Alexander Eychmüller

List of Publications by Year in descending order

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378 papers 27,616 citations

4658 85 h-index 153 g-index

396 all docs

396 docs citations

396 times ranked 27838 citing authors

#	Article	IF	CITATIONS
1	Thiol-Capping of CdTe Nanocrystals:  An Alternative to Organometallic Synthetic Routes. Journal of Physical Chemistry B, 2002, 106, 7177-7185.	2.6	1,485
2	Brown adipose tissue activity controls triglyceride clearance. Nature Medicine, 2011, 17, 200-205.	30.7	1,367
3	Aqueous Synthesis of Thiol-Capped CdTe Nanocrystals:  State-of-the-Art. Journal of Physical Chemistry C, 2007, 111, 14628-14637.	3.1	703
4	Strongly Photoluminescent CdTe Nanocrystals by Proper Surface Modification. Journal of Physical Chemistry B, 1998, 102, 8360-8363.	2.6	678
5	Engineering Ordered and Nonordered Porous Noble Metal Nanostructures: Synthesis, Assembly, and Their Applications in Electrochemistry. Chemical Reviews, 2015, 115, 8896-8943.	47.7	576
6	Synthesis and Characterization of a Size Series of Extremely Small Thiol-Stabilized CdSe Nanocrystals. Journal of Physical Chemistry B, 1999, 103, 3065-3069.	2.6	565
7	Determination of the Fluorescence Quantum Yield of Quantum Dots: Suitable Procedures and Achievable Uncertainties. Analytical Chemistry, 2009, 81, 6285-6294.	6.5	556
8	Quantum-dot quantum well CdS/HgS/CdS: Theory and experiment. Physical Review B, 1994, 49, 17072-17078.	3.2	386
9	Infrared-Emitting Colloidal Nanocrystals: Synthesis, Assembly, Spectroscopy, and Applications. Small, 2007, 3, 536-557.	10.0	385
10	Structure and Photophysics of Semiconductor Nanocrystals. Journal of Physical Chemistry B, 2000, 104, 6514-6528.	2.6	350
11	Seeded Growth Synthesis of Uniform Gold Nanoparticles with Diameters of 15â^'300 nm. Journal of Physical Chemistry C, 2011, 115, 4502-4506.	3.1	347
12	Surface distortion as a unifying concept and descriptor in oxygen reduction reaction electrocatalysis. Nature Materials, 2018, 17, 827-833.	27.5	344
13	Monodisperse Platinum Nanospheres with Adjustable Diameters from 10 to 100 nm: Synthesis and Distinct Optical Properties. Nano Letters, 2008, 8, 4588-4592.	9.1	333
14	Noble Metal Aerogelsâ€"Synthesis, Characterization, and Application as Electrocatalysts. Accounts of Chemical Research, 2015, 48, 154-162.	15.6	313
15	Colloidally Prepared HgTe Nanocrystals with Strong Room-Temperature Infrared Luminescence. Advanced Materials, 1999, 11, 552-555.	21.0	312
16	Lightâ€Emitting Diodes with Semiconductor Nanocrystals. Angewandte Chemie - International Edition, 2008, 47, 6538-6549.	13.8	305
17	Modern Inorganic Aerogels. Angewandte Chemie - International Edition, 2017, 56, 13200-13221.	13.8	303
18	Chemistry and photophysics of thiol-stabilized II-VI semiconductor nanocrystals. Pure and Applied Chemistry, 2000, 72, 179-188.	1.9	292

