Arthur J Nozik

List of Publications by Year
in descending order

241 papers	35,658 citations	4370 86 h-index	3094 187 g-index
244 all docs	244 docs citations	244 times ranked	24610 citing authors

#	Article	IF	Citations
1	Quantum dot solar cells. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 115-120.	1.3	2,193
2	Highly Efficient Multiple Exciton Generation in Colloidal PbSe and PbS Quantum Dots. Nano Letters, 2005, 5, 865-871.	4.5	1,548
3	Peak External Photocurrent Quantum Efficiency Exceeding 100% via MEG in a Quantum Dot Solar Cell. Science, 2011, 334, 1530-1533.	6.0	1,511
4	Comparing Photosynthetic and Photovoltaic Efficiencies and Recognizing the Potential for Improvement. Science, 2011, 332, 805-809.	6.0	1,369
5	Solar conversion efficiency of photovoltaic and photoelectrolysis cells with carrier multiplication absorbers. Journal of Applied Physics, 2006, 100, 074510.	1.1	1,289
6	Charge Recombination in Dye-Sensitized Nanocrystalline TiO2Solar Cells. Journal of Physical Chemistry B, 1997, 101, 2576-2582.	1.2	930
7	Photoelectrochemistry: Applications to Solar Energy Conversion. Annual Review of Physical Chemistry, 1978, 29, 189-222.	4.8	886
8	Schottky Solar Cells Based on Colloidal Nanocrystal Films. Nano Letters, 2008, 8, 3488-3492.	4.5	882
9	Physical Chemistry of Semiconductorâ˜Liquid Interfaces. The Journal of Physical Chemistry, 1996, 100, 13061-13078.	2.9	851
10	Efficiency of hotâ€carrier solar energy converters. Journal of Applied Physics, 1982, 53, 3813-3818.	1.1	850
11	Multiple Exciton Generation in Colloidal Silicon Nanocrystals. Nano Letters, 2007, 7, 2506-2512.	4.5	794
12	SPECTROSCOPY ANDHOTELECTRONRELAXATIONDYNAMICS INSEMICONDUCTORQUANTUMWELLS ANDQUANTUMDOTS. Annual Review of Physical Chemistry, 2001, 52, 193-231.	4.8	714
13	Structural, Optical, and Electrical Properties of Self-Assembled Films of PbSe Nanocrystals Treated with 1,2-Ethanedithiol. ACS Nano, 2008, 2, 271-280.	7.3	693
14	PbTe Colloidal Nanocrystals:Â Synthesis, Characterization, and Multiple Exciton Generation. Journal of the American Chemical Society, 2006, 128, 3241-3247.	6.6	660
15	Multiple exciton generation in semiconductor quantum dots. Chemical Physics Letters, 2008, 457, 3-11.	1.2	632
16	Photosensitization of Nanoporous TiO2 Electrodes with InP Quantum Dots. Langmuir, 1998, 14, 3153-3156.	1.6	566
17	Synthesis and Characterization of InP Quantum Dots. The Journal of Physical Chemistry, 1994, 98, 4966-4969.	2.9	447
18	Nanocrystalline TiO2Solar Cells Sensitized with InAs Quantum Dotsâ€. Journal of Physical Chemistry B, 2006, 110, 25451-25454.	1.2	443

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19	Nanoscience and Nanostructures for Photovoltaics and Solar Fuels. Nano Letters, 2010, 10, 2735-2741.	4.5	413
20	Structural, Optical, and Electrical Properties of PbSe Nanocrystal Solids Treated Thermally or with Simple Amines. Journal of the American Chemical Society, 2008, 130, 5974-5985.	6.6	407
21	Size-Dependent Spectroscopy of InP Quantum Dots. Journal of Physical Chemistry B, 1997, 101, 4904-4912.	1.2	396
22	Femtosecond IR Study of Excited-State Relaxation and Electron-Injection Dynamics of Ru(dcbpy)2(NCS)2in Solution and on Nanocrystalline TiO2and Al2O3Thin Films. Journal of Physical Chemistry B, 1999, 103, 3110-3119.	1.2	385
