	52
388	Systematic optimization of quantum junction colloidal quantum dot solar cells. <i>Applied Physics Letters</i> , 2012, 101, 151112.	3.3	52
389	Single-step colloidal quantum dot films for infrared solar harvesting. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	52
390	Permanent Lattice Compression of Lead-Halide Perovskite for Persistently Enhanced Optoelectronic Properties. <i>ACS Energy Letters</i> , 2020, 5, 642-649.	17.4	52
391	Atomistic Design of CdSe/CdS Core-Shell Quantum Dots with Suppressed Auger Recombination. <i>Nano Letters</i> , 2016, 16, 6491-6496.	9.1	51
392	Picosecond Charge Transfer and Long Carrier Diffusion Lengths in Colloidal Quantum Dot Solids. <i>Nano Letters</i> , 2018, 18, 7052-7059.	9.1	51
393	Spectrally Tunable and Stable Electroluminescence Enabled by Rubidium Doping of CsPbBr ₃ Nanocrystals. <i>Advanced Optical Materials</i> , 2019, 7, 1901440.	7.3	51
394	Boosting the Single-Pass Conversion for Renewable Chemical Electrosynthesis. <i>Joule</i> , 2019, 3, 13-15.	24.0	51
395	Regioselective magnetization in semiconducting nanorods. <i>Nature Nanotechnology</i> , 2020, 15, 192-197.	31.5	51
396	Boride-derived oxygen-evolution catalysts. <i>Nature Communications</i> , 2021, 12, 6089.	12.8	51

#	ARTICLE	IF	CITATIONS
397	A microchanneled solid electrolyte for carbon-efficient CO ₂ electrolysis. <i>Joule</i> , 2022, 6, 1333-1343.	24.0	51
398	Ultrafast nonresonant third-order optical nonlinearity of fullerene-containing polyurethane films at telecommunication wavelengths. <i>Applied Physics Letters</i> , 2003, 83, 2115-2117.	3.3	50
399	Behavior of light at photonic crystal interfaces. <i>Physical Review B</i> , 2005, 71, .	3.2	50
400	Luminescence from processible quantum dot-polymer light emitters 1100–1600 nm: Tailoring spectral width and shape. <i>Applied Physics Letters</i> , 2004, 84, 3459-3461.	3.3	49
401	Smooth Morphology Ultrasensitive Solution-Processed Photodetectors. <i>Advanced Materials</i> , 2008, 20, 4398-4402.	21.0	49
402	Role of Symmetry Breaking on the Optical Transitions in Lead-Salt Quantum Dots. <i>Nano Letters</i> , 2010, 10, 3577-3582.	9.1	49
403	Enhanced Open-Circuit Voltage in Colloidal Quantum Dot Photovoltaics via Reactivity-Controlled Solution-Phase Ligand Exchange. <i>Advanced Materials</i> , 2017, 29, 1703627.	21.0	49
404	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16077-16081.	13.8	49
405	Nanostructured Back Reflectors for Efficient Colloidal Quantum-Dot Infrared Optoelectronics. <i>Advanced Materials</i> , 2019, 31, e1901745.	21.0	49
406	Atomistic Description of Thiostannate-Capped CdSe Nanocrystals: Retention of Four-Coordinate SnS ₄ Motif and Preservation of Cd-Rich Stoichiometry. <i>Journal of the American Chemical Society</i> , 2015, 137, 1862-1874.	13.7	48
407	Orthogonal colloidal quantum dot inks enable efficient multilayer optoelectronic devices. <i>Nature Communications</i> , 2020, 11, 4814.	12.8	48
408	Engineering Directionality in Quantum Dot Shell Lasing Using Plasmonic Lattices. <i>Nano Letters</i> , 2020, 20, 1468-1474.	9.1	48
409	Chip-Based Nanostructured Sensors Enable Accurate Identification and Classification of Circulating Tumor Cells in Prostate Cancer Patient Blood Samples. <i>Analytical Chemistry</i> , 2013, 85, 398-403.	6.5	47
410	Stabilizing Surface Passivation Enables Stable Operation of Colloidal Quantum Dot Photovoltaic Devices at Maximum Power Point in an Air Ambient. <i>Advanced Materials</i> , 2020, 32, e1906497.	21.0	47
411	Micron Thick Colloidal Quantum Dot Solids. <i>Nano Letters</i> , 2020, 20, 5284-5291.	9.1	47
412	Nanostructured CMOS Wireless Ultra-Wideband Label-Free PCR-Free DNA Analysis SoC. <i>IEEE Journal of Solid-State Circuits</i> , 2014, 49, 1223-1241.	5.4	46
413	Lattice dynamics and the nature of structural transitions in organolead halide perovskites. <i>Physical Review B</i> , 2016, 94, .	3.2	46
414	Mechanistic Control of the Growth of Three-Dimensional Gold Sensors. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21123-21132.	3.1	46

#	ARTICLE	IF	CITATIONS
415	Nanoimprint-Transfer-Patterned Solids Enhance Light Absorption in Colloidal Quantum Dot Solar Cells. <i>Nano Letters</i> , 2017, 17, 2349-2353.	9.1	46
416	Ligand-Assisted Reconstruction of Colloidal Quantum Dots Decreases Trap State Density. <i>Nano Letters</i> , 2020, 20, 3694-3702.	9.1	46
417	Stable all-optical limiting in nonlinear periodic structures I Analysis. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 43.	2.1	45
418	Molecular Doping of the Hole-Transporting Layer for Efficient, Single-Step-Deposited Colloidal Quantum Dot Photovoltaics. <i>ACS Energy Letters</i> , 2017, 2, 1952-1959.	17.4	45
419	Chemicalâ€”Electricity Carbon: Water Device. <i>Advanced Materials</i> , 2018, 30, e1707635.	21.0	45
420	Energy Level Tuning at the MAPbI ₃ Perovskite/Contact Interface Using Chemical Treatment. <i>ACS Energy Letters</i> , 2019, 4, 2181-2184.	17.4	45
421	Solution-processed perovskite-colloidal quantum dot tandem solar cells for photon collection beyond 1000 nm. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26020-26028.	10.3	44
422	Hybrid tandem solar cells with depleted-heterojunction quantum dot and polymer bulk heterojunction subcells. <i>Nano Energy</i> , 2015, 17, 196-205.	16.0	43
423	Cellulose Nanocrystal:Polymer Hybrid Optical Diffusers for Indexâ€”Matchingâ€”Free Light Management in Optoelectronic Devices. <i>Advanced Optical Materials</i> , 2017, 5, 1700430.	7.3	43
424	Ternary Alloys Enable Efficient Production of Methoxylated Chemicals via Selective Electrocatalytic Hydrogenation of Lignin Monomers. <i>Journal of the American Chemical Society</i> , 2021, 143, 17226-17235.	13.7	43
425	Electroâ€”Optic Modulation in Hybrid Metal Halide Perovskites. <i>Advanced Materials</i> , 2019, 31, e1808336.	21.0	42
426	Toward Stable Monolithic Perovskite/Silicon Tandem Photovoltaics: A Six-Month Outdoor Performance Study in a Hot and Humid Climate. <i>ACS Energy Letters</i> , 2021, 6, 2944-2951.	17.4	42
427	Facetâ€”Oriented Coupling Enables Fast and Sensitive Colloidal Quantum Dot Photodetectors. <i>Advanced Materials</i> , 2021, 33, e2101056.	21.0	42
428	Photonic crystal heterostructures: Waveguiding phenomena and methods of solution in an envelope function picture. <i>Physical Review B</i> , 2002, 65, .	3.2	41
429	Ultrafast nonresonant third-order optical nonlinearity of a conjugated 3,3â€”bipyridine derivative from 1150 to 1600 nm. <i>Applied Physics Letters</i> , 2003, 82, 4420-4422.	3.3	41
430	Carrier Relaxation Dynamics in Lead Sulfide Colloidal Quantum Dots. <i>Journal of Physical Chemistry B</i> , 2008, 112, 2757-2760.	2.6	41
431	Biexciton Resonances Reveal Exciton Localization in Stacked Perovskite Quantum Wells. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3895-3901.	4.6	41
432	Precise Control of Thermal and Redox Properties of Organic Holeâ€”Transport Materials. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15529-15533.	13.8	41

