Victor I Klimov

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	General Trends in the Performance of Quantum Dot Luminescent Solar Concentrators (LSCs) Revealed Using the "Effective LSC Quality Factorâ€, ACS Energy Letters, 2022, 7, 1741-1749.	8.8	16
2	High-efficiency photoemission from magnetically doped quantum dots driven by multi-step spin-exchange Auger ionization. Nature Photonics, 2022, 16, 433-440.	15.6	15
3	Two-band optical gain and ultrabright electroluminescence from colloidal quantum dots at 1000 A cmâ^²2. Nature Communications, 2022, 13, .	5.8	22
4	Colloidal quantum dot lasers. Nature Reviews Materials, 2021, 6, 382-401.	23.3	196
5	Highly versatile near-infrared emitters based on an atomically defined HgS interlayer embedded into a CdSe/CdS quantum dot. Nature Nanotechnology, 2021, 16, 673-679.	15.6	37
6	Prospects and challenges of colloidal quantum dot laser diodes. Nature Photonics, 2021, 15, 643-655.	15.6	63
7	Semiconductor quantum dots: Technological progress and future challenges. Science, 2021, 373, .	6.0	600
8	Enhanced Emission from Bright Excitons in Asymmetrically Strained Colloidal CdSe/Cd _{<i>x</i>} Zn _{1–<i>x</i>} Se Quantum Dots. ACS Nano, 2021, 15, 14444-14452.	7.3	9
9	Solution-processable integrated CMOS circuits based on colloidal CuInSe2 quantum dots. Nature Communications, 2020, 11, 5280.	5.8	23
10	Exploiting Functional Impurities for Fast and Efficient Incorporation of Manganese into Quantum Dots. Journal of the American Chemical Society, 2020, 142, 18160-18173.	6.6	10
11	Spectroscopic insights into high defect tolerance of Zn:CuInSe2 quantum-dot-sensitized solar cells. Nature Energy, 2020, 5, 409-417.	19.8	86
12	Spectroscopic and Magneto-Optical Signatures of Cu ¹⁺ and Cu ²⁺ Defects in Copper Indium Sulfide Quantum Dots. ACS Nano, 2020, 14, 2212-2223.	7.3	56
13	Optically pumped colloidal-quantum-dot lasing in LED-like devices with an integrated optical cavity. Nature Communications, 2020, 11, 271.	5.8	96
14	Sub–single-exciton lasing using charged quantum dots coupled to a distributed feedback cavity. Science, 2019, 365, 672-675.	6.0	86
15	Dual-Emitting Dot-in-Bulk CdSe/CdS Nanocrystals with Highly Emissive Core- and Shell-Based Trions Sharing the Same Resident Electron. Nano Letters, 2019, 19, 8846-8854.	4.5	6
16	Hot-electron dynamics in quantum dots manipulated by spin-exchange Auger interactions. Nature Nanotechnology, 2019, 14, 1035-1041.	15.6	31
17	Asymmetrically strained quantum dots with non-fluctuating single-dot emission spectra and subthermal room-temperature linewidths. Nature Materials, 2019, 18, 249-255.	13.3	97
18	Transient Spectroscopy of Glass-Embedded Perovskite Quantum Dots: Novel Structures in an Old Wrapping. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1495-1511.	1.4	10

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19	Tandem luminescent solar concentrators based on engineered quantum dots. Nature Photonics, 2018, 12, 105-110.	15.6	280
20	Performance Limits of Luminescent Solar Concentrators Tested with Seed/Quantum-Well Quantum Dots in a Selective-Reflector-Based Optical Cavity. Nano Letters, 2018, 18, 395-404.	4.5	46
21	Optical gain in colloidal quantum dots achieved with direct-current electrical pumping. Nature Materials, 2018, 17, 42-49.	13.3	204
22	Charge-Transport Mechanisms in CulnSe _{<i>x</i>} S _{2–<i>x</i>} Quantum-Dot Films. ACS Nano, 2018, 12, 12587-12596.	7.3	21
23	Enhanced Multiple Exciton Generation in PbS CdS Janus-like Heterostructured Nanocrystals. ACS Nano, 2018, 12, 10084-10094.	7.3	56
24	Droop-Free Colloidal Quantum Dot Light-Emitting Diodes. Nano Letters, 2018, 18, 6645-6653.	4.5	193