23	Synthesis and characterization of surface-modified colloidal cadmium telluride quantum dots. The Journal of Physical Chemistry, 1993, 97, 11999-12003.	2.9	378
24	Singlet Fission for Dye-Sensitized Solar Cells:Â Can a Suitable Sensitizer Be Found?. Journal of the American Chemical Society, 2006, 128, 16546-16553.	6.6	375
25	Stability Assessment on a 3% Bilayer PbS/ZnO Quantum Dot Heterojunction Solar Cell. Advanced Materials, 2010, 22, 3704-3707.	11.1	351
26	Nanoscale design to enable the revolution in renewable energy. Energy and Environmental Science, 2009, 2, 559.	15.6	348
27	Third Generation Photovoltaics based on Multiple Exciton Generation in Quantum Confined Semiconductors. Accounts of Chemical Research, 2013, 46, 1252-1260.	7.6	340
28	Comparing Multiple Exciton Generation in Quantum Dots To Impact Ionization in Bulk Semiconductors: Implications for Enhancement of Solar Energy Conversion. Nano Letters, 2010, 10, 3019-3027.	4.5	329
29	Photoenhancement of Luminescence in Colloidal CdSe Quantum Dot Solutions. Journal of Physical Chemistry B, 2003, 107, 11346-11352.	1.2	328
30	Photochemical diodes. Applied Physics Letters, 1977, 30, 567-569.	1.5	316
31	Photoelectrolysis of water using semiconducting TiO2 crystals. Nature, 1975, 257, 383-386.	13.7	312
32	pâ€photoelectrolysis cells. Applied Physics Letters, 1976, 29, 150-153.	1.5	312
33	Exciton Multiplication and Relaxation Dynamics in Quantum Dots:Â Applications to Ultrahigh-Efficiency Solar Photon Conversionâ€. Inorganic Chemistry, 2005, 44, 6893-6899.	1.9	303
34	Dynamics of Electron Injection in Nanocrystalline Titanium Dioxide Films Sensitized with [Ru(4,4â€˜-dicarboxy-2,2â€˜-bipyridine)2(NCS)2] by Infrared Transient Absorption. Journal of Physical Chemistry B, 1998, 102, 6455-6458.	1.2	292
35	Synthesis and Characterization of InP, GaP, and GaInP2 Quantum Dots. The Journal of Physical Chemistry, 1995, 99, 7754-7759.	2.9	290
36	Multiexciton Generation by a Single Photon in Nanocrystals. Nano Letters, 2006, 6, 2856-2863.	4.5	287

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37	Highly efficient bandâ€edge emission from InP quantum dots. Applied Physics Letters, 1996, 68, 3150-3152.	1.5	277
38	Quantum Dot Size Dependent Jâ^'V Characteristics in Heterojunction ZnO/PbS Quantum Dot Solar Cells. Nano Letters, 2011, 11, 1002-1008.	4.5	277
39	Enhanced Stability of Photoelectrodes with Electrogenerated Polyaniline Films. Journal of the Electrochemical Society, 1982, 129, 2261-2265.	1.3	268
40	Upper limit on the electron antineutrino mass from the Troitsk experiment. Physical Review D, 2011, 84, .	1.6	267
41	n-Type Transition Metal Oxide as a Hole Extraction Layer in PbS Quantum Dot Solar Cells. Nano Letters, 2011, 11, 3263-3266.	4.5	258
42	Absolute Photoluminescence Quantum Yields of IR-26 Dye, PbS, and PbSe Quantum Dots. Journal of Physical Chemistry Letters, 2010, 1, 2445-2450.	2.1	256
43	High Triplet Yield from Singlet Fission in a Thin Film of 1,3-Diphenylisobenzofuran. Journal of the American Chemical Society, 2010, 132, 16302-16303.	6.6	236
44	The Role of Chromophore Coupling in Singlet Fission. Accounts of Chemical Research, 2013, 46, 1290-1299.	7.6	235
45	Multiple Exciton Generation in Films of Electronically Coupled PbSe Quantum Dots. Nano Letters, 2007, 7, 1779-1784.	4.5	230