#	ARTICLE	IF	CITATIONS
433	CO ₂ Electroreduction to Methane at Production Rates Exceeding 100 mA/cm ² . ACS Sustainable Chemistry and Engineering, 2020, 8, 14668-14673.	6.7	41
434	Theory of photonic crystal heterostructures. Physical Review B, 2002, 66, .	3.2	40
435	High near-infrared photoluminescence quantum efficiency from PbS nanocrystals in polymer films. Synthetic Metals, 2005, 148, 257-261.	3.9	40
436	Imprinted Electrodes for Enhanced Light Trapping in Solution Processed Solar Cells. Advanced Materials, 2014, 26, 443-448.	21.0	40
437	Remote Molecular Doping of Colloidal Quantum Dot Photovoltaics. ACS Energy Letters, 2016, 1, 922-930.	17.4	40
438	Hybrid Tandem Quantum Dot/Organic Solar Cells with Enhanced Photocurrent and Efficiency via Ink and Interlayer Engineering. ACS Energy Letters, 2018, 3, 1307-1314.	17.4	40
439	Potential-Responsive Surfaces for Manipulation of Cell Adhesion, Release, and Differentiation. Angewandte Chemie - International Edition, 2019, 58, 14519-14523.	13.8	40
440	Tracking the expression of therapeutic protein targets in rare cells by antibody-mediated nanoparticle labelling and magnetic sorting. Nature Biomedical Engineering, 2021, 5, 41-52.	22.5	40
441	Redox-mediated electrosynthesis of ethylene oxide from CO ₂ and water. Nature Catalysis, 2022, 5, 185-192.	34.4	40
442	Depleted-heterojunction colloidal quantum dot photovoltaics employing low-cost electrical contacts. Applied Physics Letters, 2010, 97, 023109.	3.3	39
443	High-Performance Quantum-Dot Solids via Elemental Sulfur Synthesis. Advanced Materials, 2014, 26, 3513-3519.	21.0	39
444	Enhanced Solar-to-Hydrogen Generation with Broadband Epsilon-Near-Zero Nanostructured Photocatalysts. Advanced Materials, 2017, 29, 1701165.	21.0	39
445	Electro-optic Response in Germanium Halide Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 1018-1027.	4.6	39
446	Synthesis, Applications, and Prospects of Quantum-Dot-In-Perovskite Solids. Advanced Energy Materials, 2022, 12, 2100774.	19.5	39
447	Rigid Conjugated Diamine Templates for Stable Dion-Jacobson-Type Two-Dimensional Perovskites. Journal of the American Chemical Society, 2021, 143, 19901-19908.	13.7	39
448	Photonic crystal heterostructures-Resonant tunnelling, waveguides and filters. Journal of Optics, 2002, 4, S242-S246.	1.5	38
449	Photooxidation and Photoconductivity of Polyferrocenylsilane Thin Films. Macromolecular Chemistry and Physics, 2003, 204, 915-921.	2.2	38
450	Reducing the crossover of carbonate and liquid products during carbon dioxide electroreduction. Cell Reports Physical Science, 2021, 2, 100522.	5.6	38

#	ARTICLE	IF	CITATIONS
451	Impact of polydispersity on light propagation in colloidal photonic crystals. <i>Applied Physics Letters</i> , 2004, 85, 5887-5889.	3.3	37
452	Design of Phosphor White Light Systems for High-Power Applications. <i>ACS Photonics</i> , 2016, 3, 2243-2248.	6.6	37
453	Large-Scale Synthesis of Metal Nanocrystals in Aqueous Suspensions. <i>Chemistry of Materials</i> , 2016, 28, 3196-3202.	6.7	37
454	Imbalanced charge carrier mobility and Schottky junction induced anomalous current-voltage characteristics of excitonic PbS colloidal quantum dot solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2016, 155, 155-165.	6.2	37
455	Electroosmotic flow steers neutral products and enables concentrated ethanol electroproduction from CO ₂ . <i>Joule</i> , 2021, 5, 2742-2753.	24.0	37
456	Eliminating the need for anodic gas separation in CO ₂ electroreduction systems via liquid-to-liquid anodic upgrading. <i>Nature Communications</i> , 2022, 13, .	12.8	37
457	Cross-linked C60 Polymer Breaches the Quantum Gap. <i>Nano Letters</i> , 2004, 4, 1673-1675.	9.1	36
458	Programmable Metal/Semiconductor Nanostructures for mRNA-Modulated Molecular Delivery. <i>Nano Letters</i> , 2018, 18, 6222-6228.	9.1	36
459	Thiophene Cation Intercalation to Improve Band-Edge Integrity in Reduced-Dimensional Perovskites. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13977-13983.	13.8	36
460	Glycerol Oxidation Pairs with Carbon Monoxide Reduction for Low-Voltage Generation of C ₂ and C ₃ Product Streams. <i>ACS Energy Letters</i> , 2021, 6, 3538-3544.	17.4	36
461	Proximal Bacterial Lysis and Detection in Nanoliter Wells Using Electrochemistry. <i>ACS Nano</i> , 2013, 7, 8183-8189.	14.6	35
462	Sample-to-Answer Isolation and mRNA Profiling of Circulating Tumor Cells. <i>Analytical Chemistry</i> , 2015, 87, 6258-6264.	6.5	35
463	Halide Re-Shelled Quantum Dot Inks for Infrared Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 37536-37541.	8.0	35
464	Nonlinear distributed-feedback structures as passive optical limiters. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2000, 17, 1360.	2.1	34
465	Enhanced Open-Circuit Voltage in Visible Quantum Dot Photovoltaics by Engineering of Carrier-Collecting Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 3792-3795.	8.0	34
466	Solution-Processed In ₂ O ₃ /ZnO Heterojunction Electron Transport Layers for Efficient Organic Bulk Heterojunction and Inorganic Colloidal Quantum-Dot Solar Cells. <i>Solar Rrl</i> , 2018, 2, 1800076.	5.8	34
467	Dimensional Mixing Increases the Efficiency of 2D/3D Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5115-5119.	4.6	34
468	Ligand Exchange at a Covalent Surface Enables Balanced Stoichiometry in III-V Colloidal Quantum Dots. <i>Nano Letters</i> , 2021, 21, 6057-6063.	9.1	34

