Dmitri V Talapin

List of Publications by Year
in descending order

186	39,069	7672	4853
papers	citations	79 h-index	174 g-index

195	195	195	34229
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Active learning of polarizable nanoparticle phase diagrams for the guided design of triggerable self-assembling superlattices. Molecular Systems Design and Engineering, 2022, 7, 350-363.	1.7	3
2	Synthesis of In_{1â€“x}Ga_xP Quantum Dots in Lewis Basic Molten Salts: The Effects of Surface Chemistry, Reaction Conditions, and Molten Salt Composition. Journal of Physical Chemistry C, 2022, 126, 1564-1580.	1.5	5
3	Magnetoresistance of high mobility HgTe quantum dot films with controlled charging. Journal of Materials Chemistry C, 2022, 10, 13771-13777.	2.7	6
4	Self-assembly of nanocrystals into strongly electronically coupled all-inorganic supercrystals. Science, 2022, 375, 1422-1426.	6.0	57
5	Direct Heat-Induced Patterning of Inorganic Nanomaterials. Journal of the American Chemical Society, 2022, 144, 10495-10506.	6.6	8
6	Direct Optical Lithography of Colloidal Metal Oxide Nanomaterials for Diffractive Optical Elements with 2Ï€ Phase Control. Journal of the American Chemical Society, 2021, 143, 2372-2383.	6.6	21
7	Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals. Nature Communications, 2021, 12, 1860.	5.8	19
8	Nanoscale Disorder Generates Subdiffusive Heat Transport in Self-Assembled Nanocrystal Films. Nano Letters, 2021, 21, 3540-3547.	4.5	7
9	Observation of biexciton emission from single semiconductor nanoplatelets. Physical Review Materials, 2021, 5, .	0.9	7
10	64â€3: Invited Paper: High Optical Density Quantum Dot Pixel Color Conversion Films for Displays. Digest of Technical Papers SID International Symposium, 2021, 52, 941-944.	0.1	1
11	Atomic-resolution in-situ cooling study of functionally terminated 2D transition metal carbides.. Microscopy and Microanalysis, 2021, 27, 658-660.	0.2	1
12	Advanced Materials for Energy-Water Systems: The Central Role of Water/Solid Interfaces in Adsorption, Reactivity, and Transport. Chemical Reviews, 2021, 121, 9450-9501.	23.0	43
13	Semiconductor quantum dots: Technological progress and future challenges. Science, 2021, 373, .	6.0	600
14	Roll-To-Roll Friendly Solution-Processing of Ultrathin, Sintered CdTe Nanocrystal Photovoltaics. ACS Applied Materials & Interfaces, 2021, 13, 44165-44173.	4.0	5
15	Direct Optical Lithography of CsPbX₃ Nanocrystals via Photoinduced Ligand Cleavage with Postpatterning Chemical Modification and Electronic Coupling. Nano Letters, 2021, 21, 7609-7616.	4.5	41
16	Titanium Nitride Modified Photoluminescence from Single Semiconductor Nanoplatelets. Advanced Functional Materials, 2020, 30, 1904179.	7.8	7
17	Hot-Carrier Relaxation in CdSe/CdS Core/Shell Nanoplatelets. Journal of Physical Chemistry C, 2020, 124, 1020-1026.	1.5	9
18	Functional materials and devices by self-assembly. MRS Bulletin, 2020, 45, 799-806.	1.7	27

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19	Optical Patterning: Direct Optical Patterning of Quantum Dot Lightâ€Emitting Diodes via In Situ Ligand Exchange (Adv. Mater. 46/2020). Advanced Materials, 2020, 32, 2070346.	11.1	2