25	Thickness-Controlled Quasi-Two-Dimensional Colloidal PbSe Nanoplatelets. Journal of the American Chemical Society, 2017, 139, 2152-2155.	6.6	25
26	Two olor Emitting Colloidal Nanocrystals as Singleâ€Particle Ratiometric Probes of Intracellular pH. Advanced Functional Materials, 2017, 27, 1605533.	7.8	30
27	Thick-Shell CuInS ₂ /ZnS Quantum Dots with Suppressed "Blinking―and Narrow Single-Particle Emission Line Widths. Nano Letters, 2017, 17, 1787-1795.	4.5	179
28	Phase-Transfer Ligand Exchange of Lead Chalcogenide Quantum Dots for Direct Deposition of Thick, Highly Conductive Films. Journal of the American Chemical Society, 2017, 139, 6644-6653.	6.6	112
29	Spectro-electrochemical Probing of Intrinsic and Extrinsic Processes in Exciton Recombination in I–III–VI ₂ Nanocrystals. Nano Letters, 2017, 17, 4508-4517.	4.5	60
30	Direct Measurements of Magnetic Polarons in Cd _{1–<i>x</i>} Mn _{<i>x</i>} Se Nanocrystals from Resonant Photoluminescence. Nano Letters, 2017, 17, 3068-3075.	4.5	36
31	Continuous-wave lasing in colloidal quantum dot solids enabled by facet-selective epitaxy. Nature, 2017, 544, 75-79.	13.7	319
32	Electron–hole exchange blockade and memory-less recombination in photoexcitedÂfilmsÂof colloidal quantum dots. Nature Physics, 2017, 13, 604-610.	6.5	19
33	Single-Particle Ratiometric Pressure Sensing Based on "Double-Sensor―Colloidal Nanocrystals. Nano Letters, 2017, 17, 1071-1081.	4.5	26
34	Towards zero-threshold optical gain using charged semiconductor quantum dots. Nature Nanotechnology, 2017, 12, 1140-1147.	15.6	122
35	Light Emission Mechanisms in CuInS ₂ Quantum Dots Evaluated by Spectral Electrochemistry. ACS Photonics, 2017, 4, 2425-2435.	3.2	115
36	Superposition Principle in Auger Recombination of Charged and Neutral Multicarrier States in Semiconductor Quantum Dots. ACS Nano, 2017, 11, 8437-8447.	7.3	63

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37	Effect of Interfacial Alloying versus "Volume Scaling―on Auger Recombination in Compositionally Graded Semiconductor Quantum Dots. Nano Letters, 2017, 17, 5607-5613.	4.5	73
38	Auger Up-Conversion of Low-Intensity Infrared Light in Engineered Quantum Dots. ACS Nano, 2016, 10, 10829-10841.	7.3	31
39	Quality Factor of Luminescent Solar Concentrators and Practical Concentration Limits Attainable with Semiconductor Quantum Dots. ACS Photonics, 2016, 3, 1138-1148.	3.2	154
40	Spectroscopic and Device Aspects of Nanocrystal Quantum Dots. Chemical Reviews, 2016, 116, 10513-10622.	23.0	744
41	Colloidal Spherical Quantum Wells with Near-Unity Photoluminescence Quantum Yield and Suppressed Blinking. ACS Nano, 2016, 10, 9297-9305.	7.3	119
42	Doctor-blade deposition of quantum dots onto standard window glass for low-loss large-area luminescent solar concentrators. Nature Energy, 2016, 1, .	19.8	196
43	Mn ²⁺ -Doped Lead Halide Perovskite Nanocrystals with Dual-Color Emission Controlled by Halide Content. Journal of the American Chemical Society, 2016, 138, 14954-14961.	6.6	725
44	Effect of Core/Shell Interface on Carrier Dynamics and Optical Gain Properties of Dual-Color Emitting CdSe/CdS Nanocrystals. ACS Nano, 2016, 10, 6877-6887.	7.3	57
45	Spectral and Dynamical Properties of Single Excitons, Biexcitons, and Trions in Cesium–Lead-Halide Perovskite Quantum Dots. Nano Letters, 2016, 16, 2349-2362.	4.5	533
46	Revealing giant internal magnetic fields due to spin fluctuations in magnetically doped colloidal nanocrystals. Nature Nanotechnology, 2016, 11, 137-142.	15.6	53
47	Auger-decay engineering in quantum dots in relation to applications in LEDs and lasers (Presentation) Tj ETQq1	1 0.78431	4 rgBT /Over