#	ARTICLE	IF	CITATIONS
469	Fast Near-Infrared Photodetection Using III-V Colloidal Quantum Dots. <i>Advanced Materials</i> , 2022, 34, .	21.0	34
470	Dual Coordination of Ti and Pb Using Bilinkable Ligands Improves Perovskite Solar Cell Performance and Stability. <i>Advanced Functional Materials</i> , 2020, 30, 2005155.	14.9	33
471	Crystal Site Feature Embedding Enables Exploration of Large Chemical Spaces. <i>Matter</i> , 2020, 3, 433-448.	10.0	33
472	Dual-Phase Regulation for High-Efficiency Perovskite Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	33
473	Materials processing strategies for colloidal quantum dot solar cells: advances, present-day limitations, and pathways to improvement. <i>MRS Communications</i> , 2013, 3, 83-90.	1.8	32
474	Electronically Active Impurities in Colloidal Quantum Dot Solids. <i>ACS Nano</i> , 2014, 8, 11763-11769.	14.6	32
475	Velocity valleys enable efficient capture and spatial sorting of nanoparticle-bound cancer cells. <i>Nanoscale</i> , 2015, 7, 6278-6285.	5.6	32
476	Computational Study of Magic-Size CdSe Clusters with Complementary Passivation by Carboxylic and Amine Ligands. <i>Journal of Physical Chemistry C</i> , 2016, 120, 10015-10019.	3.1	32
477	Control Over Ligand Exchange Reactivity in Hole Transport Layer Enables High-Efficiency Colloidal Quantum Dot Solar Cells. <i>ACS Energy Letters</i> , 2021, 6, 468-476.	17.4	32
478	Two-dimensional profiling of carriers in a buried heterostructure multi-quantum-well laser: Calibrated scanning spreading resistance microscopy and scanning capacitance microscopy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002, 20, 2126.	1.6	31
479	Direct measurements of large near-band edge nonlinear index change from 1.48 to 1.55 μm in InGaAs/InAlGaAs multiquantum wells. <i>Applied Physics Letters</i> , 2003, 82, 4429-4431.	3.3	31
480	Efficient recovery of potent tumour-infiltrating lymphocytes through quantitative immunomagnetic cell sorting. <i>Nature Biomedical Engineering</i> , 2022, 6, 108-117.	22.5	31
481	Luminescent properties and electronic structure of conjugated polymer-dielectric nanocrystal composites. <i>Journal of Applied Physics</i> , 2002, 91, 6679.	2.5	30
482	Joint Mapping of Mobility and Trap Density in Colloidal Quantum Dot Solids. <i>ACS Nano</i> , 2013, 7, 5757-5762.	14.6	30
483	Light dilution via wavelength management for efficient high-density photobioreactors. <i>Biotechnology and Bioengineering</i> , 2017, 114, 1160-1169.	3.3	30
484	Quantum Dots in Two-Dimensional Perovskite Matrices for Efficient Near-Infrared Light Emission. <i>ACS Photonics</i> , 2017, 4, 830-836.	6.6	30
485	Deep-Blue Perovskite Single-Mode Lasing through Efficient Vapor-Assisted Chlorination. <i>Advanced Materials</i> , 2021, 33, e2006697.	21.0	30
486	Defect Tolerance of Mixed B-Site Organic-Inorganic Halide Perovskites. <i>ACS Energy Letters</i> , 2021, 6, 4220-4227.	17.4	30

#	ARTICLE	IF	CITATIONS
487	Bound State in the Continuum in Nanoantenna-Coupled Slab Waveguide Enables Low-Threshold Quantum-Dot Lasing. <i>Nano Letters</i> , 2021, 21, 9754-9760.	9.1	30
488	Catalyst Regeneration via Chemical Oxidation Enables Long-Term Electrochemical Carbon Dioxide Reduction. <i>Journal of the American Chemical Society</i> , 2022, 144, 13254-13265.	13.7	30
489	Direct imaging of the depletion region of an InP p-n junction under bias using scanning voltage microscopy. <i>Applied Physics Letters</i> , 2002, 81, 5057-5059.	3.3	29
490	Measurement of the phase shift upon reflection from photonic crystals. <i>Applied Physics Letters</i> , 2005, 86, 151112.	3.3	29
491	Exciton Lifetime Broadening and Distribution Profiles of PbS Colloidal Quantum Dot Thin Films Using Frequency- and Temperature-Scanned Photocurrent Radiometry. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23333-23348.	3.1	29
492	Fractal circuit sensors enable rapid quantification of biomarkers for donor lung assessment for transplantation. <i>Science Advances</i> , 2015, 1, e1500417.	10.3	29
493	Conformal Fabrication of Colloidal Quantum Dot Solids for Optically Enhanced Photovoltaics. <i>ACS Nano</i> , 2015, 9, 5447-5453.	14.6	29
494	Compound Homo Junction: Hetero Junction Reduces Bulk and Interface Recombination in ZnO Photoanodes for Water Splitting. <i>Small</i> , 2017, 13, 1603527.	10.0	29
495	Ultrathin Semiconductor Superabsorbers from the Visible to the Near-Infrared. <i>Advanced Materials</i> , 2018, 30, 1705876.	21.0	29
496	Ultrahigh resolution and color gamut with scattering-reducing transmissive pixels. <i>Nature Communications</i> , 2019, 10, 4782.	12.8	29
497	Optimizing Solid-State Ligand Exchange for Colloidal Quantum Dot Optoelectronics: How Much Is Enough?. <i>ACS Applied Energy Materials</i> , 2020, 3, 5385-5392.	5.1	29
498	Electrical Scanning Probe Microscopy: Investigating the Inner Workings of Electronic and Optoelectronic Devices. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2005, 30, 71-124.	12.3	28
499	Perovskite Quantum Dots Modeled Using ab Initio and Replica Exchange Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13965-13971.	3.1	28
500	Imaging Heterogeneously Distributed Photoactive Traps in Perovskite Single Crystals. <i>Advanced Materials</i> , 2018, 30, e1705494.	21.0	28
501	Tuning Solute Redistribution Dynamics for Scalable Fabrication of Colloidal Quantum Dot Optoelectronics. <i>Advanced Materials</i> , 2019, 31, e1805886.	21.0	28
502	Ultrasensitive and rapid quantification of rare tumorigenic stem cells in hPSC-derived cardiomyocyte populations. <i>Science Advances</i> , 2020, 6, eaay7629.	10.3	28
503	Quantum Dot Self-Assembly Enables Low-Threshold Lasing. <i>Advanced Science</i> , 2021, 8, e2101125.	11.2	28
504	Transmission regimes of periodic nonlinear optical structures. <i>Physical Review E</i> , 2000, 62, R4536-R4539.	2.1	27