46	Tuning colloidal quantum dot band edge positions through solution-phase surface chemistry modification. Nature Communications, 2017, 8, 15257.	5.8	230
47	Optical, Electronic, and Structural Properties of Uncoupled and Close-Packed Arrays of InP Quantum Dots. Journal of Physical Chemistry B, 1998, 102, 9791-9796.	1.2	223
48	Hot-carrier cooling in GaAs: Quantum wells versus bulk. Physical Review B, 1993, 48, 14675-14678.	1.1	220
49	Variations in the Quantum Efficiency of Multiple Exciton Generation for a Series of Chemically Treated PbSe Nanocrystal Films. Nano Letters, 2009, 9, 836-845.	4.5	219
50	Solar Cells Based on Quantum Dots: Multiple Exciton Generation and Intermediate Bands. MRS Bulletin, 2007, 32, 236-241.	1.7	215
51	Introduction to Solar Photon Conversion. Chemical Reviews, 2010, 110, 6443-6445.	23.0	201
52	Synthesis of extremely small InP quantum dots and electronic coupling in their disordered solid films. Applied Physics Letters, 2001, 78, 4022-4024.	1.5	198
53	The promise and challenge of nanostructured solar cells. Nature Nanotechnology, 2014, 9, 951-954.	15.6	181
54	Optical and Electrical Properties ofCd2SnO4: A Defect Semiconductor. Physical Review B, 1972, 6, 453-459.	1.1	180

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55	Enhanced photoredox chemistry in quantized semiconductor colloids. The Journal of Physical Chemistry, 1986, 90, 12-13.	2.9	166
56	Determining the Internal Quantum Efficiency of PbSe Nanocrystal Solar Cells with the Aid of an Optical Model. Nano Letters, 2008, 8, 3904-3910.	4.5	166
57	Mechanistic studies of the photocatalytic behavior of titania: particles in a photoelectrochemical slurry cell and the relevance to photodetoxification reactions. The Journal of Physical Chemistry, 1991, 95, 221-225.	2.9	160
58	Dynamic Burstein-Moss shift in semiconductor colloids. The Journal of Physical Chemistry, 1989, 93, 2873-2875.	2.9	154
59	Absorption Cross-Section and Related Optical Properties of Colloidal InAs Quantum Dots. Journal of Physical Chemistry B, 2005, 109, 7084-7087.	1.2	151
60	Size and Composition Dependent Multiple Exciton Generation Efficiency in PbS, PbSe, and PbS_xSe_{1â€“x} Alloyed Quantum Dots. Nano Letters, 2013, 13, 3078-3085.	4.5	149
61	Synthesis, structure, and optical properties of colloidal GaN quantum dots. Applied Physics Letters, 1999, 75, 478-480.	1.5	148
62	Hot carrier injection at semiconductor-electrolyte junctions. Journal of Applied Physics, 1980, 51, 2158.	1.1	128
63	Stabilization of n-type silicon photoelectrodes to surface oxidation in aqueous electrolyte solution and mediation of oxidation reaction by surface-attached organic conducting polymer. Journal of the American Chemical Society, 1981, 103, 1849-1850.	6.6	126
64	Singlet Exciton Fission for Solar Cell Applications: Energy Aspects of Interchromophore Coupling. Journal of Physical Chemistry B, 2010, 114, 14223-14232.	1.2	126
65	Anti-Stokes photoluminescence in colloidal semiconductor quantum dots. Applied Physics Letters, 1999, 75, 971-973.	1.5	125
66	Tuning the Synthesis of Ternary Lead Chalcogenide Quantum Dots by Balancing Precursor Reactivity. ACS Nano, 2011, 5, 183-190.	7.3	125