20	Area and thickness dependence of Auger recombination in nanoplatelets. Journal of Chemical Physics, 2020, 153, 054104.	1.2	25
21	Stoichiometry of the Core Determines the Electronic Structure of Coreâ€“Shell IIIâ€“V/IIâ€“VI Nanoparticles. Chemistry of Materials, 2020, 32, 9798-9804.	3.2	14
22	<scp>SAS</scp>PDF: pair distribution function analysis of nanoparticle assemblies from small-angle scattering data. Journal of Applied Crystallography, 2020, 53, 699-709.	1.9	10
23	Nonequilibrium Thermodynamics of Colloidal Gold Nanocrystals Monitored by Ultrafast Electron Diffraction and Optical Scattering Microscopy. ACS Nano, 2020, 14, 4792-4804.	7.3	20
24	Covalent surface modifications and superconductivity of two-dimensional metal carbide MXenes. Science, 2020, 369, 979-983.	6.0	870
25	Quantized Reaction Pathways for Solution Synthesis of Colloidal ZnSe Nanostructures: A Connection between Clusters, Nanowires, and Two-Dimensional Nanoplatelets. ACS Nano, 2020, 14, 3847-3857.	7.3	51
26	Quantum dot solids showing state-resolved band-like transport. Nature Materials, 2020, 19, 323-329.	13.3	136
27	Heat-driven acoustic phonons in lamellar nanoplatelet assemblies. Nanoscale, 2020, 12, 9661-9668.	2.8	5
28	Direct Optical Patterning of Quantum Dot Lightâ€Emitting Diodes via In Situ Ligand Exchange. Advanced Materials, 2020, 32, e2003805.	11.1	62
29	Bright trion emission from semiconductor nanoplatelets. Physical Review Materials, 2020, 4, .	0.9	24
30	Colloidal Atomic Layer Deposition with Stationary Reactant Phases Enables Precise Synthesis of â€œDigitalâ€•IIâ€“VI Nano-heterostructures with Exquisite Control of Confinement and Strain. Journal of the American Chemical Society, 2019, 141, 13487-13496.	6.6	58
31	Uniaxial transition dipole moments in semiconductor quantum rings caused by broken rotational symmetry. Nature Communications, 2019, 10, 3253.	5.8	19
32	Direct Wavelength-Selective Optical and Electron-Beam Lithography of Functional Inorganic Nanomaterials. ACS Nano, 2019, 13, 13917-13931.	7.3	77
33	High Carrier Mobility in HgTe Quantum Dot Solids Improves Mid-IR Photodetectors. ACS Photonics, 2019, 6, 2358-2365.	3.2	77
34	Colloidal Gelation in Liquid Metals Enables Functional Nanocomposites of 2D Metal Carbides (MXenes) and Lightweight Metals. ACS Nano, 2019, 13, 12415-12424.	7.3	41
35	Polarized near-infrared intersubband absorptions in CdSe colloidal quantum wells. Nature Communications, 2019, 10, 4511.	5.8	34
36	Binary Assembly of PbS and Au Nanocrystals: Patchy PbS Surface Ligand Coverage Stabilizes the CuAu Superlattice. ACS Nano, 2019, 13, 5375-5384.	7.3	33

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37	Systematic Mapping of Binary Nanocrystal Superlattices: The Role of Topology in Phase Selection. Journal of the American Chemical Society, 2019, 141, 5728-5740.	6.6	40
38	Nanocrystals in Molten Salts and Ionic Liquids: Experimental Observation of Ionic Correlations Extending beyond the Debye Length. ACS Nano, 2019, 13, 5760-5770.	7.3	48
39	Emission Statistics and Optical Transition Dipoles of Semiconductor Nanoplatelets. , 2019, , .		0
40	Elevated Temperature Photophysical Properties and Morphological Stability of CdSe and CdSe/CdS Nanoplatelets. Journal of Physical Chemistry Letters, 2018, 9, 286-293.	2.1	27
