Deren Yang

List of Publications by Citations

856	21,238	69	107
papers	citations	h-index	g-index
901	23,627	4.8	7.01
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
856	Low Temperature Synthesis of Flowerlike ZnO Nanostructures by Cetyltrimethylammonium Bromide-Assisted Hydrothermal Process. *Journal of Physical Chemistry B*, **2004**, 108, 3955-3958	3.4	446
855	Synthesis of Pd-Pt bimetallic nanocrystals with a concave structure through a bromide-induced galvanic replacement reaction. *Journal of the American Chemical Society*, **2011**, 133, 6078-89	16.4	364
854	Controllable Growth of ZnO Microcrystals by a Capping-Molecule-Assisted Hydrothermal Process. *Crystal Growth and Design*, **2005**, 5, 547-550	3.5	307
853	Luminescent metal-organic framework films as highly sensitive and fast-response oxygen sensors. *Journal of the American Chemical Society*, **2014**, 136, 5527-30	16.4	279
852	Synthesis of flower-like ZnO nanostructures by an organic-free hydrothermal process. *Nanotechnology*, **2004**, 15, 622-626	3.4	265
851	Selective etching of GaN polar surface in potassium hydroxide solution studied by x-ray photoelectron spectroscopy. *Journal of Applied Physics*, **2001**, 90, 4219-4223	2.5	262
850	Intermetallic Nanocrystals: Syntheses and Catalytic Applications. *Advanced Materials*, **2017**, 29, 1605997	24	246
849	Enhanced Electronic Properties of SnO via Electron Transfer from Graphene Quantum Dots for Efficient Perovskite Solar Cells. *ACS Nano*, **2017**, 11, 9176-9182	16.7	224
848	Facile synthesis of Pd-Pt alloy nanocages and their enhanced performance for preferential oxidation of CO in excess hydrogen. *ACS Nano*, **2011**, 5, 8212-22	16.7	223
847	Large-Scale Synthesis of SnO2 Nanotube Arrays as High-Performance Anode Materials of Li-Ion Batteries. *Journal of Physical Chemistry C*, **2011**, 115, 11302-11305	3.8	218
846	Plasmonic Silicon Quantum Dots Enabled High-Sensitivity Ultrabroadband Photodetection of Graphene-Based Hybrid Phototransistors. *ACS Nano*, **2017**, 11, 9854-9862	16.7	209
845	A simple hydrothermal route for synthesizing SnO2quantum dots. *Nanotechnology*, **2006**, 17, 2386-2389	3.4	173
844	Demonstration of optical microfiber knot resonators. *Applied Physics Letters*, **2006**, 88, 223501	3.4	172
843	Epitaxial Growth of Twinned Au-Pt Core-Shell Star-Shaped Decahedra as Highly Durable Electrocatalysts. *Nano Letters*, **2015**, 15, 7808-15	11.5	168
842	Controlling the morphology of rhodium nanocrystals by manipulating the growth kinetics with a syringe pump. *Nano Letters*, **2011**, 11, 898-903	11.5	168
841	Graphene Coupled with Silicon Quantum Dots for High-Performance Bulk-Silicon-Based Schottky-Junction Photodetectors. *Advanced Materials*, **2016**, 28, 4912-9	24	163
840	Porous ZnCo2O4 nanowires synthesis via sacrificial templates: high-performance anode materials of Li-ion batteries. *Inorganic Chemistry*, **2011**, 50, 3320-4	5.1	159

839	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. *Npj 2D Materials and Applications*, **2017**, 1,	8.8	144
838	Multiwalled carbon nanotubes anchored with SnS2 nanosheets as high-performance anode materials of lithium-ion batteries. *ACS Applied Materials & Interfaces*, **2011**, 3, 4067-74	9.5	139
837	Enhancement of ZnO light emission via coupling with localized surface plasmon of Ag island film. *Applied Physics Letters*, **2008**, 92, 041119	3.4	137
836	CNTs@SnO2@C Coaxial Nanocables with Highly Reversible Lithium Storage. *Journal of Physical Chemistry C*, **2010**, 114, 22535-22538	3.8	132
835	A selective NH3 gas sensor based on Fe2O3–ZnO nanocomposites at room temperature. *Sensors and Actuators B: Chemical*, **2006**, 114, 910-915	8.5	131
834	Seed-assisted cast quasi-single crystalline silicon for photovoltaic application: Towards high efficiency and low cost silicon solar cells. *Solar Energy Materials and Solar Cells*, **2012**, 101, 95-101	6.4	130
833	Carbon-coated SnO2 nanotubes: template-engaged synthesis and their application in lithium-ion batteries. *Nanoscale*, **2011**, 3, 746-50	7.7	130
832	Kinetically controlled synthesis of Pt-Cu alloy concave nanocubes with high-index facets for methanol electro-oxidation. *Chemical Communications*, **2014**, 50, 560-2	5.8	126
831	Engineering crystalline structures of two-dimensional MoS2 sheets for high-performance organic solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 7727-7733	13	124
830	Ligand-free Self-Assembly of Ceria Nanocrystals into Nanorods by Oriented Attachment at Low Temperature. *Journal of Physical Chemistry C*, **2007**, 111, 12677-12680	3.8	124
829	Controllable growth of ZnO nanostructures by citric acid assisted hydrothermal process. *Materials Letters*, **2005**, 59, 1696-1700	3.3	124
828	CuO nanodendrites synthesized by a novel hydrothermal route. *Nanotechnology*, **2004**, 15, 1428-1432	3.4	116
827	Electrically pumped ZnO film ultraviolet random lasers on silicon substrate. *Applied Physics Letters*, **2007**, 91, 251109	3.4	115
826	Ultraviolet electroluminescence from ZnO/p-Si heterojunctions. *Journal of Applied Physics*, **2007**, 101, 053103	2.5	112
825	Comparative study on the localized surface plasmon resonance of boron- and phosphorus-doped silicon nanocrystals. *ACS Nano*, **2015**, 9, 378-86	16.7	110
824	Arrays of ZnO nanowires fabricated by a simple chemical solution route. *Nanotechnology*, **2003**, 14, 423-426	3.4	107
823	Photoluminescence of Si-rich silicon nitride: Defect-related states and silicon nanoclusters. *Applied Physics Letters*, **2007**, 90, 131903	3.4	106
822	Spin-coating silicon-quantum-dot ink to improve solar cell efficiency. *Solar Energy Materials and Solar Cells*, **2011**, 95, 2941-2945	6.4	103

821	Highly loaded CoO/graphene nanocomposites as lithium-ion anodes with superior reversible capacity. *Journal of Materials Chemistry A*, **2013**, 1, 2337	13	102
820	Nanocrystals composed of alternating shells of Pd and Pt can be obtained by sequentially adding different precursors. *Journal of the American Chemical Society*, **2011**, 133, 10422-5	16.4	102
819	Self-templating synthesis of SnO2-carbon hybrid hollow spheres for superior reversible lithium ion storage. *ACS Applied Materials & Interfaces*, **2011**, 3, 1946-52	9.5	101
818	In situ study of oxidative etching of palladium nanocrystals by liquid cell electron microscopy. *Nano Letters*, **2014**, 14, 3761-5	11.5	100
817	Thin Czochralski silicon solar cells based on diamond wire sawing technology. *Solar Energy Materials and Solar Cells*, **2012**, 98, 337-342	6.4	100
816	From cobalt nitrate carbonate hydroxide hydrate nanowires to porous Co(3)O(4) nanorods for high performance lithium-ion battery electrodes. *Nanotechnology*, **2008**, 19, 035711	3.4	99
815	Selective Synthesis of Fe2O3 and Fe3O4 Nanowires Via a Single Precursor: A General Method for Metal Oxide Nanowires. *Nanoscale Research Letters*, **2010**, 5, 1295-300	5	98
814	Shape-Control Fabrication and Characterization of the Airplane-like FeO(OH) and Fe2O3 Nanostructures. *Crystal Growth and Design*, **2006**, 6, 351-353	3.5	98
813	Broadband optoelectronic synaptic devices based on silicon nanocrystals for neuromorphic computing. *Nano Energy*, **2018**, 52, 422-430	17.1	97
812	CuGe core□shell nanowire arrays as three-dimensional electrodes for high-rate capability lithium-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 1511-1515		97
811	Single crystalline CdS nanorods fabricated by a novel hydrothermal method. *Chemical Physics Letters*, **2003**, 377, 654-657	2.5	97
810	Carbon Nanocapsules as Nanoreactors for Controllable Synthesis of Encapsulated Iron and Iron Oxides: Magnetic Properties and Reversible Lithium Storage. *Journal of Physical Chemistry C*, **2011**, 115, 3612-3620	3.8	96
809	Enhancement and patterning of ultraviolet emission in ZnO with an electron beam. *Applied Physics Letters*, **2006**, 88, 134103	3.4	95
808	Enhancing the Efficiency of Multicrystalline Silicon Solar Cells by the Inkjet Printing of Silicon-Quantum-Dot Ink. *Journal of Physical Chemistry C*, **2012**, 116, 21240-21243	3.8	92
807	Facile synthesis of five-fold twinned, starfish-like rhodium nanocrystals by eliminating oxidative etching with a chloride-free precursor. *Angewandte Chemie - International Edition*, **2010**, 49, 5296-300	16.4	92
806	Gas sensing behavior of polyvinylpyrrolidone-modified ZnO nanoparticles for trimethylamine. *Sensors and Actuators B: Chemical*, **2006**, 113, 324-328	8.5	91
805	Hydrothermal synthesis of Zn2SnO4 nanorods in the diameter regime of sub-5 nm and their properties. *Journal of Physical Chemistry B*, **2006**, 110, 7631-4	3.4	90
804	Long Bi2S3nanowires prepared by a simple hydrothermal method. *Nanotechnology*, **2003**, 14, 974-977	3.4	89

803	Selenium Nanotubes Synthesized by a Novel Solution Phase Approach. *Journal of Physical Chemistry B*, **2004**, 108, 1179-1182	3.4	86
802	Synthesis of NiO nanowires by a sol-gel process. *Materials Letters*, **2005**, 59, 1967-1970	3.3	82
801	Epitaxial Growth of Multimetallic Pd@PtM (M = Ni, Rh, Ru) Core-Shell Nanoplates Realized by in Situ-Produced CO from Interfacial Catalytic Reactions. *Nano Letters*, **2016**, 16, 7999-8004	11.5	80
800	Efficient and highly light stable planar perovskite solar cells with graphene quantum dots doped PCBM electron transport layer. *Nano Energy*, **2017**, 40, 345-351	17.1	78
799	Recombination activity of Σ3 boundaries in boron-doped multicrystalline silicon: Influence of iron contamination. *Journal of Applied Physics*, **2005**, 97, 033701	2.5	77
798	Tuning Surface Structure and Strain in Pd-Pt Core-Shell Nanocrystals for Enhanced Electrocatalytic Oxygen Reduction. *Small*, **2017**, 13, 1603423	11	76
797	Grown-in defects in nitrogen-doped Czochralski silicon. *Journal of Applied Physics*, **2002**, 92, 188-194	2.5	76
796	Interface engineering for efficient and stable chemical-doping-free graphene-on-silicon solar cells by introducing a graphene oxide interlayer. *Journal of Materials Chemistry A*, **2014**, 2, 16877-16883	13	74
795	Fabrication of flower-like silver structures through anisotropic growth. *Langmuir*, **2011**, 27, 6211-7	4	74
794	Metal oxide and sulfide hollow spheres: layer-by-layer synthesis and their application in lithium-ion battery. *Journal of Physical Chemistry B*, **2008**, 112, 14836-42	3.4	74
793	Fairly pure ultraviolet electroluminescence from ZnO-based light-emitting devices. *Applied Physics Letters*, **2006**, 89, 111112	3.4	74
792	Preparation and characterization of water-soluble CdS nanocrystals by surface modification of ethylene diamine. *Materials Letters*, **2005**, 59, 1024-1027	3.3	72
791	Effects of complexing agent on CdS thin films prepared by chemical bath deposition. *Materials Letters*, **2004**, 58, 5-9	3.3	71
790	Order-aligned Mn3O4 nanostructures as super high-rate electrodes for rechargeable lithium-ion batteries. *Journal of Power Sources*, **2013**, 222, 32-37	8.9	70
789	Directional CdS nanowires fabricated by chemical bath deposition. *Journal of Crystal Growth*, **2002**, 246, 108-112	1.6	70
788	Lattice-mismatch-induced twinning for seeded growth of anisotropic nanostructures. *ACS Nano*, **2015**, 9, 3307-13	16.7	69
787	Effect of nitrogen–oxygen complex on electrical properties of Czochralski silicon. *Applied Physics Letters*, **1996**, 68, 487-489	3.4	69
786	Investigation of texturization for monocrystalline silicon solar cells with different kinds of alkaline. *Renewable Energy*, **2004**, 29, 2101-2107	8.1	68