67	Coreâ˜Shell Quantum Dots of Lattice-Matched ZnCdSe2Shells on InP Cores:Â Experiment and Theory. Journal of Physical Chemistry B, 2000, 104, 12149-12156.	1.2	122
68	Time-Resolved Photoconductivity of PbSe Nanocrystal Arraysâ€. Journal of Physical Chemistry B, 2006, 110, 25455-25461.	1.2	120
69	Electron and Hole Transfer from Indium Phosphide Quantum Dots. Journal of Physical Chemistry B, 2005, 109, 2625-2631.	1.2	118
70	Electron Transfer Dynamics in Quantum Dot/Titanium Dioxide Composites Formed by in Situ Chemical Bath Deposition. Journal of Physical Chemistry B, 2003, 107, 14154-14157.	1.2	117
71	Toward Designed Singlet Fission: Solution Photophysics of Two Indirectly Coupled Covalent Dimers of 1,3-Diphenylisobenzofuran. Journal of Physical Chemistry B, 2013, 117, 4680-4695.	1.2	117
72	Comparison of Carrier Multiplication Yields in PbS and PbSe Nanocrystals: The Role of Competing Energy-Loss Processes. Nano Letters, 2012, 12, 622-628.	4.5	113

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73	Size-dependent Raman study of InP quantum dots. Applied Physics Letters, 2003, 82, 185-187.	1.5	108
74	Interfacial electron-transfer equilibria and flatband potentials of .alpha.-ferric oxide and titanium dioxide colloids studied by pulse radiolysis. The Journal of Physical Chemistry, 1984, 88, 4278-4283.	2.9	105
75	Solid-state perspectives of the photoelectrochemistry of semiconductorâ€“electrolyte junctions. Nature, 1984, 312, 21-27.	13.7	104
76	Primary photochemical events in CdS semiconductor colloids as probed by picosecond laser flash photolysis. Chemical Physics Letters, 1989, 157, 384-389.	1.2	102
77	Mottâ€Schottky Plots and Flatband Potentials for Single Crystal Rutile Electrodes. Journal of the Electrochemical Society, 1982, 129, 1973-1977.	1.3	100
78	Fluorescence Intermittency in Single InP Quantum Dots. Nano Letters, 2001, 1, 557-564.	4.5	99
79	Control of PbSe Quantum Dot Surface Chemistry and Photophysics Using an Alkylselenide Ligand. ACS Nano, 2012, 6, 5498-5506.	7.3	99
80	Toward Designed Singlet Fission: Electronic States and Photophysics of 1,3-Diphenylisobenzofuran. Journal of Physical Chemistry A, 2010, 114, 1457-1473.	1.1	98
81	High resolution MÃ¶ssbauer spectrum of Fe4N. Solid State Communications, 1969, 7, 1677-1679.	0.9	96
82	Analysis of photoluminescence from solubilized single-walled carbon nanotubes. Physical Review B, 2005, 71, .	1.1	95
83	Flowing versus Static Conditions for Measuring Multiple Exciton Generation in PbSe Quantum Dots. Journal of Physical Chemistry C, 2010, 114, 17486-17500.	1.5	95
84	Comparison of hot-carrier relaxation in quantum wells and bulk GaAs at high carrier densities. Physical Review B, 1992, 45, 1450-1453.	1.1	94
85	Electron Relaxation in Colloidal InP Quantum Dots with Photogenerated Excitons or Chemically Injected Electrons. Journal of Physical Chemistry B, 2003, 107, 102-109.	1.2	90
86	Synthesis and characterization of binary and ternary IIIâ€“V quantum dots. Journal of Luminescence, 1996, 70, 95-107.	1.5	88
87	Synthesis and Characterization of Colloidal InP Quantum Rods. Nano Letters, 2003, 3, 833-837.	4.5	88
88	Two Thin Film Polymorphs of the Singlet Fission Compound 1,3-Diphenylisobenzofuran. Journal of Physical Chemistry C, 2014, 118, 12121-12132.	1.5	85
89	Electron transfer reactions and flat-band potentials of tungsten(VI) oxide colloids. The Journal of Physical Chemistry, 1984, 88, 5827-5830.	2.9	84