41	Semiconductor Nanoplatelet Excimers. Nano Letters, 2018, 18, 6948-6953.	4.5	46
42	Origin of Broad Emission Spectra in InP Quantum Dots: Contributions from Structural and Electronic Disorder. Journal of the American Chemical Society, 2018, 140, 15791-15803.	6.6	123
43	Direct Synthesis of Six-Monolayer (1.9 nm) Thick Zinc-Blende CdSe Nanoplatelets Emitting at 585 nm. Chemistry of Materials, 2018, 30, 6957-6960.	3.2	77
44	Describing screening in dense ionic fluids with a charge-frustrated Ising model. Journal of Chemical Physics, 2018, 149, 164505.	1.2	20
45	Monodisperse InAs Quantum Dots from Aminoarsine Precursors: Understanding the Role of Reducing Agent. Chemistry of Materials, 2018, 30, 3623-3627.	3.2	48
46	Anisotropic Photoluminescence from Isotropic Optical Transition Dipoles in Semiconductor Nanoplatelets. Nano Letters, 2018, 18, 4647-4652.	4.5	38
47	Surface chemistry and buried interfaces in all-inorganic nanocrystalline solids. Nature Nanotechnology, 2018, 13, 841-848.	15.6	30
48	Colloidal Chemistry in Molten Salts: Synthesis of Luminescent In_{1â€“x}Ga_xP and In_{1â€“x}Ga_xAs Quantum Dots. Journal of the American Chemical Society, 2018, 140, 12144-12151.	6.6	60
49	Conduction Band Fine Structure in Colloidal HgTe Quantum Dots. ACS Nano, 2018, 12, 9397-9404.	7.3	56
50	Tandem Solar Cells from Solution-Processed CdTe and PbS Quantum Dots Using a ZnTeâ€“ZnO Tunnel Junction. Nano Letters, 2017, 17, 1020-1027.	4.5	71
51	Violet-to-Blue Gain and Lasing from Colloidal CdS Nanoplatelets: Low-Threshold Stimulated Emission Despite Low Photoluminescence Quantum Yield. ACS Photonics, 2017, 4, 576-583.	3.2	74
52	New Forms of CdSe: Molecular Wires, Gels, and Ordered Mesoporous Assemblies. Journal of the American Chemical Society, 2017, 139, 3368-3377.	6.6	16
53	Understanding and Curing Structural Defects in Colloidal GaAs Nanocrystals. Nano Letters, 2017, 17, 2094-2101.	4.5	34
54	Stable colloids in molten inorganic salts. Nature, 2017, 542, 328-331.	13.7	148

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55	Orbitals, Occupation Numbers, and Band Structure of Short One-Dimensional Cadmium Telluride Polymers. Journal of Physical Chemistry A, 2017, 121, 3142-3147.	1.1	8
56	Transparent Ohmic Contacts for Solution-Processed, Ultrathin CdTe Solar Cells. ACS Energy Letters, 2017, 2, 270-278.	8.8	32
57	Nonmonotonic Dependence of Auger Recombination Rate on Shell Thickness for CdSe/CdS Core/Shell Nanoplatelets. Nano Letters, 2017, 17, 6900-6906.	4.5	44
58	A room temperature continuous-wave nanolaser using colloidal quantum wells. Nature Communications, 2017, 8, 143.	5.8	119
59	Size-Dependent Biexciton Quantum Yields and Carrier Dynamics of Quasi-Two-Dimensional Core/Shell Nanoplatelets. ACS Nano, 2017, 11, 9119-9127.	7.3	66
60	Direct optical lithography of functional inorganic nanomaterials. Science, 2017, 357, 385-388.	6.0	224
61	Soluble Lead and Bismuth Chalcogenidometallates: Versatile Solders for Thermoelectric Materials. Chemistry of Materials, 2017, 29, 6396-6404.	3.2	14
62	Assessment of Anisotropic Semiconductor Nanorod and Nanoplatelet Heterostructures with Polarized Emission for Liquid Crystal Display Technology. ACS Nano, 2016, 10, 5769-5781.	7.3	195
