

Uwe R Kortshagen

List of Publications by Year in descending order

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261
papers

14,352
citations

19608

61
h-index

22764

112
g-index

268
all docs

268
docs citations

268
times ranked

11190
citing authors

#	ARTICLE	IF	CITATIONS
1	Band Gap Tuning of Films of Undoped ZnO Nanocrystals by Removal of Surface Groups. <i>Nanomaterials</i> , 2022, 12, 565.	1.9	7
2	Plasma-Synthesized Nitrogen-Doped Titanium Dioxide Nanoparticles With Tunable Visible Light Absorption and Photocatalytic Activity. , 2022, 1, .		1
3	Plasma diagnostics and modeling of lithium-containing plasmas. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 254001.	1.3	0
4	Distance-dependent resonance energy transfer in alkyl-terminated Si nanocrystal solids. <i>Journal of Chemical Physics</i> , 2022, 156, 124705.	1.2	0
5	Particle trapping, size-filtering, and focusing in the nonthermal plasma synthesis of sub-10 nanometer particles. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 235202.	1.3	7
6	Water-Soluble Luminescent Silicon Nanocrystals by Plasma-Induced Acrylic Acid Grafting and PEGylation. <i>ACS Applied Bio Materials</i> , 2022, 5, 105-112.	2.3	5
7	Broadband, Angle- and Polarization-Invariant Antireflective and Absorbing Films by a Scalable Synthesis of Monodisperse Silicon Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 23624-23636.	4.0	5
8	Hopping charge transport in hydrogenated amorphous silicon-germanium alloy thin films. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	1
9	Predicting plasma conditions necessary for synthesis of $\text{Al}_{2}\text{O}_{3}$ nanocrystals. <i>Nanoscale</i> , 2021, 13, 11387-11395.	2.8	4
10	Plasma-driven solution electrolysis. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	58
11	Inductively coupled nonthermal plasma synthesis of aluminum nanoparticles. <i>Nanotechnology</i> , 2021, 32, .	1.3	10
12	Evaluating Tandem Luminescent Solar Concentrator Performance Based on Luminophore Selection. , 2021, , .		1
13	Material-dependent submicrometer particle trapping in capacitively-coupled plasma sheaths in an intermediate collision regime. <i>Plasma Sources Science and Technology</i> , 2021, 30, 095014.	1.3	1
14	Nonthermal plasma synthesized silicon-silicon nitride core-shell nanocrystals with enhanced photoluminescence. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 504005.	1.3	3
15	Observation of suppressed diffusion and propagation thermal conductivity of hydrogenated amorphous silicon films. <i>Nanoscale Advances</i> , 2021, 4, 87-94.	2.2	2
16	Bilayer Luminescent Solar Concentrators with Enhanced Absorption and Efficiency for Agrivoltaic Applications. <i>ACS Applied Energy Materials</i> , 2021, 4, 14102-14110.	2.5	14
17	In Memoriam Ephraim Sparrow. <i>International Journal of Heat and Mass Transfer</i> , 2020, 148, 118755.	2.5	0
18	Poly(methyl methacrylate) Films with High Concentrations of Silicon Quantum Dots for Visibly Transparent Luminescent Solar Concentrators. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 4572-4578.	4.0	36