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19	A Flexible TiO ₂ (B)â€Based Battery Electrode with Superior Power Rate and Ultralong Cycle Life. Advanced Materials, 2013, 25, 3462-3467.	21.0	286
20	Hydrogels and Aerogels from Noble Metal Nanoparticles. Angewandte Chemie - International Edition, 2009, 48, 9731-9734.	13.8	271
21	Efficient Phase Transfer of Luminescent Thiol-Capped Nanocrystals:  From Water to Nonpolar Organic Solvents. Nano Letters, 2002, 2, 803-806.	9.1	247
22	Colloidal semiconductor nanocrystals: the aqueous approach. Chemical Society Reviews, 2013, 42, 2905-2929.	38.1	247
23	Bimetallic Aerogels: Highâ€Performance Electrocatalysts for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2013, 52, 9849-9852.	13.8	246
24	Quantum dot integrated LEDs using photonic and excitonic color conversion. Nano Today, 2011, 6, 632-647.	11.9	245
25	Detection of shallow electron traps in quantum sized CdS by fluorescence quenching experiments. Chemical Physics Letters, 1993, 203, 271-276.	2.6	234
26	A quantum dot quantum well: CdS/HgS/CdS. Chemical Physics Letters, 1993, 208, 59-62.	2.6	219
27	Efficient UV-Blue Photoluminescing Thiol-Stabilized Water-Soluble Alloyed ZnSe(S) Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 5905-5908.	2.6	216
28	Size-Dependent Electrochemical Behavior of Thiol-Capped CdTe Nanocrystals in Aqueous Solution. Journal of Physical Chemistry B, 2005, 109, 1094-1100.	2.6	211
29	Size and Shape Control of Colloidally Synthesized IVâ^'VI Nanoparticulate Tin(II) Sulfide. Journal of the American Chemical Society, 2008, 130, 14978-14980.	13.7	207
30	EXAFS Studies on the Size Dependence of Structural and Dynamic Properties of CdS Nanoparticles. Journal of Physical Chemistry B, 1997, 101, 2691-2701.	2.6	199
31	Nickel cobalt oxide hollow nanosponges as advanced electrocatalysts for the oxygen evolution reaction. Chemical Communications, 2015, 51, 7851-7854.	4.1	195
32	Shedding Light on Vacancy-Doped Copper Chalcogenides: Shape-Controlled Synthesis, Optical Properties, and Modeling of Copper Telluride Nanocrystals with Near-Infrared Plasmon Resonances. ACS Nano, 2013, 7, 4367-4377.	14.6	186
33	Chemically Tailoring Coal to Fluorescent Carbon Dots with Tuned Size and Their Capacity for Cu(II) Detection. Small, 2014, 10, 4926-4933.	10.0	186
34	Solid-State Anion Exchange Reactions for Color Tuning of CsPbX ₃ Perovskite Nanocrystals. Chemistry of Materials, 2016, 28, 9033-9040.	6.7	182
35	Factors Governing the Quality of Aqueous CdTe Nanocrystals:  Calculations and Experiment. Journal of Physical Chemistry B, 2006, 110, 19280-19284.	2.6	181
36	Highâ€Performance Electrocatalysis on Palladium Aerogels. Angewandte Chemie - International Edition, 2012, 51, 5743-5747.	13.8	181