90	Optical properties of gallium arsenide nanocrystals. The Journal of Physical Chemistry, 1992, 96, 1156-1160.	2.9	84

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91	Electronic Coupling in InP Nanoparticle Arrays. Nano Letters, 2003, 3, 1695-1699.	4.5	84
92	Excitation Energy Dependent Efficiency of Charge Carrier Relaxation and Photoluminescence in Colloidal InP Quantum Dots. Journal of Physical Chemistry B, 2002, 106, 7758-7765.	1.2	79
93	Size quantization of colloidal semiconductor particles in silicate glasses. Chemical Physics Letters, 1988, 143, 305-308.	1.2	77
94	Gallium arsenide nanocrystals prepared in quinoline. The Journal of Physical Chemistry, 1991, 95, 5382-5384.	2.9	77
95	Growth of InP Nanostructures via Reaction of Indium Droplets with Phosphide Ions:Â Synthesis of InP Quantum Rods and InPâ^'TiO2Composites. Journal of the American Chemical Society, 2004, 126, 2632-2639.	6.6	76
96	Photoelectrochemical cells. Philosophical Transactions of the Royal Society A, 1980, 295, 453-470.	1.3	75
97	Nitrogen fixation via photoenhanced reduction on p-gallium phosphide electrodes. Journal of the American Chemical Society, 1978, 100, 8007-8009.	6.6	74
98	Significance of the Lattice Contribution to MÃ¶ssbauer Quadrupole Splitting: Re-Evaluation of theFe57mNuclear Quadrupole Moment. Physical Review, 1967, 159, 273-276.	2.7	72
99	Site-Selective Passivation of Defects in NiO Solar Photocathodes by Targeted Atomic Deposition. ACS Applied Materials & Interfaces, 2016, 8, 4754-4761.	4.0	71
100	MÃ¶ssbauer Resonance Studies of Ferrous Ions in Ice. Journal of Chemical Physics, 1967, 47, 2960-2977.	1.2	69
101	Irreversibilities in the mechanism of photoelectrolysis. Nature, 1978, 271, 137-139.	13.7	69
102	Nanostructured and Photoelectrochemical Systems for Solar Photon Conversion. Series on Photoconversion of Solar Energy, 2008, , .	0.2	68
103	Colloidal Quantum Dots of III-V Semiconductors. MRS Bulletin, 1998, 23, 24-30.	1.7	63
104	Effect of Solar Concentration on the Thermodynamic Power Conversion Efficiency of Quantum-Dot Solar Cells Exhibiting Multiple Exciton Generation. Journal of Physical Chemistry Letters, 2012, 3, 2857-2862.	2.1	62
105	Anomalous Independence of Multiple Exciton Generation on Different Group IVâ^'VI Quantum Dot Architectures. Nano Letters, 2011, 11, 1623-1629.	4.5	61
106	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. Progress in Solid State Chemistry, 2008, 36, 1-133.	3.9	58
107	Synthesis and Spectroscopy of Silver-Doped PbSe Quantum Dots. Journal of the American Chemical Society, 2017, 139, 10382-10394.	6.6	58
108	Quantized colloids produced by dissolution of layered semiconductors in acetonitrile. The Journal of Physical Chemistry, 1988, 92, 1400-1402.	2.9	57

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109	Hot carrier injection of photogenerated electrons at indium phosphideâ€“electrolyte interfaces. Journal of Applied Physics, 1983, 54, 6463-6473.	1.1	56
110	Enhanced Multiple Exciton Generation in PbS | CdS Janus-like Heterostructured Nanocrystals. ACS Nano, 2018, 12, 10084-10094.	7.3	56
111	Continuous-Wave and Time-Resolved Optically Detected Magnetic Resonance Studies of Nonetched/Etched InP Nanocrystals. Journal of Physical Chemistry B, 2002, 106, 1606-1612.	1.2	54