48	Shape-Controlled Narrow-Gap SnTe Nanostructures: From Nanocubes to Nanorods and Nanowires. Journal of the American Chemical Society, 2015, 137, 15074-15077.	6.6	42
49	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	7.3	1,005
50	Tuning Carrier Mobilities and Polarity of Charge Transport in Films of CuInSe _x S _{2–x} Quantum Dots. Advanced Materials, 2015, 27, 1701-1705.	11.1	39
51	Temperature and Magnetic-Field Dependence of Radiative Decay in Colloidal Germanium Quantum Dots. Nano Letters, 2015, 15, 2685-2692.	4.5	10
52	Carrier multiplication detected through transient photocurrent in device-grade films of lead selenide quantum dots. Nature Communications, 2015, 6, 8185.	5.8	56
53	Two Dimensional Coherent Spectroscopy of CdSe/ZnS Colloidal Quantum Dots at Cryogenic Temperatures. , 2015, , .		1
54	Deviation From [Pump=Signal + Idler] Photon Energy Conservation in an Ultrafast Optical Parametric Amplifier. , 2015, , .		0

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55	Effect of Auger Recombination on Lasing in Heterostructured Quantum Dots with Engineered Core/Shell Interfaces. Nano Letters, 2015, 15, 7319-7328.	4.5	163
56	Highly efficient large-area colourless luminescent solar concentrators using heavy-metal-free colloidal quantum dots. Nature Nanotechnology, 2015, 10, 878-885.	15.6	448
57	Room Temperature Single-Photon Emission from Individual Perovskite Quantum Dots. ACS Nano, 2015, 9, 10386-10393.	7.3	459
58	Design and Synthesis of Heterostructured Quantum Dots with Dual Emission in the Visible and Infrared. ACS Nano, 2015, 9, 539-547.	7.3	49
59	Real-Time Dynamics of Carrier Multiplication in Ultrafast Photocurrent of Device-Grade Quantum Dot Films. , 2015, , .		0
60	Two Dimensional Coherent Spectroscopy of CdSe/ZnS Colloidal Quantum Dots. , 2014, , .		0
61	Influence of Shell Thickness on the Performance of Lightâ€Emitting Devices Based on CdSe/Zn _{1â€X} Cd _X S Core/Shell Heterostructured Quantum Dots. Advanced Materials, 2014, 26, 8034-8040.	11.1	250
62	Dual-Color Electroluminescence from Dot-in-Bulk Nanocrystals. Nano Letters, 2014, 14, 486-494.	4.5	66
63	Effect of the Core/Shell Interface on Auger Recombination Evaluated by Single-Quantum-Dot Spectroscopy. Nano Letters, 2014, 14, 396-402.	4.5	188
64	Large-area luminescent solar concentrators based on â€~Stokes-shift-engineered' nanocrystals in a mass-polymerized PMMA matrix. Nature Photonics, 2014, 8, 392-399.	15.6	568
65	Simple yet Versatile Synthesis of CuInSe _{<i>x</i>} S _{2–<i>x</i>} Quantum Dots for Sunlight Harvesting. Journal of Physical Chemistry C, 2014, 118, 16987-16994.	1.5	75
66	Photocharging Artifacts in Measurements of Electron Transfer in Quantum-Dot-Sensitized Mesoporous Titania Films. Journal of Physical Chemistry Letters, 2014, 5, 111-118.	2.1	29
67	Magneto-Optical Properties of CuInS ₂ Nanocrystals. Journal of Physical Chemistry Letters, 2014, 5, 4105-4109.	2.1	69
68	PbSe Quantum Dot Solar Cells with More than 6% Efficiency Fabricated in Ambient Atmosphere. Nano Letters, 2014, 14, 6010-6015.	4.5	212
69	(Invited) Improving the Performance of Quantum Dot Light-Emitting Diodes through Nanoscale Engineering. ECS Transactions, 2014, 61, 75-85.	0.3	0
70	Enhanced carrier multiplication in engineered quasi-type-II quantum dots. Nature Communications, 2014, 5, 4148.	5.8	143
71	Auger Recombination of Biexcitons and Negative and Positive Trions in Individual Quantum Dots. ACS Nano, 2014, 8, 7288-7296.	7.3	234
72	Electrochemical Control of Two-Color Emission from Colloidal Dot-in-Bulk Nanocrystals. Nano Letters, 2014, 14, 3855-3863.	4.5	30

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73	Multicarrier Interactions in Semiconductor Nanocrystals in Relation to the Phenomena of Auger Recombination and Carrier Multiplication. Annual Review of Condensed Matter Physics, 2014, 5, 285-316.	5.2	201