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37	Functionâ€Led Design of Aerogels: Selfâ€Assembly of Alloyed PdNi Hollow Nanospheres for Efficient Electrocatalysis. Angewandte Chemie - International Edition, 2015, 54, 13101-13105.	13.8	180
38	Colloidal nanocrystals for telecommunications. Complete coverage of the low-loss fiber windows by mercury telluride quantum dot. Pure and Applied Chemistry, 2000, 72, 295-307.	1.9	175
39	Bright Whiteâ€Light Emitting Manganese and Copper Coâ€Doped ZnSe Quantum Dots. Angewandte Chemie - International Edition, 2011, 50, 4432-4436.	13.8	173
40	Gold Aerogels: Three-Dimensional Assembly of Nanoparticles and Their Use as Electrocatalytic Interfaces. ACS Nano, 2016, 10, 2559-2567.	14.6	165
41	Real-time magnetic resonance imaging and quantification of lipoprotein metabolism in vivo using nanocrystals. Nature Nanotechnology, 2009, 4, 193-201.	31.5	159
42	Progress in the Light Emission of Colloidal Semiconductor Nanocrystals. Small, 2010, 6, 1364-1378.	10.0	159
43	Colloidal Nanocrystal-Based Gels and Aerogels: Material Aspects and Application Perspectives. Journal of Physical Chemistry Letters, 2012, 3, 8-17.	4.6	155
44	Coreâ€"Shell Structuring of Pure Metallic Aerogels towards Highly Efficient Platinum Utilization for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2018, 57, 2963-2966.	13.8	154
45	The contribution of particle core and surface to strain, disorder and vibrations in thiolcapped CdTe nanocrystals. Journal of Chemical Physics, 1998, 108, 7807-7815.	3.0	153
46	High Efficiency Quantum Dot Heterojunction Solar Cell Using Anatase (001) TiO ₂ Nanosheets. Advanced Materials, 2012, 24, 2202-2206.	21.0	150
47	Multimetallic Aerogels by Template-Free Self-Assembly of Au, Ag, Pt, and Pd Nanoparticles. Chemistry of Materials, 2014, 26, 1074-1083.	6.7	148
48	Controlled Fabrication of Gold-Coated 3D Ordered Colloidal Crystal Films and Their Application in Surface-Enhanced Raman Spectroscopy. Chemistry of Materials, 2005, 17, 5731-5736.	6.7	147
49	Promoting Electrocatalysis upon Aerogels. Advanced Materials, 2019, 31, e1804881.	21.0	146
50	Nanoparticle-based autoantigen delivery to Treg-inducing liver sinusoidal endothelial cells enables control of autoimmunity in mice. Journal of Hepatology, 2015, 62, 1349-1356.	3.7	145
51	Ordered Macroporous Bimetallic Nanostructures: Design, Characterization, and Applications. Accounts of Chemical Research, 2008, 41, 244-253.	15.6	143
52	Colloidal Nanocrystals Embedded in Macrocrystals: Robustness, Photostability, and Color Purity. Nano Letters, 2012, 12, 5348-5354.	9.1	136
53	Kinetically Controlled Synthesis of PdNi Bimetallic Porous Nanostructures with Enhanced Electrocatalytic Activity. Small, 2015, 11, 1430-1434.	10.0	133
54	Light Energy Conversion by Mesoscopic PbS Quantum Dots/TiO ₂ Heterojunction Solar Cells. ACS Nano, 2012, 6, 3092-3099.	14.6	132