785	Homogeneous coating of Au and SnO2 nanocrystals on carbon nanotubes via layer-by-layer assembly: a new ternary hybrid for a room-temperature CO gas sensor. *Chemical Communications*, **2008**, 6182-4	5.8	67
784	Straight and thin ZnO nanorods: hectogram-scale synthesis at low temperature and cathodoluminescence. *Journal of Physical Chemistry B*, **2006**, 110, 827-30	3.4	67
783	Texturization of monocrystalline silicon with tribasic sodium phosphate. *Solar Energy Materials and Solar Cells*, **2003**, 77, 255-263	6.4	67
782	From ZnO nanorods to 3D hollow microhemispheres: solvothermal synthesis, photoluminescence and gas sensor properties. *Nanotechnology*, **2007**, 18, 455604	3.4	66
781	Improved performance and air stability of planar perovskite solar cells via interfacial engineering using a fullerene amine interlayer. *Nano Energy*, **2016**, 28, 330-337	17.1	65
780	Low-cost solar grade silicon purification process with Al–Si system using a powder metallurgy technique. *Separation and Purification Technology*, **2011**, 77, 33-39	8.3	65
779	Optimum Quantum Yield of the Light Emission from 2 to 10 nm Hydrosilylated Silicon Quantum Dots. *Particle and Particle Systems Characterization*, **2016**, 33, 44-52	3.1	65
778	Nanoscale kinetics of asymmetrical corrosion in core-shell nanoparticles. *Nature Communications*, **2018**, 9, 1011	17.4	64
777	Room temperature electrically pumped ultraviolet random lasing from ZnO nanorod arrays on Si. *Optics Express*, **2009**, 17, 14426-33	3.3	64
776	Size-controlled synthesis of Pd nanosheets for tunable plasmonic properties. *CrystEngComm*, **2015**, 17, 1833-1838	3.3	63
775	Synthesis of polycrystalline SnO2 nanotubes on carbon nanotube template for anode material of lithium-ion battery. *Materials Research Bulletin*, **2009**, 44, 211-215	5.1	63
774	Coupling PtNi Ultrathin Nanowires with MXenes for Boosting Electrocatalytic Hydrogen Evolution in Both Acidic and Alkaline Solutions. *Small*, **2019**, 15, e1805474	11	63
773	One-pot, large-scale synthesis of SnO2 nanotubes at room temperature. *Chemical Communications*, **2008**, 3028-30	5.8	62
772	Three-dimensionally porous Fe3O4 as high-performance anode materials for lithium-ion batteries. *Journal of Power Sources*, **2014**, 246, 198-203	8.9	61
771	Silicene oxides: formation, structures and electronic properties. *Scientific Reports*, **2013**, 3, 3507	4.9	60
770	Synthesis of ultrafine lanthanum hydroxide nanorods by a simple hydrothermal process. *Materials Letters*, **2004**, 58, 1180-1182	3.3	59
769	Facile synthesis of Pd–Pt alloy concave nanocubes with high-index facets as electrocatalysts for methanol oxidation. *CrystEngComm*, **2014**, 16, 2411-2416	3.3	58
768	Synthesis of Co2SnO4@C core–shell nanostructures with reversible lithium storage. *Journal of Power Sources*, **2011**, 196, 10234-10239	8.9	58

767	Phase-Selective Synthesis and Self-Assembly of Monodisperse Copper Sulfide Nanocrystals. *Journal of Physical Chemistry C*, **2008**, 112, 13390-13394	3.8	58
766	InOOH hollow spheres synthesized by a simple hydrothermal reaction. *Journal of Physical Chemistry B*, **2005**, 109, 20676-9	3.4	58
765	Novel CuS hollow spheres fabricated by a novel hydrothermal method. *Microporous and Mesoporous Materials*, **2005**, 80, 153-156	5.3	58
764	Enhanced performance and light soaking stability of planar perovskite solar cells using an amine-based fullerene interfacial modifier. *Journal of Materials Chemistry A*, **2016**, 4, 18509-18515	13	57
763	Boron- and Phosphorus-Hyperdoped Silicon Nanocrystals. *Particle and Particle Systems Characterization*, **2015**, 32, 213-221	3.1	57
762	Ultrathin Two-Dimensional Pd-Based Nanorings as Catalysts for Hydrogenation with High Activity and Stability. *Small*, **2015**, 11, 4745-52	11	56
761	Hydrothermal growth and characterization of magnetite (Fe3O4) thin films. *Surface and Coatings Technology*, **2007**, 201, 5870-5874	4.4	56
760	Interface coupling in graphene/fluorographene heterostructure for high-performance graphene/silicon solar cells. *Nano Energy*, **2016**, 28, 12-18	17.1	55
759	An 8.68% efficiency chemically-doped-free graphene-silicon solar cell using silver nanowires network buried contacts. *ACS Applied Materials & Interfaces*, **2015**, 7, 4135-41	9.5	55
758	Low-temperature growth of uniform ZnO particles with controllable ellipsoidal morphologies and characteristic luminescence patterns. *Journal of Physical Chemistry B*, **2006**, 110, 19147-53	3.4	55
757	Large-scale synthesis of Si@C three-dimensional porous structures as high-performance anode materials for lithium-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 20494-20499	13	54
756	Layer-stacked tin disulfide nanorods in silica nanoreactors with improved lithium storage capabilities. *Nanoscale*, **2012**, 4, 4002-6	7.7	54
755	An improved seed-mediated growth method to coat complete silver shells onto silica spheres for surface-enhanced Raman scattering. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2011**, 387, 17-22	5.1	54
754	Carbon nanotube-based magnetic-fluorescent nanohybrids as highly efficient contrast agents for multimodal cellular imaging. *Journal of Materials Chemistry*, **2010**, 20, 9895		54
753	Hydrothermal synthesis, characterization and properties of SnS nanoflowers. *Materials Letters*, **2006**, 60, 2686-2689	3.3	54
752	Synthesis and field emission characteristics of bilayered ZnO nanorod array prepared by chemical reaction. *Journal of Physical Chemistry B*, **2005**, 109, 17055-9	3.4	54
751	Designing superior solid electrolyte interfaces on silicon anodes for high-performance lithium-ion batteries. *Nanoscale*, **2019**, 11, 19086-19104	7.7	53
750	ZnO:Eu thin-films: Sol–gel derivation and strong photoluminescence from 5D0 -j7F0 transition of Eu3+ ions. *Journal of Alloys and Compounds*, **2007**, 431, 317-320	5.7	53

749	Effect of pressure on nanocrystalline diamond films deposition by hot filament CVD technique from CH4/H2 gas mixture. *Surface and Coatings Technology*, **2007**, 202, 261-267	4.4	52
748	Hydrothermal synthesis of flower-like SrCO3 nanostructures. *Materials Letters*, **2005**, 59, 420-422	3.3	52
747	Light-Emitting Diodes Based on Colloidal Silicon Quantum Dots with Octyl and Phenylpropyl Ligands. *ACS Applied Materials & Interfaces*, **2018**, 10, 5959-5966	9.5	51
746	Synaptic silicon-nanocrystal phototransistors for neuromorphic computing. *Nano Energy*, **2019**, 63, 103859	17.1	51
745	Facile synthesis of uniform MWCNT@Si nanocomposites as high-performance anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2015**, 622, 966-972	5.7	51
744	Electroluminescence of SnO2/p-Si heterojunction. *Applied Physics Letters*, **2008**, 92, 121908	3.4	51
743	Electroluminescent synaptic devices with logic functions. *Nano Energy*, **2018**, 54, 383-389	17.1	51
742	First-Principles Study of 2.2 nm Silicon Nanocrystals Doped with Boron. *Journal of Physical Chemistry C*, **2011**, 115, 9838-9843	3.8	50
741	Critical Role of Dopant Location for P-Doped Si Nanocrystals. *Journal of Physical Chemistry C*, **2011**, 115, 661-666	3.8	50
740	Synthesis of CdS nanotubes by chemical bath deposition. *Journal of Crystal Growth*, **2004**, 263, 372-376	1.6	50
739	Trap Assisted Bulk Silicon Photodetector with High Photoconductive Gain, Low Noise, and Fast Response by Ag Hyperdoping. *Advanced Optical Materials*, **2018**, 6, 1700638	8.1	49
738	Size-Dependent Structures and Optical Absorption of Boron-Hyperdoped Silicon Nanocrystals. *Advanced Optical Materials*, **2016**, 4, 700-707	8.1	49
737	High Efficiency Organic/Silicon-Nanowire Hybrid Solar Cells: Significance of Strong Inversion Layer. *Scientific Reports*, **2015**, 5, 17371	4.9	49
736	First-Principles Study on the Surface Chemistry of 1.4 nm Silicon Nanocrystals: Case of Hydrosilylation. *Journal of Physical Chemistry C*, **2012**, 116, 19434-19443	3.8	49
735	Cu/Sn Core/Shell Nanowire Arrays as Three-Dimensional Electrodes for Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2011**, 115, 23620-23624	3.8	49
734	Origin of room temperature ferromagnetism in MgO films. *Applied Physics Letters*, **2013**, 102, 072406	3.4	48
733	CoO/NiSi(x) core-shell nanowire arrays as lithium-ion anodes with high rate capabilities. *Nanoscale*, **2012**, 4, 991-6	7.7	48
732	Rare-Earth Doped ZnO Films: A Material Platform to Realize Multicolor and Near-Infrared Electroluminescence. *Advanced Optical Materials*, **2014**, 2, 240-244	8.1	47