63	Introduction: Nanoparticle Chemistry. Chemical Reviews, 2016, 116, 10343-10345.	23.0	131
64	Facile, Economic and Size-Tunable Synthesis of Metal Arsenide Nanocrystals. Chemistry of Materials, 2016, 28, 6797-6802.	3.2	40
65	Self-Assembly of Colloidal Nanocrystals: From Intricate Structures to Functional Materials. Chemical Reviews, 2016, 116, 11220-11289.	23.0	1,485
66	Building devices from colloidal quantum dots. Science, 2016, 353, .	6.0	996
67	Surface-Area-Dependent Electron Transfer Between Isoenergetic 2D Quantum Wells and a Molecular Acceptor. Journal of the American Chemical Society, 2016, 138, 11109-11112.	6.6	35
68	Colloidal CdSe Quantum Rings. Journal of the American Chemical Society, 2016, 138, 9771-9774.	6.6	42
69	Solution-Processed, Ultrathin Solar Cells from CdCl₃^{â€“}-Capped CdTe Nanocrystals: The Multiple Roles of CdCl₃^{â€“} Ligands. Journal of the American Chemical Society, 2016, 138, 7464-7467.	6.6	64
70	The surface science of nanocrystals. Nature Materials, 2016, 15, 141-153.	13.3	1,293
71	Photoconductivity of CdTe Nanocrystal-Based Thin Films: Te^{2â€“} Ligands Lead To Charge Carrier Diffusion Lengths Over 2 Î¼m. Journal of Physical Chemistry Letters, 2015, 6, 4815-4821.	2.1	19
72	Composition-matched molecular â€œsoldersâ€•for semiconductors. Science, 2015, 347, 425-428.	6.0	172

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73	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	7.3	1,005
74	Inorganic Surface Ligands for Colloidal Nanomaterials. Zeitschrift Fur Physikalische Chemie, 2015, 229, 85-107.	1.4	47
75	Many-Body Effects in Nanocrystal Superlattices: Departure from Sphere Packing Explains Stability of Binary Phases. Journal of the American Chemical Society, 2015, 137, 4494-4502.	6.6	158
76	Auger-Limited Carrier Recombination and Relaxation in CdSe Colloidal Quantum Wells. Journal of Physical Chemistry Letters, 2015, 6, 1032-1036.	2.1	61
77	Picosecond energy transfer and multiexciton transfer outpaces Auger recombination in binaryÂCdSe nanoplatelet solids. Nature Materials, 2015, 14, 484-489.	13.3	211
78	Red, Yellow, Green, and Blue Amplified Spontaneous Emission and Lasing Using Colloidal CdSe Nanoplatelets. ACS Nano, 2015, 9, 9475-9485.	7.3	240
79	Solution-Processed Transistors Using Colloidal Nanocrystals with Composition-Matched Molecular â€œSoldersâ€: Approaching Single Crystal Mobility. Nano Letters, 2015, 15, 6309-6317.	4.5	88
80	12.2: Invited Paper: Colloidal Quantum Rods and Wells for Lighting and Lasing Applications. Digest of Technical Papers SID International Symposium, 2014, 45, 134-137.	0.1	0
81	VACANCY-DOPED PLASMONIC COPPER CHALCOGENIDE NANOCRYSTALS WITH TUNABLE OPTICAL PROPERTIES. , 2014, , .		0
82	Soft epitaxy of nanocrystal superlattices. Nature Communications, 2014, 5, 5045.	5.8	40
83	Thermoelectric Tin Selenide: The Beauty of Simplicity. Angewandte Chemie - International Edition, 2014, 53, 9126-9127.	7.2	44
84	Exploring size and state dynamics in CdSe quantum dots using two-dimensional electronic spectroscopy. Journal of Chemical Physics, 2014, 140, 084701.	1.2	62
85	High Efficiency Solution Processed Sintered CdTe Nanocrystal Solar Cells: The Role of Interfaces. Nano Letters, 2014, 14, 670-675.	4.5	148