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55	A Fine Size Selection of Brightly Luminescent Water-Soluble Ag–In–S and Ag–In–S/ZnS Quantum Dots. Journal of Physical Chemistry C, 2017, 121, 9032-9042.	3.1	131
56	Comparative Examination of the Stability of Semiconductor Quantum Dots in Various Biochemical Buffers. Journal of Physical Chemistry B, 2006, 110, 1959-1963.	2.6	128
57	Formation of luminescent spherical core-shell particles by the consecutive adsorption of polyelectrolyte and CdTe(S) nanocrystals on latex colloids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 163, 39-44.	4.7	127
58	Controlling the Growth of Palladium Aerogels with High-Performance toward Bioelectrocatalytic Oxidation of Glucose. Journal of the American Chemical Society, 2014, 136, 2727-2730.	13.7	124
59	Simple and Sensitive Colorimetric Detection of Dopamine Based on Assembly of Cyclodextrin-Modified Au Nanoparticles. Small, 2016, 12, 2439-2442.	10.0	123
60	Electrochemical synthesis of CdTe nanocrystal/polypyrrole composites for optoelectronic applications. Journal of Materials Chemistry, 2000, 10, 2163-2166.	6.7	121
61	Unusual Ultraâ€Hydrophilic, Porous Carbon Cuboids for Atmosphericâ€Water Capture. Angewandte Chemie - International Edition, 2015, 54, 1941-1945.	13.8	119
62	Threeâ€Dimensional Selfâ€Assembly of Thiolâ€Capped CdTe Nanocrystals: Gels and Aerogels as Building Blocks for Nanotechnology. Advanced Materials, 2008, 20, 4257-4262.	21.0	116
63	Current Advances in TiO2-Based Nanostructure Electrodes for High Performance Lithium Ion Batteries. Batteries, 2018, 4, 7.	4.5	116
64	Fungal Templates for Nobleâ€Metal Nanoparticles and Their Application in Catalysis. Angewandte Chemie - International Edition, 2008, 47, 7876-7879.	13.8	112
65	3D Assembly of Semiconductor and Metal Nanocrystals: Hybrid CdTe/Au Structures with Controlled Content. Journal of the American Chemical Society, 2011, 133, 13413-13420.	13.7	112
66	ITOâ€Free, Smallâ€Molecule Organic Solar Cells on Sprayâ€Coated Copperâ€Nanowireâ€Based Transparent Electrodes. Advanced Energy Materials, 2014, 4, 1300737.	19.5	110
67	Highly Luminescent and Water-Resistant CsPbBr ₃ â€"CsPb ₂ Br ₅ Perovskite Nanocrystals Coordinated with Partially Hydrolyzed Poly(methyl methacrylate) and Polyethylenimine. ACS Nano, 2019, 13, 10386-10396.	14.6	110
68	Off-resonance surface plasmon enhanced spontaneous emission from CdTe quantum dots. Applied Physics Letters, 2006, 89, 253118.	3.3	109
69	Synthesis of Palladium Nanoparticles and Their Applications for Surface-Enhanced Raman Scattering and Electrocatalysis. Journal of Physical Chemistry C, 2010, 114, 21976-21981.	3.1	109
70	Unveiling reductant chemistry in fabricating noble metal aerogels for superior oxygen evolutionÂand ethanol oxidation. Nature Communications, 2020, 11, 1590.	12.8	106
71	Large-Area (over 50 cm \tilde{A} — 50 cm) Freestanding Films of Colloidal InP/ZnS Quantum Dots. Nano Letters, 2012, 12, 3986-3993.	9.1	104
72	Emerging Hierarchical Aerogels: Selfâ€Assembly of Metal and Semiconductor Nanocrystals. Advanced Materials, 2018, 30, e1707518.	21.0	104

