Daniel Vanmaekelbergh

List of Publications by Year
in descending order

247	19,231	9786 73	12946 131
papers	citations	h-index	g-index

259	259	259	20097
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Controlling the dynamics of spontaneous emission from quantum dots by photonic crystals. Nature, 2004, 430, 654-657.	27.8	1,089
2	The Kinetics of the Radiative and Nonradiative Processes in Nanocrystalline ZnO Particles upon Photoexcitation. Journal of Physical Chemistry B, 2000, 104, 1715-1723.	2.6	831
3	Highly Emissive Divalent-Ion-Doped Colloidal CsPb_{1â€“x}M_xBr₃ Perovskite Nanocrystals through Cation Exchange. Journal of the American Chemical Society, 2017, 139, 4087-4097.	13.7	590
4	Identification of the transition responsible for the visible emission in ZnO using quantum size effects. Journal of Luminescence, 2000, 90, 123-128.	3.1	502
5	Luminescent Solar Concentrators - A review of recent results. Optics Express, 2008, 16, 21773.	3.4	442
6	Physicochemical Evaluation of the Hot-Injection Method, a Synthesis Route for Monodisperse Nanocrystals. Small, 2005, 1, 1152-1162.	10.0	438
7	The luminescence of nanocrystalline ZnO particles: the mechanism of the ultraviolet and visible emission. Journal of Luminescence, 2000, 87-89, 454-456.	3.1	409
8	Single-Step Synthesis to Control the Photoluminescence Quantum Yield and Size Dispersion of CdSe Nanocrystals. Journal of Physical Chemistry B, 2003, 107, 489-496.	2.6	346
9	Long-range orientation and atomic attachment of nanocrystals in 2D honeycomb superlattices. Science, 2014, 344, 1377-1380.	12.6	343
10	Trap-Limited Electronic Transport in Assemblies of Nanometer-Size TiO2Particles. Physical Review Letters, 1996, 77, 3427-3430.	7.8	323
11	On the Incorporation Mechanism of Hydrophobic Quantum Dots in Silica Spheres by a Reverse Microemulsion Method. Chemistry of Materials, 2008, 20, 2503-2512.	6.7	297
12	Cu2O:Â Electrodeposition and Characterization. Chemistry of Materials, 1999, 11, 3512-3517.	6.7	270
13	Experimental realization and characterization of an electronic Lieb lattice. Nature Physics, 2017, 13, 672-676.	16.7	259
14	Photoelectrochemistry of Electrodeposited Cu[sub 2]O. Journal of the Electrochemical Society, 2000, 147, 486.	2.9	244
15	Impedance spectroscopy at semiconductor electrodes: Review and recent developments. Electrochimica Acta, 1996, 41, 967-973.	5.2	229
16	Electronic Coupling and Exciton Energy Transfer in CdTe Quantum-Dot Molecules. Journal of the American Chemical Society, 2006, 128, 10436-10441.	13.7	226
17	Low-Dimensional Semiconductor Superlattices Formed by Geometric Control over Nanocrystal Attachment. Nano Letters, 2013, 13, 2317-2323.	9.1	218
18	ZnO nanowire lasers. Nanoscale, 2011, 3, 2783.	5.6	217

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19	Investigation of the Electronic Transport Properties of Nanocrystalline Particulate TiO2Electrodes by Intensity-Modulated Photocurrent Spectroscopy. Journal of Physical Chemistry B, 1997, 101, 2716-2722.	2.6	208
20	Electron-conducting quantum dot solids: novel materials based on colloidal semiconductor nanocrystals. Chemical Society Reviews, 2005, 34, 299.	38.1	199
21	In situ study of the formation mechanism ofÂtwo-dimensional superlattices from PbSeÂnanocrystals. Nature Materials, 2016, 15, 1248-1254.	27.5	199