86	Allâ€Inorganic Nanocrystals as a Glue for BiSbTe Grains: Design of Interfaces in Mesostructured Thermoelectric Materials. Angewandte Chemie - International Edition, 2014, 53, 7466-7470.	7.2	47
87	Persistent Interexcitonic Quantum Coherence in CdSe Quantum Dots. Journal of Physical Chemistry Letters, 2014, 5, 196-204.	2.1	64
88	Nanocrystal Grain Growth and Device Architectures for High-Efficiency CdTe Ink-Based Photovoltaics. ACS Nano, 2014, 8, 9063-9072.	7.3	67
89	Thermal Stability of Colloidal InP Nanocrystals: Small Inorganic Ligands Boost High-Temperature Photoluminescence. ACS Nano, 2014, 8, 977-985.	7.3	57
90	Surface Functionalization of Semiconductor and Oxide Nanocrystals with Small Inorganic Oxoanions (PO₄^{3â€“}, MoO₄^{2â€“}) and Polyoxometalate Ligands. ACS Nano, 2014, 8, 9388-9402.	7.3	92

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91	Probing the Surface of Colloidal Nanomaterials with Potentiometry in Situ. Journal of the American Chemical Society, 2014, 136, 11228-11231.	6.6	15
92	Carrier Dynamics in Highly Quantum-Confined, Colloidal Indium Antimonide Nanocrystals. ACS Nano, 2014, 8, 8513-8519.	7.3	27
93	Role of Precursor Reactivity in Crystallization of Solution-Processed Semiconductors: The Case of Cu₂ZnSnS₄. Chemistry of Materials, 2014, 26, 4038-4043.	3.2	28
94	Synthesis and Search for Design Principles of New Electron Accepting Polymers for All-Polymer Solar Cells. Chemistry of Materials, 2014, 26, 3450-3459.	3.2	100
95	Self-Assembly of Tetrahedral CdSe Nanocrystals: Effective â€œPatchinessâ€•via Anisotropic Steric Interaction. Journal of the American Chemical Society, 2014, 136, 5868-5871.	6.6	80
96	Colloidal Nanocrystals with Inorganic Halide, Pseudohalide, and Halometallate Ligands. ACS Nano, 2014, 8, 7359-7369.	7.3	204
97	Temperature-Dependent Hall and Field-Effect Mobility in Strongly Coupled All-Inorganic Nanocrystal Arrays. Nano Letters, 2014, 14, 653-662.	4.5	71
98	Dispersion-free continuum two-dimensional electronic spectrometer. Applied Optics, 2014, 53, 1909.	0.9	39
99	Low-Threshold Stimulated Emission Using Colloidal Quantum Wells. Nano Letters, 2014, 14, 2772-2777.	4.5	338
100	Connecting the dots. Science, 2014, 344, 1340-1341.	6.0	21
101	Bi_{1â€“x}Sb_x Alloy Nanocrystals: Colloidal Synthesis, Charge Transport, and Thermoelectric Properties. ACS Nano, 2013, 7, 10296-10306.	7.3	36
102	Quantum dot light-emitting devices. MRS Bulletin, 2013, 38, 685-691.	1.7	127
103	Two-dimensional electronic spectroscopy of CdSe nanoparticles at very low pulse power. Journal of Chemical Physics, 2013, 138, 014705.	1.2	53
104	IIIâ€“V Nanocrystals Capped with Molecular Metal Chalcogenide Ligands: High Electron Mobility and Ambipolar Photoresponse. Journal of the American Chemical Society, 2013, 135, 1349-1357.	6.6	161
105	Light-Induced Charged and Trap States in Colloidal Nanocrystals Detected by Variable Pulse Rate Photoluminescence Spectroscopy. ACS Nano, 2013, 7, 229-238.	7.3	44
106	Spin-Dependent Exciton Quenching and Spin Coherence in CdSe/CdS Nanocrystals. Nano Letters, 2013, 13, 65-71.	4.5	16
107	Surface chemistry mediates thermal transport in three-dimensional nanocrystal arrays. Nature Materials, 2013, 12, 410-415.	13.3	218