112	Size Dependent Femtosecond Electron Cooling Dynamics in CdSe Quantum Rods. Nano Letters, 2004, 4, 1089-1092.	4.5	52
113	Emission Quenching in PbSe Quantum Dot Arrays by Short-Term Air Exposure. Journal of Physical Chemistry Letters, 2011, 2, 889-893.	2.1	51
114	Carrier Transport in PbS and PbSe QD Films Measured by Photoluminescence Quenching. Journal of Physical Chemistry C, 2014, 118, 16228-16235.	1.5	50
115	Quantum Confined Electronâ€“Phonon Interaction in Silicon Nanocrystals. Nano Letters, 2015, 15, 1511-1516.	4.5	50
116	Electron and Hole Adducts Formed in Illuminated InP Colloidal Quantum Dots Studied by Electron Paramagnetic Resonance. Journal of Physical Chemistry B, 2002, 106, 4390-4395.	1.2	49
117	Fast Electron Transfer Across Semiconductorâ^'Molecule Interfaces:â€‰ GaAs/Co(Cp)2+/0. Journal of Physical Chemistry B, 1999, 103, 2122-2141.	1.2	48
118	Excited-state spectroscopy of InP quantum dots. Physical Review B, 1998, 57, R4265-R4268.	1.1	46
119	Theoretical Studies of Electron Transfer and Electron Localization at the Semiconductorâ^'Liquid Interface. Journal of Physical Chemistry B, 1997, 101, 2459-2475.	1.2	45
120	Electron transfer dynamics at p-gallium arsenide/liquid interfaces. The Journal of Physical Chemistry, 1992, 96, 10096-10098.	2.9	44
121	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	1.3	44
122	Dependence of hot carrier luminescence on barrier thickness in GaAs/AlGaAs superlattices and multiple quantum wells. Solid State Communications, 1990, 75, 297-301.	0.9	43
123	Exploration of Metal Chloride Uptake for Improved Performance Characteristics of PbSe Quantum Dot Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2892-2899.	2.1	43
124	Electrode materials for photoelectrochemical devices. Journal of Crystal Growth, 1977, 39, 200-209.	0.7	42
125	Two color blinking of single strain-induced GaAs quantum dots. Applied Physics Letters, 1999, 74, 2666-2668.	1.5	42
126	Photoelectrochemistry withpâ€Si electrodes: Effects of inversion. Applied Physics Letters, 1980, 37, 488-491.	1.5	41

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127	Direction of the Magnetic Easy Axis inÎ³â€²-Fe4N. Physical Review B, 1971, 4, 2224-2228.	1.1	40
128	Utilizing hot electrons. Nature Energy, 2018, 3, 170-171.	19.8	40
129	Size quantization in layered semiconductor colloids with tetrahedral bonding: mercury diiodide. The Journal of Physical Chemistry, 1987, 91, 1295-1297.	2.9	39
130	Study of the Schottky barrier and determination of the energetic positions of band edges at the n- and p-type gallium indium phosphide electrode | electrolyte interface. Journal of Electroanalytical Chemistry, 1994, 367, 27-30.	1.9	39
131	Making the most of photons. Nature Nanotechnology, 2009, 4, 548-549.	15.6	39
132	Ultrafast Exciton Fine Structure Relaxation Dynamics in Lead Chalcogenide Nanocrystals. Nano Letters, 2008, 8, 1374-1381.	4.5	38
133	Multiple exciton generation in quantum dots versus singlet fission in molecular chromophores for solar photon conversion. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140412.	1.6	37
134	Picosecond relaxation of hotâ€carrier distributions in GaAs/GaAsP strainedâ€layer superlattices. Applied Physics Letters, 1987, 51, 48-50.	1.5	36