22	Understanding the self-assembly of charged nanoparticles at the water/oil interface. Physical Chemistry Chemical Physics, 2006, 8, 3828-3835.	2.8	187
23	The Hidden Role of Acetate in the PbSe Nanocrystal Synthesis. Journal of the American Chemical Society, 2006, 128, 6792-6793.	13.7	186
24	Exciton Polaritons Confined in a ZnO Nanowire Cavity. Physical Review Letters, 2006, 97, 147401.	7.8	186
25	Staircase in the Electron Mobility of a ZnO Quantum Dot Assembly due to Shell Filling. Physical Review Letters, 2002, 89, 036801.	7.8	185
26	Suppression of electronâ€“vibron coupling in graphene nanoribbons contacted via a single atom. Nature Communications, 2013, 4, 2023.	12.8	177
27	Frequency-Dependent Spontaneous Emission Rate from CdSe and CdTe Nanocrystals: Influence of Dark States. Physical Review Letters, 2005, 95, 236804.	7.8	174
28	Carrier Multiplication and Its Reduction by Photodoping in Colloidal InAs Quantum Dots. Journal of Physical Chemistry C, 2007, 111, 4146-4152.	3.1	172
29	Self-assembly of colloidal nanocrystals as route to novel classes of nanostructured materials. Nano Today, 2011, 6, 419-437.	11.9	172
30	Phase-Correlated Nondirectional Laser Emission from the End Facets of a ZnO Nanowire. Nano Letters, 2006, 6, 2707-2711.	9.1	171
31	Statistical analysis of time-resolved emission from ensembles of semiconductor quantum dots: Interpretation of exponential decay models. Physical Review B, 2007, 75, .	3.2	170
32	Wide Energy-Window View on the Density of States and Hole Mobility in Poly(p-Phenylene Vinylene). Physical Review Letters, 2004, 93, 166601.	7.8	168
33	Low-Temperature Nanocrystal Unification through Rotations and Relaxations Probed by in Situ Transmission Electron Microscopy. Nano Letters, 2008, 8, 3959-3963.	9.1	167
34	Entropy-Driven Formation of Binary Semiconductor-Nanocrystal Superlattices. Nano Letters, 2010, 10, 4235-4241.	9.1	161
35	Robust zero-energy modes in an electronic higher-order topological insulator. Nature Materials, 2019, 18, 1292-1297.	27.5	158
36	Electrochemical Assembly of Ordered Macropores in Gold. Advanced Materials, 2000, 12, 888-890.	21.0	149

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37	Size-Selective Photoetching of Nanocrystalline Semiconductor Particles. Chemistry of Materials, 1998, 10, 3513-3522.	6.7	146
38	Anisotropic Cation Exchange in PbSe/CdSe Core/Shell Nanocrystals of Different Geometry. Chemistry of Materials, 2012, 24, 294-302.	6.7	144
39	Paramagnetic Lipid-Coated Silica Nanoparticles with a Fluorescent Quantum Dot Core: A New Contrast Agent Platform for Multimodality Imaging. Bioconjugate Chemistry, 2008, 19, 2471-2479.	3.6	143
40	Amine-terminated silicon nanoparticles: synthesis, optical properties and their use in bioimaging. Journal of Materials Chemistry, 2009, 19, 5926.	6.7	142
41	Morphology and Strongly Enhanced Photoresponse of GaP Electrodes Made Porous by Anodic Etching. Journal of the Electrochemical Society, 1996, 143, 305-314.	2.9	140
42	Design and characterization of electrons in a fractal geometry. Nature Physics, 2019, 15, 127-131.	16.7	140
43	Influence of Adsorbed Oxygen on the Emission Properties of Nanocrystalline ZnO Particles. Journal of Physical Chemistry B, 2000, 104, 4355-4360.	2.6	137