108	Indirect Exciton Formation due to Inhibited Carrier Thermalization in Single CdSe/CdS Nanocrystals. Journal of Physical Chemistry Letters, 2013, 4, 691-697.	2.1	19

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109	Magnet-in-the-Semiconductor Nanomaterials: High Electron Mobility in All-Inorganic Arrays of FePt/CdSe and FePt/CdS Coreâ€“Shell Heterostructures. Journal of Physical Chemistry Letters, 2013, 4, 1918-1923.	2.1	19
110	Reversible Light-Induced On-Off Switching of Charge Traps in Quantum Dots Probe by Variable-Pulse-Rate Photoluminescence Spectroscopy.. Materials Research Society Symposia Proceedings, 2013, 1509, 1.	0.1	0
111	Seeded Synthesis of CdSe/CdS Rod and Tetrapod Nanocrystals. Journal of Visualized Experiments, 2013, , e50731.	0.2	7
112	Nanocrystal solids: A modular approach to materials design. MRS Bulletin, 2012, 37, 63-71.	1.7	37
113	Exciton storage in CdSe/CdS tetrapod semiconductor nanocrystals: Electric field effects on exciton and multiexciton states. Physical Review B, 2012, 86, .	1.1	24
114	Auger Recombination of Biexcitons and Charged Excitons in CdSe/CdS core/shell Nanocrystals. Materials Research Society Symposia Proceedings, 2012, 1409, 13.	0.1	0
115	Colloidal Atomic Layer Deposition (c-ALD) using Self-Limiting Reactions at Nanocrystal Surface Coupled to Phase Transfer between Polar and Nonpolar Media. Journal of the American Chemical Society, 2012, 134, 18585-18590.	6.6	297
116	Carrier Cooling in Colloidal Quantum Wells. Nano Letters, 2012, 12, 6158-6163.	4.5	105
117	Colloidal InSb Nanocrystals. Journal of the American Chemical Society, 2012, 134, 20258-20261.	6.6	111
118	Measurement of electronic splitting in PbS quantum dots by two-dimensional nonlinear spectroscopy. Physical Review B, 2012, 86, .	1.1	44
119	Soluble Precursors for CuInSe₂, CuIn_{1â€“x}Ga_xSe₂, and Cu₂ZnSn(S,Se)₄ Based on Colloidal Nanocrystals and Molecular Metal Chalcogenide Surface Ligands. Journal of the American Chemical Society, 2012, 134, 5010-5013.	6.6	119
120	Low Voltage, Hysteresis Free, and High Mobility Transistors from All-Inorganic Colloidal Nanocrystals. Nano Letters, 2012, 12, 1813-1820.	4.5	137
121	Effect of Metal Ions on Photoluminescence, Charge Transport, Magnetic and Catalytic Properties of All-Inorganic Colloidal Nanocrystals and Nanocrystal Solids. Journal of the American Chemical Society, 2012, 134, 13604-13615.	6.6	156
122	Inorganically Functionalized PbSâ€“CdS Colloidal Nanocrystals: Integration into Amorphous Chalcogenide Glass and Luminescent Properties. Journal of the American Chemical Society, 2012, 134, 2457-2460.	6.6	142
123	Charged excitons, Auger recombination and optical gain in CdSe/CdS nanocrystals. Nanotechnology, 2012, 23, 015201.	1.3	41
124	Three-Dimensional Nanocrystal Superlattices Grown in Nanoliter Microfluidic Plugs. Journal of the American Chemical Society, 2011, 133, 8956-8960.	6.6	66
125	Evaluation of Ordering in Single-Component and Binary Nanocrystal Superlattices by Analysis of Their Autocorrelation Functions. ACS Nano, 2011, 5, 1703-1712.	7.3	30