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19	Probing Dopant Locations in Silicon Nanocrystals via High Energy X-ray Diffraction and Reverse Monte Carlo Simulation. <i>Nano Letters</i> , 2020, 20, 852-859.	4.5	7
20	Aluminum Oxide Nanoparticle Films Deposited from a Nonthermal Plasma: Synthesis, Characterization, and Crystallization. <i>ACS Omega</i> , 2020, 5, 24754-24761.	1.6	23
21	Nonthermal Plasma-Enhanced Chemical Vapor Deposition of Two-Dimensional Molybdenum Disulfide. <i>ACS Omega</i> , 2020, 5, 21853-21861.	1.6	11
22	Plasmonic nanocomposites of zinc oxide and titanium nitride. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, 042404.	0.9	4
23	Bright Silicon Nanocrystals from a Liquid Precursor: Quasi-Direct Recombination with High Quantum Yield. <i>ACS Nano</i> , 2020, 14, 3858-3867.	7.3	43
24	Size and structural characterization of Si nanocrystal aggregates from a low pressure nonthermal plasma reactor. <i>Powder Technology</i> , 2020, 373, 164-173.	2.1	24
25	Nanocrystal-based inorganic nanocomposites: A new paradigm for plasma-produced optoelectronic thin films. <i>Plasma Processes and Polymers</i> , 2020, 17, 2000002.	1.6	3
26	Confined yet free to go. <i>Nature Materials</i> , 2020, 19, 260-261.	13.3	0
27	Ion attachment rates and collection forces on dust particles in a plasma sheath with finite ion inertia and mobility. <i>Physical Review E</i> , 2020, 102, 063212.	0.8	2
28	Thermal transport in ZnO nanocrystal networks synthesized by nonthermal plasma. <i>Physical Review Materials</i> , 2020, 4, .	0.9	4
29	Bacterial Toxicity of Germanium Nanocrystals Induced by Doping with Boron and Phosphorus. <i>ACS Applied Nano Materials</i> , 2019, 2, 4744-4755.	2.4	7
30	Metal-insulator transition in a semiconductor nanocrystal network. <i>Science Advances</i> , 2019, 5, eaaw1462.	4.7	16
31	Aerosol-Phase Synthesis and Processing of Luminescent Silicon Nanocrystals. <i>Chemistry of Materials</i> , 2019, 31, 8451-8458.	3.2	20
32	Determination of nanoparticle collision cross section distribution functions in low pressure plasma synthesis reactors via ion mobility spectrometry. <i>Nano Futures</i> , 2019, 3, 015002.	1.0	10
33	High temperature thermoelectric properties of laser sintered thin films of phosphorous-doped silicon-germanium nanoparticles. <i>AIP Advances</i> , 2019, 9, .	0.6	9
34	Synthesis of PEG-grafted boron doped Si nanocrystals. <i>Journal of Chemical Physics</i> , 2019, 151, 211103.	1.2	5
35	Silicon Quantum Dot-Poly(methyl methacrylate) Nanocomposites with Reduced Light Scattering for Luminescent Solar Concentrators. <i>ACS Photonics</i> , 2019, 6, 170-180.	3.2	58
36	Thermodynamic Driving Force in the Spontaneous Formation of Inorganic Nanoparticle Solutions. <i>Nano Letters</i> , 2018, 18, 1888-1895.	4.5	27

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37	Measuring Dopant-Modulated Vibrational Energy Transfer over the Surface of Silicon Nanoparticles by 2D-IR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8693-8698.	1.5	3
38	Obtaining Structural Parameters from STEM-EDX Maps of Core/Shell Nanocrystals for Optoelectronics. <i>ACS Applied Nano Materials</i> , 2018, 1, 989-996.	2.4	15
39	Tuning Nanocrystal Surface Depletion by Controlling Dopant Distribution as a Route Toward Enhanced Film Conductivity. <i>Nano Letters</i> , 2018, 18, 2870-2878.	4.5	45
40	Quasi continuous wave laser sintering of Si-Ge nanoparticles for thermoelectrics. <i>Journal of Applied Physics</i> , 2018, 123, 094301.	1.1	10
41	Comparative toxicity assessment of novel Si quantum dots and their traditional Cd-based counterparts using bacteria models <i>Shewanella oneidensis</i> and <i>Bacillus subtilis</i> . <i>Environmental Science: Nano</i> , 2018, 5, 1890-1901.	2.2	37
42	Variable range hopping conduction in ZnO nanocrystal thin films. <i>Nanotechnology</i> , 2018, 29, 415202.	1.3	9
43	Toxicity Evaluation of Boron- and Phosphorus-Doped Silicon Nanocrystals toward <i>Shewanella oneidensis</i> MR-1. <i>ACS Applied Nano Materials</i> , 2018, 1, 4884-4893.	2.4	14
44	Nonthermal Plasma Synthesis of Titanium Nitride Nanocrystals with Plasmon Resonances at Near-Infrared Wavelengths Relevant to Photothermal Therapy. <i>ACS Applied Nano Materials</i> , 2018, 1, 2869-2876.	2.4	43
45	Highly efficient luminescent solar concentrators based on earth-abundant indirect-bandgap silicon quantum dots. <i>Nature Photonics</i> , 2017, 11, 177-185.	15.6	319
46	Abrupt Size Partitioning of Multimodal Photoluminescence Relaxation in Monodisperse Silicon Nanocrystals. <i>ACS Nano</i> , 2017, 11, 1597-1603.	7.3	34
47	Nonthermal Plasma Synthesis of Core/Shell Quantum Dots: Strained Ge/Si Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 8263-8270.	4.0	42
48	Doped Silicon Nanocrystal Plasmonics. <i>ACS Photonics</i> , 2017, 4, 963-970.	3.2	43
49	Elemental Distribution Analysis of Core/Shell Nanocrystals with STEM/EDX. <i>Microscopy and Microanalysis</i> , 2017, 23, 1904-1905.	0.2	0
50	Ultrafast Silicon Photonics with Visible to Mid-Infrared Pumping of Silicon Nanocrystals. <i>Nano Letters</i> , 2017, 17, 6409-6414.	4.5	10
51	The 2017 Plasma Roadmap: Low temperature plasma science and technology. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 323001.	1.3	710
52	Near-Infrared Plasmonic Copper Nanocups Fabricated by Template-Assisted Magnetron Sputtering. <i>ACS Photonics</i> , 2017, 4, 2881-2890.	3.2	14
53	ZnO Nanocrystal Networks Near the Insulator-Metal Transition: Tuning Contact Radius and Electron Density with Intense Pulsed Light. <i>Nano Letters</i> , 2017, 17, 4634-4642.	4.5	30
54	Silicon nanocrystals from plasma synthesis. <i>Series in Materials Science and Engineering</i> , 2017, , 271-292.	0.1	0