#	ARTICLE	IF	CITATIONS
505	Quantum dots in a metallopolymer host: studies of composites of polyferrocenes and CdSe nanocrystals. <i>Journal of Materials Chemistry</i> , 2003, 13, 2213.	6.7	27
506	Renewables need a grand-challenge strategy. <i>Nature</i> , 2016, 538, 30-30.	27.8	27
507	Optical Resonance Engineering for Infrared Colloidal Quantum Dot Photovoltaics. <i>ACS Energy Letters</i> , 2016, 1, 852-857.	17.4	27
508	Learning-in-Templates Enables Accelerated Discovery and Synthesis of New Stable Double Perovskites. <i>Journal of the American Chemical Society</i> , 2019, 141, 3682-3690.	13.7	27
509	Title is missing!. <i>Journal of Materials Science: Materials in Electronics</i> , 2001, 12, 21-25.	2.2	26
510	Stable all-optical limiting in nonlinear periodic structures II Computations. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 1873.	2.1	26
511	Nonlinear optical figures of merit of processible composite of poly(2-methoxy,5-(2-ethylhexyloxy)-p-phenylene vinylene) and poly(methyl methacrylate). <i>Journal of Applied Physics</i> , 2002, 91, 522.	2.5	26
512	Wavelength dependence and figures of merit of ultrafast third-order optical nonlinearity of a conjugated 3,3'-bipyridine derivative. <i>Applied Optics</i> , 2003, 42, 7235.	2.1	26
513	Solution-Processed Infrared Optoelectronics: Photovoltaics, Sensors, and Sources. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2008, 14, 1223-1229.	2.9	26
514	A sensitive pair. <i>Nature Nanotechnology</i> , 2012, 7, 349-350.	31.5	26
515	Three-dimensional, sharp-tipped electrodes concentrate applied fields to enable direct electrical release of intact biomarkers from cells. <i>Lab on A Chip</i> , 2014, 14, 1785.	6.0	26
516	Quantitative Analysis of Trap-State-Mediated Exciton Transport in Perovskite-Shelled PbS Quantum Dot Thin Films Using Photocarrier Diffusion-Wave Nondestructive Evaluation and Imaging. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14416-14427.	3.1	26
517	Dopant-tuned stabilization of intermediates promotes electrosynthesis of valuable C3 products. <i>Nature Communications</i> , 2019, 10, 4807.	12.8	26
518	Third-order optical nonlinearity and figure of merit of CdS nanocrystals chemically stabilized in spin-processable polymeric films. <i>Journal of Materials Science</i> , 2004, 39, 993-996.	3.7	25
519	Ultrasensitive visual read-out of nucleic acids using electrocatalytic fluid displacement. <i>Nature Communications</i> , 2015, 6, 6978.	12.8	25
520	Broadband Epsilon-near-Zero Reflectors Enhance the Quantum Efficiency of Thin Solar Cells at Visible and Infrared Wavelengths. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 5556-5565.	8.0	25
521	Effect of disorder on transport properties in a tight-binding model for lead halide perovskites. <i>Scientific Reports</i> , 2017, 7, 8902.	3.3	25
522	Prismatic Deflection of Live Tumor Cells and Cell Clusters. <i>ACS Nano</i> , 2018, 12, 12692-12700.	14.6	25

#	ARTICLE	IF	CITATIONS
523	A fully-integrated and automated testing device for PCR-free viral nucleic acid detection in whole blood. <i>Lab on A Chip</i> , 2018, 18, 1928-1935.	6.0	25
524	Active Sulfur Sites in Semimetallic Titanium Disulfide Enable CO ₂ Electroreduction. <i>ACS Catalysis</i> , 2020, 10, 66-72.	11.2	25
525	A Donor-Supply Electrode (DSE) for Colloidal Quantum Dot Photovoltaics. <i>Nano Letters</i> , 2011, 11, 5173-5178.	9.1	24
526	Temperature- and ligand-dependent carrier transport dynamics in photovoltaic PbS colloidal quantum dot thin films using diffusion-wave methods. <i>Solar Energy Materials and Solar Cells</i> , 2017, 164, 135-145.	6.2	24
527	Examining Structure-Property-Function Relationships in Thiophene, Selenophene, and Tellurophene Homopolymers. <i>ACS Applied Energy Materials</i> , 2018, 1, 5033-5042.	5.1	24
528	Spatial Collection in Colloidal Quantum Dot Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 1908200.	14.9	24
529	Metal-Free Hydrogen-Bonded Polymers Mimic Noble Metal Electrocatalysts. <i>Advanced Materials</i> , 2020, 32, e1902177.	21.0	24
530	Transition Dipole Moments of n = 1, 2, and 3 Perovskite Quantum Wells from the Optical Stark Effect and Many-Body Perturbation Theory. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 716-723.	4.6	24
531	Au/TiO ₂ Photonic Crystals as UV-Visible Photocatalysts for H ₂ Production. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	24
532	Ga doping disrupts C-C coupling and promotes methane electroproduction on CuAl catalysts. <i>Chem Catalysis</i> , 2022, 2, 908-916.	6.1	24
533	Characterization of internal order of colloidal crystals by optical diffraction. <i>Optical and Quantum Electronics</i> , 2002, 34, 27-36.	3.3	23
534	Photoconductivity in Donor-Acceptor Polyferrocenylsilane-Fullerene Composite Films. <i>Chemistry of Materials</i> , 2005, 17, 5770-5773.	6.7	23
535	Hybrid tandem quantum dot/organic photovoltaic cells with complementary near infrared absorption. <i>Applied Physics Letters</i> , 2017, 110, 223903.	3.3	23
536	Small-Band-Offset Perovskite Shells Increase Auger Lifetime in Quantum Dot Solids. <i>ACS Nano</i> , 2017, 11, 12378-12384.	14.6	23
537	Bromine Incorporation and Suppressed Cation Rotation in Mixed-Halide Perovskites. <i>ACS Nano</i> , 2020, 14, 15107-15118.	14.6	23
538	Efficient and Stable Colloidal Quantum Dot Solar Cells with a Green-Solvent Hole-Transport Layer. <i>Advanced Energy Materials</i> , 2020, 10, 2002084.	19.5	23
539	Directional Light Emission from Layered Metal Halide Perovskite Crystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3458-3465.	4.6	23
540	Boosting photoelectrochemical efficiency by near-infrared-active lattice-matched morphological heterojunctions. <i>Nature Communications</i> , 2021, 12, 4296.	12.8	23