44	Three-Dimensional Atomic Imaging of Colloidal Coreâ€“Shell Nanocrystals. Nano Letters, 2011, 11, 3420-3424.	9.1	134
45	Delayed Exciton Emission and Its Relation to Blinking in CdSe Quantum Dots. Nano Letters, 2015, 15, 7718-7725.	9.1	130
46	High charge mobility in two-dimensional percolative networks of PbSe quantum dots connected by atomic bonds. Nature Communications, 2015, 6, 8195.	12.8	125
47	Shell-Tunneling Spectroscopy of the Single-Particle Energy Levels of Insulating Quantum Dots. Nano Letters, 2001, 1, 551-556.	9.1	119
48	Strong Carrierâ€“Phonon Coupling in Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 11024-11030.	14.6	119
49	Density of States Measured by Scanning-Tunneling Spectroscopy Sheds New Light on the Optical Transitions in PbSe Nanocrystals. Physical Review Letters, 2005, 95, 086801.	7.8	113
50	Temperature Dependence of Three-Terminal Molecular Junctions with Sulfur End-Functionalized Tercyclohexylidenes. Nano Letters, 2006, 6, 1031-1035.	9.1	113
51	Driving Force for Electron Transport in Porous Nanostructured Photoelectrodes. Journal of Physical Chemistry B, 1999, 103, 747-750.	2.6	104
52	Atomic Imaging of Phase Transitions and Morphology Transformations in Nanocrystals. Advanced Materials, 2009, 21, 4992-4995.	21.0	104
53	Quantitative Atomic Resolution Force Imaging on Epitaxial Graphene with Reactive and Nonreactive AFM Probes. ACS Nano, 2012, 6, 10216-10221.	14.6	104
54	Nature of Sub-Band Gap Luminescent Eigenmodes in a ZnO Nanowire. Nano Letters, 2008, 8, 119-123.	9.1	103

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55	Temporary Charge Carrier Separation Dominates the Photoluminescence Decay Dynamics of Colloidal CdSe Nanoplatelets. Nano Letters, 2016, 16, 2047-2053.	9.1	103
56	Quantum-Confined Electronic States in Atomically Well-Defined Graphene Nanostructures. Physical Review Letters, 2011, 107, 236803.	7.8	100
57	Increase of the Photoluminescence Intensity of InP Nanowires by Photoassisted Surface Passivation. Journal of the American Chemical Society, 2005, 127, 12357-12362.	13.7	95
58	Observation of a Ternary Nanocrystal Superlattice and Its Structural Characterization by Electron Tomography. Angewandte Chemie - International Edition, 2009, 48, 9655-9657.	13.8	95
59	Energetics of Polar and Nonpolar Facets of PbSe Nanocrystals from Theory and Experiment. ACS Nano, 2010, 4, 211-218.	14.6	93
60	Light Scattering near the Localization Transition in Macroporous GaP Networks. Physical Review Letters, 1999, 83, 2183-2186.	7.8	91
61	Molecular three-terminal devices: fabrication and measurements. Faraday Discussions, 2006, 131, 347-356.	3.2	90
62	Quantitative Structural Analysis of Binary Nanocrystal Superlattices by Electron Tomography. Nano Letters, 2009, 9, 2719-2724.	9.1	90
63	Charge carrier dynamics in nanoporous photoelectrodes. Electrochimica Acta, 1998, 43, 2773-2780.	5.2	85
64	Dirac Cones, Topological Edge States, and Nontrivial Flat Bands in Two-Dimensional Semiconductors with a Honeycomb Nanogeometry. Physical Review X, 2014, 4, .	8.9	85
65	The Different Nature of Band Edge Absorption and Emission in Colloidal PbSe/CdSe Core/Shell Quantum Dots. ACS Nano, 2011, 5, 58-66.	14.6	84
66	Density of Trap States and Auger-mediated Electron Trapping in CdTe Quantum-Dot Solids. Nano Letters, 2015, 15, 3056-3066.	9.1	84