74	Probing the gamma-scintillation process in semiconductor nanomaterials using ultrafast transient cathodoluminescence. Proceedings of SPIE, 2013, , .	0.8	0
75	Controlling the influence of Auger recombination on the performance of quantum-dot light-emitting diodes. Nature Communications, 2013, 4, 2661.	5.8	605
76	An integrated approach to realizing high-performance liquid-junction quantum dot sensitized solar cells. Nature Communications, 2013, 4, 2887.	5.8	255
77	Heavily doped n-type PbSe and PbS nanocrystals using ground-state charge transfer from cobaltocene. Scientific Reports, 2013, 3, 2004.	1.6	116
78	Dynamic Hole Blockade Yields Two-Color Quantum and Classical Light from Dot-in-Bulk Nanocrystals. Nano Letters, 2013, 13, 321-328.	4.5	60
79	Engineered CuInSe _{<i>x</i>} S _{2–<i>x</i>} Quantum Dots for Sensitized Solar Cells. Journal of Physical Chemistry Letters, 2013, 4, 355-361.	2.1	157
80	Aspect Ratio Dependence of Auger Recombination and Carrier Multiplication in PbSe Nanorods. Nano Letters, 2013, 13, 1092-1099.	4.5	123
81	Response of Semiconductor Nanocrystals to Extremely Energetic Excitation. Nano Letters, 2013, 13, 925-932.	4.5	35
82	Carrier Multiplication in Semiconductor Nanocrystals: Influence of Size, Shape, and Composition. Accounts of Chemical Research, 2013, 46, 1261-1269.	7.6	161
83	Carrier Multiplication in Quantum Dots within the Framework of Two Competing Energy Relaxation Mechanisms. Journal of Physical Chemistry Letters, 2013, 4, 2061-2068.	2.1	59
84	Size and Composition Dependent Multiple Exciton Generation Efficiency in PbS, PbSe, and PbS _{<i>x</i>} Se _{1–<i>x</i>} Alloyed Quantum Dots. Nano Letters, 2013, 13, 3078-3085.	4.5	149
85	Controlled Alloying of the Core–Shell Interface in CdSe/CdS Quantum Dots for Suppression of Auger Recombination. ACS Nano, 2013, 7, 3411-3419.	7.3	417
86	Super-Poissonian Statistics of Photon Emission from Single CdSe-CdS Core-Shell Nanocrystals Coupled to Metal Nanostructures. Physical Review Letters, 2013, 110, 117401.	2.9	66
87	Measurement of Electronic States of PbS Nanocrystal Quantum Dots Using Scanning Tunneling Spectroscopy: The Role of Parity Selection Rules in Optical Absorption. Physical Review Letters, 2013, 110, 127406.	2.9	68
88	Two-Color Quantum and Classical Light Using Dot-in-Bulk Semiconductor Nanocrystals. , 2013, , .		0
89	Spectroscopic insights into the performance of quantum dot light-emitting diodes. MRS Bulletin, 2013, 38, 721-730.	1.7	91
90	PbSe/CdSe Core-Shell Colloidal Quantum Dots with Enhanced Optical Nonlinearities and Dual-Band Infrared/Visible Emission. , 2013, , .		2

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91	Wavefunction engineering in core-shell semiconductor nanocrystals: from fine-tuned exciton dynamics and suppressed Auger recombination to dual color electroluminescence. Proceedings of SPIE, 2012, , .	0.8	0
92	Multiexciton Dynamics in Infrared-Emitting Colloidal Nanostructures Probed by a Superconducting Nanowire Single-Photon Detector. ACS Nano, 2012, 6, 9532-9540.	7.3	43
93	Highly Effective Surface Passivation of PbSe Quantum Dots through Reaction with Molecular Chlorine. Journal of the American Chemical Society, 2012, 134, 20160-20168.	6.6	221
94	Long-lived photoinduced magnetization in copper-doped ZnSe–CdSe core–shell nanocrystals. Nature Nanotechnology, 2012, 7, 792-797.	15.6	110
95	Lifetime blinking in nonblinking nanocrystal quantum dots. Nature Communications, 2012, 3, 908.	5.8	204