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55	Laser light scattering from silicon particles generated in an argon diluted silane plasma. Journal Physics D: Applied Physics, 2016, 49, 085203.	1.3	8
56	Influence of the surface termination on the light emission of crystalline silicon nanoparticles. Nanotechnology, 2016, 27, 325703.	1.3	9
57	Atmospheric-pressure glow plasma synthesis of plasmonic and photoluminescent zinc oxide nanocrystals. Journal of Applied Physics, 2016, 119, 243302.	1.1	8
58	Controlled synthesis of germanium nanoparticles by nonthermal plasmas. Applied Physics Letters, 2016, 108, .	1.5	12
59	A New Generation of Primary Luminescent Thermometers Based on Silicon Nanoparticles and Operating in Different Media. Particle and Particle Systems Characterization, 2016, 33, 740-748.	1.2	29
60	Nonthermal Plasma Synthesis of Nanocrystals: Fundamental Principles, Materials, and Applications. Chemical Reviews, 2016, 116, 11061-11127.	23.0	309
61	Enhancing Silicon Nanocrystal Photoluminescence through Temperature and Microstructure. Journal of Physical Chemistry C, 2016, 120, 18909-18916.	1.5	21
62	Quantification of Elemental Distribution in Spherical Core-Shell Nanoparticles Measured by STEM-EDX. Microscopy and Microanalysis, 2016, 22, 128-129.	0.2	1
63	Luminescent, water-soluble silicon quantum dots via micro-plasma surface treatment. Journal Physics D: Applied Physics, 2016, 49, 08LT02.	1.3	14
64	Broadband Absorbing Excitonâ€“Plasmon Metafluids with Narrow Transparency Windows. Nano Letters, 2016, 16, 1472-1477.	4.5	23
65	Metalâ€“insulator transition in films of doped semiconductor nanocrystals. Nature Materials, 2016, 15, 299-303.	13.3	96
66	Generation of hot carrier population in colloidal silicon quantum dots for high-efficiency photovoltaics. Solar Energy Materials and Solar Cells, 2016, 145, 391-396.	3.0	19
67	Nonthermal Plasma Synthesis of Nanocrystals: Fundamentals, Applications, and Future Research Needs. Plasma Chemistry and Plasma Processing, 2016, 36, 73-84.	1.1	37
68	Self-assembly of plasmonic/excitonic silicon nanocrystals into photonic crystals. MRS Communications, 2015, 5, 573-577.	0.8	0
69	Tunability Limit of Photoluminescence in Colloidal Silicon Nanocrystals. Scientific Reports, 2015, 5, 12469.	1.6	68
70	Nonequilibrium-Plasma-Synthesized ZnO Nanocrystals with Plasmon Resonance Tunable via Al Doping and Quantum Confinement. Nano Letters, 2015, 15, 8162-8169.	4.5	62
71	Special issue on plasma synthesis of nanoparticles. Journal Physics D: Applied Physics, 2015, 48, 310301.	1.3	2
72	Requirements for plasma synthesis of nanocrystals at atmospheric pressures. Journal Physics D: Applied Physics, 2015, 48, 035205.	1.3	34

