## Daniel Vanmaekelbergh

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4088556/publications.pdf Version: 2024-02-01

		9786	12946
247	19,231	73	131
papers	citations	h-index	g-index
259	259	259	20097
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	On the Formation of Honeycomb Superlattices from PbSe Quantum Dots: The Role of Solvent-Mediated Repulsion and Facet-to-Facet Attraction in NC Self-Assembly and Alignment. Journal of Physical Chemistry C, 2022, 126, 986-996.	3.1	1
2	Two-Dimensional CdSe-PbSe Heterostructures and PbSe Nanoplatelets: Formation, Atomic Structure, and Optical Properties. Journal of Physical Chemistry C, 2022, 126, 1513-1522.	3.1	11
3	Universality of optical absorptance quantization in two-dimensional group-IV, III-V, II-VI, and IV-VI semiconductors. Physical Review B, 2022, 105, .	3.2	3
4	Electronic Quantum Materials Simulated with Artificial Model Lattices. ACS Nanoscience Au, 2022, 2, 198-224.	4.8	9
5	<i>In Situ</i> Optical and X-ray Spectroscopy Reveals Evolution toward Mature CdSe Nanoplatelets by Synergetic Action of Myristate and Acetate Ligands. Journal of the American Chemical Society, 2022, 144, 8096-8105.	13.7	9
6	Engineering a Robust Flat Band in III–V Semiconductor Heterostructures. Nano Letters, 2021, 21, 680-685.	9.1	19
7	Unusual Spectral Diffusion of Single CuInS <sub>2</sub> Quantum Dots Sheds Light on the Mechanism of Radiative Decay. Nano Letters, 2021, 21, 658-665.	9.1	30
8	Single Trap States in Single CdSe Nanoplatelets. ACS Nano, 2021, 15, 7216-7225.	14.6	30
9	Extended Nucleation and Superfocusing in Colloidal Semiconductor Nanocrystal Synthesis. Nano Letters, 2021, 21, 2487-2496.	9.1	36
10	Electronic properties of atomically coherent square PbSe nanocrystal superlattice resolved by Scanning Tunneling Spectroscopy. Nanotechnology, 2021, 32, 325706.	2.6	4
11	Pushing the limit of lithography for patterning two-dimensional lattices in III-V semiconductor quantum wells. , 2021, , .		0
12	From CdSe Nanoplatelets to Quantum Rings by Thermochemical Edge Reconfiguration. Chemistry of Materials, 2021, 33, 6853-6859.	6.7	7
13	Oriented Attachment: From Natural Crystal Growth to a Materials Engineering Tool. Accounts of Chemical Research, 2021, 54, 787-797.	15.6	58
14	Fröhlich interaction dominated by a single phonon mode in CsPbBr3. Nature Communications, 2021, 12, 5844.	12.8	34
15	The Fine-Structure Constant as a Ruler for the Band-Edge Light Absorption Strength of Bulk and Quantum-Confined Semiconductors. Nano Letters, 2021, 21, 9426-9432.	9.1	1
16	Effective spin-orbit gaps in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mi>s</mml:mi>  and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mi>p</mml:mi>  orbital bands of an artificial honeycomb lattice. Physical Review Materials, 2021, 5, .</mml:math </mml:math 	2.4	3
17	Stimulated Emission through an Electron–Hole Plasma in Colloidal CdSe Quantum Rings. Nano Letters, 2021, 21, 10062-10069.	9.1	3
18	p Orbital Flat Band and Dirac Cone in the Electronic Honeycomb Lattice. ACS Nano, 2020, 14, 13638-13644	14.6	31

