Brian A Korgel

List of Publications by Year
in descending order

Version: 2024-02-01

218 papers	22,934 citations	8732 75 h-index	8370 147 g-index
223 all docs	223 docs citations	223 times ranked	24353 citing authors

#	Article	IF	Citations
1	Control of Thickness and Orientation of Solution-Grown Silicon Nanowires. Science, 2000, 287, 1471-1473.	6.0	1,496
2	Copper Selenide Nanocrystals for Photothermal Therapy. Nano Letters, 2011, 11, 2560-2566.	4.5	1,264
3	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	7.3	1,005
4	Synthesis of CuInS₂, CuInSe₂, and Cu(In_xGa_{1-x})Se₂ (CIGS) Nanocrystal â€œInksâ€•for Printable Photovoltaics. Journal of the American Chemical Society, 2008, 130, 16770-16777.	6.6	887
5	Two-Photon Luminescence Imaging of Cancer Cells Using Molecularly Targeted Gold Nanorods. Nano Letters, 2007, 7, 941-945.	4.5	851
6	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
7	In Situ TEM of Two-Phase Lithiation of Amorphous Silicon Nanospheres. Nano Letters, 2013, 13, 758-764.	4.5	680
8	Synthesis of Cu₂ZnSnS₄ Nanocrystals for Use in Low-Cost Photovoltaics. Journal of the American Chemical Society, 2009, 131, 12554-12555.	6.6	639
9	Solution-Grown Silicon Nanowires for Lithium-Ion Battery Anodes. ACS Nano, 2010, 4, 1443-1450.	7.3	492
10	Assembly and Self-Organization of Silver Nanocrystal Superlattices:â€‰ Ordered â€œSoft Spheresâ€• Journal of Physical Chemistry B, 1998, 102, 8379-8388.	1.2	461
11	Solventless Synthesis of Monodisperse Cu2S Nanorods, Nanodisks, and Nanoplatelets. Journal of the American Chemical Society, 2003, 125, 16050-16057.	6.6	423
12	The Importance of the CTAB Surfactant on the Colloidal Seed-Mediated Synthesis of Gold Nanorods. Langmuir, 2008, 24, 644-649.	1.6	382
13	Synthesis of Ligand-Stabilized Silicon Nanocrystals with Size-Dependent Photoluminescence Spanning Visible to Near-Infrared Wavelengths. Chemistry of Materials, 2012, 24, 393-401.	3.2	326
14	Size Tunable Visible Luminescence from Individual Organic Monolayer Stabilized Silicon Nanocrystal Quantum Dots. Nano Letters, 2002, 2, 681-685.	4.5	318
15	General Shape Control of Colloidal CdS, CdSe, CdTe Quantum Rods and Quantum Rod Heterostructures. Journal of Physical Chemistry B, 2005, 109, 8538-8542.	1.2	312
16	Solventless Synthesis of Copper Sulfide Nanorods by Thermolysis of a Single Source Thiolate-Derived Precursor. Journal of the American Chemical Society, 2003, 125, 5638-5639.	6.6	309
17	Nucleation and Growth of Germanium Nanowires Seeded by Organic Monolayer-Coated Gold Nanocrystals. Journal of the American Chemical Society, 2002, 124, 1424-1429.	6.6	284
18	Silicon Nanowire Fabric as a Lithium Ion Battery Electrode Material. Journal of the American Chemical Society, 2011, 133, 20914-20921.	6.6	251

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19	Solventless Synthesis of Nickel Sulfide Nanorods and Triangular Nanoprisms. Nano Letters, 2004, 4, 537-542.	4.5	217
20	Opto-thermoelectric nanotweezers. Nature Photonics, 2018, 12, 195-201.	15.6	216
21	Synthesis and Magnetic Properties of Silica-Coated FePt Nanocrystals. Journal of Physical Chemistry B, 2006, 110, 11160-11166.	1.2	207