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73	Reply to "Comment on "Ultrafast Photoluminescence in Quantum-Confined Silicon Nanocrystals Arises from an Amorphous Surface Layer" TM ". ACS Photonics, 2015, 2, 456-458.	3.2	6
74	Langmuir probe measurements of electron energy probability functions in dusty plasmas. Journal Physics D: Applied Physics, 2015, 48, 105204.	1.3	44
75	Plasmonic Properties of Silicon Nanocrystals Doped with Boron and Phosphorus. Nano Letters, 2015, 15, 5597-5603.	4.5	130
76	Accurate determination of the size distribution of Si nanocrystals from PL spectra. RSC Advances, 2015, 5, 55119-55125.	1.7	13
77	Surface Structure and Silicon Nanocrystal Photoluminescence: The Role of Hypervalent Silyl Groups. Journal of Physical Chemistry C, 2015, 119, 26683-26691.	1.5	24
78	Size-dependent evolution of phonon confinement in colloidal Si nanoparticles. Journal of Raman Spectroscopy, 2015, 46, 1110-1116.	1.2	9
79	Nonthermal plasma synthesis of metal sulfide nanocrystals from metalorganic vapor and elemental sulfur. Journal Physics D: Applied Physics, 2015, 48, 314004.	1.3	21
80	Enhanced Luminescent Stability through Particle Interactions in Silicon Nanocrystal Aggregates. ACS Nano, 2015, 9, 9772-9782.	7.3	37
81	Photostability of thermally-hydrosilylated silicon quantum dots. RSC Advances, 2015, 5, 103822-103828.	1.7	18
82	Boron- and phosphorus-doped silicon germanium alloy nanocrystals "Nonthermal plasma synthesis and gas-phase thin film deposition. APL Materials, 2014, 2, .	2.2	17
83	UV and air stability of high-efficiency photoluminescent silicon nanocrystals. Applied Surface Science, 2014, 323, 54-58.	3.1	16
84	High electron mobility in thin films formed via supersonic impact deposition of nanocrystals synthesized in nonthermal plasmas. Nature Communications, 2014, 5, 5822.	5.8	77
85	Influence of Size Purification and Self-Assembly on the Photoluminescence of Silicon Nanocrystal Ensembles. ECS Transactions, 2014, 61, 199-204.	0.3	0
86	Quantum confinement in mixed phase silicon thin films grown by co-deposition plasma processing. Solar Energy Materials and Solar Cells, 2014, 129, 7-12.	3.0	8
87	Controlled Doping of Silicon Nanocrystals Investigated by Solution-Processed Field Effect Transistors. ACS Nano, 2014, 8, 5650-5656.	7.3	78
88	Plasma-induced crystallization of silicon nanoparticles. Journal Physics D: Applied Physics, 2014, 47, 075202.	1.3	83
89	Plasma synthesis of stoichiometric Cu ₂ S nanocrystals stabilized by oleylamine. Chemical Communications, 2014, 50, 8346.	2.2	18
90	Phase separation and the "coffee-ring" TM effect in polymer "nanocrystal mixtures. Soft Matter, 2014, 10, 1665.	1.2	20