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19	Observation of the quantized motion of excitons in CdSe nanoplatelets. Physical Review B, 2020, 102, .	3.2	13
20	Exciton-phonon coupling in InP quantum dots with ZnS and (Zn,Cd)Se shells. Physical Review B, 2020, 101, .	3.2	10
21	Unravelling three-dimensional adsorption geometries of PbSe nanocrystal monolayers at a liquid-air interface. Communications Chemistry, 2020, 3, .	4.5	19
22	Fine Structure of Nearly Isotropic Bright Excitons in InP/ZnSe Colloidal Quantum Dots. Journal of Physical Chemistry Letters, 2019, 10, 5468-5475.	4.6	18
23	Hybrid Oleate–lodide Ligand Shell for Air-Stable PbSe Nanocrystals and Superstructures. Chemistry of Materials, 2019, 31, 5808-5815.	6.7	12
24	Triangular nanoperforation and band engineering of InGaAs quantum wells: a lithographic route toward Dirac cones in Ill–V semiconductors. Nanotechnology, 2019, 30, 155301.	2.6	11
25	Hyperfine Interactions and Slow Spin Dynamics in Quasi-isotropic InP-based Core/Shell Colloidal Nanocrystals. ACS Nano, 2019, 13, 10201-10209.	14.6	8
26	Robust zero-energy modes in an electronic higher-order topological insulator. Nature Materials, 2019, 18, 1292-1297.	27.5	158
27	Room-Temperature Electron Transport in Self-Assembled Sheets of PbSe Nanocrystals with a Honeycomb Nanogeometry. Journal of Physical Chemistry C, 2019, 123, 14058-14066.	3.1	4
28	Understanding the Formation of PbSe Honeycomb Superstructures by Dynamics Simulations. Physical Review X, 2019, 9, .	8.9	10
29	Sizing Curve, Absorption Coefficient, Surface Chemistry, and Aliphatic Chain Structure of PbTe Nanocrystals. Chemistry of Materials, 2019, 31, 1672-1680.	6.7	17
30	Phase diagrams of honeycomb and square nanocrystal superlattices from the nanocrystal's surface chemistry at the dispersion-air interface. Journal of Chemical Physics, 2019, 151, 234702.	3.0	6
31	Design and characterization of electrons in a fractal geometry. Nature Physics, 2019, 15, 127-131.	16.7	140
32	<mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"&gt;<mml:mi>p</mml:mi></mml:math> -Band Engineering in Artificial Electronic Lattices. Physical Review X, 2019, 9, .	8.9	33
33	Efficient Steplike Carrier Multiplication in Percolative Networks of Epitaxially Connected PbSe Nanocrystals. ACS Nano, 2018, 12, 378-384.	14.6	19
34	Lasing Supraparticles Self-Assembled from Nanocrystals. ACS Nano, 2018, 12, 12788-12794.	14.6	51
35	Crystallization of Nanocrystals in Spherical Confinement Probed by <i>in Situ</i> X-ray Scattering. Nano Letters, 2018, 18, 3675-3681.	9.1	53
36	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

#	Article	IF	CITATIONS
37	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
38	Exciton Fine Structure and Lattice Dynamics in InP/ZnSe Core/Shell Quantum Dots. ACS Photonics, 2018, 5, 3353-3362.	6.6	42
39	Reversible Charge-Carrier Trapping Slows Förster Energy Transfer in CdSe/CdS Quantum-Dot Solids. Nano Letters, 2018, 18, 5867-5874.	9.1	5
40	Cuboidal Supraparticles Self-Assembled from Cubic CsPbBr <sub>3</sub> Perovskite Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 15706-15712.	3.1	65
41	Highly Emissive Divalent-Ion-Doped Colloidal CsPb <sub>1–<i>x</i></sub> M <sub><i>x</i></sub> Br <sub>3</sub> Perovskite Nanocrystals through Cation Exchange. Journal of the American Chemical Society, 2017, 139, 4087-4097.	13.7	590
42	Experimental realization and characterization of an electronic Lieb lattice. Nature Physics, 2017, 13, 672-676.	16.7	259
43	Morphological and chemical transformations of single silica-coated CdSe/CdS nanorods upon fs-laser excitation. Nanoscale, 2017, 9, 4810-4818.	5.6	4
44	Ligand-Induced Shape Transformation of PbSe Nanocrystals. Chemistry of Materials, 2017, 29, 4122-4128.	6.7	45
45	Strong Carrier–Phonon Coupling in Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 11024-11030.	14.6	119
46	Polarized emission in II–VI and perovskite colloidal quantum dots. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 214001.	1.5	4
47	Optical Spectroscopy of Dark and Bright Excitons in CdSe Nanocrystals in High Magnetic Fields. Journal of Physical Chemistry C, 2017, 121, 23693-23704.	3.1	17
48	Composite Supraparticles with Tunable Light Emission. ACS Nano, 2017, 11, 9136-9142.	14.6	39
49	Transport Properties of a Two-Dimensional PbSe Square Superstructure in an Electrolyte-Gated Transistor. Nano Letters, 2017, 17, 5238-5243.	9.1	40
50	Non-blinking single-photon emitters in silica. Scientific Reports, 2016, 6, 21187.	3.3	28
51	In situ study of the formation mechanism ofÂtwo-dimensional superlattices from PbSeÂnanocrystals. Nature Materials, 2016, 15, 1248-1254.	27.5	199
52	Recognizing nitrogen dopant atoms in graphene using atomic force microscopy. Physical Review B, 2016, 93, .	3.2	12
53	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
54	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