731	Facile synthesis of Rh-Pd alloy nanodendrites as highly active and durable electrocatalysts for oxygen reduction reaction. *Nanoscale*, **2014**, 6, 7012-8	7.7	47
730	Effect of oxygen precipitation on the performance of Czochralski silicon solar cells. *Solar Energy Materials and Solar Cells*, **2011**, 95, 3148-3151	6.4	47
729	Rational design of three-dimensional macroporous silicon as high performance Li-ion battery anodes with long cycle life. *Journal of Power Sources*, **2016**, 331, 76-81	8.9	47
728	Perovskite Bifunctional Device with Improved Electroluminescent and Photovoltaic Performance through Interfacial Energy-Band Engineering. *Advanced Materials*, **2019**, 31, e1902543	24	46
727	Optically Stimulated Synaptic Devices Based on the Hybrid Structure of Silicon Nanomembrane and Perovskite. *Nano Letters*, **2020**, 20, 3378-3387	11.5	46
726	Nitrogen effects on thermal donor and shallow thermal donor in silicon. *Journal of Applied Physics*, **1995**, 77, 943-944	2.5	46
725	Silver Nanoshell Plasmonically Controlled Emission of Semiconductor Quantum Dots in the Strong Coupling Regime. *ACS Nano*, **2016**, 10, 4154-63	16.7	45
724	Large-scale synthesis and application of SnS2graphene nanocomposites as anode materials for lithium-ion batteries with enhanced cyclic performance and reversible capacity. *Journal of Alloys and Compounds*, **2013**, 580, 457-464	5.7	45
723	Temperature-dependent Raman scattering of silicon nanowires. *Journal of Physical Chemistry B*, **2006**, 110, 1229-34	3.4	45
722	Self-assembly of CdS: from nanoparticles to nanorods and arrayed nanorod bundles. *Materials Chemistry and Physics*, **2005**, 93, 65-69	4.4	45
721	Zero-power optoelectronic synaptic devices. *Nano Energy*, **2020**, 73, 104790	17.1	44
720	Impact of solar irradiance intensity and temperature on the performance of compensated crystalline silicon solar cells. *Solar Energy Materials and Solar Cells*, **2014**, 128, 427-434	6.4	44
719	Controllable growth of dendrite-like CuO nanostructures by ethylene glycol assisted hydrothermal process. *Materials Research Bulletin*, **2008**, 43, 1291-1296	5.1	44
718	Effect of the substrate temperature on the crystallization of TiO2 films prepared by DC reactive magnetron sputtering. *Journal of Crystal Growth*, **2007**, 300, 551-554	1.6	44
717	Synthesis of La1CaxMnO3 nanowires by a solgel process. *Chemical Physics Letters*, **2002**, 363, 579-582	2.5	43
716	Synthesis of cadmium hydroxide nanoflake and nanowisker by hydrothermal method. *Materials Letters*, **2005**, 59, 56-58	3.3	43
715	Self-Organized Fullerene Interfacial Layer for Efficient and Low-Temperature Processed Planar Perovskite Solar Cells with High UV-Light Stability. *Advanced Science*, **2017**, 4, 1700018	13.6	42
714	CuSi1Gex coreshell nanowire arrays as three-dimensional electrodes for high-rate capability lithium-ion batteries. *Journal of Power Sources*, **2012**, 208, 434-439	8.9	42

713	Structure and luminescence evolution of annealed Europium-doped silicon oxides films. *Optics Express*, **2010**, 18, 27191-6	3.3	42
712	Synthesis of MgO nanotube bundles. *Nanotechnology*, **2004**, 15, 1004-1008	3.4	42
711	Optoelectronic Synaptic Devices for Neuromorphic Computing. *Advanced Intelligent Systems*, **2021**, 3, 2000099	6	42
710	Silicon nanocrystals: unfading silicon materials for optoelectronics. *Materials Science and Engineering Reports*, **2019**, 138, 85-117	30.9	41
709	Improvement of conversion efficiency of multicrystalline silicon solar cells by incorporating reactive ion etching texturing. *Solar Energy Materials and Solar Cells*, **2014**, 127, 21-26	6.4	41
708	Germanium effect on void defects in Czochralski silicon. *Journal of Crystal Growth*, **2002**, 243, 371-374	1.6	41
707	Direct CVD Growth of Graphene on Technologically Important Dielectric and Semiconducting Substrates. *Advanced Science*, **2018**, 5, 1800050	13.6	41
706	The enhanced efficiency of graphene-silicon solar cells by electric field doping. *Nanoscale*, **2015**, 7, 7072-7	7.7	40
705	Layer-by-layer synthesis of □Fe2O3@SnO2@C porous core-shell nanorods with high reversible capacity in lithium-ion batteries. *Nanoscale*, **2013**, 5, 4744-50	7.7	40
704	Impurity engineering of Czochralski silicon. *Materials Science and Engineering Reports*, **2013**, 74, 1-33	30.9	40
703	MgO nanostructures synthesized by thermal evaporation. *Materials Science and Engineering C*, **2006** , 26, 1097-1101	8.3	40
702	Bonding of Oxygen at the Oxide/Nanocrystal Interface of Oxidized Silicon Nanocrystals: An Ab Initio Study. *Journal of Physical Chemistry C*, **2010**, 114, 8774-8781	3.8	39
701	Assembling CoSn3 nanoparticles on multiwalled carbon nanotubes with enhanced lithium storage properties. *Nanoscale*, **2011**, 3, 1798-801	7.7	39
700	Electronic and magnetic properties of graphene, silicene and germanene with varying vacancy concentration. *AIP Advances*, **2017**, 7, 045308	1.5	38
699	In situ study of the growth of two-dimensional palladium dendritic nanostructures using liquid-cell electron microscopy. *Chemical Communications*, **2014**, 50, 9447-50	5.8	38
698	Theoretical Study of Chlorine for Silicon Nanocrystals. *Journal of Physical Chemistry C*, **2011**, 115, 12822-12825	3.8	38
697	Low-temperature chemical solution route for ZnO based sulfide coaxial nanocables: general synthesis and gas sensor application. *Nanotechnology*, **2007**, 18, 115619	3.4	38
696	Effects of nitrogen on dislocations in silicon during heat treatment. *Physica B: Condensed Matter*, **1999**, 273-274, 553-556	2.8	38

695	One-Pot Synthesis of Biocompatible CdSe/CdS Quantum Dots and Their Applications as Fluorescent Biological Labels. *Nanoscale Research Letters*, **2011**, 6, 31	5	37
694	Array-orderly single crystalline silicon nano-wires. *Chemical Physics Letters*, **2003**, 367, 528-532	2.5	37
693	Carbon Nanotube-ZnO Nanosphere Heterostructures: Low-Temperature Chemical Reaction Synthesis, Photoluminescence, and Their Application for Room Temperature NH3 Gas Sensor. *Science of Advanced Materials*, **2009**, 1, 13-17	2.3	37
692	High efficiency organic/silicon hybrid solar cells with doping-free selective emitter structure induced by a WO3 thin interlayer. *Nano Energy*, **2015**, 16, 54-61	17.1	36
691	Vertically ordered Ni3Si/Si nanorod arrays as anode materials for high-performance Li-ion batteries. *Nanoscale*, **2012**, 4, 5343-7	7.7	36
690	Optical properties of sputtered hexagonal CdZnO films with band gap energies from 1.8 to 3.3 eV. *Journal of Alloys and Compounds*, **2011**, 509, 6599-6602	5.7	36
689	Sequential occurrence of ZnO nanopaticles, nanorods, and nanotips during hydrothermal process in a dilute aqueous solution. *Materials Letters*, **2005**, 59, 3393-3397	3.3	36
688	Hydrothermal synthesis of flower-like Bi2S3with nanorods in the diameter region of 30 nm. *Nanotechnology*, **2004**, 15, 1122-1125	3.4	36
687	Single-crystalline SnS2nano-belts fabricated by a novel hydrothermal method. *Journal of Physics Condensed Matter*, **2003**, 15, L661-L665	1.8	36
686	Electron-beam-induced current study of hydrogen passivation on grain boundaries in multicrystalline silicon: Influence of GB character and impurity contamination. *Physica B: Condensed Matter*, **2005**, 364, 162-169	2.8	36
685	Higher quality mono-like cast silicon with induced grain boundaries. *Solar Energy Materials and Solar Cells*, **2015**, 140, 121-125	6.4	35
684	Effect of tin on point defects and oxygen precipitation in Czochralski silicon: Experimental and theoretical studies. *Journal of Applied Physics*, **2013**, 113, 093511	2.5	35
683	Strain-induced Stranski-Krastanov growth of Pd@Pt core-shell hexapods and octapods as electrocatalysts for methanol oxidation. *Nanoscale*, **2017**, 9, 11077-11084	7.7	35
682	Fluorine-Passivated Silicon Nanocrystals: Surface Chemistry versus Quantum Confinement. *Journal of Physical Chemistry C*, **2012**, 116, 5401-5406	3.8	35
681	Synthesis of Co3O4@SnO2@C core-shell nanorods with superior reversible lithium-ion storage. *RSC Advances*, **2012**, 2, 9511	3.7	35
680	Star-shaped PbS crystals fabricated by a novel hydrothermal method. *Journal of Physics Condensed Matter*, **2003**, 15, 7611-7615	1.8	35
679	Synthesis of aluminium borate nanowires by sol–gel method. *Materials Research Bulletin*, **2005**, 40, 1551-1557	5.1	35
678	Oxygen precipitation in nitrogen-doped Czochralski silicon. *Physica B: Condensed Matter*, **1999**, 273-274, 308-311	2.8	35

677	Seed-mediated growth of Au nanorings with size control on Pd ultrathin nanosheets and their tunable surface plasmonic properties. *Nanoscale*, **2016**, 8, 3704-10	7.7	34
676	A high-quality round-shaped monolayer MoS2 domain and its transformation. *Nanoscale*, **2016**, 8, 219-25	7.7	34
675	Low-voltage driven ~1.54 μm electroluminescence from erbium-doped ZnO/p+-Si heterostructured devices: Energy transfer from ZnO host to erbium ions. *Applied Physics Letters*, **2013**, 102, 181111	3.4	34
674	General Layer-By-Layer Approach To Composite Nanotubes and Their Enhanced Lithium-Storage and Gas-Sensing Properties. *Chemistry of Materials*, **2009**, 21, 5264-5271	9.6	34
673	Silicon nanowires fabricated by thermal evaporation of silicon monoxide. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 23, 131-134	3	34
672	A critical SiO layer on Si porous structures to construct highly-reversible anode materials for lithium-ion batteries. *Chemical Communications*, **2017**, 53, 6101-6104	5.8	33
671	Doping Si nanocrystals embedded in SiO2 with P in the framework of density functional theory. *Physical Review B*, **2014**, 89,	3.3	33
670	Layer-by-layer assembly synthesis of ZnO/SnO2 composite nanowire arrays as high-performance anode for lithium-ion batteries. *Materials Research Bulletin*, **2011**, 46, 2378-2384	5.1	33
669	Ni3Si2Si nanowires on Ni foam as a high-performance anode of Li-ion batteries. *Electrochemistry Communications*, **2011**, 13, 1443-1446	5.1	33
668	General solution route for nanoplates of hexagonal oxide or hydroxide. *Journal of Physical Chemistry B*, **2006**, 110, 11196-8	3.4	33
667	Ink Engineering of Inkjet Printing Perovskite. *ACS Applied Materials & Interfaces*, **2020**, 12, 39082-39091	9.5	33
666	Facile synthesis of Ru-decorated Pt cubes and icosahedra as highly active electrocatalysts for methanol oxidation. *Nanoscale*, **2016**, 8, 12812-8	7.7	32
665	Synthesis of flower-like CdS nanostructures by organic-free hydrothermal process and their optical properties. *Materials Letters*, **2007**, 61, 3507-3510	3.3	32
664	13.7% Efficiency graphene/gallium arsenide Schottky junction solar cells with a P3HT hole transport layer. *Nano Energy*, **2015**, 16, 91-98	17.1	31
663	A ternary organic electron transport layer for efficient and photostable perovskite solar cells under full spectrum illumination. *Journal of Materials Chemistry A*, **2018**, 6, 5566-5573	13	31
662	The location and doping effect of boron in Si nanocrystals embedded silicon oxide film. *Applied Physics Letters*, **2013**, 102, 123108	3.4	31
661	Synthesis of hexagonal structured wurtzite and chalcopyrite CuInS2 via a simple solution route. *Nanoscale Research Letters*, **2011**, 6, 562	5	31
660	A Versatile Approach for the Synthesis of ZnO Nanorod-Based Hybrid Nanomaterials via Layer-by-Layer Assembly. *Journal of Physical Chemistry C*, **2009**, 113, 8147-8151	3.8	31