96	â€~Giant' CdSe/CdS Core/Shell Nanocrystal Quantum Dots As Efficient Electroluminescent Materials: Strong Influence of Shell Thickness on Light-Emitting Diode Performance. Nano Letters, 2012, 12, 331-336.	4.5	364
97	Tuning Radiative Recombination in Cu-Doped Nanocrystals via Electrochemical Control of Surface Trapping. Nano Letters, 2012, 12, 4372-4379.	4.5	125
98	Role of Solvent–Oxygen Ion Pairs in Photooxidation of CdSe Nanocrystal Quantum Dots. ACS Nano, 2012, 6, 2371-2377.	7.3	33
99	Generalized Synthesis of Hybrid Metal–Semiconductor Nanostructures Tunable from the Visible to the Infrared. ACS Nano, 2012, 6, 3832-3840.	7.3	99
100	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
101	High‣ensitivity p–n Junction Photodiodes Based on PbS Nanocrystal Quantum Dots. Advanced Functional Materials, 2012, 22, 1741-1748.	7.8	139
102	Strong Photon Bunching in Individual Nanocrystal Quantum Dots Coupled to Rough Silver Film. , 2012, , .		0
103	Two types of luminescence blinking revealed by spectroelectrochemistry of single quantum dots. Nature, 2011, 479, 203-207.	13.7	659
104	Breakdown of Volume Scaling in Auger Recombination in CdSe/CdS Heteronanocrystals: The Role of the Coreâ^'Shell Interface. Nano Letters, 2011, 11, 687-693.	4.5	282
105	Spin-Polarized <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:msup><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mo>+from Mn-Doped Colloidal Nanocrystals. Physical Review Letters, 2011, 107, 067402.</mml:mo></mml:mrow></mml:msup></mml:math>	o> ≊/9 nml:n	nr ơ w>
106	Pump-Intensity- and Shell-Thickness-Dependent Evolution of Photoluminescence Blinking in Individual Core/Shell CdSe/CdS Nanocrystals. Nano Letters, 2011, 11, 5213-5218.	4.5	87
107	Copper-Doped Inverted Core/Shell Nanocrystals with "Permanent―Optically Active Holes. Nano Letters, 2011, 11, 4753-4758.	4.5	176
108	Nano-engineered electron–hole exchange interaction controls exciton dynamics in core–shell semiconductor nanocrystals. Nature Communications, 2011, 2, 280.	5.8	223

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109	Efficient Synthesis of Highly Luminescent Copper Indium Sulfide-Based Core/Shell Nanocrystals with Surprisingly Long-Lived Emission. Journal of the American Chemical Society, 2011, 133, 1176-1179.	6.6	671
110	Near-Unity Quantum Yields of Biexciton Emission from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>CdSe</mml:mi><mml:mo>/</mml:mo><mml:mi>CdS</mml:mi>Nanocrys Measured Using Single-Particle Spectroscopy. Physical Review Letters, 2011, 106, 187401.</mml:math 	tals	187
111	Spectral Dependence of Nanocrystal Photoionization Probability: The Role of Hot-Carrier Transfer. ACS Nano, 2011, 5, 5045-5055.	7.3	74
112	Electronic Properties and Structure of Assemblies of CdSe Nanocrystal Quantum Dots and Ruâ€Polypyridine Complexes Probed by Steady State and Timeâ€Resolved Photoluminescence. Advanced Functional Materials, 2011, 21, 3159-3168.	7.8	26
113	Role of mid-gap states in charge transport and photoconductivity in semiconductor nanocrystal films. Nature Communications, 2011, 2, 486.	5.8	236
114	"Soft―Chemical Synthesis and Manipulation of Semiconductor Nanocrystals. , 2010, , 1-61.		20
115	Effect of Air Exposure on Surface Properties, Electronic Structure, and Carrier Relaxation in PbSe Nanocrystals. ACS Nano, 2010, 4, 2021-2034.	7.3	230
116	Apparent Versus True Carrier Multiplication Yields in Semiconductor Nanocrystals. Nano Letters, 2010, 10, 2049-2057.	4.5	214
117	Revealing the Exciton Fine Structure of PbSe Nanocrystal Quantum Dots Using Optical Spectroscopy in High Magnetic Fields. Physical Review Letters, 2010, 105, 067403.	2.9	42
118	Spectroscopic Signatures of Photocharging due to Hot-Carrier Transfer in Solutions of Semiconductor Nanocrystals under Low-Intensity Ultraviolet Excitation. ACS Nano, 2010, 4, 6087-6097.	7.3	87