67	Room-Temperature Laser Emission of ZnO Nanowires Explained by Many-Body Theory. Physical Review Letters, 2012, 108, 157402.	7.8	82
68	Characterization of Photoinduced Electron Tunneling in Gold/SAM/Q-CdSe Systems by Time-Resolved Photoelectrochemistry. Journal of Physical Chemistry B, 2000, 104, 7266-7272.	2.6	79
69	Morphological Transformations and Fusion of PbSe Nanocrystals Studied Using Atomistic Simulations. Nano Letters, 2010, 10, 3966-3971.	9.1	79
70	Electron transport in quantum dot solids: Monte Carlo simulations of the effects of shell filling, Coulomb repulsions, and site disorder. Physical Review B, 2007, 75, .	3.2	78
71	Differences in Cross-Link Chemistry between Rigid and Flexible Dithiol Molecules Revealed by Optical Studies of CdTe Quantum Dots. Journal of Physical Chemistry C, 2007, 111, 11208-11215.	3.1	77
72	Dipolar Structures in Colloidal Dispersions of PbSe and CdSe Quantum Dots. Nano Letters, 2007, 7, 2931-2936.	9.1	77

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73	Effects of Crystal Shape on the Energy Levels of Zero-Dimensional PbS Quantum Dots. Physical Review Letters, 2002, 88, 236803.	7.8	74
74	Reappraisal of Variable-Range Hopping in Quantum-Dot Solids. Nano Letters, 2008, 8, 3516-3520.	9.1	73
75	Distance-Dependent Electron Transfer in Au/Spacer/Q-CdSe Assemblies. Angewandte Chemie - International Edition, 2000, 39, 2297-2299.	13.8	71
76	Electron transport in disordered semiconductors studied by a small harmonic modulation of the steady state. Physical Review B, 2000, 61, 4699-4704.	3.2	71
77	Semiconductor Nanorod Self-Assembly at the Liquid/Air Interface Studied by in Situ GISAXS and ex Situ TEM. Nano Letters, 2012, 12, 5515-5523.	9.1	71
78	Porous etching: A means to enhance the photoresponse of indirect semiconductors. Advanced Materials, 1995, 7, 739-742.	21.0	70
79	Optical Investigation of Quantum Confinement in PbSe Nanocrystals at Different Points in the Brillouin Zone. Small, 2008, 4, 127-133.	10.0	70
80	Reduced Auger Recombination in Single CdSe/CdS Nanorods by One-Dimensional Electron Delocalization. Nano Letters, 2013, 13, 4884-4892.	9.1	70
81	Binary Superlattices of PbSe and CdSe Nanocrystals. Journal of the American Chemical Society, 2008, 130, 7833-7835.	13.7	69
82	Polarization, Microscopic Origin, and Mode Structure of Luminescence and Lasing from Single ZnO Nanowires. Nano Letters, 2009, 9, 3515-3520.	9.1	68
83	Charge Carrier Dynamics in Illuminated, Particulate ZnO Electrodes. Journal of Physical Chemistry B, 2000, 104, 7686-7693.	2.6	67
84	Electronic structure of atomically coherent square semiconductor superlattices with dimensionality below two. Physical Review B, 2013, 88, .	3.2	66
85	Optical Transitions in Artificial Few-Electron Atoms Strongly Confined inside ZnO Nanocrystals. Physical Review Letters, 2003, 90, 097401.	7.8	65
86	Cuboidal Supraparticles Self-Assembled from Cubic CsPbBr₃ Perovskite Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 15706-15712.	3.1	65
87	Resonant electron tunneling through semiconducting nanocrystals in a symmetrical and an asymmetrical junction. Physical Review B, 2000, 62, R7743-R7746.	3.2	64
88	Electron Transport in Two-Dimensional Arrays of Gold Nanocrystals Investigated by Scanning Electrochemical Microscopy. Journal of the American Chemical Society, 2004, 126, 7126-7132.	13.7	64