22	Chemical Surface Passivation of Ge Nanowires. Journal of the American Chemical Society, 2004, 126, 15466-15472.	6.6	206
23	Synthesis of Organic Monolayer-Stabilized Copper Nanocrystals in Supercritical Water. Journal of the American Chemical Society, 2001, 123, 7797-7803.	6.6	203
24	Hydrophobic Gold Nanoparticle Self-Assembly with Phosphatidylcholine Lipid: Membrane-Loaded and Janus Vesicles. Nano Letters, 2010, 10, 3733-3739.	4.5	200
25	Solventless Synthesis of Bi2S3(Bismuthinite) Nanorods, Nanowires, and Nanofabric. Chemistry of Materials, 2005, 17, 1655-1660.	3.2	199
26	Lithium Ion Battery Peformance of Silicon Nanowires with Carbon Skin. ACS Nano, 2014, 8, 915-922.	7.3	185
27	Solution-Grown Germanium Nanowire Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2012, 4, 4658-4664.	4.0	181
28	Solutionâ^'Liquidâ^'Solid (SLS) Growth of Silicon Nanowires. Journal of the American Chemical Society, 2008, 130, 5436-5437.	6.6	180
29	Small-angle x-ray-scattering study of silver-nanocrystal disorder-order phase transitions. Physical Review B, 1999, 59, 14191-14201.	1.1	174
30	Nanocrystal and Nanowire Synthesis and Dispersibility in Supercritical Fluids. Journal of Physical Chemistry B, 2004, 108, 9574-9587.	1.2	169
31	Monodisperse silicon nanocavities and photonic crystals with magnetic response in the optical region. Nature Communications, 2013, 4, 1904.	5.8	157
32	Lamellar Twinning in Semiconductor Nanowires. Journal of Physical Chemistry C, 2007, 111, 2929-2935.	1.5	151
33	Columnar Self-Assembly of Colloidal Nanodisks. Nano Letters, 2006, 6, 2959-2963.	4.5	149
34	Labeling tumor cells with fluorescent nanocrystalâ€“aptamer bioconjugates. Biosensors and Bioelectronics, 2006, 21, 1859-1866.	5.3	146
35	Copper-Coated Amorphous Silicon Particles as an Anode Material for Lithium-Ion Batteries. Chemistry of Materials, 2012, 24, 1306-1315.	3.2	144
36	Self-Assembled Simple Hexagonal AB₂ Binary Nanocrystal Superlattices: SEM, GISAXS, and Defects. Journal of the American Chemical Society, 2009, 131, 3281-3290.	6.6	143

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37	Influence of Surface States on Electron Transport through Intrinsic Ge Nanowires. Journal of Physical Chemistry B, 2005, 109, 5518-5524.	1.2	139
38	Growth of Single Crystal Silicon Nanowires in Supercritical Solution from Tethered Gold Particles on a Silicon Substrate. Nano Letters, 2003, 3, 93-99.	4.5	137
39	CuInSe₂ Quantum Dot Solar Cells with High Open-Circuit Voltage. Journal of Physical Chemistry Letters, 2013, 4, 2030-2034.	2.1	137
40	Alkyl Passivation and Amphiphilic Polymer Coating of Silicon Nanocrystals for Diagnostic Imaging. Small, 2010, 6, 2026-2034.	5.2	136
41	Condensation of Ordered Nanocrystal Thin Films. Physical Review Letters, 1998, 80, 3531-3534.	2.9	135
42	Germanium as a Sodium Ion Battery Material: In Situ TEM Reveals Fast Sodiation Kinetics with High Capacity. Chemistry of Materials, 2016, 28, 1236-1242.	3.2	134
43	Wurtziteâˆ’Chalcopyrite Polytypism in CuInS₂ Nanodisks. Chemistry of Materials, 2009, 21, 1962-1966.	3.2	129