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91	Carrier Transport in Films of Alkyl-Ligand-Terminated Silicon Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2014, 118, 19580-19588.	1.5	32
92	Silicon Nanocrystals at Elevated Temperatures: Retention of Photoluminescence and Diamond Silicon to β -Silicon Carbide Phase Transition. <i>ACS Nano</i> , 2014, 8, 9219-9223.	7.3	20
93	Ultrafast Photoluminescence in Quantum-Confined Silicon Nanocrystals Arises from an Amorphous Surface Layer. <i>ACS Photonics</i> , 2014, 1, 960-967.	3.2	31
94	Nanoparticles: Highly Luminescent ZnO Quantum Dots Made in a Nonthermal Plasma (<i>Adv. Funct. Mater.</i>) Tj ETQqO 0 0 rgBT /Overlock 10 Tf 50	7.8	2
95	High Quantum Yield Dual Emission from Gas-Phase Grown Crystalline Si Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014, 118, 10375-10383.	1.5	24
96	Highly Luminescent ZnO Quantum Dots Made in a Nonthermal Plasma. <i>Advanced Functional Materials</i> , 2014, 24, 1988-1993.	7.8	80
97	Strength and Plasticity of H- and Oxide- Terminated Cubic Si Nanocrystals. <i>Microscopy and Microanalysis</i> , 2014, 20, 1460-1461.	0.2	0
98	Hypervalent surface interactions for colloidal stability and doping of silicon nanocrystals. <i>Nature Communications</i> , 2013, 4, 2197.	5.8	107
99	Tunable Band Gap Emission and Surface Passivation of Germanium Nanocrystals Synthesized in the Gas Phase. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3392-3396.	2.1	45
100	Phosphorus-Doped Silicon Nanocrystals Exhibiting Mid-Infrared Localized Surface Plasmon Resonance. <i>Nano Letters</i> , 2013, 13, 1317-1322.	4.5	165
101	Effects of Water Adsorption and Surface Oxidation on the Electrical Conductivity of Silicon Nanocrystal Films. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4211-4218.	1.5	23
102	Temperature Dependent Photoluminescence of Size-Purified Silicon Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 4233-4238.	4.0	39
103	Propagating Nanocavity-Enhanced Rapid Crystallization of Silicon Thin Films. <i>Nano Letters</i> , 2013, 13, 5735-5739.	4.5	4
104	Properties of nonthermal capacitively coupled plasmas generated in narrow quartz tubes for synthesis of silicon nanoparticles. , 2013, , .		0
105	Analytical STEM Study of P-Doped Silicon Nanocrystals Exhibiting Mid-Infrared Localized Surface Plasmon Resonance. <i>Microscopy and Microanalysis</i> , 2013, 19, 1508-1509.	0.2	1
106	On the Origin of Efficient Photoluminescence in Silicon Nanocrystals. , 2013, , .		1
107	Environmental photostability of SF ₆ -etched silicon nanocrystals. <i>Nanotechnology</i> , 2012, 23, 395205.	1.3	6
108	Absolute absorption cross sections of ligand-free colloidal germanium nanocrystals. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	21

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109	Freestanding silicon nanocrystals with extremely low defect content. <i>Physical Review B</i> , 2012, 86, .	1.1	21
110	The energy distribution function of ions impinging on nanoparticles in a collisional low-pressure plasma. <i>Plasma Sources Science and Technology</i> , 2012, 21, 035002.	1.3	5
111	Hybrid solar cells from MDMO-PPV and silicon nanocrystals. <i>Nanoscale</i> , 2012, 4, 3963.	2.8	12
112	Ensemble Brightening and Enhanced Quantum Yield in Size-Purified Silicon Nanocrystals. <i>ACS Nano</i> , 2012, 6, 7389-7396.	7.3	92
113	The 2012 Plasma Roadmap. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 253001.	1.3	511
114	On the Origin of Photoluminescence in Silicon Nanocrystals: Pressure-Dependent Structural and Optical Studies. <i>Nano Letters</i> , 2012, 12, 4200-4205.	4.5	133
115	An All-Gas-Phase Approach for the Fabrication of Silicon Nanocrystal Light-Emitting Devices. <i>Nano Letters</i> , 2012, 12, 2822-2825.	4.5	66
116	Nanocrystal Inks without Ligands: Stable Colloids of Bare Germanium Nanocrystals. <i>Nano Letters</i> , 2011, 11, 2133-2136.	4.5	44
117	High-Efficiency Silicon Nanocrystal Light-Emitting Devices. <i>Nano Letters</i> , 2011, 11, 1952-1956.	4.5	337
118	Plasma production of nanodevice-grade semiconductor nanocrystals. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 174009.	1.3	15
119	Quantum confinement in germanium nanocrystal thin films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 110-112.	1.2	14
120	Combined plasma gas-phase synthesis and colloidal processing of InP/ZnS core/shell nanocrystals. <i>Nanoscale Research Letters</i> , 2011, 6, 68.	3.1	25
121	Routes to Achieving High Quantum Yield Luminescence from Gas-Phase-Produced Silicon Nanocrystals. <i>Advanced Functional Materials</i> , 2011, 21, 4042-4046.	7.8	74
122	Photoluminescence: Routes to Achieving High Quantum Yield Luminescence from Gas-Phase-Produced Silicon Nanocrystals (<i>Adv. Funct. Mater.</i> 21/2011). <i>Advanced Functional Materials</i> , 2011, 21, 4041-4041.	7.8	1
123	Oxidation of freestanding silicon nanocrystals probed with electron spin resonance of interfacial dangling bonds. <i>Physical Review B</i> , 2011, 83, .	1.1	63
124	Separation Control Using Plasma Actuators: Steady Flow in Low Pressure Turbines. , 2011, , .		7
125	Opto-electronic properties of co-deposited mixed-phase hydrogenated amorphous/nanocrystalline silicon thin films. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1321, 337.	0.1	0
126	Silicon nanocrystals based light emitting diodes integrated using all inorganic metal oxides as the charge transport layers. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0