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73	Enzymeâ€Encapsulating Quantum Dot Hydrogels and Xerogels as Biosensors: Multifunctional Platforms for Both Biocatalysis and Fluorescent Probing. Angewandte Chemie - International Edition, 2013, 52, 976-979.	13.8	103
74	Multimetallic Hierarchical Aerogels: Shape Engineering of the Building Blocks for Efficient Electrocatalysis. Advanced Materials, 2017, 29, 1605254.	21.0	98
7 5	Boron Nitride Aerogels with Superâ€Flexibility Ranging from Liquid Nitrogen Temperature to 1000 °C. Advanced Functional Materials, 2019, 29, 1900188.	14.9	97
76	Hierarchical Carbideâ€Derived Carbon Foams with Advanced Mesostructure as a Versatile Electrochemical Energyâ€Storage Material. Advanced Energy Materials, 2014, 4, 1300645.	19.5	96
77	Discrete excitonic transitions in quantum-sized CdS particles. Chemical Physics Letters, 1990, 172, 201-204.	2.6	93
78	Typeâ€I and Typeâ€I Nanoscale Heterostructures Based on CdTe Nanocrystals: A Comparative Study. Small, 2008, 4, 1148-1152.	10.0	91
79	Semiconductor Nanocrystal Assemblies:Â Experimental Pitfalls and a Simple Model of Particleâ^'Particle Interaction. Journal of Physical Chemistry B, 2002, 106, 5604-5608.	2.6	90
80	CdTe Quantum Dot/Dye Hybrid System as Photosensitizer for Photodynamic Therapy. Nanoscale Research Letters, 2010, 5, 753-760.	5.7	90
81	Selective Fabrication of Ordered Bimetallic Nanostructures with Hierarchical Porosity. Angewandte Chemie - International Edition, 2005, 44, 5997-6001.	13.8	89
82	Engineering Selfâ€Supported Noble Metal Foams Toward Electrocatalysis and Beyond. Advanced Energy Materials, 2020, 10, 1901945.	19.5	89
83	Origin and Dynamics of Highly Efficient Broadband Photoluminescence of Aqueous Glutathione-Capped Size-Selected Ag–In–S Quantum Dots. Journal of Physical Chemistry C, 2018, 122, 13648-13658.	3.1	88
84	High-Rate Unidirectional Energy Transfer in Directly Assembled CdTe Nanocrystal Bilayers. Small, 2005, 1, 392-395.	10.0	87
85	Specific ion effects directed noble metal aerogels: Versatile manipulation for electrocatalysis and beyond. Science Advances, 2019, 5, eaaw4590.	10.3	87
86	Annealing of Nanometer-Sized Zinc Oxide Particles. Chemistry of Materials, 2002, 14, 1411-1417.	6.7	86
87	Designed Fabrication of Ordered Porous Au/Ag Nanostructured Films for Surface-Enhanced Raman Scattering Substrates. Langmuir, 2006, 22, 2605-2609.	3. 5	86
88	Emerging Noble Metal Aerogels: State of the Art and a Look Forward. Matter, 2019, 1, 39-56.	10.0	84
89	Particleâ-'Particle Interactions in Semiconductor Nanocrystal Assemblies. Nano Letters, 2001, 1, 267-269.	9.1	83
90	Engineering Multimetallic Aerogels for pHâ€Universal HER and ORR Electrocatalysis. Advanced Energy Materials, 2020, 10, 1903857.	19.5	83

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91	Switchable Photoluminescence of CdTe Nanocrystals by Temperature-Responsive Microgels. Langmuir, 2008, 24, 9820-9824.	3.5	81
92	Self-Supporting Hierarchical Porous PtAg Alloy Nanotubular Aerogels as Highly Active and Durable Electrocatalysts. Chemistry of Materials, 2016, 28, 6477-6483.	6.7	81
93	CdTe Nanocrystals Capped with a Tetrazolyl Analogue of Thioglycolic Acid: Aqueous Synthesis, Characterization, and Metal-Assisted Assembly. ACS Nano, 2010, 4, 4090-4096.	14.6	80
94	Synthesis of surface-modified colloidal semiconductor nanocrystals and study of photoinduced charge separation and transport in nanocrystal-polymer composites. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 237-241.	2.7	79
95	Synthesis and Characterization of Cadmium Phosphide Quantum Dots Emitting in the Visible Red to Near-Infrared. Journal of the American Chemical Society, 2010, 132, 5613-5615.	13.7	79
96	Diffusion- and reaction-limited cluster aggregation revisited. Physical Chemistry Chemical Physics, 2019, 21, 5723-5729.	2.8	79
97	Nanostructuring Noble Metals as Unsupported Electrocatalysts for Polymer Electrolyte Fuel Cells. Advanced Energy Materials, 2017, 7, 1700548.	19.5	76
98	Fabrication and characterization of red-emitting electroluminescent devices based on thiol-stabilized semiconductor nanocrystals. Applied Physics Letters, 2007, 90, 034107.	3.3	75
99	Ultrasmall SnO2 Nanocrystals: Hot-bubbling Synthesis, Encapsulation in Carbon Layers and Applications in High Capacity Li-Ion Storage. Scientific Reports, 2015, 4, 4647.	3.3	75
100	3D Assembly of Allâ€Inorganic Colloidal Nanocrystals into Gels and Aerogels. Angewandte Chemie - International Edition, 2016, 55, 6334-6338.	13.8	75
101	The Assembling of Semiconductor Nanocrystals. European Journal of Inorganic Chemistry, 2005, 2005, 3613-3623.	2.0	74
102	Dual-color emitting quantum-dot-quantum-well CdSe-ZnS heteronanocrystals hybridized on InGaNâ^•GaN light emitting diodes for high-quality white light generation. Applied Physics Letters, 2008, 92, .	3.3	74
103	Absolute photoluminescence quantum yields of IR26 and IR-emissive Cd _{1â^'x} Hg _x Te and PbS quantum dots â€" method- and material-inherent challenges. Nanoscale, 2015, 7, 133-143.	5.6	74
104	Pt-Ni Aerogels as Unsupported Electrocatalysts for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2016, 163, F998-F1003.	2.9	74
105	Near-Infrared Electroluminescence from HgTe Nanocrystals. ChemPhysChem, 2004, 5, 1435-1438.	2.1	68
106	Gradated alloyed CdZnSe nanocrystals with high luminescence quantum yields and stability for optoelectronic and biological applications. Journal of Materials Chemistry, 2011, 21, 11550.	6.7	67
107	PbS–Organic Mesocrystals: The Relationship between Nanocrystal Orientation and Superlattice Array. Angewandte Chemie - International Edition, 2012, 51, 10776-10781.	13.8	67
108	Application of Polymer Quantum Dot-Enzyme Hybrids in the Biosensor Development and Test Paper Fabrication. Analytical Chemistry, 2012, 84, 5047-5052.	6.5	67