44	Spray-deposited CuInSe2 nanocrystal photovoltaics. Energy and Environmental Science, 2010, 3, 1600.	15.6	128
45	A â€œTips and Tricksâ€•Practical Guide to the Synthesis of Metal Halide Perovskite Nanocrystals. Chemistry of Materials, 2020, 32, 5410-5423.	3.2	127
46	Synthesis of Cadmium Sulfide Q Particles in Water-in-CO2Microemulsions. Langmuir, 1999, 15, 6613-6615.	1.6	125
47	Colloidal CIGS and CZTS nanocrystals: A precursor route to printed photovoltaics. Journal of Solid State Chemistry, 2012, 189, 2-12.	1.4	124
48	Synthesis and Characterization of Dilute Magnetic Semiconductor Manganese-Doped Indium Arsenide Nanocrystals. Nano Letters, 2003, 3, 1441-1447.	4.5	120
49	Synthesis of High Aspect Ratio Quantum-Size CdS Nanorods and Their Surface-Dependent Photoluminescence. Langmuir, 2008, 24, 9043-9049.	1.6	120
50	Carbon Nanotube Synthesis in Supercritical Toluene. Journal of the American Chemical Society, 2004, 126, 4951-4957.	6.6	118
51	Self-Assembled Honeycomb Networks of Gold Nanocrystals. Nano Letters, 2001, 1, 595-600.	4.5	115
52	Pyrite Nanocrystal Solar Cells: Promising, or Foolâ€™s Gold?. Journal of Physical Chemistry Letters, 2012, 3, 2352-2356.	2.1	114
53	High Yield Solutionâˆ’Liquidâˆ’Solid Synthesis of Germanium Nanowires. Journal of the American Chemical Society, 2005, 127, 15718-15719.	6.6	107
54	Synthesis of Germanium Nanocrystals in High Temperature Supercritical Fluid Solvents. Nano Letters, 2004, 4, 969-974.	4.5	106

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55	Tin-Seeded Silicon Nanowires for High Capacity Li-Ion Batteries. Chemistry of Materials, 2012, 24, 3738-3745.	3.2	106
56	Size-Dependent Photoluminescence Efficiency of Silicon Nanocrystal Quantum Dots. Journal of Physical Chemistry C, 2017, 121, 23240-23248.	1.5	104
57	Raman Spectroscopy of Oxide-Embedded and Ligand-Stabilized Silicon Nanocrystals. Journal of Physical Chemistry Letters, 2012, 3, 1089-1093.	2.1	103
58	Flexible Germanium Nanowires: Ideal Strength, Room Temperature Plasticity, and Bendable Semiconductor Fabric. ACS Nano, 2010, 4, 2356-2362.	7.3	102
59	Metal Nanocrystal Superlattice Nucleation and Growth. Langmuir, 2004, 20, 978-983.	1.6	100
60	Germanium Nanowire Synthesis:Â An Example of Solid-Phase Seeded Growth with Nickel Nanocrystals. Chemistry of Materials, 2005, 17, 5705-5711.	3.2	100
61	In Vivo Whole Animal Fluorescence Imaging of a Microparticle-Based Oral Vaccine Containing (CuInSexS2â€“x)/ZnS Core/Shell Quantum Dots. Nano Letters, 2013, 13, 4294-4298.	4.5	98
62	High Yield of Germanium Nanocrystals Synthesized from Germanium Diiodide in Solution. Chemistry of Materials, 2005, 17, 6479-6485.	3.2	97
63	Growth Kinetics and Metastability of Monodisperse Tetraoctylammonium Bromide Capped Gold Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 193-199.	1.2	94
64	Catalytic Solid-Phase Seeding of Silicon Nanowires by Nickel Nanocrystals in Organic Solvents. Nano Letters, 2005, 5, 681-684.	4.5	93
65	Bismuth Nanocrystal-Seeded III-V Semiconductor Nanowire Synthesis. Crystal Growth and Design, 2005, 5, 1971-1976.	1.4	88
