

Brian A Korgel

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

214
papers

19,818
citations

69
h-index

137
g-index

223
ext. papers

21,466
ext. citations

9.5
avg, IF

6.85
L-index

#	Paper	IF	Citations
214	Room-temperature Observation of Near-intrinsic Exciton Linewidth in Monolayer WS ₂ . <i>Advanced Materials</i> , 2022 , e2108721	24	2
213	Room-Temperature Observation of Near-Intrinsic Exciton Linewidth in Monolayer WS ₂ (Adv. Mater. 15/2022). <i>Advanced Materials</i> , 2022 , 34, 2270115	24	
212	Tunable Chiral Optics in All-Solid-Phase Reconfigurable Dielectric Nanostructures. <i>Nano Letters</i> , 2021 , 21, 973-979	11.5	21
211	Directional Modulation of Exciton Emission Using Single Dielectric Nanospheres. <i>Advanced Materials</i> , 2021 , 33, e2007236	24	5
210	Dielectric Nanospheres: Directional Modulation of Exciton Emission Using Single Dielectric Nanospheres (Adv. Mater. 20/2021). <i>Advanced Materials</i> , 2021 , 33, 2170153	24	0
209	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021 , 15, 10775-10981	16.7	222
208	Broadband Forward Light Scattering by Architectural Design of Core/Shell Silicon Particles. <i>Advanced Functional Materials</i> , 2021 , 31, 2100915	15.6	1
207	Photonic Lift-off Process to Fabricate Ultrathin Flexible Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 44549-44555	9.5	2
206	Compositional Fluctuations Mediated by Excess Tellurium in Bismuth Antimony Telluride Nanocomposites Yield High Thermoelectric Performance. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 20184-20194	3.8	3
205	A Tips and Tricks Practical Guide to the Synthesis of Metal Halide Perovskite Nanocrystals. <i>Chemistry of Materials</i> , 2020 , 32, 5410-5423	9.6	54
204	Synthesis of TlBr and Tl ₂ AgBr ₃ Nanocrystals. <i>ChemNanoMat</i> , 2020 , 6, 790-796	3.5	
203	Enhanced Coloration Efficiency of Electrochromic Tungsten Oxide Nanorods by Site Selective Occupation of Sodium Ions. <i>Nano Letters</i> , 2020 , 20, 2072-2079	11.5	22
202	Spectrally tunable infrared plasmonic F ₂ Sn:InO nanocrystal cubes. <i>Journal of Chemical Physics</i> , 2020 , 152, 014709	3.9	19
201	Suppressing material loss in the visible and near-infrared range for functional nanophotonics using bandgap engineering. <i>Nature Communications</i> , 2020 , 11, 5055	17.4	17
200	Scalable colloidal synthesis of Bi ₂ Te _{2.7} Se _{0.3} plate-like particles give access to a high-performing n-type thermoelectric material for low temperature application. <i>Nanoscale Advances</i> , 2020 , 2, 5699-5709 ^{5.1}		6
199	Effect of Nonincorporative Cations on the Size and Shape of Indium Oxide Nanocrystals. <i>Chemistry of Materials</i> , 2020 , 32, 9347-9354	9.6	5
198	Transient Lattice Response upon Photoexcitation in CuInSe Nanocrystals with Organic or Inorganic Surface Passivation. <i>ACS Nano</i> , 2020 , 14, 13548-13556	16.7	8