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109	Mesocrystalline materials and the involvement of oriented attachment $\hat{a} \in \text{``a review. CrystEngComm,}$ 2014, 16, 9408-9424.	2.6	67
110	Photoluminescence Quantum Yield and Matrix-Induced Luminescence Enhancement of Colloidal Quantum Dots Embedded in Ionic Crystals. Chemistry of Materials, 2014, 26, 3231-3237.	6.7	67
111	Investigations on the stability of thiol stabilized semiconductor nanoparticles. Physical Chemistry Chemical Physics, 2002, 4, 4747-4753.	2.8	66
112	Synthesis of Extremely Small CdSe and Bright Blue Luminescent CdSe/ZnS Nanoparticles by a Prefocused Hot-Injection Approach. Chemistry of Materials, 2009, 21, 1743-1749.	6.7	66
113	Anisotropic Emission from Multilayered Plasmon Resonator Nanocomposites of Isotropic Semiconductor Quantum Dots. ACS Nano, 2011, 5, 1328-1334.	14.6	66
114	Unsupported Ptâ€Ni Aerogels with Enhanced High Current Performance and Durability in Fuel Cell Cathodes. Angewandte Chemie - International Edition, 2017, 56, 10707-10710.	13.8	65
115	Arrays of Inorganic Nanodots and Nanowires Using Nanotemplates Based on Switchable Block Copolymer Supramolecular Assemblies. Advanced Functional Materials, 2009, 19, 2805-2811.	14.9	64
116	A spray-coating process for highly conductive silver nanowire networks as the transparent top-electrode for small molecule organic photovoltaics. Nanoscale, 2015, 7, 2777-2783.	5.6	62
117	Layerâ€byâ€Layer Allâ€Inorganic Quantumâ€Dotâ€Based LEDs: A Simple Procedure with Robust Performance. Advanced Functional Materials, 2010, 20, 3298-3302.	14.9	61
118	Mixed Aerogels from Au and CdTe Nanoparticles. Advanced Functional Materials, 2013, 23, 1903-1911.	14.9	60
119	A Roadmap for 3D Metal Aerogels: Materials Design and Application Attempts. Matter, 2021, 4, 54-94.	10.0	60
120	Penetration of Amphiphilic Quantum Dots through Model and Cellular Plasma Membranes. ACS Nano, 2012, 6, 2150-2156.	14.6	59
121	Covalent immobilization of quantum dots on macroscopic surfaces using poly(acrylic acid) brushes. Journal of Materials Chemistry, 2008, 18, 214-220.	6.7	58
122	Self-Assembly of TGA-Capped CdTe Nanocrystals into Three-Dimensional Luminescent Nanostructures. Chemistry of Materials, 2010, 22, 2309-2314.	6.7	58
123	Promoting the Electrocatalytic Performance of Noble Metal Aerogels by Ligandâ€Directed Modulation. Angewandte Chemie - International Edition, 2020, 59, 5706-5711.	13.8	58
124	Synthesis of noble metal nanoparticles and their non-ordered superstructures. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 1385-1404.	3.4	57
125	Self-assembly of nanocrystals into strongly electronically coupled all-inorganic supercrystals. Science, 2022, 375, 1422-1426.	12.6	57
126	Electron Transport in Particulate ZnO Electrodes:  A Simple Approach. Journal of Physical Chemistry B, 2002, 106, 8514-8523.	2.6	56