89	Orbital and Charge-Resolved Polaron States in CdSe Dots and Rods Probed by Scanning Tunneling Spectroscopy. Physical Review Letters, 2009, 102, 196401.	7.8	64
90	Electrochemical Charging of CdSe Quantum Dot Films: Dependence on Void Size and Counterion Proximity. ACS Nano, 2013, 7, 2500-2508.	14.6	59

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91	Electrochemical gating: A method to tune and monitor the (opto)electronic properties of functional materials. Electrochimica Acta, 2007, 53, 1140-1149.	5.2	58
92	Oriented Attachment: From Natural Crystal Growth to a Materials Engineering Tool. Accounts of Chemical Research, 2021, 54, 787-797.	15.6	58
93	Orbital Occupation in Electron-Charged CdSe Quantum-Dot Solids. Journal of Physical Chemistry B, 2005, 109, 19634-19642.	2.6	57
94	Size Effects on Semiconductor Nanoparticles. , 2014, , 13-51.		57
95	Greatly Enhanced Subâ€Bandgap Photocurrent in Porous GaP Photoanodes. Journal of the Electrochemical Society, 1996, 143, 1137-1142.	2.9	56
96	Can scanning tunnelling spectroscopy measure the density of states of semiconductor quantum dots?. Physical Chemistry Chemical Physics, 2006, 8, 3845.	2.8	56
97	Enhancement of the lightâ€toâ€current conversion efficiency in an nâ€SiC/solution diode by porous etching. Applied Physics Letters, 1996, 69, 2246-2248.	3.3	54
98	Controlling quantum dot emission by plasmonic nanoarrays. Optics Express, 2015, 23, 28206.	3.4	53
99	Shape-Dependent Multiexciton Emission and Whispering Gallery Modes in Supraparticles of CdSe/Multishell Quantum Dots. ACS Nano, 2015, 9, 3942-3950.	14.6	53
100	Crystallization of Nanocrystals in Spherical Confinement Probed by in Situ X-ray Scattering. Nano Letters, 2018, 18, 3675-3681.	9.1	53
101	Dynamics of Intraband and Interband Auger Processes in Colloidal Coreâ€“Shell Quantum Dots. ACS Nano, 2015, 9, 10366-10376.	14.6	52
102	Topological states in multi-orbital HgTe honeycomb lattices. Nature Communications, 2015, 6, 6316.	12.8	51
103	Lasing Supraparticles Self-Assembled from Nanocrystals. ACS Nano, 2018, 12, 12788-12794.	14.6	51
104	Direct and surface state mediated electron transfer at semiconductor/electrolyte junctionsâ€”I. A comparison of steady-state results. Electrochimica Acta, 1997, 42, 1121-1134.	5.2	50
105	Catalysis and Pore Initiation in the Anodic Dissolution of Silicon in HF. Journal of the Electrochemical Society, 1997, 144, 1296-1301.	2.9	49
106	Porous GaP Multilayers Formed by Electrochemical Etching. Electrochemical and Solid-State Letters, 2002, 5, G32.	2.2	49
107	Synthesis of Highly Luminescent Silica-Coated CdSe/CdS Nanorods. Chemistry of Materials, 2013, 25, 3427-3434.	6.7	49
108	Atomic Resolution Monitoring of Cation Exchange in CdSe-PbSe Heteronanocrystals during Epitaxial Solidâ€“Solidâ€“Vapor Growth. Nano Letters, 2014, 14, 3661-3667.	9.1	48

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109	Spectroscopic Studies of Electron Injection in Quantum Dot Sensitized Mesoporous Oxide Films. Journal of Physical Chemistry C, 2010, 114, 18866-18873.	3.1	47
110	Thermally induced atomic reconstruction of PbSe/CdSe core/shell quantum dots into PbSe/CdSe bi-hemisphere hetero-nanocrystals. Journal of Materials Chemistry, 2011, 21, 11556.	6.7	47