197	Surface Science and Colloidal Stability of Double-Perovskite Cs ₂ AgBiBr ₆ Nanocrystals and Their Superlattices. <i>Chemistry of Materials</i> , 2019 , 31, 7962-7969	9.6	36
196	Development of wide bandgap perovskites for next-generation low-cost CdTe tandem solar cells. <i>Chemical Engineering Science</i> , 2019 , 199, 388-397	4.4	19
195	Thermal Phase Transitions in Superlattice Assemblies of Cuboidal CH ₃ NH ₃ PbI ₃ Nanocrystals Followed by Grazing Incidence X-ray Scattering. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 17555-17565	3.8	14
194	An All-Inorganic Colloidal Nanocrystal Flexible Polarizer. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 8730-8735	16.4	21
193	All-optical reconfigurable chiral meta-molecules. <i>Materials Today</i> , 2019 , 25, 10-20	21.8	40
192	Pervasive Cation Vacancies and Antisite Defects in Copper Indium Diselenide (CuInSe ₂) Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 9544-9551	3.8	16
191	Addition of Monovalent Silver Cations to CH ₃ NH ₃ PbBr ₃ Produces Crystallographically Oriented Perovskite Thin Films. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6087-6096	6.1	6
190	Enhanced Open-Circuit Voltage of Wide-Bandgap Perovskite Photovoltaics by Using Alloyed (FA _{1-x} Cs _x)Pb(I _{1-x} Br _x) ₃ Quantum Dots. <i>ACS Energy Letters</i> , 2019 , 4, 1954-1960	20.1	44
189	CuGaSe ₂ and CuIn _x Ga _{1-x} Se ₂ Nanocrystals with Sphalerite or Wurtzite Phase for Optoelectronic Applications. <i>ACS Applied Nano Materials</i> , 2019 , 2, 4673-4680	5.6	6
188	Thermal Stability of the Black Perovskite Phase in Cesium Lead Iodide Nanocrystals Under Humid Conditions. <i>Chemistry of Materials</i> , 2019 , 31, 9750-9758	9.6	20
187	Mechanical properties of hydrogenated amorphous silicon (a-Si:H) particles. <i>Journal of Applied Physics</i> , 2019 , 126, 204303	2.5	3
186	Optical nanomanipulation on solid substrates via optothermally-gated photon nudging. <i>Nature Communications</i> , 2019 , 10, 5672	17.4	17
185	Bismuth Enhances the Stability of CH ₃ NH ₃ PbI ₃ (MAPI) Perovskite under High Humidity. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 963-970	3.8	15
184	Deliquescent Chromism of Nickel(II) Iodide Thin Films. <i>Langmuir</i> , 2019 , 35, 2146-2152	4	4
183	Predictive Modeling of CuInSe ₂ Nanocrystal Photovoltaics: The Importance of Band Alignment and Carrier Diffusion. <i>ACS Applied Energy Materials</i> , 2019 , 2, 1494-1504	6.1	10
182	Uniform Selenization of Crack-Free Films of Cu(In,Ga)Se ₂ Nanocrystals. <i>ACS Applied Energy Materials</i> , 2019 , 2, 736-742	6.1	4
181	Tunable Resonance Coupling in Single Si Nanoparticle-Monolayer WS Structures. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 16690-16697	9.5	54
180	Herausforderungen bei der Synthese siliciumbasierter dielektrischer Metamaterialien. <i>Angewandte Chemie</i> , 2018 , 130, 4568-4589	3.6	

179	Measurement of Two-Photon Absorption of Silicon Nanocrystals in Colloidal Suspension for Bio-Imaging Applications. <i>Physica Status Solidi (B): Basic Research</i> , 2018 , 255, 1700501	1.3	9
178	Opto-thermoelectric nanotweezers. <i>Nature Photonics</i> , 2018 , 12, 195-201	33.9	127
177	Silicon-Based Dielectric Metamaterials: Focus on the Current Synthetic Challenges. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 4478-4498	16.4	27
176	Facile Exchange of Tightly Bonded L-Type Oleylamine and Diphenylphosphine Ligands on Copper Indium Diselenide Nanocrystals Mediated by Molecular Iodine. <i>Chemistry of Materials</i> , 2018 , 30, 8359-8387	9.6	11
175	In Situ Transmission Electron Microscopy of Oxide Shell-Induced Pore Formation in (De)lithiated Silicon Nanowires. <i>ACS Energy Letters</i> , 2018 , 3, 2829-2834	20.1	14
174	Flexible CuInSe ₂ Nanocrystal Solar Cells on Paper. <i>ACS Energy Letters</i> , 2017 , 2, 574-581	20.1	45
173	Bright long-lived luminescence of silicon nanocrystals sensitized by two-photon absorbing antenna. <i>Chem</i> , 2017 , 2, 550-560	16.2	17
172	A simplified synthesis of silica Colloids with tunable hydrophobicity. <i>Colloid and Polymer Science</i> , 2017 , 295, 925-932	2.4	3
171	Colloidal Silicon-Germanium Nanorod Heterostructures. <i>Chemistry of Materials</i> , 2017 , 29, 9786-9792	9.6	11
170	Silicon Nanocrystal Superlattice Nucleation and Growth. <i>Langmuir</i> , 2017 , 33, 13068-13076	4	5
169	Size-Dependent Photoluminescence Efficiency of Silicon Nanocrystal Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 23240-23248	3.8	78
168	Bubble Assemblies of Nanocrystals: Superlattices without a Substrate. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 4865-4871	6.4	4
167	Efficient Carrier Multiplication in Colloidal Silicon Nanorods. <i>Nano Letters</i> , 2017 , 17, 5580-5586	11.5	25
166	Highly Fluorescent Silicon Nanocrystals Stabilized in Water Using Quatsomes. <i>Langmuir</i> , 2017 , 33, 14366-14377	11.0	10
165	Orientationally Ordered Silicon Nanocrystal Cuboctahedra in Superlattices. <i>Nano Letters</i> , 2016 , 16, 7814-7821	11.3	28
164	Cooling Dodecanethiol-Capped 2 nm Diameter Gold Nanocrystal Superlattices below Room Temperature Induces a Reversible Order-Disorder Structure Transition. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 27682-27687	3.8	11
163	Plastic Microgroove Solar Cells Using CuInSe ₂ Nanocrystals. <i>ACS Energy Letters</i> , 2016 , 1, 1021-1027	20.1	10
162	Simultaneous Tunable Selection and Self-Assembly of Si Nanowires from Heterogeneous Feedstock. <i>ACS Nano</i> , 2016 , 10, 4384-94	16.7	15