659	Sonochemical synthesis of amorphous long silver sulfide nanowires. *Materials Letters*, **2007**, 61, 235-238	3.3	31
658	Texturization of cast multicrystalline silicon for solar cells. *Semiconductor Science and Technology*, **2004**, 19, 485-489	1.8	31
657	Silicon-nanocrystal-incorporated ternary hybrid solar cells. *Nano Energy*, **2016**, 26, 305-312	17.1	31
656	Large-scale synthesis of Ag□Si core□hell nanowall arrays as high-performance anode materials of Li-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 13949-13954	13	30
655	Water-Dispersible Silicon-Quantum-Dot-Containing Micelles Self-Assembled from an Amphiphilic Polymer. *Particle and Particle Systems Characterization*, **2014**, 31, 751-756	3.1	30
654	Enhancement effect of germanium on oxygen precipitation in Czochralski silicon. *Journal of Applied Physics*, **2006**, 99, 073509	2.5	30
653	Germanium effect on oxygen precipitation in Czochralski silicon. *Journal of Applied Physics*, **2004**, 96, 4161-4165	2.5	30
652	Shape and phase control of CdS nanocrystals using cationic surfactant in noninjection synthesis. *Nanoscale Research Letters*, **2011**, 6, 374	5	29
651	Labeling transplanted mice islet with polyvinylpyrrolidone coated superparamagnetic iron oxide nanoparticles for in vivo detection by magnetic resonance imaging. *Nanotechnology*, **2009**, 20, 365101	3.4	29
650	Localized surface plasmon enhanced photoluminescence from ZnO films: Extraction direction and emitting layer thickness. *Journal of Applied Physics*, **2009**, 106, 063120	2.5	29
649	The effect of germanium doping on oxygen donors in Czochralski-grown silicon. *Journal of Physics Condensed Matter*, **2004**, 16, 5745-5750	1.8	29
648	Graphene coupled with Pt cubic nanoparticles for high performance, air-stable graphene-silicon solar cells. *Nano Energy*, **2017**, 32, 225-231	17.1	28
647	An Interlayer with Strong Pb-Cl Bond Delivers Ultraviolet-Filter-Free, Efficient, and Photostable Perovskite Solar Cells. *IScience*, **2019**, 21, 217-227	6.1	28
646	Porous silicon in carbon cages as high-performance lithium-ion battery anode Materials. *Electrochimica Acta*, **2017**, 252, 438-445	6.7	28
645	Formation of nanostructured emitter for silicon solar cells using catalytic silver nanoparticles. *Applied Surface Science*, **2013**, 264, 621-624	6.7	28
644	Preparation of echinus-like SiO2@Ag structures with the aid of the HCP phase. *Chemical Communications*, **2011**, 47, 5169-71	5.8	28
643	Cobalt ferrite nanorings: Ostwald ripening dictated synthesis and magnetic properties. *Chemical Communications*, **2008**, 5648-50	5.8	28
642	Controlling the growth and field emission properties of silicide nanowire arrays by direct silicification of Ni foil. *Nanotechnology*, **2008**, 19, 375602	3.4	28

641	Kinetically-controlled growth of cubic and octahedral Rh-Pd alloy oxygen reduction electrocatalysts with high activity and durability. *Nanoscale*, **2015**, 7, 301-7	7.7	27
640	Carbon dioxide as a green carbon source for the synthesis of carbon cages encapsulating porous silicon as high performance lithium-ion battery anodes. *Nanoscale*, **2018**, 10, 5626-5633	7.7	27
639	Tunable surface plasmon resonance frequencies of monodisperse indium tin oxide nanoparticles by controlling composition, size, and morphology. *Nanoscale Research Letters*, **2014**, 9, 547	5	27
638	Low-voltage driven visible and infrared electroluminescence from light-emitting device based on Er-doped TiO2/p+-Si heterostructure. *Applied Physics Letters*, **2012**, 100, 031103	3.4	27
637	A facile two-step hydrothermal route for the synthesis of □Fe2O3 nanocrystals and their magnetic properties. *Journal of Materials Science*, **2007**, 42, 9205-9209	4.3	27
636	Correlation between luminescence and structural evolution of Si-rich silicon oxide film annealed at different temperatures. *Journal of Applied Physics*, **2007**, 101, 103504	2.5	27
635	Formation of pnp bipolar structure by thermal donors in nitrogen-containing p-type Czochralski silicon wafers. *Applied Physics Letters*, **2002**, 81, 496-498	3.4	27
634	Tuning Surface Structure of PdPb/Pt Pb Nanocrystals for Boosting the Methanol Oxidation Reaction. *Advanced Science*, **2019**, 6, 1902249	13.6	26
633	Freestanding doped silicon nanocrystals synthesized by plasma. *Journal Physics D: Applied Physics*, **2015**, 48, 314006	3	26
632	Density functional theory study on boron- and phosphorus-doped hydrogen-passivated silicene. *Physical Chemistry Chemical Physics*, **2015**, 17, 4146-51	3.6	26
631	Multimetallic AuPd@Pd@Pt core-interlayer-shell icosahedral electrocatalysts for highly efficient oxygen reduction reaction. *Science Bulletin*, **2018**, 63, 494-501	10.6	26
630	CHNHPbBr Quantum Dot-Induced Nucleation for High Performance Perovskite Light-Emitting Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 22320-22328	9.5	26
629	Nanostructured hybrid cobalt oxide/copper electrodes of lithium-ion batteries with reversible high-rate capabilities. *Journal of Alloys and Compounds*, **2012**, 521, 83-89	5.7	26
628	Hydrothermal Synthesis and Photoluminescence Properties of La2□EuxSn2O7 (x=0□1.0) Nanocrystals. *Journal of the American Ceramic Society*, **2007**, 90, 3095-3098	3.8	26
627	Raman spectrum of array-ordered crystalline silicon nanowires. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 23, 221-225	3	26
626	Atomistic Surface Passivation of CHNHPbI Perovskite Single Crystals for Highly Sensitive Coplanar-Structure X-Ray Detectors. *Research*, **2020**, 2020, 5958243	7.8	26
625	An inverted planar solar cell with 13% efficiency and a sensitive visible light detector based on orientation regulated 2D perovskites. *Journal of Materials Chemistry A*, **2018**, 6, 24633-24640	13	26
624	Multicrystalline silicon crystal assisted by silicon flakes as seeds. *Solar Energy Materials and Solar Cells*, **2018**, 174, 202-205	6.4	25

623	Tailoring the Edge Sites of 2D Pd Nanostructures with Different Fractal Dimensions for Enhanced Electrocatalytic Performance. *Advanced Science*, **2018**, 5, 1800430	13.6	25
622	Surface modification of chlorine-passivated silicon nanocrystals. *Physical Chemistry Chemical Physics* , **2013**, 15, 1815-20	3.6	25
621	Reflectivity of porous-pyramids structured silicon surface. *Applied Surface Science*, **2010**, 257, 472-475	6.7	25
620	Influence of germanium doping on the mechanical strength of Czochralski silicon wafers. *Journal of Applied Physics*, **2008**, 103, 123521	2.5	25
619	Strain-Induced Corrosion Kinetics at Nanoscale Are Revealed in Liquid: Enabling Control of Corrosion Dynamics of Electrocatalysis. *CheM*, **2020**, 6, 2257-2271	16.2	24
618	Large-scale synthesis of silicon arrays of nanowire on titanium substrate as high-performance anode of Li-ion batteries. *Journal of Alloys and Compounds*, **2012**, 526, 53-58	5.7	24
617	Functionalization of carbon nanotubes with magnetic nanoparticles: general nonaqueous synthesis and magnetic properties. *Nanotechnology*, **2008**, 19, 315604	3.4	24
616	Photoluminescence of Tb3+ doped SiNx films grown by plasma-enhanced chemical vapor deposition. *Journal of Applied Physics*, **2006**, 100, 083106	2.5	24
615	Low temperature chemical reaction synthesis of single-crystalline Eu(OH)3nanorods and their thermal conversion to Eu2O3nanorods. *Nanotechnology*, **2007**, 18, 065605	3.4	24
614	Electrophotoluminescence of ZnO film. *Applied Physics Letters*, **2007**, 91, 021105	3.4	24
613	Intrinsic gettering in germanium-doped Czochralski crystal silicon crystals. *Journal of Crystal Growth* , **2003**, 250, 359-363	1.6	24
612	Simple Near-Infrared Electron Acceptors for Efficient Photovoltaics and Sensitive Photodetectors. *ACS Applied Materials & Interfaces*, **2020**, 12, 39515-39523	9.5	24
611	Ambient Engineering for High-Performance Organic-Inorganic Perovskite Hybrid Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 21505-11	9.5	24
610	Single-crystalline Pd square nanoplates enclosed by {100} facets on reduced graphene oxide for formic acid electro-oxidation. *Chemical Communications*, **2016**, 52, 14204-14207	5.8	23
609	Multicolor and near-infrared electroluminescence from the light-emitting devices with rare-earth doped TiO2 films. *Applied Physics Letters*, **2015**, 107, 131103	3.4	23
608	Voltage-controlled synthesis of Cu□i2O@Si core□hell nanorod arrays as high-performance anodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 20510-20514	13	23
607	Modulation of atomic-layer-deposited Al2O3 film passivation of silicon surface by rapid thermal processing. *Applied Physics Letters*, **2011**, 99, 052103	3.4	23
606	A General Approach for Uniform Coating of a Metal Layer on MWCNTs via Layer-by-Layer Assembly. *Journal of Physical Chemistry C*, **2009**, 113, 17387-17391	3.8	23

605	Temperature dependence of the first-order Raman scattering in silicon nanowires. *Scripta Materialia*, **2006**, 55, 183-186	5.6	23
604	Donor formation in nitrogen doped silicon. *Journal of Applied Physics*, **1996**, 80, 1493-1498	2.5	23
603	Local epitaxial growth of Au-Rh core-shell star-shaped decahedra: A case for studying electronic and ensemble effects in hydrogen evolution reaction. *Applied Catalysis B: Environmental*, **2020**, 263, 118255	21.8	23
602	Amine treatment induced perovskite nanowire network in perovskite solar cells: efficient surface passivation and carrier transport. *Nanotechnology*, **2018**, 29, 065401	3.4	23
601	Morphology and composition controlled synthesis of flower-like silver nanostructures. *Nanoscale Research Letters*, **2014**, 9, 302	5	22
600	SiGe porous nanorod arrays as high-performance anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2013**, 577, 564-568	5.7	22
599	Synthesis of SiGe-based three-dimensional nanoporous electrodes for high performance lithium-ion batteries. *Journal of Power Sources*, **2013**, 229, 185-189	8.9	22
598	Field emission performance enhancement of Au nanoparticles doped graphene emitters. *Applied Physics Letters*, **2013**, 103, 233105	3.4	22
597	Suppression of boron□oxygen defects in p-type Czochralski silicon by germanium doping. *Applied Physics Letters*, **2010**, 97, 051903	3.4	22
596	Hybrid nanostructures of Au nanocrystals and ZnO nanorods: Layer-by-layer assembly and tunable blue-shift band gap emission. *Materials Research Bulletin*, **2009**, 44, 889-892	5.1	22
595	Germanium-doped Czochralski silicon for photovoltaic applications. *Solar Energy Materials and Solar Cells*, **2011**, 95, 2466-2470	6.4	22
594	Preparation of metal@silica core-shell particle films by interfacial self-assembly. *Journal of Colloid and Interface Science*, **2010**, 350, 58-62	9.3	22
593	Hydrothermal Synthesis and Characterization of Zirconia Nanocrystallites. *Journal of the American Ceramic Society*, **2007**, 90, 1334-1338	3.8	22
592	Thermal-desorption induced enhancement and patterning of ultraviolet emission in chemically grown ZnO. *Nanotechnology*, **2006**, 17, 2789-2793	3.4	22
591	347nm ultraviolet electroluminescence from MgxZn1□O-based light emitting devices. *Applied Physics Letters*, **2007**, 90, 251115	3.4	22
590	Carbon-assisted synthesis of aligned ZnO nanowires. *Materials Letters*, **2005**, 59, 2710-2714	3.3	22
589	Effect of intrinsic point defects on copper precipitation in large-diameter Czochralski silicon. *Applied Physics Letters*, **2003**, 83, 3048-3050	3.4	22
588	Photoluminescence of oxidized porous silicon under UV-light illumination. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2005**, 116, 95-98	3.1	22