66	Electrochemical Lithiation of Graphene-Supported Silicon and Germanium for Rechargeable Batteries. Journal of Physical Chemistry C, 2012, 116, 11917-11923.	1.5	87
67	Room Temperature Hydrosilylation of Silicon Nanocrystals with Bifunctional Terminal Alkenes. Langmuir, 2013, 29, 1533-1540.	1.6	87
68	Creating polymer hydrogel microfibres with internal alignment via electrical and mechanical stretching. Biomaterials, 2014, 35, 3243-3251.	5.7	83
69	Multiexciton Solar Cells of CuInSe₂ Nanocrystals. Journal of Physical Chemistry Letters, 2014, 5, 304-309.	2.1	83
70	Tunable Resonance Coupling in Single Si Nanoparticleâ€“Monolayer WS₂ Structures. ACS Applied Materials & Interfaces, 2018, 10, 16690-16697.	4.0	82
71	The Role of Precursor-Decomposition Kinetics in Silicon-Nanowire Synthesis in Organic Solvents. Angewandte Chemie - International Edition, 2005, 44, 3573-3577.	7.2	79
72	Space charge limited currents and trap concentrations in GaAs nanowires. Nanotechnology, 2006, 17, 2681-2688.	1.3	79

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73	Influences of Gold, Binder and Electrolyte on Silicon Nanowire Performance in Li-Ion Batteries. Journal of Physical Chemistry C, 2012, 116, 18079-18086.	1.5	79
74	The Role of Ligand Packing Frustration in Body-Centered Cubic (bcc) Superlattices of Colloidal Nanocrystals. Journal of Physical Chemistry Letters, 2015, 6, 2406-2412.	2.1	79
75	Graphene-Supported High-Resolution TEM and STEM Imaging of Silicon Nanocrystals and their Capping Ligands. Journal of Physical Chemistry C, 2012, 116, 22463-22468.	1.5	78
76	Supercritical Fluidâ^'Liquidâ^'Solid Synthesis of Gallium Phosphide Nanowires. Chemistry of Materials, 2005, 17, 230-233.	3.2	77
77	Limitations on the Optical Tunability of Small Diameter Gold Nanoshells. Langmuir, 2009, 25, 11777-11785.	1.6	77
78	Thickness-limited performance of CuInSe_2 nanocrystal photovoltaic devices. Optics Express, 2010, 18, A411.	1.7	74
79	Nanocrystal photovoltaics: a review of recent progress. Current Opinion in Chemical Engineering, 2013, 2, 160-167.	3.8	74
80	Enhanced Open-Circuit Voltage of Wide-Bandgap Perovskite Photovoltaics by Using Alloyed (FA_{1â€“x}Cs_x)Pb(I_{1â€“x}Br_x)₃ Quantum Dots. ACS Energy Letters, 2019, 4, 1954-1960.	3.8	73
81	High capacity lithium ion battery anodes of silicon and germanium. Current Opinion in Chemical Engineering, 2013, 2, 286-293.	3.8	72
82	Synthesis of Amorphous Silicon Colloids by Trisilane Thermolysis in High Temperature Supercritical Solvents. Langmuir, 2004, 20, 6546-6548.	1.6	69
83	Nanocrystals for Electronics. Annual Review of Chemical and Biomolecular Engineering, 2012, 3, 287-311.	3.3	67
84	Seeded germanium nanowire synthesis in solution. Journal of Materials Chemistry, 2009, 19, 996.	6.7	66
85	Strongly Birefringent Pb3O2Cl2Nanobelts. Journal of the American Chemical Society, 2005, 127, 10089-10095.	6.6	64
86	Time-Resolved Small-Angle X-ray Scattering Studies of Nanocrystal Superlattice Self-Assembly. Journal of the American Chemical Society, 1998, 120, 2969-2970.	6.6	63
87	Hydrogenated Amorphous Silicon (a-Si:H) Colloids. Chemistry of Materials, 2010, 22, 6378-6383.	3.2	63