135	In situ spectroscopic characterization of a solution-phase X-type ligand exchange at colloidal lead sulphide quantum dot surfaces. Chemical Communications, 2016, 52, 13893-13896.	2.2	36
136	Optical Absorbance Enhancement in PbS QD/Cinnamate Ligand Complexes. Journal of Physical Chemistry Letters, 2018, 9, 3425-3433.	2.1	36
137	The energetics of p/n photoelectrolysis cells. The Journal of Physical Chemistry, 1984, 88, 3238-3243.	2.9	35
138	Correlation between Photooxidation and the Appearance of Raman Scattering Bands in Lead Chalcogenide Quantum Dots. Journal of Physical Chemistry Letters, 2011, 2, 599-603.	2.1	35
139	Ultrafast Photoinduced Electron Transfer across Semiconductor-Liquid Interfaces in the Presence of Electric Fields. The Journal of Physical Chemistry, 1994, 98, 2739-2741.	2.9	34
140	Evidence for hotâ€electron injection acrosspâ€GaP/electrolyte junctions. Applied Physics Letters, 1982, 41, 101-103.	1.5	33
141	Oxygen evolution on tantalumâ€“polypyrroleâ€“platinum anodes. Nature, 1982, 295, 578-580.	13.7	33
142	Observation of the quantum confined ground state in InP quantum dots at 300 K. Applied Physics Letters, 1996, 68, 304-306.	1.5	33
143	Electron Transfer Rate Constants for Majority Electrons at GaAs and GaInP2Semiconductorâ^'Liquid Interfaces. Journal of Physical Chemistry B, 1997, 101, 7038-7042.	1.2	33
144	Photoelectrochemistry of levulinic acid on undoped platinized n-titanium dioxide powders. The Journal of Physical Chemistry, 1983, 87, 3089-3093.	2.9	32

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145	Synthesis and Spectroscopy of PbSe Fused Quantum-Dot Dimers. Journal of the American Chemical Society, 2014, 136, 4670-4679.	6.6	32
146	On the Marcus model of electron transfer at immiscible liquid interfaces and its application to the semiconductor/liquid interface. Chemical Physics, 1996, 205, 245-267.	0.9	30
147	Single quantum well electrodes for photoelectrochemistry. The Journal of Physical Chemistry, 1990, 94, 3381-3384.	2.9	29
148	Photogenerated carrier dynamics under the influence of electric fields in III-V semiconductors. Physical Review B, 1994, 50, 1746-1754.	1.1	29
149	Study of electron transfer at semiconductor-liquid interfaces addressing the full system electronic structure. Chemical Physics, 1996, 205, 47-72.	0.9	29
150	Paramagnetic and Electric Quadrupole Hyperfine Interactions of Ferric Ions in Ice and FeCl3Â·6H2O. Journal of Chemical Physics, 1968, 49, 4141-4149.	1.2	28
151	Theoretical and experimental investigation of electronic structure and relaxation of colloidal nanocrystalline indium phosphide quantum dots. Physical Review B, 2003, 67, .	1.1	28
152	MÃ¶ssbauer effect in Fe1-xCuxCr2S4. Solid State Communications, 1968, 6, 363-365.	0.9	27
153	Kinetics of electron transfer from photoexcited superlattice electrodes. The Journal of Physical Chemistry, 1988, 92, 2493-2501.	2.9	27
154	Colloidal InP/ZnS coreâ€“shell nanocrystals studied by linearly and circularly polarized photoluminescence. Chemical Physics, 2004, 297, 93-98.	0.9	27
155	Quantization effects in the photoelectrochemistry of superlattice photoelectrodes. Nature, 1985, 316, 51-53.	13.7	26
156	Recombination dynamics at indium phosphide/liquid interfaces. The Journal of Physical Chemistry, 1993, 97, 10421-10429.	2.9	26