111	Topographic and electronic contrast of the graphene moirÃ© on Ir(111) probed by scanning tunneling microscopy and noncontact atomic force microscopy. Physical Review B, 2011, 83, .	3.2	46
112	Conformal and Atomic Characterization of Ultrathin CdSe Platelets with a Helical Shape. Nano Letters, 2014, 14, 6257-6262.	9.1	46
113	Scanning Tunneling Spectroscopy of Individual PbSe Quantum Dots and Molecular Aggregates Stabilized in an Inert Nanocrystal Matrix. ACS Nano, 2008, 2, 600-606.	14.6	45
114	Ligand-Induced Shape Transformation of PbSe Nanocrystals. Chemistry of Materials, 2017, 29, 4122-4128.	6.7	45
115	Observation of the Full Exciton and Phonon Fine Structure in CdSe/CdS Dot-in-Rod Heteronanocrystals. ACS Nano, 2014, 8, 5921-5931.	14.6	43
116	Interfacial Self-Assembly and Oriented Attachment in the Family of PbX (X = S, Se, Te) Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 12464-12473.	3.1	43
117	Electrochemical Control over Photoinduced Electron Transfer and Trapping in CdSe-CdTe Quantum-Dot Solids. ACS Nano, 2014, 8, 7067-7077.	14.6	42
118	Exciton Fine Structure and Lattice Dynamics in InP/ZnSe Core/Shell Quantum Dots. ACS Photonics, 2018, 5, 3353-3362.	6.6	42
119	Coulomb blockade of electron transport in a ZnO quantum-dot solid. Applied Physics Letters, 2003, 83, 5530-5532.	3.3	41
120	Electron Tomography Resolves a Novel Crystal Structure in a Binary Nanocrystal Superlattice. Nano Letters, 2013, 13, 1312-1316.	9.1	41
121	Transport Properties of a Two-Dimensional PbSe Square Superstructure in an Electrolyte-Gated Transistor. Nano Letters, 2017, 17, 5238-5243.	9.1	40
122	Study of Stabilization and Surface Recombination on nâ€‰â€â€‰GaP Photoelectrodes: Mechanisms and Interrelation. Journal of the Electrochemical Society, 1982, 129, 546-550.	2.9	39
123	Femtosecond Cooling of Hot Electrons in CdSe Quantum-Well Platelets. Nano Letters, 2015, 15, 2409-2416.	9.1	39
124	Composite Supraparticles with Tunable Light Emission. ACS Nano, 2017, 11, 9136-9142.	14.6	39
125	Calculation of the electrical impedance associated with the surface recombination of free carriers at an illuminated semiconductor/electrolyte interface. Journal Physics D: Applied Physics, 1986, 19, 643-656.	2.8	38
126	On the kinetics of semiconductor-electrode stabilization. Faraday Discussions of the Chemical Society, 1980, 70, 153.	2.2	37

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127	Tunable photonic strength in porous GaP. Applied Physics Letters, 2002, 80, 4498-4500.	3.3	37
128	On the Electrical Impedance Due to the Anodic Dissolution of Silicon in â€‰HFâ€‰ Solutions. Journal of the Electrochemical Society, 1994, 141, 697-702.	2.9	36
129	Extended Nucleation and Superfocusing in Colloidal Semiconductor Nanocrystal Synthesis. Nano Letters, 2021, 21, 2487-2496.	9.1	36
130	Two-Photon Photoemission Study of Competing Auger and Surface-Mediated Relaxation of Hot Electrons in CdSe Quantum Dot Solids. Nano Letters, 2013, 13, 1655-1661.	9.1	34
131	Scanning probe microscopy and spectroscopy of colloidal semiconductor nanocrystals and assembled structures. Chemical Reviews, 2016, 116, 11181-11219.	47.7	34
132	Mono- and Multilayer Silicene-Type Honeycomb Lattices by Oriented Attachment of PbSe Nanocrystals: Synthesis, Structural Characterization, and Analysis of the Disorder. Chemistry of Materials, 2018, 30, 4831-4837.	6.7	34