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127	Seed-Induced Crystallization of Amorphous Silicon for the Formation of Large-Grain Poly-Crystalline Silicon. , 2010, , .		0
128	Heat transferâ€™A review of 2004 literature. International Journal of Heat and Mass Transfer, 2010, 53, 4343-4396.	2.5	50
129	A Silicon Nanocrystal Schottky Junction Solar Cell produced from Colloidal Silicon Nanocrystals. Nanoscale Research Letters, 2010, 5, 1253-1256.	3.1	46
130	Optimization of Si NC/P3HT Hybrid Solar Cells. Advanced Functional Materials, 2010, 20, 2157-2164.	7.8	125
131	Heat transferâ€™A review of 2005 literature. International Journal of Heat and Mass Transfer, 2010, 53, 4397-4447.	2.5	85
132	A flexible method for depositing dense nanocrystal thin films: impaction of germanium nanocrystals. Nanotechnology, 2010, 21, 335302.	1.3	72
133	Optical Absorption in Co-Deposited Mixed-Phase Hydrogenated Amorphous/Nanocrystalline Silicon Thin Films. Materials Research Society Symposia Proceedings, 2010, 1245, 1.	0.1	2
134	Silicon and Germanium Nanocrystal Inks for Low-Cost Solar Cells. , 2010, , .		1
135	Charging, Coagulation, and Heating Model of Nanoparticles in a Low-Pressure Plasma Accounting for Ionâ€™Neutral Collisions. IEEE Transactions on Plasma Science, 2010, 38, 803-809.	0.6	23
136	Hybrid Silicon Nanocrystalâ€™Organic Light-Emitting Devices for Infrared Electroluminescence. Nano Letters, 2010, 10, 1154-1157.	4.5	132
137	Germanium and Silicon Nanocrystal Thin-Film Field-Effect Transistors from Solution. Nano Letters, 2010, 10, 2661-2666.	4.5	119
138	Plasma Actuator Simulation: Force Contours and Dielectric Charging Characteristics. , 2010, , .		6
139	Structural and electronic properties of dual plasma codeposited mixed-phase amorphous/nanocrystalline thin films. Journal of Applied Physics, 2010, 107, .	1.1	28
140	Separation Control Using DBD Plasma Actuators: Thrust Enhancement Studies. , 2010, , .		0
141	Experimental Studies of Plasma Actuator Performance for Separation Control. , 2010, , .		6
142	Separation Control Using Plasma Actuators: 2-D and Edge Effects in Steady Flow in Low Pressure Turbines. , 2010, , .		2
143	Selective nanoparticle heating: Another form of nonequilibrium in dusty plasmas. Physical Review E, 2009, 79, 026405.	0.8	121
144	Hybrid Solar Cells From Silicon Nanocrystals and Conductive Polymers. , 2009, , .		1