#	ARTICLE	IF	CITATIONS
541	Single-step-fabricated disordered metasurfaces for enhanced light extraction from LEDs. <i>Light: Science and Applications</i> , 2021, 10, 180.	16.6	23
542	Donor-acceptor C ₆₀ -Containing Polyferrocenylsilanes: Synthesis, Characterization, and Applications in Photodiode Devices. <i>Advanced Functional Materials</i> , 2008, 18, 470-477.	14.9	22
543	Dead zones in colloidal quantum dot photovoltaics: evidence and implications. <i>Optics Express</i> , 2010, 18, A451.	3.4	22
544	Quantum beats due to excitonic ground-state splitting in colloidal quantum dots. <i>Physical Review B</i> , 2012, 86, .	3.2	22
545	Self-assembled nanoparticle-stabilized photocatalytic reactors. <i>Nanoscale</i> , 2016, 8, 2107-2115.	5.6	22
546	Pulsed axial epitaxy of colloidal quantum dots in nanowires enables facet-selective passivation. <i>Nature Communications</i> , 2018, 9, 4947.	12.8	22
547	Structural Distortion and Bandgap Increase of Two-Dimensional Perovskites Induced by Trifluoromethyl Substitution on Spacer Cations. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10144-10149.	4.6	22
548	Colloidal Quantum Dot Bulk Heterojunction Solids with Near-Unity Charge Extraction Efficiency. <i>Advanced Science</i> , 2020, 7, 2000894.	11.2	22
549	Early Transition-Metal-Based Binary Oxide/Nitride for Efficient Electrocatalytic Hydrogen Evolution from Saline Water in Different pH Environments. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 53702-53716.	8.0	22
550	Narrowing the Phase Distribution of Quasi-2D Perovskites for Stable Deep-Blue Electroluminescence. <i>Advanced Science</i> , 2022, 9, .	11.2	22
551	Two-dimensional transverse cross-section nanopotentiometry of actively driven buried-heterostructure multiple-quantum-well lasers. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002, 20, 2401.	1.6	21
552	Folded-Light-Path Colloidal Quantum Dot Solar Cells. <i>Scientific Reports</i> , 2013, 3, 2166.	3.3	21
553	Efficient, air-stable colloidal quantum dot solar cells encapsulated using atomic layer deposition of a nanolaminate barrier. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	21
554	Controlled Crystal Plane Orientations in the ZnO Transport Layer Enable High-Responsivity, Low-Dark-Current Infrared Photodetectors. <i>Advanced Materials</i> , 2022, 34, e2200321.	21.0	21
555	Infrared Cavity-Enhanced Colloidal Quantum Dot Photovoltaics Employing Asymmetric Multilayer Electrodes. <i>ACS Energy Letters</i> , 2018, 3, 2908-2913.	17.4	20
556	Linear Electro-Optic Modulation in Highly Polarizable Organic Perovskites. <i>Advanced Materials</i> , 2021, 33, e2006368.	21.0	20
557	Photocurrent extraction efficiency in colloidal quantum dot photovoltaics. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	19
558	Boosting plant biology. <i>Nature Materials</i> , 2014, 13, 329-331.	27.5	19

#	ARTICLE	IF	CITATIONS
559	Low-Temperature-Processed Colloidal Quantum Dots as Building Blocks for Thermoelectrics. <i>Advanced Energy Materials</i> , 2019, 9, 1803049.	19.5	19
560	Nanostructured Architectures for Biomolecular Detection inside and outside the Cell. <i>Advanced Functional Materials</i> , 2020, 30, 1907701.	14.9	19
561	Direct observation of lateral current spreading in ridge waveguide lasers using scanning voltage microscopy. <i>Applied Physics Letters</i> , 2003, 82, 4166-4168.	3.3	18
562	Integrated nanostructures for direct detection of DNA at attomolar concentrations. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	18
563	A tunable colloidal quantum dot photo field-effect transistor. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	18
564	Programmable definition of nanogap electronic devices using self-inhibited reagent depletion. <i>Nature Communications</i> , 2015, 6, 6940.	12.8	18
565	Synergistic photocurrent addition in hybrid quantum dot: Bulk heterojunction solar cells. <i>Nano Energy</i> , 2015, 13, 491-499.	16.0	18
566	Narrow Emission from Rb ₃ Sb ₂ I ₉ Nanoparticles. <i>Advanced Optical Materials</i> , 2020, 8, 1901606.	7.3	18
567	Magnetic Ranking Cytometry: Profiling Rare Cells at the Single-Cell Level. <i>Accounts of Chemical Research</i> , 2020, 53, 1445-1457.	15.6	18
568	Stable, Bromine-Free, Tetragonal Perovskites with 1.7 eV Bandgaps via A-Site Cation Substitution. , 2020, 2, 869-872.		18
569	Gold Adparticles on Silver Combine Low Overpotential and High Selectivity in Electrochemical CO ₂ Conversion. <i>ACS Applied Energy Materials</i> , 2021, 4, 7504-7512.	5.1	18
570	Guanidinium-Pseudohalide Perovskite Interfaces Enable Surface Reconstruction of Colloidal Quantum Dots for Efficient and Stable Photovoltaics. <i>ACS Nano</i> , 2022, 16, 1649-1660.	14.6	18
571	Personnel Administration in Education.. <i>ILR Review</i> , 1956, 9, 504.	2.3	17
572	Optimized templates for bottom-up growth of high-performance integrated biomolecular detectors. <i>Lab on A Chip</i> , 2013, 13, 2569.	6.0	17
573	Graphene Oxide Shells on Plasmonic Nanostructures Lead to High-Performance Photovoltaics: A Model Study Based on Dye-Sensitized Solar Cells. <i>ACS Energy Letters</i> , 2017, 2, 117-123.	17.4	17
574	Quantum Dot Color-Converting Solids Operating Efficiently in the kW/cm ² Regime. <i>Chemistry of Materials</i> , 2017, 29, 5104-5112.	6.7	17
575	A water-processable cellulose-based resist for advanced nanofabrication. <i>Nanoscale</i> , 2018, 10, 17884-17892.	5.6	17
576	Naphthalenediimide Cations Inhibit 2D Perovskite Formation and Facilitate Subpicosecond Electron Transfer. <i>Journal of Physical Chemistry C</i> , 2020, 124, 24379-24390.	3.1	17

#	ARTICLE	IF	CITATIONS
577	Nanostructured Architectures Promote the Mesenchymalâ€“Epithelial Transition for Invasive Cells. ACS Nano, 2020, 14, 5324-5336.	14.6	17
578	Solvent Engineering of Colloidal Quantum Dot Inks for Scalable Fabrication of Photovoltaics. ACS Applied Materials & Interfaces, 2021, 13, 36992-37003.	8.0	17
579	Precursor Tailoring Enables Alkylammonium Tin Halide Perovskite Phosphors for Solidâ€“State Lighting. Advanced Functional Materials, 2022, 32, .	14.9	17
580	Photoelectric phenomena in polymer-based composites. Journal of Applied Physics, 2000, 88, 3448-3453.	2.5	16
581	Megahertz-frequency large-area optical modulators at 1.55 μ m based on solution-cast colloidal quantum dots. Optics Express, 2008, 16, 6683.	3.4	16
582	Ultrafast Carrier Trapping in Thick-Shell Colloidal Quantum Dots. Journal of Physical Chemistry Letters, 2017, 8, 3179-3184.	4.6	16
583	Halogen Vacancies Enable Ligandâ€“Assisted Selfâ€“Assembly of Perovskite Quantum Dots into Nanowires. Angewandte Chemie, 2019, 131, 16223-16227.	2.0	16
584	Colloidal-quantum-dot-in-perovskite nanowires. Infrared Physics and Technology, 2019, 98, 16-22.	2.9	16
585	Monolithic Organic/Colloidal Quantum Dot Hybrid Tandem Solar Cells via Buffer Engineering. Advanced Materials, 2020, 32, e2004657.	21.0	16
586	Thiophene Cation Intercalation to Improve Bandâ€“Edge Integrity in Reducedâ€“Dimensional Perovskites. Angewandte Chemie, 2020, 132, 14081-14087.	2.0	16
587	Stable all-optical limiting in nonlinear periodic structures III Nonsolitonic pulse propagation. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 695.	2.1	15
588	Freestanding nano-photoelectrode as a highly efficient and visible-light-driven photocatalyst for water-splitting. Journal of Materials Chemistry A, 2017, 5, 10651-10657.	10.3	15
589	Precise Control of Thermal and Redox Properties of Organic Holeâ€“Transport Materials. Angewandte Chemie, 2018, 130, 15755-15759.	2.0	15
590	Colloidal Quantum Dot Solar Cell Band Alignment using Two-Step Ionic Doping. , 2020, 2, 1583-1589.		15
591	Suppression of Auger Recombination by Gradient Alloying in InAs/CdSe/CdS QDs. Chemistry of Materials, 2020, 32, 7703-7709.	6.7	15
592	Concentrated Ethanol Electrosynthesis from CO ₂ via a Porous Hydrophobic Adlayer. ACS Applied Materials & Interfaces, 2022, 14, 4155-4162.	8.0	15
593	Non-equilibrium carriers and recombination phenomena in type-II quantum dots. Nanotechnology, 2001, 12, 523-528.	2.6	14
594	Carrier transport and luminescence in composite organicâ€“inorganic light-emitting devices. Solid-State Electronics, 2002, 46, 61-68.	1.4	14