587	Formation of a denuded zone in nitrogen-doped Czochralski silicon wafer treated by ramping anneals. *Semiconductor Science and Technology*, **2005**, 20, 228-232	1.8	22
586	A versatile solution route for oxide/sulfide core–shell nanostructures and nonlayered sulfide nanotubes. *Nanotechnology*, **2005**, 16, 2721-2725	3.4	22
585	Stabilizing Fullerene for Burn-in-Free and Stable Perovskite Solar Cells under Ultraviolet Preconditioning and Light Soaking. *Advanced Materials*, **2021**, 33, e2006910	24	22
584	High and Fast Response of a Graphene–Silicon Photodetector Coupled with 2D Fractal Platinum Nanoparticles. *Advanced Optical Materials*, **2018**, 6, 1700793	8.1	22
583	Silicon-Quantum-Dot Light-Emitting Diodes With Interlayer-Enhanced Hole Transport. *IEEE Photonics Journal*, **2017**, 9, 1-10	1.8	21
582	Size-dependent magnetic properties of branchlike nickel oxide nanocrystals. *AIP Advances*, **2017**, 7, 015028	1.8	21
581	Magnetic-fluorescent nanohybrids of carbon nanotubes coated with Eu, Gd co-doped LaF3 as a multimodal imaging probe. *Journal of Colloid and Interface Science*, **2012**, 367, 61-6	9.3	21
580	Fabrication of TiO2 nanorod array/semiconductor nanocrystal hybrid structure for photovoltaic applications. *Solar Energy*, **2012**, 86, 1359-1365	6.8	21
579	Enhanced solar energy conversion in Au-doped, single-wall carbon nanotube-Si heterojunction cells. *Nanoscale Research Letters*, **2013**, 8, 225	5	21
578	Synthesis of NixSiy–SiGe core–shell nanowire arrays on Ni foam as a high-performance anode for Li-ion batteries. *RSC Advances*, **2013**, 3, 7713	3.7	21
577	Enhancement of light-extraction efficiency of SiNx light emitting devices through a rough Ag island film. *Applied Physics Letters*, **2012**, 100, 031113	3.4	21
576	Functionalization of ZnO nanorods with α-Fe2O3 nanoparticles: Layer-by-layer synthesis, optical and magnetic properties. *Materials Chemistry and Physics*, **2010**, 124, 908-911	4.4	21
575	Crystallization and disappearance of defects of the annealed silicon nanowires. *Microelectronic Engineering*, **2003**, 66, 65-69	2.5	21
574	Defects in germanium-doped Czochralski silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, 931-938	1.6	21
573	Fulleropyrrolidinium Iodide As an Efficient Electron Transport Layer for Air-Stable Planar Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 34612-34619	9.5	21
572	Density functional theory study on the B doping and B/P codoping of Si nanocrystals embedded in SiO2. *Physical Review B*, **2017**, 95,	3.3	20
571	Surface plasmon enhanced luminescence from organic-inorganic hybrid perovskites. *Applied Physics Letters*, **2017**, 110, 233113	3.4	20
570	Efficiency improvement of silicon solar cells enabled by ZnO nanowhisker array coating. *Nanoscale Research Letters*, **2012**, 7, 306	5	20

569	One-dimensional hybrid nanostructures: synthesis via layer-by-layer assembly and applications. *Nanoscale*, **2012**, 4, 5517-26	7.7	20
568	Remarkable decrease in threshold for electrically pumped random ultraviolet lasing from ZnO film by incorporation of Zn2TiO4 nanoparticles. *Optics Express*, **2011**, 19, 8662-9	3.3	20
567	The effect of impurity-induced lattice strain and Fermi level position on low temperature oxygen diffusion in silicon. *Journal of Applied Physics*, **2011**, 109, 063532	2.5	20
566	Fabrication and characterization of CuInS2 films by chemical bath deposition in acid conditions. *Journal of Materials Science: Materials in Electronics*, **2009**, 20, 609-613	2.1	20
565	Microcrystalline silicon carbide thin films grown by HWCVD at different filament temperatures and their application in n-i-p microcrystalline silicon solar cells. *Thin Solid Films*, **2009**, 517, 3513-3515	2.2	20
564	Electrically pumped ultraviolet random lasing from ZnO-based metal-insulator-semiconductor devices: dependence on carrier transport. *Optics Express*, **2009**, 17, 4712-7	3.3	20
563	Enhancement of electroluminescence from TiO2/p+-Si heterostructure-based devices through engineering of oxygen vacancies in TiO2. *Applied Physics Letters*, **2009**, 95, 252102	3.4	20
562	Noninjection Synthesis of CdS and Alloyed CdSxSe1-xNanocrystals Without Nucleation Initiators. *Nanoscale Research Letters*, **2010**, 5, 966-71	5	20
561	Influence of substrates in ZnO devices on the surface plasmon enhanced light emission. *Optics Express*, **2008**, 16, 8896-901	3.3	20
560	A model for distribution of oxygen in multicrystalline silicon ingot grown by directional solidification. *Solar Energy Materials and Solar Cells*, **2007**, 91, 1688-1691	6.4	20
559	Electron-beam-induced current study of grain boundaries in multicrystalline Si. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 2908-2917		20
558	Micro-defects in Ge doped Czochralski grown Si crystals. *Journal of Crystal Growth*, **2006**, 292, 266-271	1.6	20
557	Crystalline boron oxide nanowires on silicon substrate. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 27, 319-324	3	20
556	Density functional theory study on organically surface-modified silicene. *RSC Advances*, **2015**, 5, 33831-33837	3.7	19
555	Interface engineering and efficiency improvement of monolayer graphene–silicon solar cells by inserting an ultra-thin LiF interlayer. *RSC Advances*, **2015**, 5, 46480-46484	3.7	19
554	Wet-chemical synthesized MCMB@Si@C microspheres for high-performance lithium-ion battery anodes. *Chemical Communications*, **2018**, 54, 9466-9469	5.8	19
553	Solvation effect in precursor solution enables over 16% efficiency in thick 2D perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 19423-19429	13	19
552	Improved cyclic stability of Mg2Si by direct carbon coating as anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2014**, 587, 807-811	5.7	19

551	Efficiency improvement of crystalline silicon solar cells with a back-surface field produced by boron and aluminum co-doping. *Scripta Materialia*, **2012**, 66, 394-397	5.6	19
550	Experimental evidence of staggered oxygen dimers as a component of boron-oxygen complexes in silicon. *Applied Physics Letters*, **2013**, 102, 082107	3.4	19
549	Synthesis and characterization of single crystalline MnOOH and MnO2 nanorods by means of the hydrothermal process assisted with CTAB. *Materials Letters*, **2006**, 60, 3895-3898	3.3	19
548	Copper precipitation in large-diameter Czochralski silicon. *Journal of Applied Physics*, **2005**, 97, 094909	2.5	19
547	A simple and novel low-temperature hydrothermal synthesis of ZnO nanorods. *Inorganic Materials*, **2006**, 42, 1210-1214	0.9	19
546	Visible-blind short-wavelength infrared photodetector with high responsivity based on hyperdoped silicon. *Photonics Research*, **2019**, 7, 351	6	19
545	Self-Powered FA0.55MA0.45PbI3 Single-Crystal Perovskite X-Ray Detectors with High Sensitivity. *Advanced Functional Materials*,2109149	15.6	19
544	Structures, Oxidation, and Charge Transport of Phosphorus-Doped Germanium Nanocrystals. *Particle and Particle Systems Characterization*, **2016**, 33, 271-278	3.1	19
543	Electrochemical synthesis of SnCo alloy shells on orderly rod-shaped Cu current collectors as anode materials for lithium-ion batteries with enhanced performance. *Journal of Alloys and Compounds*, **2013**, 570, 119-124	5.7	18
542	Bidirectional direct-current electroluminescence from i-MgxZn1−xO/n-ZnO/SiOx double-barrier heterostructures on Si. *Applied Physics Letters*, **2009**, 94, 061110	3.4	18
541	Crystallization behaviors of TiO2 films derived from thermal oxidation of evaporated and sputtered titanium films. *Journal of Alloys and Compounds*, **2009**, 480, 938-941	5.7	18
540	Reductive hydrothermal synthesis of La(OH)3:Tb3+ nanorods as a new green emitting phosphor. *Journal of Nanoparticle Research*, **2008**, 10, 307-312	2.3	18
539	Aligned single crystal MgB2nanowires. *Superconductor Science and Technology*, **2004**, 17, L31-L33	3.1	18
538	Effect of rapid thermal process on oxygen precipitation and denuded zone in nitrogen-doped silicon wafers. *Microelectronic Engineering*, **2003**, 69, 97-104	2.5	18
537	Some critical factors in the synthesis of CdS nanorods by hydrothermal process. *Materials Letters*, **2005**, 59, 3037-3041	3.3	18
536	Oxygen-related centers in multicrystalline silicon. *Solar Energy Materials and Solar Cells*, **2000**, 62, 37-42	6.4	18
535	Intermetallic Pd3Pb square nanoplates as highly efficient electrocatalysts for oxygen reduction reaction. *CrystEngComm*, **2019**, 21, 290-296	3.3	17
534	Self-generation of a quasi p–n junction for high efficiency chemical-doping-free graphene/silicon solar cells using a transition metal oxide interlayer. *Journal of Materials Chemistry A*, **2016**, 4, 10558-10565	13	17

533	Room temperature ferromagnetism of amorphous MgO films prepared by pulsed laser deposition. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 997-1001	2.6	17
532	Firmly bonded graphene–silicon nanocomposites as high-performance anode materials for lithium-ion batteries. *RSC Advances*, **2015**, 5, 46173-46180	3.7	17
531	Effects of heavy phosphorus-doping on mechanical properties of Czochralski silicon. *Journal of Applied Physics*, **2010**, 107, 123503	2.5	17
530	Enhanced electroluminescence of silicon-rich silicon nitride light-emitting devices by NH3 plasma and annealing treatment. *Physica E: Low-Dimensional Systems and Nanostructures*, **2009**, 41, 920-922	3	17
529	Wetting behaviors and applications of metal-catalyzed CVD grown graphene. *Journal of Materials Chemistry A*, **2018**, 6, 22437-22464	13	17
528	PdCu alloy nanodendrites with tunable composition as highly active electrocatalysts for methanol oxidation. *RSC Advances*, **2017**, 7, 5800-5806	3.7	16
527	Performance Improvement of Graphene/Silicon Photodetectors Using High Work Function Metal Nanoparticles with Plasma Effect. *Advanced Optical Materials*, **2018**, 6, 1701243	8.1	16
526	Controlled synthesis of luminescent CuInS2 nanocrystals and their optical properties. *Journal of Luminescence*, **2012**, 132, 313-317	3.8	16
525	Growth and photoelectrochemical properties of ordered CuInS2 nanorod arrays. *Chemical Communications*, **2012**, 48, 4746-8	5.8	16
524	Phase-controlled synthesis of nickel silicide nanostructures. *Materials Research Bulletin*, **2012**, 47, 3797-3803	3.1	16
523	On the assumed impact of germanium doping on void formation in Czochralski-grown silicon. *Journal of Applied Physics*, **2010**, 108, 123501	2.5	16
522	Electrically pumped wavelength-tunable ultraviolet random lasing from Mg(x)Zn(1-x)O films on Si. *Optics Express*, **2010**, 18, 10668-73	3.3	16
521	Oxygen precipitation heterogeneously nucleating on silicon phosphide precipitates in heavily phosphorus-doped Czochralski silicon. *Journal of Applied Physics*, **2009**, 105, 093503	2.5	16
520	Improved fracture strength of multicrystalline silicon by germanium doping. *Journal of Crystal Growth*, **2011**, 318, 230-233	1.6	16
519	Tiny SiO2 nano-wires synthesized on Si (111) wafer. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 23, 1-4	3	16
518	Highly Pure and Luminescent Graphene Quantum Dots on Silicon Directly Grown by Chemical Vapor Deposition. *Particle and Particle Systems Characterization*, **2016**, 33, 8-14	3.1	16
517	Vacuum co-deposited CH3NH3PbI3 films by controlling vapor pressure for efficient planar perovskite solar cells. *Solar Energy*, **2019**, 181, 339-344	6.8	16
516	Illumination-Induced Hole Doping for Performance Improvement of Graphene/n-Silicon Solar Cells with P3HT Interlayer. *Advanced Electronic Materials*, **2017**, 3, 1600516	6.4	15