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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	Scanning probe microscopy and spectroscopy of colloidal semiconductor nanocrystals and assembled structures. Chemical Reviews, 2016, 116, 11181-11219.	47.7	34
57	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
58	Controlling quantum dot emission by plasmonic nanoarrays. Optics Express, 2015, 23, 28206.	3.4	53
59	Topological states in multi-orbital HgTe honeycomb lattices. Nature Communications, 2015, 6, 6316.	12.8	51
60	Bending and buckling of narrow armchair graphene nanoribbons via STM manipulation. New Journal of Physics, 2015, 17, 053013.	2.9	25
61	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
62	Quantum Confinement Regimes in CdTe Nanocrystals Probed by Single Dot Spectroscopy: From Strong Confinement to the Bulk Limit. ACS Nano, 2015, 9, 7840-7845.	14.6	10
63	Femtosecond Cooling of Hot Electrons in CdSe Quantum-Well Platelets. Nano Letters, 2015, 15, 2409-2416.	9.1	39
64	Shape-Dependent Multiexciton Emission and Whispering Gallery Modes in Supraparticles of CdSe/Multishell Quantum Dots. ACS Nano, 2015, 9, 3942-3950.	14.6	53
65	Density of Trap States and Auger-mediated Electron Trapping in CdTe Quantum-Dot Solids. Nano Letters, 2015, 15, 3056-3066.	9.1	84
66	Dynamics of Intraband and Interband Auger Processes in Colloidal Core–Shell Quantum Dots. ACS Nano, 2015, 9, 10366-10376.	14.6	52
67	Delayed Exciton Emission and Its Relation to Blinking in CdSe Quantum Dots. Nano Letters, 2015, 15, 7718-7725.	9.1	130
68	High charge mobility in two-dimensional percolative networks of PbSe quantum dots connected by atomic bonds. Nature Communications, 2015, 6, 8195.	12.8	125
69	(Invited) Topological States in Multi-Orbital Honeycomb Lattices of HgTe (CdTe) Quantum Dots. ECS Transactions, 2015, 69, 81-88.	0.5	1
70	Superlattice substitution. Nature, 2015, 524, 418-419.	27.8	0
71	Core–shell reconfiguration through thermal annealing in Fe <sub><i>x</i></sub> O/CoFe <sub>2</sub> O <sub>4</sub> ordered 2D nanocrystal arrays. Nanotechnology, 2014, 25, 055601.	2.6	9
72	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