119	Infrared-Active Heterostructured Nanocrystals with Ultralong Carrier Lifetimes. Journal of the American Chemical Society, 2010, 132, 9960-9962.	6.6	80
120	Highly Emissive Multiexcitons in Steady-State Photoluminescence of Individual "Giant―CdSe/CdS Core/Shell Nanocrystals. Nano Letters, 2010, 10, 2401-2407.	4.5	161
121	Multiexciton Phenomena in Semiconductor Nanocrystals. , 2010, , 147-213.		0
122	New Aspects of Nanocrystal Lasing. , 2009, , .		0
123	Anomalous Circular Polarization of Photoluminescence Spectra of Individual CdSe Nanocrystals in an Applied Magnetic Field. Physical Review Letters, 2009, 102, 017402.	2.9	49
124	HIGH FIELD MAGNETO-OPTICAL SPECTROSCOPY OF HIGHLY ALIGNED INDIVIDUAL AND ENSEMBLE SINGLE-WALLED CARBON NANOTUBES. International Journal of Modern Physics B, 2009, 23, 2667-2675.	1.0	1
125	Giant multishell CdSe nanocrystal quantum dots with suppressed blinking: novel fluorescent probes for real-time detection of single-molecule events. , 2009, 7189, 718904.		11
126	Tunable magnetic exchange interactions inÂmanganese-doped inverted core–shell ZnSe–CdSeÂnanocrystals. Nature Materials, 2009, 8, 35-40.	13.3	217

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127	Formation and Optical Characteristics of Type-II Strain-Relieved GaSb/GaAs Quantum Dots by Using an Interfacial Misfit Growth Mode. IEEE Nanotechnology Magazine, 2009, 8, 269-274.	1.1	7
128	Universal Size-Dependent Trend in Auger Recombination in Direct-Gap and Indirect-Gap Semiconductor Nanocrystals. Physical Review Letters, 2009, 102, 177404.	2.9	314
129	Exciton localization and migration in individual CdSe quantum wires at low temperatures. Physical Review B, 2009, 80, .	1.1	23
130	Hybrid Photovoltaics Based on Semiconductor Nanocrystals and Amorphous Silicon. Nano Letters, 2009, 9, 1235-1241.	4.5	81
131	Suppressed Auger Recombination in "Giant―Nanocrystals Boosts Optical Gain Performance. Nano Letters, 2009, 9, 3482-3488.	4.5	456
132	Colloidal Synthesis of Infrared-Emitting Germanium Nanocrystals. Journal of the American Chemical Society, 2009, 131, 3436-3437.	6.6	137
133	A Reduction Pathway in the Synthesis of PbSe Nanocrystal Quantum Dots. Journal of the American Chemical Society, 2009, 131, 10620-10628.	6.6	106
134	Quantum Optics with Nanocrystal Quantum Dots in Solution: Quantitative Study of Clustering. Journal of Physical Chemistry C, 2009, 113, 2241-2246.	1.5	12
135	Optical Gain in the Auger-Recombination-Free Regime Using Strongly Confined Indirect Multiexcitons. , 2009, , .		1
136	"Giant―Multishell CdSe Nanocrystal Quantum Dots with Suppressed Blinking. Journal of the American Chemical Society, 2008, 130, 5026-5027.	6.6	867
137	New Aspects of Carrier Multiplication in Semiconductor Nanocrystals. Accounts of Chemical Research, 2008, 41, 1810-1819.	7.6	393
138	Evidence for Barrierless Auger Recombination in PbSe Nanocrystals: A Pressure-Dependent Study of Transient Optical Absorption. Physical Review Letters, 2008, 101, 217401.	2.9	80
139	Size-Dependent Intrinsic Radiative Decay Rates of Silicon Nanocrystals at Large Confinement Energies. Physical Review Letters, 2008, 100, 067401.	2.9	147
140	Linearly polarized â€~fine structure' of the bright exciton state in individual CdSe nanocrystal quantum dots. Physical Review B, 2008, 77, .	1.1	51
141	Utilizing the Lability of Lead Selenide to Produce Heterostructured Nanocrystals with Bright, Stable Infrared Emission. Journal of the American Chemical Society, 2008, 130, 4879-4885.	6.6	438
142	Sensitization and Protection of Lanthanide Ion Emission in In ₂ O ₃ :Eu Nanocrystal Quantum Dots. Journal of Physical Chemistry C, 2008, 112, 20246-20250.	1.5	46