515	Enhanced optoelectronic quality of perovskite films with excess CHNHI for high-efficiency solar cells in ambient air. *Nanotechnology*, **2017**, 28, 205401	3.4	15
514	Ultra-small Rh nanoparticles supported on WO3 nanowires as efficient catalysts for visible-light-enhanced hydrogen evolution from ammonia borane. *Nanoscale Advances*, **2019**, 1, 3941-3947	5.1	15
513	Developing near-infrared quantum-dot light-emitting diodes to mimic synaptic plasticity. *Science China Materials*, **2019**, 62, 1470-1478	7.1	15
512	Seed-Assisted Growth of Cast-Mono Silicon for Photovoltaic Application: Challenges and Strategies. *Solar Rrl*, **2020**, 4, 1900486	7.1	15
511	Simple synthesis of SiGe@C porous microparticles as high-rate anode materials for lithium-ion batteries. *RSC Advances*, **2017**, 7, 33837-33842	3.7	15
510	Sub-2nm SnO2 nanocrystals: A reduction/oxidation chemical reaction synthesis and optical properties. *Materials Research Bulletin*, **2008**, 43, 3164-3170	5.1	15
509	Intrinsic gettering Based on rapid thermal annealing in germanium-doped Czochralski silicon. *Journal of Applied Physics*, **2007**, 101, 033526	2.5	15
508	Hydrothermal synthesis and characterization of novel aloe-like SnS2 nanostructures. *Journal of Materials Science*, **2006**, 41, 3489-3492	4.3	15
507	Influence of copper precipitation on oxygen precipitation in Czochralski silicon. *Semiconductor Science and Technology*, **2004**, 19, 299-305	1.8	15
506	Elimination of Interfacial-Electrochemical-Reaction-Induced Polarization in Perovskite Single Crystals for Ultrasensitive and Stable X-Ray Detector Arrays. *Advanced Materials*, **2021**, e2103078	24	15
505	Facile synthesis of Pd@Ru nanoplates with controlled thickness as efficient catalysts for hydrogen evolution reaction. *CrystEngComm*, **2018**, 20, 4230-4236	3.3	15
504	Bioinspired molecules design for bilateral synergistic passivation in buried interfaces of planar perovskite solar cells. *Nano Research*,1	10	15
503	Electroluminescence from metal-oxide-semiconductor devices with erbium-doped CeO2 films on silicon. *Applied Physics Letters*, **2015**, 106, 141102	3.4	14
502	Effect of dopant compensation on the performance of Czochralski silicon solar cells. *Solar Energy Materials and Solar Cells*, **2012**, 101, 102-106	6.4	14
501	Low-cost fabrication of Cu2ZnSnS4 thin films for solar cell absorber layers. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 548-552	2.1	14
500	Two-peak characteristic distribution of iron impurities at the bottom of cast quasi-single-crystalline silicon ingot. *Scripta Materialia*, **2013**, 68, 655-657	5.6	14
499	Electrically pumped random lasing from hydrothermal ZnO films of large grains. *Applied Surface Science*, **2015**, 332, 620-624	6.7	14
498	Light-induced degradation in n-type Czochralski silicon by boron-doping and thermal donor compensation. *Journal of Applied Physics*, **2012**, 112, 084509	2.5	14

497	Lightly boron and phosphorus co-doped silicon nanocrystals. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	14
496	Formation of Various Pyramidal Structures on Monocrystalline Silicon Surface and Their Influence on the Solar Cells. *Journal of Nanomaterials*, **2013**, 2013, 1-5	3.2	14
495	Chemical synthesis of Cu(In) metal inks to prepare CuInS2 thin films and solar cells. *Journal of Alloys and Compounds*, **2010**, 507, 317-321	5.7	14
494	Impurity engineering of Czochralski silicon used for ultra large-scaled-integrated circuits. *Journal of Crystal Growth*, **2009**, 311, 837-841	1.6	14
493	Electrically tunable electroluminescence from SiN(x)-based light-emitting devices. *Optics Express*, **2012**, 20, 17359-66	3.3	14
492	Electroluminescence from TiO2/p+-Si heterostructure. *Applied Physics Letters*, **2009**, 94, 061115	3.4	14
491	Nitrogen□Oxygen Complexes in Silicon. *Physica Status Solidi (B): Basic Research*, **1998**, 210, 295-299	1.3	14
490	Cathodoluminescence and its mapping of flower-like ZnO, ZnO/ZnS core□shell and tube-like ZnS nanostructures. *Materials Research Bulletin*, **2007**, 42, 1286-1292	5.1	14
489	Precise fabrication of point defects in self-assembled three-dimensional macroporous photonic crystals. *Journal of Physical Chemistry B*, **2006**, 110, 1107-10	3.4	14
488	Porous Si@C coaxial nanotubes: layer-by-layer assembly on ZnO nanorod templates and application to lithium-ion batteries. *CrystEngComm*, **2017**, 19, 1220-1229	3.3	13
487	Room-temperature processed, air-stable and highly efficient graphene/silicon solar cells with an organic interlayer. *Journal of Materials Chemistry A*, **2016**, 4, 11284-11291	13	13
486	Light-emitting diodes based on colloidal silicon quantum dots. *Journal of Semiconductors*, **2018**, 39, 061008	2.3	13
485	Building a Bridge from Papermaking to Solar Fuels. *Angewandte Chemie - International Edition*, **2019**, 58, 14850-14854	16.4	13
484	A review on graphene-silicon Schottky junction interface. *Journal of Alloys and Compounds*, **2019**, 806, 63-70	5.7	13
483	Enhancement of room temperature dislocation-related photoluminescence of electron irradiated silicon. *Journal of Applied Physics*, **2013**, 113, 033518	2.5	13
482	Impact of rapid thermal processing on oxygen precipitation in heavily arsenic and antimony doped Czochralski silicon. *Journal of Applied Physics*, **2013**, 113, 163510	2.5	13
481	Size controllable synthesis of ultrafine silver particles through a one-step reaction. *Materials Letters*, **2011**, 65, 628-631	3.3	13
480	Electrically pumped ultraviolet random lasing from ZnO films: Compensation between optical gain and light scattering. *Applied Physics Letters*, **2010**, 97, 251115	3.4	13

479	Ge-vacancy pair in Ge-doped Czochralski silicon. *Journal of Applied Physics*, **2008**, 103, 123519	2.5	13
478	Microcrystalline silicon-carbon alloys as anti-reflection window layers in high efficiency thin film silicon solar cells. *Physica Status Solidi - Rapid Research Letters*, **2008**, 2, 160-162	2.5	13
477	Effect of annealing on photoluminescence of passivated porous silicon. *Solid-State Electronics*, **2006** , 50, 1529-1531	1.7	13
476	Germanium effect on as-grown oxygen precipitation in Czochralski silicon. *Journal of Crystal Growth* , **2006**, 291, 66-71	1.6	13
475	Hydrogen annealing of grown-in voids in nitrogen-doped Czochralski grown silicon. *Semiconductor Science and Technology*, **2003**, 18, 399-403	1.8	13
474	Crystallization and Raman Shift of Array-Orderly Silicon Nanowires after Annealing at High Temperature. *Japanese Journal of Applied Physics*, **2004**, 43, 4460-4461	1.4	13
473	Sulfide-assisted growth of silicon nano-wires by thermal evaporation of sulfur powders. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 24, 278-281	3	13
472	Facile synthesis of PtCu3 alloy hexapods and hollow nanoframes as highly active electrocatalysts for methanol oxidation. *CrystEngComm*, **2016**, 18, 7823-7830	3.3	13
471	Ion-templated fabrication of Pt-Cu alloy octahedra with controlled compositions for electrochemical detection of H2O2. *Journal of Alloys and Compounds*, **2019**, 788, 1334-1340	5.7	13
470	Controlling dislocation gliding and propagation in quasi-single crystalline silicon by using -oriented seeds. *Solar Energy Materials and Solar Cells*, **2019**, 193, 214-218	6.4	12
469	Silver□ickel oxide core□shell nanoflower arrays as high-performance anode for lithium-ion batteries. *Journal of Power Sources*, **2015**, 285, 131-136	8.9	12
468	Color-tunable electroluminescence from Eu-doped TiO(2)/p(+)-Si heterostructured devices: engineering of energy transfer. *Optics Express*, **2015**, 23, 2819-26	3.3	12
467	Al2O3-Interlayer-Enhanced Performance of All-Inorganic Silicon-Quantum-Dot Near-Infrared Light-Emitting Diodes. *IEEE Transactions on Electron Devices*, **2018**, 65, 577-583	2.9	12
466	Multicrystalline silicon assisted by polycrystalline silicon slabs as seeds. *Solar Energy Materials and Solar Cells*, **2018**, 179, 312-318	6.4	12
465	Fabrication and photovoltaic conversion enhancement of graphene/n-Si Schottky barrier solar cells by electrophoretic deposition. *Electrochimica Acta*, **2014**, 130, 279-285	6.7	12
464	Grain boundary engineering of high performance multicrystalline silicon: Control of iron contamination at the ingot edge. *Solar Energy Materials and Solar Cells*, **2017**, 171, 131-135	6.4	12
463	A chemical strategy to reinforce electrically pumped ultraviolet random lasing from ZnO films. *Journal of Materials Chemistry*, **2012**, 22, 16738		12
462	Effect of germanium on the kinetics of boron-oxygen defect generation and dissociation in Czochralski silicon. *Applied Physics Letters*, **2010**, 97, 162107	3.4	12