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73	Atomic Resolution Monitoring of Cation Exchange in CdSe-PbSe Heteronanocrystals during Epitaxial Solid–Solid–Vapor Growth. Nano Letters, 2014, 14, 3661-3667.	9.1	48
74	Conformal and Atomic Characterization of Ultrathin CdSe Platelets with a Helical Shape. Nano Letters, 2014, 14, 6257-6262.	9.1	46
75	Self-Assembled CdSe/CdS Nanorod Sheets Studied in the Bulk Suspension by Magnetic Alignment. ACS Nano, 2014, 8, 10486-10495.	14.6	22
76	Method To Incorporate Anisotropic Semiconductor Nanocrystals of All Shapes in an Ultrathin and Uniform Silica Shell. Chemistry of Materials, 2014, 26, 1905-1911.	6.7	17
77	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
78	Long-range orientation and atomic attachment of nanocrystals in 2D honeycomb superlattices. Science, 2014, 344, 1377-1380.	12.6	343
79	Electrochemical Control over Photoinduced Electron Transfer and Trapping in CdSe-CdTe Quantum-Dot Solids. ACS Nano, 2014, 8, 7067-7077.	14.6	42
80	Size Effects on Semiconductor Nanoparticles. , 2014, , 13-51.		57
81	Synthesis of Highly Luminescent Silica-Coated CdSe/CdS Nanorods. Chemistry of Materials, 2013, 25, 3427-3434.	6.7	49
82	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
83	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
84	Reduced Auger Recombination in Single CdSe/CdS Nanorods by One-Dimensional Electron Delocalization. Nano Letters, 2013, 13, 4884-4892.	9.1	70
85	Low-Dimensional Semiconductor Superlattices Formed by Geometric Control over Nanocrystal Attachment. Nano Letters, 2013, 13, 2317-2323.	9.1	218
86	Electron Tomography Resolves a Novel Crystal Structure in a Binary Nanocrystal Superlattice. Nano Letters, 2013, 13, 1312-1316.	9.1	41
87	Electrochemical Charging of CdSe Quantum Dot Films: Dependence on Void Size and Counterion Proximity. ACS Nano, 2013, 7, 2500-2508.	14.6	59
88	Suppression of electron–vibron coupling in graphene nanoribbons contacted via a single atom. Nature Communications, 2013, 4, 2023.	12.8	177
89	Electronic structure of atomically coherent square semiconductor superlattices with dimensionality below two. Physical Review B, 2013, 88, .	3.2	66
90	Loosening Quantum Confinement: Observation of Real Conductivity Caused by Hole Polarons in Semiconductor Nanocrystals Smaller than the Bohr Radius. Nano Letters, 2012, 12, 4937-4942.	9.1	16

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91	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
92	Anisotropic Cation Exchange in PbSe/CdSe Core/Shell Nanocrystals of Different Geometry. Chemistry of Materials, 2012, 24, 294-302.	6.7	144
93	Quantitative Atomic Resolution Force Imaging on Epitaxial Graphene with Reactive and Nonreactive AFM Probes. ACS Nano, 2012, 6, 10216-10221.	14.6	104
94	Room-Temperature Laser Emission of ZnO Nanowires Explained by Many-Body Theory. Physical Review Letters, 2012, 108, 157402.	7.8	82
95	Enthalpy and entropy of nanoparticle association from temperature-dependent cryo-TEM. Physical Chemistry Chemical Physics, 2011, 13, 12770.	2.8	23
96	Exciton lifetimes of CdTe nanocrystal quantum dots in high magnetic fields. Physical Review B, 2011, 83, .	3.2	30
97	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
98	Single-Dot Microscopy and Spectroscopy for Comprehensive Study of Colloidal Nanocrystals. Journal of Physical Chemistry Letters, 2011, 2, 2024-2031.	4.6	13
99	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
100	Topographic and electronic contrast of the graphene moiré on lr(111) probed by scanning tunneling microscopy and noncontact atomic force microscopy. Physical Review B, 2011, 83, .	3.2	46
101	Quantum-Confined Electronic States in Atomically Well-Defined Graphene Nanostructures. Physical Review Letters, 2011, 107, 236803.	7.8	100
102	Three-Dimensional Atomic Imaging of Colloidal Core–Shell Nanocrystals. Nano Letters, 2011, 11, 3420-3424.	9.1	134
103	ZnO nanowire lasers. Nanoscale, 2011, 3, 2783.	5.6	217
104	Twoâ€Fold Emission From the Sâ€Shell of PbSe/CdSe Core/Shell Quantum Dots. Small, 2011, 7, 3493-3501.	10.0	30
105	Self-assembly of colloidal nanocrystals as route to novel classes of nanostructured materials. Nano Today, 2011, 6, 419-437.	11.9	172
106	Entropy-Driven Formation of Binary Semiconductor-Nanocrystal Superlattices. Nano Letters, 2010, 10, 4235-4241.	9.1	161
107	Spectroscopic Studies of Electron Injection in Quantum Dot Sensitized Mesoporous Oxide Films. Journal of Physical Chemistry C, 2010, 114, 18866-18873.	3.1	47
108	Energetics of Polar and Nonpolar Facets of PbSe Nanocrystals from Theory and Experiment. ACS Nano, 2010, 4, 211-218.	14.6	93