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127	Enhancing the efficiency of a dye sensitized solar cell due to the energy transfer between CdSe quantum dots and a designed squaraine dye. RSC Advances, 2012, 2, 2748.	3.6	56
128	Stable Dispersion of Iodide-Capped PbSe Quantum Dots for High-Performance Low-Temperature Processed Electronics and Optoelectronics. Chemistry of Materials, 2015, 27, 4328-4337.	6.7	56
129	Freeze–Thawâ€Promoted Fabrication of Clean and Hierarchically Structured Nobleâ€Metal Aerogels for Electrocatalysis and Photoelectrocatalysis. Angewandte Chemie - International Edition, 2020, 59, 8293-8300.	13.8	56
130	Quantum-sized HgS in contact with quantum-sized CdS colloids. Journal of Luminescence, 1992, 53, 113-115.	3.1	55
131	White emitting CdS quantum dot nanoluminophores hybridized on near-ultraviolet LEDs for high-quality white light generation and tuning. New Journal of Physics, 2008, 10, 023026.	2.9	55
132	Investigation of factors affecting the photoluminescence of colloidallyÂprepared HgTe nanocrystals. Journal of Materials Chemistry, 1999, 9, 2721-2722.	6.7	53
133	One-step aqueous synthesis of blue-emitting glutathione-capped ZnSe1â^xTexalloyed nanocrystals. Chemical Communications, 2010, 46, 886-888.	4.1	53
134	Effect of Surface Properties on the Microstructure, Thermal, and Colloidal Stability of VB ₂ Nanoparticles. Chemistry of Materials, 2015, 27, 5106-5115.	6.7	52
135	Liquid–Liquid Diffusionâ€Assisted Crystallization: A Fast and Versatile Approach Toward High Quality Mixed Quantum Dotâ€Salt Crystals. Advanced Functional Materials, 2015, 25, 2638-2645.	14.9	52
136	Interconnection of Nanoparticles within 2D Superlattices of PbS/Oleic Acid Thin Films. Advanced Materials, 2014, 26, 3042-3049.	21.0	51
137	Luminescence and photoelectrochemical properties of size-selected aqueous copper-doped Ag–In–S quantum dots. RSC Advances, 2018, 8, 7550-7557.	3.6	51
138	Self-Organized TiO ₂ /CoO Nanotubes as Potential Anode Materials for Lithium Ion Batteries. ACS Sustainable Chemistry and Engineering, 2015, 3, 909-919.	6.7	50
139	Enzymatic Biofuel Cells on Porous Nanostructures. Small, 2016, 12, 4649-4661.	10.0	50
140	Hybrid N-Butylamine-Based Ligands for Switching the Colloidal Solubility and Regimentation of Inorganic-Capped Nanocrystals. ACS Nano, 2017, 11, 1559-1571.	14.6	49
141	Mechanical Properties of Metal Oxide Aerogels. Chemistry of Materials, 2018, 30, 145-152.	6.7	49
142	Disturbance-Promoted Unconventional and Rapid Fabrication of Self-Healable Noble Metal Gels for (Photo-)Electrocatalysis. Matter, 2020, 2, 908-920.	10.0	49
143	Covalent Linking of CdTe Nanocrystals to Amino-Functionalized Surfaces. ChemPhysChem, 2005, 6, 449-451.	2.1	48
144	Implementation of High-Quality Warm-White Light-Emitting Diodes by a Model-Experimental Feedback Approach Using Quantum Dot–Salt Mixed Crystals. ACS Applied Materials & Diterfaces, 2015, 7, 23364-23371.	8.0	48