161	Germanium as a Sodium Ion Battery Material: In Situ TEM Reveals Fast Sodiation Kinetics with High Capacity. <i>Chemistry of Materials</i> , 2016 , 28, 1236-1242	9.6	114
160	Size Dependent Pore Formation in Germanium Nanowires Undergoing Reversible Delithiation Observed by In Situ TEM. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 28825-28831	3.8	9
159	Light-Harvesting Antennae Based on Silicon Nanocrystals. <i>Topics in Current Chemistry</i> , 2016 , 374, 53	7.2	10
158	Prospects of nanoscience with nanocrystals. <i>ACS Nano</i> , 2015 , 9, 1012-57	16.7	849
157	Low Temperature Colloidal Synthesis of Silicon Nanorods from Isotetrasilane, Neopentasilane, and Cyclohexasilane. <i>Chemistry of Materials</i> , 2015 , 27, 6053-6058	9.6	24
156	Role of Halides in the Ordered Structure Transitions of Heated Gold Nanocrystal Superlattices. <i>Langmuir</i> , 2015 , 31, 6924-32	4	20
155	The Role of Ligand Packing Frustration in Body-Centered Cubic (bcc) Superlattices of Colloidal Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2406-12	6.4	67
154	Synthesis and Ligand Exchange of Thiol-Capped Silicon Nanocrystals. <i>Langmuir</i> , 2015 , 31, 6886-93	4	45
153	Controlled Styrene Monolayer Capping of Silicon Nanocrystals by Room Temperature Hydrosilylation. <i>Langmuir</i> , 2015 , 31, 6532-7	4	15
152	Light-harvesting antennae based on photoactive silicon nanocrystals functionalized with porphyrin chromophores. <i>Faraday Discussions</i> , 2015 , 185, 481-95	3.6	24
151	Interface Passivation and Trap Reduction via a Solution-Based Method for Near-Zero Hysteresis Nanowire Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 22115-20	9.5	4
150	Photoinduced Processes between Pyrene-Functionalized Silicon Nanocrystals and Carbon Allotropes. <i>Chemistry of Materials</i> , 2015 , 27, 4390-4397	9.6	22
149	Nanocrystal superlattices that exhibit improved order on heating: an example of inverse melting?. <i>Faraday Discussions</i> , 2015 , 181, 181-92	3.6	30
148	In Situ TEM Observations of Sn-Containing Silicon Nanowires Undergoing Reversible Pore Formation Due to Fast Lithiation/Delithiation Kinetics. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 21889-21895	3.8	35
147	Lithium ion battery performance of silicon nanowires with carbon skin. <i>ACS Nano</i> , 2014 , 8, 915-22	16.7	165
146	Multiexciton Solar Cells of CuInSe ₂ Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 304-9	6.4	73
145	Efficient Carrier Multiplication in Colloidal CuInSe ₂ Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3169-74	6.4	31
144	Enhancing the lithiation rate of silicon nanowires by the inclusion of tin. <i>RSC Advances</i> , 2014 , 4, 42022-42028	3.7	17