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109	Morphological Transformations and Fusion of PbSe Nanocrystals Studied Using Atomistic Simulations. Nano Letters, 2010, 10, 3966-3971.	9.1	79
110	Hole-Induced Electron Transport through Coreâ d'Shell Quantum Dots: A Direct Measurement of the Electronâ d'Hole Interaction. Nano Letters, 2010, 10, 1931-1935.	9.1	29
111	Exciton polaritons confined in ZnO nanowires. , 2010, , .		1
112	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
113	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
114	Electronic coupling of colloidal CdSe nanocrystals monitored by thin-film positron-electron momentum density methods. Applied Physics Letters, 2009, 94, 091908.	3.3	14
115	Atomic Imaging of Phase Transitions and Morphology Transformations in Nanocrystals. Advanced Materials, 2009, 21, 4992-4995.	21.0	104
116	Observation of a Ternary Nanocrystal Superlattice and Its Structural Characterization by Electron Tomography. Angewandte Chemie - International Edition, 2009, 48, 9655-9657.	13.8	95
117	From droplets to devices. Nature Nanotechnology, 2009, 4, 475-476.	31.5	14
118	Muonium in nano-crystalline II–VI semiconductors. Physica B: Condensed Matter, 2009, 404, 837-840.	2.7	2
119	Polarization, Microscopic Origin, and Mode Structure of Luminescence and Lasing from Single ZnO Nanowires. Nano Letters, 2009, 9, 3515-3520.	9.1	68
120	Quantitative Structural Analysis of Binary Nanocrystal Superlattices by Electron Tomography. Nano Letters, 2009, 9, 2719-2724.	9.1	90
121	Amine-terminated silicon nanoparticles: synthesis, optical properties and their use in bioimaging. Journal of Materials Chemistry, 2009, 19, 5926.	6.7	142
122	Binary Nanoparticle Superlattices in 3D: from Quantitative Analysis of Crystal Structures to Characterization of Lattice Defects Microscopy and Microanalysis, 2009, 15, 1192-1193.	0.4	0
123	Optical Investigation of Quantum Confinement in PbSe Nanocrystals at Different Points in the Brillouin Zone. Small, 2008, 4, 127-133.	10.0	70
124	Response Concerning "On the Interpretation of Colloidal Quantum Dot Absorption Spectra― Small, 2008, 4, 1869-1870.	10.0	1
125	Reappraisal of Variable-Range Hopping in Quantum-Dot Solids. Nano Letters, 2008, 8, 3516-3520.	9.1	73
126	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

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127	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
128	Short-range magnetic order in two-dimensional cobalt-ferrite nanoparticle assemblies. Physical Review B, 2008, 77, .	3.2	29
129	Nature of Sub-Band Gap Luminescent Eigenmodes in a ZnO Nanowire. Nano Letters, 2008, 8, 119-123.	9.1	103
130	Luminescent Solar Concentrators - A review of recent results. Optics Express, 2008, 16, 21773.	3.4	442
131	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
132	Binary Superlattices of PbSe and CdSe Nanocrystals. Journal of the American Chemical Society, 2008, 130, 7833-7835.	13.7	69
133	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
134	Low-Temperature Nanocrystal Unification through Rotations and Relaxations Probed by in Situ Transmission Electron Microscopy. Nano Letters, 2008, 8, 3959-3963.	9.1	167
135	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
136	Dipolar Structures in Colloidal Dispersions of PbSe and CdSe Quantum Dots. Nano Letters, 2007, 7, 2931-2936.	9.1	77
137	Carrier Multiplication and Its Reduction by Photodoping in Colloidal InAs Quantum Dots. Journal of Physical Chemistry C, 2007, 111, 4146-4152.	3.1	172
138	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
139	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
140	Electrochemical gating: A method to tune and monitor the (opto)electronic properties of functional materials. Electrochimica Acta, 2007, 53, 1140-1149.	5.2	58
141	Positron studies of surfaces, structure and electronic properties of nanocrystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 3883-3888.	0.8	7
142	Electronic Coupling and Exciton Energy Transfer in CdTe Quantum-Dot Molecules. Journal of the American Chemical Society, 2006, 128, 10436-10441.	13.7	226
143	Molecular three-terminal devices: fabrication and measurements. Faraday Discussions, 2006, 131, 347-356.	3.2	90
144	Can scanning tunnelling spectroscopy measure the density of states of semiconductor quantum dots?. Physical Chemistry Chemical Physics, 2006, 8, 3845.	2.8	56