#	ARTICLE	IF	CITATIONS
595	Steric Hindrance Assay for Secreted Factors in Stem Cell Culture. <i>ACS Sensors</i> , 2017, 2, 495-500.	7.8	14
596	Colloidal quantum dot solar cell power conversion efficiency optimization using analysis of current-voltage characteristics and electrode contact imaging by lock-in carrierography. <i>Progress in Photovoltaics: Research and Applications</i> , 2017, 25, 1034-1050.	8.1	14
597	Combinatorial Probes for High-Throughput Electrochemical Analysis of Circulating Nucleic Acids in Clinical Samples. <i>Angewandte Chemie</i> , 2018, 130, 3773-3778.	2.0	14
598	Curvature-Mediated Surface Accessibility Enables Ultrasensitive Electrochemical Human Methyltransferase Analysis. <i>ACS Sensors</i> , 2018, 3, 1765-1772.	7.8	14
599	Suppressing Interfacial Dipoles to Minimize Open-Circuit Voltage Loss in Quantum Dot Photovoltaics. <i>Advanced Energy Materials</i> , 2019, 9, 1901938.	19.5	14
600	Ligand cleavage enables formation of 1,2-ethanedithiol capped colloidal quantum dot solids. <i>Nanoscale</i> , 2019, 11, 10774-10781.	5.6	14
601	Exciton capture by nanocrystals in a polymer matrix. <i>Journal of Applied Physics</i> , 2003, 94, 4066-4069.	2.5	13
602	Colloidal quantum dot solar cell electrical parameter non-destructive quantitative imaging using high-frequency heterodyne lock-in carrierography and photocarrier radiometry. <i>Solar Energy Materials and Solar Cells</i> , 2018, 174, 405-411.	6.2	13
603	High-Throughput Nanofabrication of Metasurfaces with Polarization-Dependent Response. <i>Advanced Optical Materials</i> , 2020, 8, 2000786.	7.3	13
604	Colloidal Quantum Dot Photovoltaics Using Ultrathin, Solution-Processed Bilayer In ₂ O ₃ /ZnO Electron Transport Layers with Improved Stability. <i>ACS Applied Energy Materials</i> , 2020, 3, 5135-5141.	5.1	13
605	Single-Precursor Intermediate Shelling Enables Bright, Narrow Line Width InAs/InZnP-Based QD Emitters. <i>Chemistry of Materials</i> , 2020, 32, 2919-2925.	6.7	13
606	Heterogeneous Supersaturation in Mixed Perovskites. <i>Advanced Science</i> , 2020, 7, 1903166.	11.2	13
607	Nanocrystal Quantum Dot Devices: How the Lead Sulfide (PbS) System Teaches Us the Importance of Surfaces. <i>Chimia</i> , 2021, 75, 398.	0.6	13
608	Nanoparticle Amplification Labeling for High-Performance Magnetic Cell Sorting. <i>Nano Letters</i> , 2022, 22, 4774-4783.	9.1	13
609	Optical control over photoconductivity in polyferrocenylsilane films. <i>Journal of Chemical Physics</i> , 2004, 120, 1990-1996.	3.0	12
610	Light-emitting silicon-rich nitride systems and photonic structures. <i>Journal of Experimental Nanoscience</i> , 2006, 1, 29-50.	2.4	12
611	Graded Recombination Layers for Multijunction Photovoltaics. <i>Nano Letters</i> , 2012, 12, 3043-3049.	9.1	12
612	Electric field engineering using quantum-size-effect-tuned heterojunctions. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	12

#	ARTICLE	IF	CITATIONS
613	Amplified Micromagnetic Field Gradients Enable High-Resolution Profiling of Rare Cell Subpopulations. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 25683-25690.	8.0	12
614	Accelerated solution-phase exchanges minimize defects in colloidal quantum dot solids. <i>Nano Energy</i> , 2019, 63, 103876.	16.0	12
615	Highly Passivated n-Type Colloidal Quantum Dots for Solution-Processed Thermoelectric Generators with Large Output Voltage. <i>Advanced Energy Materials</i> , 2019, 9, 1901244.	19.5	12
616	Mechanisms of LiF Interlayer Enhancements of Perovskite Light-Emitting Diodes. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4213-4220.	4.6	12
617	Band Engineering via Gradient Molecular Dopants for CsFA Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2010572.	14.9	12
618	Electro-Optic Modulation Using Metal-Free Perovskites. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 19042-19047.	8.0	12
619	Large area metasurfaces made with spherical silicon resonators. <i>Nanophotonics</i> , 2020, 9, 943-951.	6.0	12
620	Nanoscope electric potential probing: Influence of probe-sample interface on spatial resolution. <i>Applied Physics Letters</i> , 2004, 84, 601-603.	3.3	11
621	Self-Assembled PbSe Nanowire:Perovskite Hybrids. <i>Journal of the American Chemical Society</i> , 2015, 137, 14869-14872.	13.7	11
622	High-Throughput Screening of Antisolvents for the Deposition of High-Quality Perovskite Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 26026-26032.	8.0	11
623	Near infrared organic photodetectors based on enhanced charge transfer state absorption by photonic architectures. <i>Journal of Materials Chemistry C</i> , 2020, 8, 9688-9696.	5.5	11
624	Experimental investigation of physical mechanisms underlying lateral current injection laser operation. <i>Applied Physics Letters</i> , 1998, 73, 285-287.	3.3	10
625	Influence of nanocrystals on the energy levels and luminescent properties of the polymer matrix in conjugated polymer-dielectric nanocomposites. <i>Surface Science</i> , 2003, 532-535, 1051-1055.	1.9	10
626	Colloidal Crystallization Accomplished by Electrodeposition on Patterned Substrates. <i>Journal of Dispersion Science and Technology</i> , 2005, 26, 259-265.	2.4	10
627	Identification of the physical origin behind disorder, heterogeneity, and reconstruction and their correlation with the photoluminescence lifetime in hybrid perovskite thin films. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21002-21015.	10.3	10
628	Single-Cell Tumbling Enables High-Resolution Size Profiling of Retinal Stem Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34811-34816.	8.0	10
629	Peptide-Functionalized Nanostructured Microarchitectures Enable Rapid Mechanotransductive Differentiation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41030-41037.	8.0	10
630	Ultrasensitive Detection and Depletion of Rare Leukemic B Cells in T Cell Populations via Immunomagnetic Cell Ranking. <i>Analytical Chemistry</i> , 2021, 93, 2327-2335.	6.5	10