143	Nanomaterials Developments for Higher-Performance Lithium Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 749-50	6.4	27
142	Silicon Nanocrystals Functionalized with Pyrene Units: Efficient Light-Harvesting Antennae with Bright Near-Infrared Emission. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3325-9	6.4	49
141	A single-step reaction for silicon and germanium nanorods. <i>Chemistry - A European Journal</i> , 2014 , 20, 5874-9	4.8	27
140	Photonic curing of ligand-capped CuInSe ₂ nanocrystal films 2014 ,		1
139	Creating polymer hydrogel microfibrils with internal alignment via electrical and mechanical stretching. <i>Biomaterials</i> , 2014 , 35, 3243-51	15.6	69
138	In vivo whole animal fluorescence imaging of a microparticle-based oral vaccine containing (CuInSe _x S _{2-x})/ZnS core/shell quantum dots. <i>Nano Letters</i> , 2013 , 13, 4294-8	11.5	95
137	Influence of composition on the performance of sintered Cu(In,Ga)Se ₂ nanocrystal thin-film photovoltaic devices. <i>ChemSusChem</i> , 2013 , 6, 481-6	8.3	31
136	High capacity lithium ion battery anodes of silicon and germanium. <i>Current Opinion in Chemical Engineering</i> , 2013 , 2, 286-293	5.4	60
135	Ordered structure rearrangements in heated gold nanocrystal superlattices. <i>Nano Letters</i> , 2013 , 13, 5710-4	11.5	47
134	Precision synthesis of silicon nanowires with crystalline core and amorphous shell. <i>Dalton Transactions</i> , 2013 , 42, 12675-80	4.3	12
133	Copper indium gallium selenide (CIGS) photovoltaic devices made using multistep selenization of nanocrystal films. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 9134-40	9.5	47
132	Silicon nanocrystal superlattices. <i>ChemPhysChem</i> , 2013 , 14, 84-7	3.2	25
131	Nanocrystal photovoltaics: a review of recent progress. <i>Current Opinion in Chemical Engineering</i> , 2013 , 2, 160-167	5.4	63
130	In situ TEM of two-phase lithiation of amorphous silicon nanospheres. <i>Nano Letters</i> , 2013 , 13, 758-64	11.5	573
129	Supercritical Fluid-Liquid-Solid (SFLS) Growth of Semiconductor Nanowires 2013 , 41-63		1
128	Monodisperse silicon nanocavities and photonic crystals with magnetic response in the optical region. <i>Nature Communications</i> , 2013 , 4, 1904	17.4	135
127	Enhanced Nickel-Seeded Synthesis of Germanium Nanowires. <i>Chemistry of Materials</i> , 2013 , 25, 2172-2173	7.6	22
126	Structure-Properties Correlation in Si Nanoparticles by Total Scattering and Computer Simulations. <i>Chemistry of Materials</i> , 2013 , 25, 2365-2371	9.6	21

125	CuInSe ₂ Quantum Dot Solar Cells with High Open-Circuit Voltage. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 2030-4	6.4	118
124	Colloidal luminescent silicon nanorods. <i>Nano Letters</i> , 2013 , 13, 3101-5	11.5	48
123	Room temperature hydrosilylation of silicon nanocrystals with bifunctional terminal alkenes. <i>Langmuir</i> , 2013 , 29, 1533-40	4	76
122	Self-Assembly and Thermal Stability of Binary Superlattices of Gold and Silicon Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4,	6.4	32
121	Colloidal CIGS and CZTS nanocrystals: A precursor route to printed photovoltaics. <i>Journal of Solid State Chemistry</i> , 2012 , 189, 2-12	3.3	109
120	Raman Spectroscopy of Oxide-Embedded and Ligand-Stabilized Silicon Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 1089-93	6.4	93
119	Stacking of hexagonal nanocrystal layers during Langmuir-Blodgett deposition. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 6017-26	3.4	36
118	Optical Properties of Silicon and Germanium Nanowire Fabric. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 22486-22491	3.8	21
117	Solution-grown germanium nanowire anodes for lithium-ion batteries. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 4658-64	9.5	165
116	Graphene-Supported High-Resolution TEM and STEM Imaging of Silicon Nanocrystals and their Capping Ligands. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 22463-22468	3.8	64
115	Synthesis of Ligand-Stabilized Silicon Nanocrystals with Size-Dependent Photoluminescence Spanning Visible to Near-Infrared Wavelengths. <i>Chemistry of Materials</i> , 2012 , 24, 393-401	9.6	286
114	Pyrite Nanocrystal Solar Cells: Promising, or Fool's Gold?. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2352-6	6.4	99
113	Chloroform-enhanced incorporation of hydrophobic gold nanocrystals into dioleoylphosphatidylcholine (DOPC) vesicle membranes. <i>Langmuir</i> , 2012 , 28, 12971-81	4	23
112	Tin-Seeded Silicon Nanowires for High Capacity Li-Ion Batteries. <i>Chemistry of Materials</i> , 2012 , 24, 3738-3745	3.45	97
111	Germanium Nanorod Extinction Spectra: Discrete Dipole Approximation Calculations and Experiment. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 22625-22630	3.8	8
110	Comparison of the photovoltaic response of oleylamine and inorganic ligand-capped CuInSe ₂ nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 2757-61	9.5	54
109	Copper-Coated Amorphous Silicon Particles as an Anode Material for Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2012 , 24, 1306-1315	9.6	131
108	Electrochemical Lithiation of Graphene-Supported Silicon and Germanium for Rechargeable Batteries. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 11917-11923	3.8	83