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145	Surface chemistry dependence of native oxidation formation on silicon nanocrystals. Journal of Applied Physics, 2009, 106, 064313.	1.1	25
146	Nonthermal plasma synthesized freestanding silicon-germanium alloy nanocrystals. Nanotechnology, 2009, 20, 295602.	1.3	62
147	SF ₆ plasma etching of silicon nanocrystals. Nanotechnology, 2009, 20, 035603.	1.3	28
148	Solution-Processed Germanium Nanocrystal Thin Films as Materials for Low-Cost Optical and Electronic Devices. Langmuir, 2009, 25, 11883-11889.	1.6	36
149	Universal Size-Dependent Trend in Auger Recombination in Direct-Gap and Indirect-Gap Semiconductor Nanocrystals. Physical Review Letters, 2009, 102, 177404.	2.9	314
150	Hybrid Solar Cells from P3HT and Silicon Nanocrystals. Nano Letters, 2009, 9, 449-452.	4.5	379
151	Photoluminescence quantum yields of amorphous and crystalline silicon nanoparticles. Physical Review B, 2009, 80, .	1.1	111
152	Separation Control Using DBD Plasma Actuators: Designs for Thrust Enhancement. , 2009, , .		4
153	Separation Control Using Plasma Actuator: Simulation of Plasma Actuator. , 2009, , .		3
154	Nanoscale design to enable the revolution in renewable energy. Energy and Environmental Science, 2009, 2, 559.	15.6	348
155	Nonthermal plasma synthesis of semiconductor nanocrystals. Journal Physics D: Applied Physics, 2009, 42, 113001.	1.3	234
156	Bubbly Silicon: A New Mechanism for Solid Phase Crystallization of Amorphous Silicon. , 2009, , .		0
157	Analytical model of particle charging in plasmas over a wide range of collisionality. Physical Review E, 2008, 78, 046402.	0.8	80
158	Size-Dependent Intrinsic Radiative Decay Rates of Silicon Nanocrystals at Large Confinement Energies. Physical Review Letters, 2008, 100, 067401.	2.9	147
159	Nanoparticles: A Route to Post-Shrink Information Systems. , 2008, , .		0
160	Air-stable full-visible-spectrum emission from silicon nanocrystals synthesized by an all-gas-phase plasma approach. Nanotechnology, 2008, 19, 245603.	1.3	126
161	Seeding Solid Phase Crystallization of Amorphous Silicon Films with Embedded Nanocrystals. Materials Research Society Symposia Proceedings, 2008, 1066, 1.	0.1	4
162	Doping efficiency, dopant location, and oxidation of Si nanocrystals. Applied Physics Letters, 2008, 92, .	1.5	186

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163	Light emitting transistors using silicon quantum dots in an organic matrix. , 2008, , .		0
164	Plasma synthesis of group IV quantum dots for luminescence and photovoltaic applications. Pure and Applied Chemistry, 2008, 80, 1901-1908.	0.9	24
165	A plasma process for the synthesis of cubic-shaped silicon nanocrystals for nanoelectronic devices. Journal Physics D: Applied Physics, 2007, 40, 2247-2257.	1.3	51
166	Gas Phase Nanoparticle Integration. Materials Research Society Symposia Proceedings, 2007, 1002, 1.	0.1	0
167	Photoluminescence Quantum Yields from Crystalline and Amorphous Silicon Nanoparticles. Materials Research Society Symposia Proceedings, 2007, 1056, 1.	0.1	0
168	Nonthermal plasma synthesis of size-controlled, monodisperse, freestanding germanium nanocrystals. Applied Physics Letters, 2007, 91, 093119.	1.5	113
169	Doped Silicon Nanoparticles Synthesized by Nonthermal Plasma. Materials Research Society Symposia Proceedings, 2007, 1031, 1.	0.1	0
170	Electroluminescence from surface oxidized silicon nanoparticles dispersed within a polymer matrix. Applied Physics Letters, 2007, 90, 061116.	1.5	40
171	In-flight dry etching of plasma-synthesized silicon nanocrystals. Applied Physics Letters, 2007, 91, .	1.5	32
172	Plasma-Assisted Synthesis of Silicon Nanocrystal Inks. Advanced Materials, 2007, 19, 2513-2519.	11.1	242
173	Fabrication of vertically aligned single-walled carbon nanotubes in atmospheric pressure non-thermal plasma CVD. Carbon, 2007, 45, 364-374.	5.4	71
174	Photosensitization of ZnO Nanowires with CdSe Quantum Dots for Photovoltaic Devices. Nano Letters, 2007, 7, 1793-1798.	4.5	935
175	Room-temperature atmospheric oxidation of Si nanocrystals after HF etching. Physical Review B, 2007, 75, .	1.1	112
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177	Plasma synthesis and liquid-phase surface passivation of brightly luminescent Si nanocrystals. Journal of Luminescence, 2006, 121, 327-334.	1.5	98
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