88	Photoluminescence quenching of silicon nanoparticles in phospholipid vesicle bilayers. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 158, 111-117.	2.0	61
89	Inverse Opal Nanocrystal Superlattice Films. Nano Letters, 2004, 4, 1943-1948.	4.5	61
90	Multifunctional particles: Magnetic nanocrystals and gold nanorods coated with fluorescent dye-doped silica shells. Journal of Solid State Chemistry, 2008, 181, 1590-1599.	1.4	61

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91	Challenges in quantum dot-neuron active interfacing. Talanta, 2005, 67, 462-471.	2.9	59
92	Melting and Sintering of a Body-Centered Cubic Superlattice of PbSe Nanocrystals Followed by Small Angle X-ray Scattering. Journal of Physical Chemistry C, 2011, 115, 6397-6404.	1.5	59
93	Comparison of the Photovoltaic Response of Oleylamine and Inorganic Ligand-Capped CuInSe₂ Nanocrystals. ACS Applied Materials & Interfaces, 2012, 4, 2757-2761.	4.0	59
94	Reversible Solvent Vapor-Mediated Phase Changes in Nanocrystal Superlattices. ACS Nano, 2011, 5, 2419-2424.	7.3	58
95	Nanocrystal-Mediated Crystallization of Silicon and Germanium Nanowires in Organic Solvents: The Role of Catalysis and Solid-Phase Seeding. Angewandte Chemie - International Edition, 2006, 45, 5184-5187.	7.2	57
96	Colloidal Luminescent Silicon Nanorods. Nano Letters, 2013, 13, 3101-3105.	4.5	57
97	Surface Science and Colloidal Stability of Double-Perovskite Cs₂AgBiBr₆ Nanocrystals and Their Superlattices. Chemistry of Materials, 2019, 31, 7962-7969.	3.2	57
98	Twin-Related Branching of Solution-Grown ZnSe Nanowires. Chemistry of Materials, 2007, 19, 4943-4948.	3.2	55
99	Enhanced Coloration Efficiency of Electrochromic Tungsten Oxide Nanorods by Site Selective Occupation of Sodium Ions. Nano Letters, 2020, 20, 2072-2079.	4.5	55
100	Importance of Solvent-Mediated Phenylsilane Decompositon Kinetics for High-Yield Solution-Phase Silicon Nanowire Synthesis. Chemistry of Materials, 2008, 20, 1239-1241.	3.2	54
101	Silicon Nanocrystals Functionalized with Pyrene Units: Efficient Light-Harvesting Antennae with Bright Near-Infrared Emission. Journal of Physical Chemistry Letters, 2014, 5, 3325-3329.	2.1	54
102	Flexible CuInSe₂ Nanocrystal Solar Cells on Paper. ACS Energy Letters, 2017, 2, 574-581.	8.8	54
103	Synthesis and Ligand Exchange of Thiol-Capped Silicon Nanocrystals. Langmuir, 2015, 31, 6886-6893.	1.6	53
104	Ordered Structure Rearrangements in Heated Gold Nanocrystal Superlattices. Nano Letters, 2013, 13, 5710-5714.	4.5	52
105	Copper Indium Gallium Selenide (CIGS) Photovoltaic Devices Made Using Multistep Selenization of Nanocrystal Films. ACS Applied Materials & Interfaces, 2013, 5, 9134-9140.	4.0	52
106	All-optical reconfigurable chiral meta-molecules. Materials Today, 2019, 25, 10-20.	8.3	52
107	GISAXS Characterization of Order in Hexagonal Monolayers of FePt Nanocrystals. Journal of Physical Chemistry C, 2010, 114, 14427-14432.	1.5	50
108	Corrosion Resistance of Thiol- and Alkene-Passivated Germanium Nanowires. Chemistry of Materials, 2010, 22, 3698-3703.	3.2	50