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145	Simultaneous Identification of Spectral Properties and Sizes of Multiple Particles in Solution with Subnanometer Resolution. Angewandte Chemie - International Edition, 2016, 55, 11770-11774.	13.8	46
146	Anodically fabricated TiO ₂ –SnO ₂ nanotubes and their application in lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 5542-5552.	10.3	46
147	Photoemission Study of Onion Like Quantum Dot Quantum Well and Double Quantum Well Nanocrystals of CdS and HgSâ€. Journal of Physical Chemistry B, 2003, 107, 7486-7491.	2.6	45
148	Tuning shades of white light with multi-color quantum-dot–quantum-well emitters based on onion-like CdSe–ZnS heteronanocrystals. Nanotechnology, 2008, 19, 335203.	2.6	45
149	A Stepâ€Wise Approach for Dual Nanoparticle Patterning via Block Copolymer Selfâ€Assembly. Advanced Functional Materials, 2013, 23, 483-490.	14.9	45
150	Large-Scale Synthesis of Micrometer-Sized Silver Nanosheets. Journal of Physical Chemistry C, 2010, 114, 4495-4501.	3.1	44
151	The distribution and degradation of radiolabeled superparamagnetic iron oxide nanoparticles and quantum dots in mice. Beilstein Journal of Nanotechnology, 2015, 6, 111-123.	2.8	44
152	CdSe Nanorod Synthesis: A New Approach. Small, 2007, 3, 1886-1888.	10.0	43
153	Highly ordered palladium nanodots and nanowires from switchable block copolymer thin films. Nanotechnology, 2009, 20, 415302.	2.6	43
154	Decoration of Diatom Biosilica with Noble Metal and Semiconductor Nanoparticles (<10â€nm): Assembly, Characterization, and Applications. Chemistry - an Asian Journal, 2012, 7, 85-90.	3.3	43
155	Chloride and Indiumâ€Chlorideâ€Complex Inorganic Ligands for Efficient Stabilization of Nanocrystals in Solution and Doping of Nanocrystal Solids. Advanced Functional Materials, 2016, 26, 2163-2175.	14.9	43
156	3D assembly of preformed colloidal nanoparticles into gels and aerogels: function-led design. Chemical Communications, 2017, 53, 12608-12621.	4.1	42
157	Structural tuning of color chromaticity through nonradiative energy transfer by interspacing CdTe nanocrystal monolayers. Applied Physics Letters, 2009, 94, .	3.3	41
158	A Membraneless Glucose/O ₂ Biofuel Cell Based on Pd Aerogels. Chemistry - A European Journal, 2014, 20, 4380-4385.	3.3	41
159	Electrical limit of silver nanowire electrodes: Direct measurement of the nanowire junction resistance. Applied Physics Letters, 2016, 108 , .	3.3	41
160	Quantum-Dot-Based (Aero)gels: Control of the Optical Properties. Journal of Physical Chemistry Letters, 2012, 3, 2188-2193.	4.6	40
161	Electrostatic and Covalent Interactions in CdTe Nanocrystalline Assemblies. Journal of Physical Chemistry B, 2005, 109, 20244-20250.	2.6	39
162	Ultrafast Interfacial Charge Carrier Dynamics in ZnSe and ZnSe/ZnS Core/Shell Nanoparticles:  Influence of Shell Formation. Journal of Physical Chemistry C, 2008, 112, 2703-2710.	3.1	39

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