#	ARTICLE	IF	CITATIONS
631	Cleavable Ligands Enable Uniform Close Packing in Colloidal Quantum Dot Solids. ACS Applied Materials & Interfaces, 2015, 7, 21995-22000.	8.0	9
632	Band-aligned $C_{3N_4}S_{3/2}$ stabilizes CdS/CuInGaS ₂ photocathodes for efficient water reduction. Journal of Materials Chemistry A, 2017, 5, 3167-3171.	10.3	9
633	Energy Transfer between Size-Controlled CsPb ₃ Quantum Dots for Light-Emitting Diode Application. ACS Applied Materials & Interfaces, 2022, 14, 17691-17697.	8.0	9
634	Gradient-Doped Colloidal Quantum Dot Solids Enable Thermophotovoltaic Harvesting of Waste Heat. ACS Energy Letters, 2016, 1, 740-746.	17.4	8
635	Controlling C_{60} Organization through Dipole-Induced Band Alignment at Self-Assembled Monolayer Interfaces. Chemistry of Materials, 2016, 28, 8322-8329.	6.7	8
636	Temperature-Induced Self-Compensating Defect Traps and Gain Thresholds in Colloidal Quantum Dots. ACS Nano, 2019, 13, 8970-8976.	14.6	8
637	InP-Quantum-Dot-in-ZnS-Matrix Solids for Thermal and Air Stability. Chemistry of Materials, 2020, 32, 9584-9590.	6.7	8
638	Abnormal Phase Transition and Band Renormalization of Guanidinium-Based Organic-Inorganic Hybrid Perovskite. ACS Applied Materials & Interfaces, 2021, 13, 44964-44971.	8.0	8
639	Ligand-induced symmetry breaking, size and morphology in colloidal lead sulfide QDs: from classic to thiourea precursors. , 0, 2, 1.		8
640	Recombination Dynamics in PbS Nanocrystal Quantum Dot Solar Cells Studied through Drift-Diffusion Simulations. ACS Applied Electronic Materials, 2021, 3, 4977-4989.	4.3	8
641	Semiconductor lasers for planar integrated optoelectronics. Solid-State Electronics, 2000, 44, 147-173.	1.4	7
642	Control over exciton confinement versus separation in composite films of polyfluorene and CdSe nanocrystals. Applied Physics Letters, 2002, 81, 3446-3448.	3.3	7
643	The photonic analogue of the graded heterostructure: Analysis using the envelope approximation. Optical and Quantum Electronics, 2002, 34, 217-226.	3.3	7
644	In situ resistance measurement of the p-type contact in InGaAsP coolerless ridge waveguide lasers. Applied Physics Letters, 2005, 86, 081111.	3.3	7
645	Power-free, digital and programmable dispensing of picoliter droplets using a Digit Chip. Lab on A Chip, 2017, 17, 1505-1514.	6.0	7
646	Study of Exciton Hopping Transport in PbS Colloidal Quantum Dot Thin Films Using Frequency- and Temperature-Scanned Photocarrier Radiometry. International Journal of Thermophysics, 2017, 38, 1.	2.1	7
647	Perovskite Single-Crystal Thin Film Devices Using Lithography Assisted Epitaxy. Matter, 2020, 3, 619-620.	10.0	7
648	The Impact of Ion Migration on the Electro-Optic Effect in Hybrid Organic-Inorganic Perovskites. Advanced Functional Materials, 2022, 32, 2107939.	14.9	7

#	ARTICLE	IF	CITATIONS
649	Optical limiting and intensity-dependent diffraction from low-contrast nonlinear periodic media: Coupled-mode analysis. <i>Physical Review E</i> , 2004, 70, 036616.	2.1	6
650	Efficient design and optimization of photonic crystal waveguides and couplers: The Interface Diffraction Method. <i>Optics Express</i> , 2005, 13, 7304.	3.4	6
651	Image-Reversal Soft Lithography: Fabrication of Ultrasensitive Biomolecular Detectors. <i>Advanced Healthcare Materials</i> , 2016, 5, 893-899.	7.6	6
652	Excitonic Creation of Highly Luminescent Defects In Situ in Working Organic Light-Emitting Diodes. <i>Advanced Optical Materials</i> , 2018, 6, 1700856.	7.3	6
653	Potential-Responsive Surfaces for Manipulation of Cell Adhesion, Release, and Differentiation. <i>Angewandte Chemie</i> , 2019, 131, 14661-14665.	2.0	6
654	Template-basierte Herstellung von 2D-phototonischen Superkristallen mit verstärkter spontaner Emission aus CsPbBr ₃ -Perowskit-Nanokristallen. <i>Angewandte Chemie</i> , 2020, 132, 17903-17909.	2.0	6
655	Solvent-Assisted Kinetic Trapping in Quaternary Perovskites. <i>Advanced Materials</i> , 2021, 33, e2008690.	21.0	6
656	Self-Aligned Non-Centrosymmetric Conjugated Molecules Enable Electro-Optic Perovskites. <i>Advanced Optical Materials</i> , 0, , 2100730.	7.3	6
657	Conjugated polymers with controllable interfacial order and energetics enable tunable heterojunctions in organic and colloidal quantum dot photovoltaics. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1788-1801.	10.3	6
658	Rapid On-Cell Selection of High-Performance Human Antibodies. <i>ACS Central Science</i> , 2022, 8, 102-109.	11.3	6
659	High-Throughput Evaluation of Emission and Structure in Reduced-Dimensional Perovskites. <i>ACS Central Science</i> , 2022, 8, 571-580.	11.3	6
660	Longitudinal carrier density profiling in semiconductor lasers via spectral analysis of side spontaneous emission. <i>Journal of Applied Physics</i> , 1996, 80, 1904-1906.	2.5	5
661	Fabrication and investigation of nanocomposites of conducting polymers and GaSb nanocrystals. <i>Surface Science</i> , 2003, 532-535, 828-831.	1.9	5
662	Atomic layer deposition of absorbing thin films on nanostructured electrodes for short-wavelength infrared photosensing. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	5
663	Perovskite nanowires find an edge. <i>Nature Electronics</i> , 2018, 1, 380-381.	26.0	5
664	Energy Selects. <i>ACS Energy Letters</i> , 2019, 4, 1455-1457.	17.4	5
665	Connecting the quantum dots. <i>IEEE Spectrum</i> , 2010, 47, 48-52.	0.7	4
666	Spontaneous and Light-Driven Conversion of NO _x on Oxide-Modified TiO ₂ Surfaces. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 12750-12756.	3.7	4