143	Direct Observation of Dark Excitons in Individual Carbon Nanotubes: Inhomogeneity in the Exchange Splitting. Physical Review Letters, 2008, 101, 087402.	2.9	134
144	Time-resolved photoluminescence of type-II Ga(As)Sb/GaAs quantum dots embedded in an InGaAs quantum well. Nanotechnology, 2008, 19, 295704.	1.3	24

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145	Scaling of multiexciton lifetimes in semiconductor nanocrystals. Physical Review B, 2008, 77, .	1.1	209
146	Nanoplasmonic renormalization and enhancement of Coulomb interactions. New Journal of Physics, 2008, 10, 105011.	1.2	66
147	Nanoplasmonic renormalization and enhancement of Coulomb interactions. Proceedings of SPIE, 2008, , .	0.8	1
148	Magnetophotoluminescence Spectroscopy of Excitons in Individual Carbon Nanotubes. , 2008, , .		0
149	Optical Nonlinearities and Multiexciton Statistics in Semiconductor Nanocrystals in the Regime of Carrier Multiplication. , 2007, , MC4.		0
150	Carrier multiplication in semiconductor nanocrystals via intraband optical transitions involving virtual biexciton states. Physical Review B, 2007, 76, .	1.1	64
151	Effect of Quantum and Dielectric Confinement on the Excitonâ^'Exciton Interaction Energy in Type II Core/Shell Semiconductor Nanocrystals. Nano Letters, 2007, 7, 108-115.	4.5	217
152	Near-field spectroscopy of surface plasmons in flat gold nanoparticles. Optics Letters, 2007, 32, 2254.	1.7	23
153	Spectral and Dynamical Properties of Multiexcitons in Semiconductor Nanocrystals. Annual Review of Physical Chemistry, 2007, 58, 635-673.	4.8	827
154	Lasing characteristics of GaSbâ^•GaAs self-assembled quantum dots embedded in an InGaAs quantum well. Applied Physics Letters, 2007, 90, 261115.	1.5	54
155	PbSe nanocrystal/conducting polymer solar cells with an infrared response to 2 micron. Journal of Materials Research, 2007, 22, 2204-2210.	1.2	102
156	Light Amplification in the Single-Exciton Regime Using Excitonâ´'Exciton Repulsion in Type-II Nanocrystal Quantum Dots. Journal of Physical Chemistry C, 2007, 111, 15382-15390.	1.5	84
157	Carrier Multiplication in InAs Nanocrystal Quantum Dots with an Onset Defined by the Energy Conservation Limit. Nano Letters, 2007, 7, 3469-3476.	4.5	280
158	Single-exciton optical gain in semiconductor nanocrystals. Nature, 2007, 447, 441-446.	13.7	894
159	Type-II Core/Shell CdS/ZnSe Nanocrystals:  Synthesis, Electronic Structures, and Spectroscopic Properties. Journal of the American Chemical Society, 2007, 129, 11708-11719.	6.6	402
160	High-Efficiency Carrier Multiplication and Ultrafast Charge Separation in Semiconductor Nanocrystals Studied via Time-Resolved Photoluminescenceâ€. Journal of Physical Chemistry B, 2006, 110, 25332-25338.	1.2	184
161	Hybrid Gold/Silica/Nanocrystal-Quantum-Dot Superstructures:Â Synthesis and Analysis of Semiconductorâ^'Metal Interactions. Journal of the American Chemical Society, 2006, 128, 15362-15363.	6.6	249
162	Photoinduced Charge Transfer between CdSe Nanocrystal Quantum Dots and Ruâ^'Polypyridine Complexes. Journal of the American Chemical Society, 2006, 128, 9984-9985.	6.6	208

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163	Detailed-balance power conversion limits of nanocrystal-quantum-dot solar cells in the presence of carrier multiplication. Applied Physics Letters, 2006, 89, 123118.	1.5	188
164	Mechanisms for Photogeneration and Recombination of Multiexcitons in Semiconductor Nanocrystals:  Implications for Lasing and Solar Energy Conversion. Journal of Physical Chemistry B, 2006, 110, 16827-16845.	1.2	468
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