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109	Twins cause kinks. Nature Materials, 2006, 5, 521-522.	13.3	49
110	Silicon Nanowires and Silica Nanotubes Seeded by Copper Nanoparticles in an Organic Solvent. Chemistry of Materials, 2008, 20, 2306-2313.	3.2	49
111	Colloidal Silicon Nanorod Synthesis. Nano Letters, 2009, 9, 3042-3047.	4.5	49
112	Second Virial Coefficient Measurements of Dilute Gold Nanocrystal Dispersions Using Small-Angle X-ray Scattering. Journal of Physical Chemistry B, 2004, 108, 16732-16738.	1.2	48
113	Youngâ€™s Modulus and Size-Dependent Mechanical Quality Factor of Nanoelectromechanical Germanium Nanowire Resonators. Journal of Physical Chemistry C, 2008, 112, 10725-10729.	1.5	48
114	Colloidal Synthesis of Germanium Nanorods. Chemistry of Materials, 2011, 23, 1964-1970.	3.2	48
115	Colloidal magnetic nanocrystals: synthesis, properties and applications. Annual Reports on the Progress of Chemistry Section C, 2007, 103, 351.	4.4	46
116	Tunable Chiral Optics in All-Solid-Phase Reconfigurable Dielectric Nanostructures. Nano Letters, 2021, 21, 973-979.	4.5	42
117	â€œMelting Transitionâ€•of a Quantum Dot Solid:â€‰ Collective Interactions Influence the Thermally-Induced Orderâ€˜Disorder Transition of a Silver Nanocrystal Superlattice. Journal of the American Chemical Society, 1999, 121, 3533-3534.	6.6	41
118	Electrorheological analysis of nano laden suspensions. Journal of Colloid and Interface Science, 2006, 297, 618-624.	5.0	39
119	Siliconâ€Based Dielectric Metamaterials: Focus on the Current Synthetic Challenges. Angewandte Chemie - International Edition, 2018, 57, 4478-4498.	7.2	39
120	An Allâ€Inorganic Colloidal Nanocrystal Flexible Polarizer. Angewandte Chemie - International Edition, 2019, 58, 8730-8735.	7.2	39
121	Optical nanomanipulation on solid substrates via optothermally-gated photon nudging. Nature Communications, 2019, 10, 5672.	5.8	39
122	Stacking of Hexagonal Nanocrystal Layers during Langmuirâ€“Blodgett Deposition. Journal of Physical Chemistry B, 2012, 116, 6017-6026.	1.2	38
123	In Situ TEM Observations of Sn-Containing Silicon Nanowires Undergoing Reversible Pore Formation Due to Fast Lithiation/Delithiation Kinetics. Journal of Physical Chemistry C, 2015, 119, 21889-21895.	1.5	38
124	Kinetics of Nonequilibrium Nanocrystal Monolayer Formation:Â Deposition from Liquid Carbon Dioxide. Nano Letters, 2003, 3, 1671-1675.	4.5	37
125	High Yield Multiwall Carbon Nanotube Synthesis in Supercritical Fluids. Chemistry of Materials, 2006, 18, 3356-3364.	3.2	37
126	Efficient Carrier Multiplication in Colloidal CuInSe₂ Nanocrystals. Journal of Physical Chemistry Letters, 2014, 5, 3169-3174.	2.1	37

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127	Nanocrystal superlattices that exhibit improved order on heating: an example of inverse melting?. Faraday Discussions, 2015, 181, 181-192.	1.6	34
128	MATERIALS SCIENCE: Nanosprings Take Shape. Science, 2005, 309, 1683-1684.	6.0	33
129	Temperature Dependence of the Field Effect Mobility of Solution-Grown Germanium Nanowires. Journal of Physical Chemistry B, 2006, 110, 6816-6823.	1.2	33