126	Metal-free Inorganic Ligands for Colloidal Nanocrystals: S^{2â€“}, HS^{â€“}, Se^{2â€“}, HSe^{â€“}, Te^{2â€“}, HTe^{â€“}, TeS₃^{2â€“}, OH^{â€“}, and NH₂^{â€“} as Surface Ligands. Journal of the American Chemical Society, 2011, 133, 10612-10620.	6.6	645

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127	Band-like transport, high electron mobility and high photoconductivity in all-inorganic nanocrystal arrays. Nature Nanotechnology, 2011, 6, 348-352.	15.6	655
128	Structural Defects in Periodic and Quasicrystalline Binary Nanocrystal Superlattices. Journal of the American Chemical Society, 2011, 133, 20837-20849.	6.6	53
129	Semiconductor Nanocrystals Functionalized with Antimony Telluride Zintl Ions for Nanostructured Thermoelectrics. Journal of the American Chemical Society, 2010, 132, 6686-6695.	6.6	149
130	Expanding the Chemical Versatility of Colloidal Nanocrystals Capped with Molecular Metal Chalcogenide Ligands. Journal of the American Chemical Society, 2010, 132, 10085-10092.	6.6	263
131	Prospects of Colloidal Nanocrystals for Electronic and Optoelectronic Applications. Chemical Reviews, 2010, 110, 389-458.	23.0	3,708
132	The Role of Particle Morphology in Interfacial Energy Transfer in CdSe/CdS Heterostructure Nanocrystals. Science, 2010, 330, 1371-1374.	6.0	177
133	Energetic and Entropic Contributions to Self-Assembly of Binary Nanocrystal Superlattices: Temperature as the Structure-Directing Factor. Journal of the American Chemical Society, 2010, 132, 11967-11977.	6.6	210
134	The Role of Order, Nanocrystal Size, and Capping Ligands in the Collective Mechanical Response of Three-Dimensional Nanocrystal Solids. Journal of the American Chemical Society, 2010, 132, 8953-8960.	6.6	157
135	â€œMagnet-in-the-Semiconductorâ€•FePtâ^'PbS and FePtâ^'PbSe Nanostructures: Magnetic Properties, Charge Transport, and Magnetoresistance. Journal of the American Chemical Society, 2010, 132, 6382-6391.	6.6	80
136	Multiexcitonic Dual Emission in CdSe/CdS Tetrapods and Nanorods. Nano Letters, 2010, 10, 4646-4650.	4.5	94
137	Highly Monodisperse Bismuth Nanoparticles and Their Three-Dimensional Superlattices. Journal of the American Chemical Society, 2010, 132, 15158-15159.	6.6	91
138	Alkyl Chains of Surface Ligands Affect Polytypism of CdSe Nanocrystals and Play an Important Role in the Synthesis of Anisotropic Nanoheterostructures. Journal of the American Chemical Society, 2010, 132, 15866-15868.	6.6	113
139	Nanocrystal Superlattices with Thermally Degradable Hybrid Inorganicâ^'Organic Capping Ligands. Journal of the American Chemical Society, 2010, 132, 15124-15126.	6.6	75
140	Energetic disorder limits energy transfer in semiconductor nanocrystalâ€“DNAâ€“dye conjugates. Applied Physics Letters, 2009, 95, 143101.	1.5	11
141	Non-blinking and photostable upconverted luminescence from single lanthanide-doped nanocrystals. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10917-10921.	3.3	626
142	Exciton Nonlinearities and Optical Gain in Colloidal CdSe/CdS Dot/rod Nanocrystals. Materials Research Society Symposia Proceedings, 2009, 1207, 1.	0.1	0
143	Excitonâ€“Exciton Interaction and Optical Gain in Colloidal CdSe/CdS Dot/Rod Nanocrystals. Advanced Materials, 2009, 21, 4942-4946.	11.1	82
144	Quasicrystalline order in self-assembled binary nanoparticle superlattices. Nature, 2009, 461, 964-967.	13.7	551