157	Ultrafast photoresponse of metallic and semiconducting single-wall carbon nanotubes. Physical Review B, 2005, 71, .	1.1	26
158	Self-Assembly of Linear Arrays of Semiconductor Nanoparticles on Carbon Single-Walled Nanotubesâ€. Journal of Physical Chemistry B, 2006, 110, 25153-25157.	1.2	26
159	Effect of surface passivation on dopant distribution in Si quantum dots: The case of B and P doping. Applied Physics Letters, 2011, 98, .	1.5	26
160	Kinetics of the cubic-to-hexagonal phase transformation in ice doped with MÃ¶ssbauer ions. Chemical Physics Letters, 1967, 1, 391-395.	1.2	25
161	Anomalies in the linear absorption, transient absorption, photoluminescence and photoluminescence excitation spectroscopies of colloidal InP quantum dots. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 142, 187-195.	2.0	25
162	Future directions in solid state chemistry: report of the NSF-sponsored workshop. Progress in Solid State Chemistry, 2002, 30, 1-101.	3.9	24

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163	Measurement of the electron antineutrino mass in tritium beta decay in the Troitsk nu-mass experiment. Physics of Atomic Nuclei, 2012, 75, 464-478.	0.1	24
164	Characterization and photocurrent spectroscopy of single quantum wells. Journal of Chemical Physics, 1990, 93, 7706-7715.	1.2	23
165	Sub-picosecond Injection of Electrons from Excited [Ru(2,2â€²-bipy-4,4â€²-dicarboxy)₂(SCN)₂] into TiO₂ Using Transient Mid-Infrared Spectroscopy*. Zeitschrift Fur Physikalische Chemie, 1999, 212, 77-84.	1.4	23
166	Theoretical Studies of Electronic State Localization and Wormholes in Silicon Quantum Dot Arrays. Nano Letters, 2001, 1, 36-41.	4.5	23
167	Designing Janus Ligand Shells on PbS Quantum Dots using Ligandâ€“Ligand Cooperativity. ACS Nano, 2019, 13, 3839-3846.	7.3	23
168	Size quantization in layered mercuric iodide colloids. The Journal of Physical Chemistry, 1988, 92, 4160-4165.	2.9	22
169	Moessbauer study of the kinetics of iron(3+) photoreduction on titanium dioxide semiconductor powders. The Journal of Physical Chemistry, 1985, 89, 3076-3080.	2.9	20
170	Quantization effects in the photocurrent spectroscopy of superlattice electrodes. Journal of the American Chemical Society, 1985, 107, 7805-7810.	6.6	20
171	Size quantization in small colloidal CdS particles studied with stopped flow spectrometry. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1987, 228, 55-68.	0.3	20
172	Miniband dispersion in GaAs/AlxGa1â^'xAs superlattices with wide wells and very thin barriers. Applied Physics Letters, 1988, 53, 2666-2668.	1.5	20
173	Three-Dimensional Confinement in the Conduction Band Structure of InP. Physical Review Letters, 2000, 84, 4168-4171.	2.9	20
174	Photocurrent spectroscopy of latticeâ€matched superlattice electrodes in photoelectrochemical cells. Applied Physics Letters, 1987, 50, 34-36.	1.5	18
175	GaAs Quantum Dots. Israel Journal of Chemistry, 1993, 33, 15-20.	1.0	18
176	Separating multiple excitons. Nature Photonics, 2012, 6, 272-273.	15.6	18
177	Photoelectrochemistry of strained-layer and lattice-matched superlattice electrodes: effects due to buffer layers. Journal of the American Chemical Society, 1988, 110, 7630-7637.	6.6	17
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