461	Impurity engineering for germanium-doped Czochralski silicon wafer used for ultra large scale integrated circuit. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 625-632		12
460	Investigation of intrinsic gettering for germanium doped Czochralski silicon wafer. *Journal of Applied Physics*, **2007**, 101, 113512	2.5	12
459	Crystallization of amorphous silicon thin films: The effect of rapid thermal processing pretreatment. *Vacuum*, **2006**, 80, 415-420	3.7	12
458	Effect of nitrogen on denuded zone in Czochralski silicon wafer. *Semiconductor Science and Technology*, **2004**, 19, 548-551	1.8	12
457	Control of the formation and luminescent properties of polymorphic erbium silicates on silicon. *Optical Materials Express*, **2019**, 9, 1716	2.6	12
456	Dual-Modal Optoelectronic Synaptic Devices with Versatile Synaptic Plasticity. *Advanced Functional Materials*,2107973	15.6	12
455	Narrowband Near-Infrared Photodetector Enabled by Dual Functional Internal-Filter-Induced Selective Charge Collection. *Advanced Optical Materials*, **2021**, 9, 2100288	8.1	12
454	Progress of Graphene□Silicon Heterojunction Photovoltaic Devices. *Advanced Materials Interfaces*, **2018**, 5, 1801520	4.6	12
453	Formation, Stability, Geometry and Band Structure of Organically Surface-Modified Germanane. *Journal of Materials Science and Technology*, **2017**, 33, 59-64	9.1	11
452	Electroluminescence from silicon-based light-emitting devices with erbium-doped TiO2 films annealed at different temperatures. *Journal of Applied Physics*, **2017**, 122, 163106	2.5	11
451	Designing functional Σ3 grain boundaries at seed junctions for high-quality cast quasi-single crystalline silicon. *Solar Energy Materials and Solar Cells*, **2019**, 200, 109985	6.4	11
450	Enhanced electrochemical properties of Cu3Si-embedded three-dimensional porous Si synthesized by one-pot synthesis. *Journal of Alloys and Compounds*, **2019**, 792, 341-347	5.7	11
449	Effects of oxygen related thermal donors on the performance of silicon heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2018**, 179, 17-21	6.4	11
448	Facile synthesis of high-quality Pt nanostructures with a controlled aspect ratio for methanol electro-oxidation. *CrystEngComm*, **2014**, 16, 8340-8343	3.3	11
447	Towards thinner and low bowing silicon solar cells: form the boron and aluminum co-doped back surface field with thinner metallization film. *Progress in Photovoltaics: Research and Applications*, **2013**, 21, 456-461	6.8	11
446	Density functional theory study on a 1.4 nm silicon nanocrystal coated with carbon. *RSC Advances*, **2012**, 2, 11227	3.7	11
445	Evolution of electroluminescence from silicon nitride light-emitting devices via nanostructural silver. *Nanoscale*, **2013**, 5, 3435-40	7.7	11
444	Constructing Ag nanoparticles□ingle wall carbon hybrid nanostructure to improve field emission properties. *Applied Surface Science*, **2013**, 265, 187-191	6.7	11

443	Cobalt–iron cyanide hollow cubes: Three-dimensional self-assembly and magnetic properties. *Journal of Alloys and Compounds*, **2011**, 509, 8382-8386	5.7	11
442	Highly Conductive p-Type Silicon Carbon Alloys Deposited by Hot-Wire Chemical Vapor Deposition. *Japanese Journal of Applied Physics*, **2010**, 49, 041303	1.4	11
441	Development of microcrystalline silicon carbide window layers by hot-wire CVD and their applications in microcrystalline silicon thin film solar cells. *Thin Solid Films*, **2011**, 519, 4523-4526	2.2	11
440	Effect of oxygen precipitates on dislocation motion in Czochralski silicon. *Journal of Crystal Growth*, **2010**, 312, 169-173	1.6	11
439	Effect of rapid thermal annealing on photoluminescence and crystal structures of CdZnO films. *Journal of Crystal Growth*, **2010**, 312, 1908-1911	1.6	11
438	Surface synthesis of PbS nanoparticles on silica spheres by a sonochemical approach. *Journal of Materials Science*, **2007**, 42, 1376-1380	4.3	11
437	The optical properties of porous silicon produced by metal-assisted anodic etching. *Journal of Materials Science*, **2007**, 42, 8496-8500	4.3	11
436	Effect of heat treatment on carbon in multicrystalline silicon. *Solar Energy Materials and Solar Cells*, **2002**, 72, 541-549	6.4	11
435	Annealing and amorphous silicon passivation of porous silicon with blue light emission. *Applied Surface Science*, **2005**, 252, 1065-1069	6.7	11
434	Infrared absorption of nitrogen–oxygen complex in silicon. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 72, 121-123	3.1	11
433	Electroluminescence from light-emitting devices with erbium-doped TiO2 films: Enhancement effect of yttrium codoping. *Journal of Applied Physics*, **2016**, 120, 163104	2.5	11
432	Interface engineering of C60/ fluorine doped tin oxide on the photovoltaic performance of perovskite solar cells using the physical vapor deposition technique. *Journal Physics D: Applied Physics*, **2019**, 52, 225104	3	11
431	Silicon-based optoelectronic synaptic devices. *Chinese Physics B*, **2020**, 29, 070703	1.2	10
430	Effects of excess silicon on the 1540 nm Er3+ luminescence in silicon rich oxynitride films. *Applied Physics Letters*, **2013**, 103, 071101	3.4	10
429	Energy transfer from luminescent centers to Er3+ in erbium-doped silicon-rich oxide films. *Nanoscale Research Letters*, **2013**, 8, 366	5	10
428	Light-emitting devices based on erbium-doped TiO2/p+-Si heterostructures: Engineering of electroluminescence via aluminum co-doping. *Applied Physics Letters*, **2013**, 102, 021108	3.4	10
427	Doping Silicon Wafers with Boron by Use of Silicon Paste. *Journal of Materials Science and Technology*, **2013**, 29, 652-654	9.1	10
426	An industrial solution to light-induced degradation of crystalline silicon solar cells. *Frontiers in Energy*, **2017**, 11, 67-71	2.6	10

425	Light absorption enhancement of amorphous silicon film coupled with metal nanoshells. *Journal of the Optical Society of America B: Optical Physics*, **2013**, 30, 405	1.7	10
424	Optical absorption and emission of nitrogen-doped silicon nanocrystals. *Nanoscale*, **2011**, 3, 4584-8	7.7	10
423	Improvement in the mechanical performance of Czochralski silicon under indentation by germanium doping. *Scripta Materialia*, **2011**, 64, 832-835	5.6	10
422	Structure of GeD complexes in Czochralski silicon. *Physica B: Condensed Matter*, **2009**, 404, 58-60	2.8	10
421	Improved electroluminescence from silicon nitride light emitting devices by localized surface plasmons. *Optical Materials Express*, **2012**, 2, 872	2.6	10
420	Magnesium catalyzed growth of SiO(2) hierarchical nanostructures by a thermal evaporation process. *Nanotechnology*, **2008**, 19, 165601	3.4	10
419	Effect of silicon interstitials on Cu precipitation in n-type Czochralski silicon. *Journal of Applied Physics*, **2008**, 103, 093534	2.5	10
418	A novel low-temperature chemical solution route for straight and dendrite-like ZnO nanostructures. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2007**, 141, 76-81	3.1	10
417	Aligned single crystal Al-catalyzed boron nanorods on Si substrates. *European Physical Journal B*, **2007**, 56, 35-39	1.2	10
416	Optical properties of single-phase FeSi2 films fabricated by electron beam evaporation. *Applied Surface Science*, **2008**, 254, 4875-4878	6.7	10
415	Transformation mechanism of Te particles into Te nanotubes and nanowires during solvothermal process. *Journal of Crystal Growth*, **2006**, 289, 568-573	1.6	10
414	Effect of light germanium doping on thermal donors in Czochralski silicon wafers. *Materials Science in Semiconductor Processing*, **2006**, 9, 110-113	4.3	10
413	Effects of rapid thermal processing on oxygen precipitation in Czochralski silicon wafer. *Semiconductor Science and Technology*, **2004**, 19, 630-633	1.8	10
412	Photoluminescence properties of the composite of porous alumina and poly (2,5-dibutoxy-1,4 phenylenevinylene). *Journal of Luminescence*, **2003**, 105, 57-60	3.8	10
411	Effect of post-treatment processes on the photoluminescence of porous silicon. *Physica B: Condensed Matter*, **2005**, 364, 180-185	2.8	10
410	Excitation transfer from porous silicon to polymer. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2005**, 121, 229-231	3.1	10
409	Comment on "electronic transport, structure, and energetics of endohedral Gd@C82 metallofullerenes". *Nano Letters*, **2005**, 5, 2340; discussion 2341	11.5	10
408	Rapid-thermal-processing-based intrinsic gettering for nitrogen-doped Czochralski silicon. *Journal of Applied Physics*, **2005**, 98, 084502	2.5	10

407	Thermal acceptor formation in nitrogen-doped silicon. *Applied Physics Letters*, **1991**, 59, 1227-1229	3.4	10
406	Mitigating Ion Migration by Polyethylene Glycol-Modified Fullerene for Perovskite Solar Cells with Enhanced Stability. *ACS Energy Letters*,3864-3872	20.1	10
405	Wetting Behavior of Metal-Catalyzed Chemical Vapor Deposition-Grown One-Dimensional Cubic-SiC Nanostructures. *Langmuir*, **2018**, 34, 5214-5224	4	9
404	Towards green antisolvent for efficient CH3NH3PbBr3 perovskite light emitting diodes: A comparison of toluene, chlorobenzene, and ethyl acetate. *Applied Physics Letters*, **2019**, 115, 033101	3.4	9
403	Single Crystal Perovskite Microplate for High-Order Multiphoton Excitation. *Small Methods*, **2019**, 3, 1900286	12.8	9
402	Germanium-doped crystalline silicon: Effects of germanium doping on boron-related defects. *Journal of Crystal Growth*, **2014**, 401, 141-145	1.6	9
401	First-Principles Study of Interstitial Boron and Oxygen Dimer Complex in Silicon. *Applied Physics Express*, **2013**, 6, 041301	2.4	9
400	Synthesis of nanoporous three-dimensional current collector for high-performance lithium-ion batteries. *RSC Advances*, **2013**, 3, 7543	3.7	9
399	Solvothermal synthesis of carbon-coated tin nanorods for superior reversible lithium ion storage. *Materials Research Bulletin*, **2011**, 46, 2278-2282	5.1	9
398	CuIn intermetallic compound inks for CuInS2 solar cells. *Journal of Materials Science: Materials in Electronics*, **2011**, 22, 1124-1129	2.1	9
397	Immobilization of dislocations by oxygen precipitates in Czochralski silicon: Feasibility of precipitation strengthening mechanism. *Journal of Crystal Growth*, **2011**, 324, 93-97	1.6	9
396	Electrically pumped ultraviolet random lasing from heterostructures formed by bilayered MgZnO films on silicon. *Applied Physics Letters*, **2010**, 97, 061111	3.4	9
395	The modulation of surface texture for single-crystalline Si solar cells using calibrated silver nanoparticles as a catalyst. *Nanotechnology*, **2011**, 22, 025703	3.4	9
394	Growth of In2O3 Nanowires Catalyzed by Cu via a Solid-Liquid-Solid Mechanism. *Nanoscale Research Letters*, **2010**, 5, 898-903	5	9
393	Infrared spectra of silicon nanowires. *Materials Letters*, **2007**, 61, 894-896	3.3	9
392	Effect of carbon doping on oxygen precipitation behavior in internal gettering processing for Czochralski silicon. *Journal of Crystal Growth*, **2006**, 290, 61-66	1.6	9
391	Effects of nitrogen doping on the dissolution of oxygen precipitates in Czochralski silicon during rapid thermal annealing. *Semiconductor Science and Technology*, **2004**, 19, 715-719	1.8	9
390	Silicon nano-wires fabricated by thermal evaporation of silicon wafer. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 24, 268-271	3	9