#	ARTICLE	IF	CITATIONS
667	Accurate and Affordable Explicit Solvent Quantum Mechanics for Electrocatalysis Investigations. <i>Matter</i> , 2021, 4, 12-14.	10.0	4
668	Combining Efficiency and Stability in Mixed Tin-Lead Perovskite Solar Cells by Capping Grains with an Ultra-thin 2D layer. , 2020, , .		4
669	<title>Longitudinally resolved measurements of carrier concentration and gain in 980-nm InGaAs/GaAs high-power quantum well lasers</title>. , 1997, , .		3
670	Two-photon absorption and multi-exciton generation in lead salt quantum dots. , 2010, , .		3
671	Solution-Processed Light Sensors and Photovoltaics. <i>IEEE Photonics Journal</i> , 2010, 2, 265-268.	2.0	3
672	Solar Cells: Overcoming the Ambient Manufacturabilityâ€Scalabilityâ€Performance Bottleneck in Colloidal Quantum Dot Photovoltaics (<i>Adv. Mater.</i> 35/2018). <i>Advanced Materials</i> , 2018, 30, 1870260.	21.0	3
673	Dopant-Assisted Matrix Stabilization Enables Thermoelectric Performance Enhancement in n-Type Quantum Dot Films. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 18999-19007.	8.0	3
674	A microfluidic platform enables comprehensive gene expression profiling of mouse retinal stem cells. <i>Lab on A Chip</i> , 2021, 21, 4464-4476.	6.0	3
675	Time-Resolved Luminescence in Conducting Polymer/Antidot Nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , 2001, 1, 457-460.	0.9	2
676	Colloidal quantum dot photovoltaics. <i>Proceedings of SPIE</i> , 2011, , .	0.8	2
677	Device design for global shutter operation in a 1.1- μ m pixel image sensor and its application to near infrared sensing. <i>Proceedings of SPIE</i> , 2017, , .	0.8	2
678	Reply to: Perovskite decomposition and missing crystal planes in HRTEM. <i>Nature</i> , 2021, 594, E8-E9.	27.8	2
679	Thiophene- and selenophene-based conjugated polymeric mixed ionic/electronic conductors. <i>Journal of Chemical Physics</i> , 2021, 155, 134704.	3.0	2
680	<title>Nonlinear distributed feedback structures for optical sensor protection</title>. , 2000, 4037, 64.		1
681	Experimental Studies and Physical Model of Efficient, Tunable Injection Using Tunnel-Transparent Dielectric Contacts on Polymer Light-Emitting Devices. <i>Materials Research Society Symposia Proceedings</i> , 2002, 734, 721.	0.1	1
682	Direct observation of electron overbarrier leakage in actively driven buried heterostructure multi-quantum-well lasers. , 2004, , .		1
683	Design and characterization of 1.1 micron pixel image sensor with high near infrared quantum efficiency. <i>Proceedings of SPIE</i> , 2017, , .	0.8	1
684	Accelerated Discovery of Optoelectronic Materials. <i>ACS Photonics</i> , 2021, 8, 699-701.	6.6	1

#	ARTICLE	IF	CITATIONS
685	Dealloying Ni-Co-Se Electrocatalysts for Efficient and Stable Oxygen Evolution at High Current Densities. ECS Meeting Abstracts, 2021, MA2021-01, 1848-1848.	0.0	1
686	All- <i>Inorganic</i> Quantum-Dot LEDs Based on a Phase-Stabilized CsPbI_3 Perovskite. <i>Angewandte Chemie</i> , 2021, 133, 16300-16306.	2.0	1
687	A versatile nanocrystal-based multi-sensory fiber-optic probe for dosimetry in PDT and thermal treatment. , 2007, , .		1
688	Si-Rich Dielectrics for Active Photonic Devices. <i>Nanostructure Science and Technology</i> , 2009, , 1-24.	0.1	1
689	Light and Humidity Induced Degradation and Grain Transformation in Mixed Cation Perovskites. , 2021, , .		1
690	Vapor-Phase Deposition of Highly Luminescent Embedded Perovskite Nanocrystals. <i>Advanced Optical Materials</i> , 0, , 2102809.	7.3	1
691	<title>Photonic crystals for integrated optical computing</title>. , 2000, 4089, 786.		0
692	GaSb-based Nanocomposites as IR-Emitters. <i>Materials Research Society Symposia Proceedings</i> , 2002, 737, 116.	0.1	0
693	Analysis of non-quarter-wave grating by a modified Fourier-transform method. <i>Applied Optics</i> , 2002, 41, 6763.	2.1	0
694	Optical CDMA and WDMA in the access network. , 2003, 5247, 126.		0
695	Design, synthesis, and characterization of a novel class of tunable chromophores for second- and third-order NLO applications. , 2004, , .		0
696	Quantum dots in processible polymers: size-tunable infrared (1000 to 1600 nm) optical emission and sensing. , 2004, 5359, 332.		0
697	Picosecond-resolved nonlinear absorption of spin-processible lead sulfide (PbS) nanocrystals from 1100 to 1600 nm. , 2004, 5361, 142.		0
698	Quantum dots synthesized on DNA for infrared biological imaging. , 2006, , .		0
699	Solution-processed Telecom-wavelength Active Optoelectronics: Monolithic Integration of Detectors and Sources Using Colloidal Quantum Dots. , 2006, , .		0
700	Coupling the computational with the sensational: Merging quantum dots, biomolecules, and polymers for record performance from solution-processed optoelectronics. , 2006, , .		0
701	Parallel detection of nucleic acids using an electronic chip. , 2008, , .		0
702	Surface passivated colloidal $\text{CuIn}(\text{S},\text{Se})_2$ quantum dots for quantum dot heterojunction solar cells (Presentation Recording). <i>Proceedings of SPIE</i> , 2015, , .	0.8	0

#	ARTICLE	IF	CITATIONS
703	Colloidal quantum dot photodetectors (Presentation Recording). , 2015, , .		0
704	Colloidal Quantum Dot Solar Cell Electrical Parameter Imaging Using Camera-based High-frequency Heterodyne Lock-in Carrierography. , 2017, , .		0
705	Evidence of Symmetry Breaking and Carrier Dynamics in Lead Salt Quantum Dots. , 2009, , .		0
706	Ultrafast photophysics of metal halide perovskite multiple quantum wells: device implications and reconciling band alignment. , 2019, , .		0
707	Materials and device architectures for quantum dot energy converters. , 0, , .		0
708	Monitoring of Cardiac Disease with Reagent-free Molecular Pendulum Aptasensors. ECS Meeting Abstracts, 2021, MA2021-02, 1563-1563.	0.0	0
709	Progress and next steps in CO ₂ reduction to chemicals. , 0, , .		0
710	Progress in inverted perovskite photovoltaics for stability. , 0, , .		0
711	(Digital Presentation) Assessing the Energy Intensity of Product Purification in CO ₂ Electrolysis. ECS Meeting Abstracts, 2022, MA2022-01, 2445-2445.	0.0	0