133	FrÃ¶hlich interaction dominated by a single phonon mode in CsPbBr3. Nature Communications, 2021, 12, 5844.	12.8	34
134	A Study of the Photoanodic Dissolution of CdS with Electrical and Optoâ€electrical Impedance Spectroscopy. Journal of the Electrochemical Society, 1992, 139, 2508-2513.	2.9	33
135	Photoelectrochemical characterization of 6Hâ€“SiC. Journal of Applied Physics, 1998, 83, 6089-6095.	2.5	33
136	Breaking and restoring a molecularly bridged metal|quantum dot junction. Applied Physics Letters, 2002, 81, 4245-4247.	3.3	33
137	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math> -Band Engineering in Artificial Electronic Lattices. Physical Review X, 2019, 9, .	8.9	33
138	Excited-State Dynamics in CdS Quantum Dots Adsorbed on a Metal Electrode. Journal of Physical Chemistry B, 1999, 103, 2781-2788.	2.6	32
139	Scanning Tunnelling Spectroscopy on Arrays of CdSe Quantum Dots: Response of Wave Functions to Local Electric Fields. Nano Letters, 2008, 8, 4014-4019.	9.1	32
140	p Orbital Flat Band and Dirac Cone in the Electronic Honeycomb Lattice. ACS Nano, 2020, 14, 13638-13644.	14.6	31
141	The anodic dissolution of InP studied by the optoelectrical impedance methodâ€”1. Competition between electron injection and hole capture at InP photoanodes. Electrochimica Acta, 1993, 38, 2559-2567.	5.2	30
142	Size selective photoetching of nanocrystalline CdS particles. Chemical Physics Letters, 1997, 269, 494-499.	2.6	30
143	Planar nanocontacts with atomically controlled separation. Applied Physics Letters, 2003, 83, 3782-3784.	3.3	30
144	Exciton lifetimes of CdTe nanocrystal quantum dots in high magnetic fields. Physical Review B, 2011, 83, .	3.2	30

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145	Twoâ€Fold Emission From the Sâ€Shell of PbSe/CdSe Core/Shell Quantum Dots. Small, 2011, 7, 3493-3501.	10.0	30
146	Atomic Structure of Wurtzite CdSe (Core)/CdS (Giant Shell) Nanobullets Related to Epitaxy and Growth. Journal of the American Chemical Society, 2016, 138, 14288-14293.	13.7	30
147	In Situ Spectroelectrochemical Determination of Energy Levels and Energy Level Offsets in Quantum-Dot Heterojunctions. Journal of Physical Chemistry C, 2016, 120, 5164-5173.	3.1	30
148	Unusual Spectral Diffusion of Single CuInS₂ Quantum Dots Sheds Light on the Mechanism of Radiative Decay. Nano Letters, 2021, 21, 658-665.	9.1	30
149	Single Trap States in Single CdSe Nanoplatelets. ACS Nano, 2021, 15, 7216-7225.	14.6	30
150	Short-range magnetic order in two-dimensional cobalt-ferrite nanoparticle assemblies. Physical Review B, 2008, 77, .	3.2	29
151	Hole-Induced Electron Transport through Coreâ"Shell Quantum Dots: A Direct Measurement of the Electronâ"Hole Interaction. Nano Letters, 2010, 10, 1931-1935.	9.1	29
152	Direct and surface state mediated electron transfer at semiconductor/electrolyte junctionsâ€"II. A comparison of the interfacial admittance. Electrochimica Acta, 1997, 42, 1135-1141.	5.2	28
153	Non-blinking single-photon emitters in silica. Scientific Reports, 2016, 6, 21187.	3.3	28
154	Recombination in semiconductor electrodes: Investigation by the electrical and optoelectrical impedance method. Journal of Applied Physics, 1993, 73, 5049-5057.	2.5	27