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145	Colloidal Nanocrystals with Molecular Metal Chalcogenide Surface Ligands. Science, 2009, 324, 1417-1420.	6.0	962
146	Comparison of Structural Behavior of Nanocrystals in Randomly Packed Films and Long-Range Ordered Superlattices by Time-Resolved Small Angle X-ray Scattering. Journal of the American Chemical Society, 2009, 131, 16386-16388.	6.6	61
147	Quasiâ€Seeded Growth of Ligandâ€Tailored PbSe Nanocrystals through Cationâ€Exchangeâ€Mediated Nucleation. Angewandte Chemie - International Edition, 2008, 47, 3029-3033.	7.2	103
148	Gold/Iron Oxide Core/Hollowâ€Shell Nanoparticles. Advanced Materials, 2008, 20, 4323-4329.	11.1	308
149	Enhanced Thermopower in PbSe Nanocrystal Quantum Dot Superlattices. Nano Letters, 2008, 8, 2283-2288.	4.5	244
150	Auâ^'PbS Coreâ^'Shell Nanocrystals: Plasmonic Absorption Enhancement and Electrical Doping via Intra-particle Charge Transfer. Journal of the American Chemical Society, 2008, 130, 9673-9675.	6.6	337
151	CdS Nanoparticles Capped with 1-Substituted 5-Thiotetrazoles: Synthesis, Characterization, and Thermolysis of the Surfactant. Chemistry of Materials, 2008, 20, 4545-4547.	3.2	45
152	LEGO Materials. ACS Nano, 2008, 2, 1097-1100.	7.3	79
153	Self-assembly of semiconductor nanocrystals into ordered superstructures. , 2008, , 119-169.		10
154	Dipoleâ^'Dipole Interactions in Nanoparticle Superlattices. Nano Letters, 2007, 7, 1213-1219.	4.5	316
155	SnTe Nanocrystals:â€‰ A New Example of Narrow-Gap Semiconductor Quantum Dots. Journal of the American Chemical Society, 2007, 129, 11354-11355.	6.6	156
156	Seeded Growth of Highly Luminescent CdSe/CdS Nanoheterostructures with Rod and Tetrapod Morphologies. Nano Letters, 2007, 7, 2951-2959.	4.5	717
157	Alignment, Electronic Properties, Doping, and On-Chip Growth of Colloidal PbSe Nanowires. Journal of Physical Chemistry C, 2007, 111, 13244-13249.	1.5	53
158	Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag2Te thin films. Nature Materials, 2007, 6, 115-121.	13.3	498
159	Self-Assembly of PbTe Quantum Dots into Nanocrystal Superlattices and Glassy Films. Journal of the American Chemical Society, 2006, 128, 3248-3255.	6.6	310
160	Structural Characterization of Self-Assembled Multifunctional Binary Nanoparticle Superlattices. Journal of the American Chemical Society, 2006, 128, 3620-3637.	6.6	452
161	Semiconductor Nanocrystals Photosensitize C60Crystals. Nano Letters, 2006, 6, 1559-1563.	4.5	71
162	Electrical control of FÃ¶rster energy transfer. Nature Materials, 2006, 5, 777-781.	13.3	141

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163	Structural diversity in binary nanoparticle superlattices. Nature, 2006, 439, 55-59.	13.7	1,956
164	Designing PbSe Nanowires and Nanorings through Oriented Attachment of Nanoparticles. Journal of the American Chemical Society, 2005, 127, 7140-7147.	6.6	1,195
165	PbSe Nanocrystal Solids for n- and p-Channel Thin Film Field-Effect Transistors. Science, 2005, 310, 86-89.	6.0	1,551
166	CdSe/CdS/ZnS and CdSe/ZnSe/ZnS Coreâ^'Shellâ^'Shell Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 18826-18831.	1.2	688
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