107	Nanocrystals for electronics. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2012 , 3, 287-311	8.9	62
106	Influences of Gold, Binder and Electrolyte on Silicon Nanowire Performance in Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 18079-18086	3.8	71
105	Temperature-dependent charge transport in copper indium diselenide nanocrystal films. <i>Journal of Applied Physics</i> , 2012 , 111, 073703	2.5	7
104	Silicon nanowire fabric as a lithium ion battery electrode material. <i>Journal of the American Chemical Society</i> , 2011 , 133, 20914-21	16.4	230
103	Copper selenide nanocrystals for photothermal therapy. <i>Nano Letters</i> , 2011 , 11, 2560-6	11.5	1047
102	Colloidal Synthesis of Germanium Nanorods. <i>Chemistry of Materials</i> , 2011 , 23, 1964-1970	9.6	46
101	Melting and Sintering of a Body-Centered Cubic Superlattice of PbSe Nanocrystals Followed by Small Angle X-ray Scattering. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 6397-6404	3.8	55
100	General Synthesis and Gas-Sensing Properties of Multiple-Shell Metal Oxide Hollow Microspheres. <i>Angewandte Chemie</i> , 2011 , 123, 2790-2793	3.6	142
99	Reversible solvent vapor-mediated phase changes in nanocrystal superlattices. <i>ACS Nano</i> , 2011 , 5, 2419-2427	24.7	53
98	Rapid SFLS Synthesis of Si Nanowires Using Trisilane with In situ Alkyl-Amine Passivation. <i>Chemistry of Materials</i> , 2011 , 23, 2697-2699	9.6	29
97	Electrostatic charging and manipulation of semiconductor nanowires. <i>Journal of Materials Research</i> , 2011 , 26, 2305-2310	2.5	4
96	Gold seed removal from the tips of silicon nanorods. <i>Nano Letters</i> , 2010 , 10, 176-80	11.5	18
95	Hydrophobic gold nanoparticle self-assembly with phosphatidylcholine lipid: membrane-loaded and janus vesicles. <i>Nano Letters</i> , 2010 , 10, 3733-9	11.5	173
94	GISAXS Characterization of Order in Hexagonal Monolayers of FePt Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 14427-14432	3.8	49
93	Spray-deposited CuInSe ₂ nanocrystal photovoltaics. <i>Energy and Environmental Science</i> , 2010 , 3, 1600	35.4	122
92	PEGylation of carboxylic acid-functionalized germanium nanowires. <i>Langmuir</i> , 2010 , 26, 14241-6	4	18
91	Hydrogenated Amorphous Silicon (a-Si:H) Colloids. <i>Chemistry of Materials</i> , 2010 , 22, 6378-6383	9.6	52
90	Corrosion Resistance of Thiol- and Alkene-Passivated Germanium Nanowires. <i>Chemistry of Materials</i> , 2010 , 22, 3698-3703	9.6	48