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145	The Hidden Role of Acetate in the PbSe Nanocrystal Synthesis. Journal of the American Chemical Society, 2006, 128, 6792-6793.	13.7	186
146	Temperature Dependence of Three-Terminal Molecular Junctions with Sulfur End-Functionalized Tercyclohexylidenes. Nano Letters, 2006, 6, 1031-1035.	9.1	113
147	Phase-Correlated Nondirectional Laser Emission from the End Facets of a ZnO Nanowire. Nano Letters, 2006, 6, 2707-2711.	9.1	171
148	Understanding the self-assembly of charged nanoparticles at the water/oil interface. Physical Chemistry Chemical Physics, 2006, 8, 3828-3835.	2.8	187
149	Exciton Polaritons Confined in a ZnO Nanowire Cavity. Physical Review Letters, 2006, 97, 147401.	7.8	186
150	Flux closure in two-dimensional magnetite nanoparticle assemblies. Physical Review B, 2006, 73, .	3.2	26
151	Physicochemical Evaluation of the Hot-Injection Method, a Synthesis Route for Monodisperse Nanocrystals. Small, 2005, 1, 1152-1162.	10.0	438
152	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
153	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
154	Orbital Occupation in Electron-Charged CdSe Quantum-Dot Solids. Journal of Physical Chemistry B, 2005, 109, 19634-19642.	2.6	57
155	Electron-conducting quantum dot solids: novel materials based on colloidal semiconductor nanocrystals. Chemical Society Reviews, 2005, 34, 299.	38.1	199
156	Frequency-Dependent Spontaneous Emission Rate from CdSe and CdTe Nanocrystals: Influence of Dark States. Physical Review Letters, 2005, 95, 236804.	7.8	174
157	Chemisorption Determines the Photovoltage of a Ti/TiO2/Au/Dye Internal Electron Emission Photovoltaic Cell. Journal of Physical Chemistry B, 2005, 109, 9205-9208.	2.6	12
158	Electrodeposited nanocrystalline PbSe quantum wells: synthesis, electrical and optical properties. Nanotechnology, 2005, 16, 339-343.	2.6	9
159	Field-dependent charge carrier dynamics in GaN: Excitonic effects. Applied Physics Letters, 2004, 85, 958-960.	3.3	4
160	Electroluminescence as internal light source for measurement of the photonic strength of random porous GaP. Applied Physics Letters, 2004, 84, 3852-3854.	3.3	6
161	Evolution of the density of states on going from a two- to a zero-dimensional semiconductor. Europhysics Letters, 2004, 65, 809-815.	2.0	9
162	Controlling the dynamics of spontaneous emission from quantum dots by photonic crystals. Nature, 2004, 430, 654-657.	27.8	1,089

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163	Sense the Electrons that Come and Go. ChemPhysChem, 2004, 5, 43-45.	2.1	3
164	Electron-conducting quantum-dot solids with ionic charge compensation. Faraday Discussions, 2004, 125, 55.	3.2	24
165	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
166	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
167	Long-Range Transport in an Assembly of ZnO Quantum Dots: The Effects of Quantum Confinement, Coulomb Repulsion and Structural Disorder. ChemPhysChem, 2003, 4, 959-966.	2.1	17
168	Hot carrier luminescence during porous etching of GaP under high electric field conditions. Surface Science, 2003, 529, 197-203.	1.9	13
169	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
170	Coulomb blockade of electron transport in a ZnO quantum-dot solid. Applied Physics Letters, 2003, 83, 5530-5532.	3.3	41
171	Optical Transitions in Artificial Few-Electron Atoms Strongly Confined inside ZnO Nanocrystals. Physical Review Letters, 2003, 90, 097401.	7.8	65
172	Planar nanocontacts with atomically controlled separation. Applied Physics Letters, 2003, 83, 3782-3784.	3.3	30
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