155	Calibrating and Controlling the Quantum Efficiency Distribution of Inhomogeneously Broadened Quantum Rods by Using a Mirror Ball. ACS Nano, 2013, 7, 5984-5992.	14.6	27
156	Recombination of Photogenerated Charge Carriers in Nanoporous Gallium Phosphide. Journal of Porous Materials, 2000, 7, 147-152.	2.6	26
157	Flux closure in two-dimensional magnetite nanoparticle assemblies. Physical Review B, 2006, 73, .	3.2	26
158	The Anodic Decomposition Mechanism of nâ€‰â€â€‰GaP Electrodes: A Hole Injection Study. Journal of the Electrochemical Society, 1989, 136, 108-113.	2.9	25
159	Bending and buckling of narrow armchair graphene nanoribbons via STM manipulation. New Journal of Physics, 2015, 17, 053013.	2.9	25
160	The mechanism of current-doubling reactions at ZnO photoanodes. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1127-1132.	1.7	24
161	A schottky barrier junction based on nanometer-scale interpenetrating GaP/Gold networks. Advanced Materials, 1997, 9, 575-578.	21.0	24
162	Free Carrier Generation in Semiconductors Induced by Absorption of Subband-Gap Light. Physical Review Letters, 1998, 80, 821-824.	7.8	24

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163	Electron-conducting quantum-dot solids with ionic charge compensation. Faraday Discussions, 2004, 125, 55.	3.2	24
164	Electron-phonon coupling and intervalley splitting determine the linewidth of single-electron transport through PbSe nanocrystals. Journal of Chemical Physics, 2009, 131, 224510.	3.0	24
165	The influence of electrodeposited gold on the properties of IIIâ€“V semiconductor electrodesâ€”part 2. A study of the impedance due to gold-related surface states at p-GaAs electrodes. Electrochimica Acta, 1993, 38, 301-306.	5.2	23
166	Enthalpy and entropy of nanoparticle association from temperature-dependent cryo-TEM. Physical Chemistry Chemical Physics, 2011, 13, 12770.	2.8	23
167	A tunnelling spectroscopy study on the single-particle energy levels and electron-electron interactions in CdSe quantum dots. Nanotechnology, 2002, 13, 258-262.	2.6	22
168	Self-Assembled CdSe/CdS Nanorod Sheets Studied in the Bulk Suspension by Magnetic Alignment. ACS Nano, 2014, 8, 10486-10495.	14.6	22
169	Modeling the Self-Assembly of Organic Molecules in 2D Molecular Layers with Different Structures. Journal of Physical Chemistry C, 2016, 120, 318-323.	3.1	22
170	A Quantitative Analysis of Photoinduced Capacitance Peaks in the Impedance of the nâ€‰â€â€‰GaAs Electrode. Journal of the Electrochemical Society, 1987, 134, 891-894.	2.9	20
171	The Lowâ€Frequency Impedance of Anodically Dissolving Semiconductor and Metal Electrodes: A Common Origin?. Journal of the Electrochemical Society, 1997, 144, 3385-3392.	2.9	20
172	Coupled Partial Ionâ€Transfer Steps in the Anodic Dissolution of Metals. Journal of the Electrochemical Society, 1999, 146, 2488-2494.	2.9	20
173	Electronic band structure of zinc blende CdSe and rock salt PbSe semiconductors with silicene-type honeycomb geometry. 2D Materials, 2015, 2, 034008.	4.4	19
174	Efficient Steplike Carrier Multiplication in Percolative Networks of Epitaxially Connected PbSe Nanocrystals. ACS Nano, 2018, 12, 378-384.	14.6	19
175	Unravelling three-dimensional adsorption geometries of PbSe nanocrystal monolayers at a liquid-air interface. Communications Chemistry, 2020, 3, .	4.5	19
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