89	Optical Properties of Solvent-Dispersed and Polymer-Embedded Germanium Nanowires. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 20983-20989	3.8	12
88	Flexible germanium nanowires: ideal strength, room temperature plasticity, and bendable semiconductor fabric. <i>ACS Nano</i> , 2010 , 4, 2356-62	16.7	93
87	Thickness-limited performance of CuInSe ₂ nanocrystal photovoltaic devices. <i>Optics Express</i> , 2010 , 18 Suppl 3, A411-20	3.3	66
86	Antiferromagnetic Single Domain L1 ₂ FePt ₃ Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2512-2518	3.8	20
85	Solution-grown silicon nanowires for lithium-ion battery anodes. <i>ACS Nano</i> , 2010 , 4, 1443-50	16.7	446
84	Alkyl passivation and amphiphilic polymer coating of silicon nanocrystals for diagnostic imaging. <i>Small</i> , 2010 , 6, 2026-34	11	125
83	Mapping spatial heterogeneity in Cu(In _(1-x) Ga _(x))Se ₂ nanocrystal-based photovoltaics with scanning photocurrent and fluorescence microscopy. <i>Small</i> , 2010 , 6, 2832-6	11	20
82	Semiconductor nanowires: A chemical engineering perspective. <i>AIChE Journal</i> , 2009 , 55, 842-848	3.6	15
81	Rotational and translational diffusivities of germanium nanowires. <i>Rheologica Acta</i> , 2009 , 48, 589-596	2.3	17
80	Limitations on the optical tunability of small diameter gold nanoshells. <i>Langmuir</i> , 2009 , 25, 11777-85	4	67
79	Self-assembled simple hexagonal AB ₂ binary nanocrystal superlattices: SEM, GISAXS, and defects. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3281-90	16.4	131
78	Wurtzite-Chalcopyrite Polytypism in CuInS ₂ Nanodisks. <i>Chemistry of Materials</i> , 2009 , 21, 1962-1966	9.6	115
77	Synthesis of Cu ₂ ZnSnS ₄ nanocrystals for use in low-cost photovoltaics. <i>Journal of the American Chemical Society</i> , 2009 , 131, 12554-5	16.4	594
76	Colloidal silicon nanorod synthesis. <i>Nano Letters</i> , 2009 , 9, 3042-7	11.5	48
75	Seeded germanium nanowire synthesis in solution. <i>Journal of Materials Chemistry</i> , 2009 , 19, 996		65
74	Synthesis of high aspect ratio quantum-size CdS nanorods and their surface-dependent photoluminescence. <i>Langmuir</i> , 2008 , 24, 9043-9	4	117
73	The importance of the CTAB surfactant on the colloidal seed-mediated synthesis of gold nanorods. <i>Langmuir</i> , 2008 , 24, 644-9	4	329
72	Solution-liquid-solid (SLS) growth of silicon nanowires. <i>Journal of the American Chemical Society</i> , 2008 , 130, 5436-7	16.4	156

71	Importance of Solvent-Mediated Phenylsilane Decomposition Kinetics for High-Yield Solution-Phase Silicon Nanowire Synthesis. <i>Chemistry of Materials</i> , 2008 , 20, 1239-1241	9.6	51
70	Silicon Nanowires and Silica Nanotubes Seeded by Copper Nanoparticles in an Organic Solvent. <i>Chemistry of Materials</i> , 2008 , 20, 2306-2313	9.6	42
69	Multifunctional Particles: Magnetic Nanocrystals and Gold Nanorods Coated with Fluorescent Dye-Doped Silica Shells. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 1590-1599	3.3	56
68	Young's Modulus and Size-Dependent Mechanical Quality Factor of Nanoelectromechanical Germanium Nanowire Resonators. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 10725-10729	3.8	45
67	Synthesis of CuInS ₂ , CuInSe ₂ , and Cu(In _x Ga(1-x))Se ₂ (CIGS) nanocrystal "inks" for printable photovoltaics. <i>Journal of the American Chemical Society</i> , 2008 , 130, 16770-7	16.4	831
66	Twin-Related Branching of Solution-Grown ZnSe Nanowires. <i>Chemistry of Materials</i> , 2007 , 19, 4943-4948	9.6	51
65	Lamellar Twinning in Semiconductor Nanowires. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2929-2935	3.8	139
64	Two-photon luminescence imaging of cancer cells using molecularly targeted gold nanorods. <i>Nano Letters</i> , 2007 , 7, 941-5	11.5	769
63	Colloidal magnetic nanocrystals: synthesis, properties and applications. <i>Annual Reports on the Progress of Chemistry Section C</i> , 2007 , 103, 351		38
62	Molecular optical imaging of therapeutic targets of cancer. <i>Advances in Cancer Research</i> , 2007 , 96, 299-344	4.4	24
61	Novel nanocrystals as a platinum-delivery vehicle for chemotherapy. <i>Nanomedicine</i> , 2007 , 2, 943-9	5.6	2
60	Germanium nanowire transistors with ethylene glycol treated poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate) contacts. <i>Applied Physics Letters</i> , 2007 , 90, 072106	3.4	20
59	Nanocrystal-mediated crystallization of silicon and germanium nanowires in organic solvents: the role of catalysis and solid-phase seeding. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 5184-7	16.4	54
58	Application of Aberration-Corrected TEM and Image Simulation to Nanoelectronics and Nanotechnology. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2006 , 19, 391-396	2.6	13
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