130	Influence of Composition on the Performance of Sintered Cu(In,Ga)Se₂ Nanocrystal Thinâ€Film Photovoltaic Devices. ChemSusChem, 2013, 6, 481-486.	3.6	33
131	Self-Assembly and Thermal Stability of Binary Superlattices of Gold and Silicon Nanocrystals. Journal of Physical Chemistry Letters, 2013, 4, 3677-3682.	2.1	33
132	Orientationally Ordered Silicon Nanocrystal Cuboctahedra in Superlattices. Nano Letters, 2016, 16, 7814-7821.	4.5	33
133	Spectrally tunable infrared plasmonic F,Sn:In2O3 nanocrystal cubes. Journal of Chemical Physics, 2020, 152, 014709.	1.2	33
134	Rapid SFLS Synthesis of Si Nanowires Using Trisilane with In situ Alkyl-Amine Passivation. Chemistry of Materials, 2011, 23, 2697-2699.	3.2	32
135	Efficient Carrier Multiplication in Colloidal Silicon Nanorods. Nano Letters, 2017, 17, 5580-5586.	4.5	32
136	An Electrifying Choice for the 2019 Chemistry Nobel Prize: Goodenough, Whittingham, and Yoshino. Chemistry of Materials, 2019, 31, 8577-8581.	3.2	31
137	MATERIALS SCIENCE: Self-Assembled Nanocoils. Science, 2004, 303, 1308-1309.	6.0	30
138	Solvent Density-Dependent Steric Stabilization of Perfluoropolyether-Coated Nanocrystals in Supercritical Carbon Dioxide. Journal of Physical Chemistry B, 2004, 108, 15969-15975.	1.2	29
139	Synthesis of germanium nanocrystals in high temperature supercritical CO2. Nanotechnology, 2005, 16, S389-S394.	1.3	29
140	A Singleâ€Step Reaction for Silicon and Germanium Nanorods. Chemistry - A European Journal, 2014, 20, 5874-5879.	1.7	29
141	Thermal Stability of the Black Perovskite Phase in Cesium Lead Iodide Nanocrystals Under Humid Conditions. Chemistry of Materials, 2019, 31, 9750-9758.	3.2	29
142	Suppressing material loss in the visible and near-infrared range for functional nanophotonics using bandgap engineering. Nature Communications, 2020, 11, 5055.	5.8	29
143	Chloroform-Enhanced Incorporation of Hydrophobic Gold Nanocrystals into Dioleoylphosphatidylcholine (DOPC) Vesicle Membranes. Langmuir, 2012, 28, 12971-12981.	1.6	28
144	Development of wide bandgap perovskites for next-generation low-cost CdTe tandem solar cells. Chemical Engineering Science, 2019, 199, 388-397.	1.9	28

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145	Nanomaterials Developments for Higher-Performance Lithium Ion Batteries. Journal of Physical Chemistry Letters, 2014, 5, 749-750.	2.1	27
146	Light-harvesting antennae based on photoactive silicon nanocrystals functionalized with porphyrin chromophores. Faraday Discussions, 2015, 185, 481-495.	1.6	27
147	Molecular Optical Imaging of Therapeutic Targets of Cancer. Advances in Cancer Research, 2006, 96, 299-344.	1.9	26
148	Low Temperature Colloidal Synthesis of Silicon Nanorods from Isotetrasilane, Neopentasilane, and Cyclohexasilane. Chemistry of Materials, 2015, 27, 6053-6058.	3.2	26
149	Pervasive Cation Vacancies and Antisite Defects in Copper Indium Diselenide (CuInSe₂) Nanocrystals. Journal of Physical Chemistry C, 2019, 123, 9544-9551.	1.5	26
150	A Comprehensive Study of Electron Energy Losses in Ge Nanowires. Nano Letters, 2004, 4, 1455-1461.	4.5	25
151	Silicon Nanocrystal Superlattices. ChemPhysChem, 2013, 14, 84-87.	1.0	25
152	Photoinduced Processes between Pyrene-Functionalized Silicon Nanocrystals and Carbon Allotropes. Chemistry of Materials, 2015, 27, 4390-4397.	3.2	25
153	Simultaneous Tunable Selection and Self-Assembly of Si Nanowires from Heterogeneous Feedstock. ACS Nano, 2016, 10, 4384-4394.	7.3	25
154	Bright Long-Lived Luminescence of Silicon Nanocrystals Sensitized by Two-Photon Absorbing Antenna. CheM, 2017, 2, 550-560.	5.8	25
155	In Situ Transmission Electron Microsopy of Oxide Shell-Induced Pore Formation in (De)lithiated Silicon Nanowires. ACS Energy Letters, 2018, 3, 2829-2834.	8.8	25
156	Nonequilibrium Phase Behavior during the Random Sequential Adsorption of Tethered Hard Disks. Physical Review Letters, 2000, 85, 4430-4433.	2.9	23
157	Germanium nanowire transistors with ethylene glycol treated poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate) contacts. Applied Physics Letters, 2007, 90, 072106.	1.5	23
158	Optical Properties of Silicon and Germanium Nanowire Fabric. Journal of Physical Chemistry C, 2012, 116, 22486-22491.	1.5	23
159	Enhanced Nickel-Seeded Synthesis of Germanium Nanowires. Chemistry of Materials, 2013, 25, 2172-2177.	3.2	23
160	Structureâ€“Properties Correlation in Si Nanoparticles by Total Scattering and Computer Simulations. Chemistry of Materials, 2013, 25, 2365-2371.	3.2	23
161	Mapping Spatial Heterogeneity in Cu(In_{1â^'x}Ga_x)Se₂ Nanocrystalâ€Based Photovoltaics with Scanning Photocurrent and Fluorescence Microscopy. Small, 2010, 6, 2832-2836.	5.2	22
162	Antiferromagnetic Single Domain L12 FePt3 Nanocrystals. Journal of Physical Chemistry C, 2010, 114, 2512-2518.	1.5	22

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163	Role of Halides in the Ordered Structure Transitions of Heated Gold Nanocrystal Superlattices. Langmuir, 2015, 31, 6924-6932.	1.6	22
164	Thermal Phase Transitions in Superlattice Assemblies of Cuboidal CH₃NH₃PbI₃ Nanocrystals Followed by Grazing Incidence X-ray Scattering. Journal of Physical Chemistry C, 2019, 123, 17555-17565.	1.5	22
165	Controlled Styrene Monolayer Capping of Silicon Nanocrystals by Room Temperature Hydrosilylation. Langmuir, 2015, 31, 6532-6537.	1.6	21
166	Enhancing the lithiation rate of silicon nanowires by the inclusion of tin. RSC Advances, 2014, 4, 42022-42028.	1.7	20
167	Facile Exchange of Tightly Bonded L-Type Oleylamine and Diphenylphosphine Ligands on Copper Indium Diselenide Nanocrystals Mediated by Molecular Iodine. Chemistry of Materials, 2018, 30, 8359-8367.	3.2	20
168	Bismuth Enhances the Stability of CH₃NH₃PbI₃ (MAPI) Perovskite under High Humidity. Journal of Physical Chemistry C, 2019, 123, 963-970.	1.5	20
169	Application of Aberration-Corrected TEM and Image Simulation to Nanoelectronics and Nanotechnology. IEEE Transactions on Semiconductor Manufacturing, 2006, 19, 391-396.	1.4	18
170	Rotational and translational diffusivities of germanium nanowires. Rheologica Acta, 2009, 48, 589-596.	1.1	18
171	Gold Seed Removal from the Tips of Silicon Nanorods. Nano Letters, 2010, 10, 176-180.	4.5	18
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