389	Nitrogen effect on self-interstitial generation in Czochralski silicon revealed by gold diffusion experiments. *Journal of Applied Physics*, **2001**, 90, 3642-3644	2.5	9
388	Electroluminescence from light-emitting devices based on erbium-doped ZnO/n-Si heterostructures: Enhancement effect of fluorine co-doping. *Optics Express*, **2019**, 27, 30919-30930	3.3	9
387	The role of O2 in CdSeTe thin film deposition and CdSeTe/CdTe solar cell performance. *Solar Energy Materials and Solar Cells*, **2020**, 214, 110595	6.4	9
386	Unexpected Kirkendall effect in twinned icosahedral nanocrystals driven by strain gradient. *Nano Research*, **2020**, 13, 2641-2649	10	9
385	Green electroluminescence from Tb4O7 films on silicon: Impact excitation of Tb3+ ions by hot carriers. *Applied Physics Letters*, **2016**, 108, 051113	3.4	9
384	Effects of n-butyl amine incorporation on the performance of perovskite light emitting diodes. *Nanotechnology*, **2019**, 30, 105703	3.4	9
383	A novel three-dimensional architecture of Co□e nanowires towards high-rate lithium and sodium storage. *Journal of Alloys and Compounds*, **2020**, 815, 152281	5.7	9
382	One-Pot Fast Synthesis of Leaf-Like CuO Nanostructures and CuO/Ag Microspheres with Photocatalytic Application. *Nano*, **2017**, 12, 1750035	1.1	8
381	Zn2GeO4@C Core□Shell Nanorods as Highly Reversible Anode Materials for Lithium-Ion Batteries. *Energy Technology*, **2017**, 5, 1656-1662	3.5	8
380	Plasmon-Coupled F□ster Resonance Energy Transfer between Silicon Quantum Dots. *Journal of Physical Chemistry C*, **2019**, 123, 23604-23609	3.8	8
379	Sensitizing properties of luminescence centers on the emission of Er3+ in Si-rich SiO2 film. *Journal of Applied Physics*, **2016**, 119, 203106	2.5	8
378	Intermetallic PdPb ultrathin nanoplate-constructed flowers with low-coordinated edge sites boost oxygen reduction performance. *Nanoscale*, **2019**, 11, 17301-17307	7.7	8
377	Ab initio study on the effect of structural relaxation on the electronic and optical properties of P-doped Si nanocrystals. *Journal of Applied Physics*, **2014**, 116, 194304	2.5	8
376	Sensitization of Er3+ ions in silicon rich oxynitride films: effect of thermal treatments. *Optics Express*, **2014**, 22, 13022-8	3.3	8
375	Near-infrared electroluminescence from light-emitting devices based on Nd-doped TiO2/p+-Si heterostructures. *Applied Physics Letters*, **2014**, 104, 201109	3.4	8
374	Influence of the compensation level on the performance of p-type crystalline silicon solar cells: Theoretical calculations and experimental study. *Solar Energy Materials and Solar Cells*, **2012**, 107, 263-271	6.4	8
373	Controllable chemical reaction synthesis of Tb(OH)3 nanorods and their photoluminescence property. *Materials Letters*, **2009**, 63, 1180-1182	3.3	8
372	Effects of high temperature rapid thermal processing on oxygen precipitation in heavily arsenic-doped Czochralski silicon. *Journal of Crystal Growth*, **2011**, 318, 183-186	1.6	8

371	Silicon nanocrystals doped with substitutional or interstitial manganese. *Applied Physics Letters*, **2011**, 99, 193108	3.4	8
370	Localized surface plasmon resonance enhanced photoluminescence from SiNx with different N/Si ratios. *Optical Materials Express*, **2012**, 2, 1437	2.6	8
369	Enhanced photoluminescence of Tb3+ in SnO2 film by phosphorus diffusion process. *Journal of Alloys and Compounds*, **2009**, 474, 246-249	5.7	8
368	Thermal Warpage of Czochralski Silicon Wafers Grown under a Nitrogen Ambience. *Physica Status Solidi A*, **1998**, 169, 193-198		8
367	Hydrothermal Synthesis and Photoluminescence of Eu2⊠SmxSn2O7 (x = 0⊠1.0) Nanophosphors. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 1427-1431	1.3	8
366	Enhanced oxygen precipitation in neutron-irradiated nitrogen-doped Czochralski silicon crystal. *Journal of Applied Physics*, **2008**, 104, 123523	2.5	8
365	Crystal-originated particles in germanium-doped Czochralski silicon crystal. *Journal of Crystal Growth*, **2007**, 306, 262-268	1.6	8
364	Germanium effect on oxygen-related defects in Czochralski silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 685-695	1.6	8
363	Defects in Ge-doped Cz-Si annealed under high stress. *Materials Science in Semiconductor Processing* , **2006**, 9, 82-87	4.3	8
362	The effect of the ramping rate on oxygen precipitation and the denuded zone in heavily doped Czochralski silicon. *Journal of Physics Condensed Matter*, **2004**, 16, 1539-1545	1.8	8
361	Nickel precipitation in large-diameter Czochralski silicon. *Physica B: Condensed Matter*, **2004**, 344, 407-412	2.8	8
360	Influence of oxygen precipitates on the warpage of annealed silicon wafers. *Microelectronic Engineering*, **2003**, 66, 345-351	2.5	8
359	Effect of nitrogen doping on the minority carrier lifetime in Czochralski silicon. *Microelectronic Engineering*, **2003**, 66, 373-378	2.5	8
358	CsPbBr quantum dots assisted crystallization of solution-processed perovskite films with preferential orientation for high performance perovskite solar cells. *Nanotechnology*, **2019**, 31, 085401	3.4	8
357	Low-temperature processed Tantalum/ Niobium co-doped TiO2 electron transport layer for high-performance planar perovskite solar cells. *Nanotechnology*, **2021**,	3.4	8
356	All-Earth-Abundant Photothermal Silicon Platform for CO2 Catalysis with Nearly 100% Sunlight Harvesting Ability. *Solar Rrl*, **2021**, 5, 2000387	7.1	8
355	An MOF-Based Luminescent Sensor Array for Pattern Recognition and Quantification of Metal Ions. *Advanced Optical Materials*, **2021**, 9, 2002180	8.1	8
354	CO Footprint of Thermal Versus Photothermal CO Catalysis. *Small*, **2021**, 17, e2007025	11	8

353	Scalable Synthesis of Pore-Rich Si/C@C Core-Shell-Structured Microspheres for Practical Long-Life Lithium-Ion Battery Anodes.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	8
352	Sensitized photoluminescence of erbium silicate synthesized on porous silicon framework. *Journal of Applied Physics*, **2017**, 122, 113103	2.5	7
351	Negatively charged silicon nitride films for improved p-type silicon surface passivation by low-temperature rapid thermal annealing. *Journal Physics D: Applied Physics*, **2019**, 52, 345102	3	7
350	Oxygen precipitation in 1020 cm□ germanium-doped Czochralski silicon. *Journal of Applied Physics*, **2015**, 117, 025705	2.5	7
349	Ge@C three-dimensional porous particles as high-performance anode materials of lithium-ion batteries. *RSC Advances*, **2015**, 5, 63056-63062	3.7	7
348	Suppression of boron-oxygen defects in Czochralski silicon by carbon co-doping. *Applied Physics Letters*, **2015**, 106, 102105	3.4	7
347	Ultraviolet-visible electroluminescence from metal-oxide-semiconductor devices with CeO2 films on silicon. *AIP Advances*, **2015**, 5, 037107	1.5	7
346	Origin of Plasticity in Nanostructured Silicon. *Physical Review Letters*, **2020**, 124, 185701	7.4	7
345	Growth and ripening of oxygen precipitation in neutron-irradiated Czochralski silicon. *Materials Science in Semiconductor Processing*, **2018**, 74, 369-374	4.3	7
344	Interface engineering of Graphene-Silicon heterojunction solar cells. *Superlattices and Microstructures*, **2016**, 99, 3-12	2.8	7
343	A novel Co-Li2O@Si core-shell nanowire array composite as a high-performance lithium-ion battery anode material. *Nanoscale*, **2016**, 8, 4511-9	7.7	7
342	Colloidal synthesis of monodisperse quaternary CuInSSe nanocrystals. *Materials Chemistry and Physics*, **2012**, 132, 865-869	4.4	7
341	Core□shell and alloy integrating PdAu bimetallic nanoplates on reduced graphene oxide for efficient and stable hydrogen evolution catalysts. *RSC Advances*, **2017**, 7, 43373-43379	3.7	7
340	Dislocation-related electroluminescence of silicon after electron irradiation. *Solid State Communications*, **2012**, 152, 1956-1959	1.6	7
339	Quantification of characteristic parameters for the dissociation kinetics of iron□boron pairs in Czochralski silicon. *Scripta Materialia*, **2011**, 64, 217-220	5.6	7
338	Electron irradiation induced defects in germanium-doped Czochralski silicon substrates and diodes. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 674-677		7
337	Controllable growth of Se nanotubes and nanowires from different solvent during the sonochemical process. *Materials Letters*, **2009**, 63, 1-4	3.3	7
336	Electrophotoluminescence of sol-gel derived ZnO film: effect of electric field on near-band-edge photoluminescence. *Optics Express*, **2009**, 17, 11434-9	3.3	7

335	Effect of vacancies on oxygen precipitation in germanium-doped Czochralski silicon. *Journal of Applied Physics*, **2010**, 107, 073518	2.5	7
334	Single step synthesis of CdSeS nanorods with chemical composition gradients. *Journal of Crystal Growth*, **2010**, 312, 3406-3409	1.6	7
333	Controllable synthesis of uncapped metal nanoparticle assembly at the air□water interface. *Materials Chemistry and Physics*, **2008**, 111, 271-274	4.4	7
332	Oxygen precipitation in Czochralski silicon: Effect of ramped anneal from 300to750□C. *Journal of Applied Physics*, **2008**, 103, 064911	2.5	7
331	The influence of microstructure on optical properties of porous silicon. *Solid-State Electronics*, **2007**, 51, 678-682	1.7	7
330	The structural evolution of nanocrystalline diamond films synthesized by r.f. PECVD. *Materials Letters*, **2006**, 60, 730-733	3.3	7
329	Effect of annealing atmosphere on oxygen precipitation and formation of denuded zone in Czochralski silicon wafer. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2370-2375	1.6	7
328	Recombination behavior of nickel in cast multicrystalline silicon. *Materials Science in Semiconductor Processing*, **2006**, 9, 304-307	4.3	7
327	Silicon nano-wires fabricated by a novel thermal evaporation of zinc sulfide. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 24, 178-182	3	7
326	Copper sulfide micro-tubes fabricated by thermal evaporation of zinc sulfide. *Materials Letters*, **2005**, 59, 2094-2096	3.3	7
325	Oxygen precipitation in neutron-irradiated Czochralski silicon annealed at elevated temperature. *Physica Status Solidi A*, **2005**, 202, 2442-2447		7
324	Shallow thermal donors in silicon doped with isotopic oxygen. *Physica B: Condensed Matter*, **2001**, 302-303, 193-196	2.8	7
323	Intrinsic gettering of Czochralski silicon annealed in argon and nitrogen atmosphere. *Physica B: Condensed Matter*, **2001**, 307, 40-44	2.8	7
322	Promoting Effect of Si□OH on the Decomposition of Electrolytes in Lithium-Ion Batteries. *Chemistry of Materials*, **2020**, 32, 6365-6373	9.6	7
321	Formation, Structures and Electronic Properties of Silicene Oxides on Ag(111). *Journal of Materials Science and Technology*, **2016**,	9.1	7
320	Two-Dimensional Silicon for (Photo)Catalysis. *Solar Rrl*, **2021**, 5, 2000392	7.1	7
319	Electrically pumped random lasing with an onset voltage of sub-3 V from ZnO-based light-emitting devices featuring nanometer-thick MoO3 interlayers. *Nanoscale*, **2015**, 7, 9164-8	7.7	6
318	Revealing the elemental-specific growth dynamics of Pt□u multipods by scanning transmission electron microscopy and chemical mapping. *Journal of Materials Chemistry A*, **2015**, 3, 21284-21289	13	6

317	Facile synthesis of ternary PtPdCu alloy hexapods as highly efficient electrocatalysts for methanol oxidation.. *RSC Advances*, **2020**, 10, 12689-12694	3.7	6
316	Enhanced lithium storage capabilities of NiO@Si core–shell nanowall arrays by voltage-control technique and their use as anode materials for lithium-ion batteries. *RSC Advances*, **2016**, 6, 109649-109656	3.7	6
315	Density Functional Theory Study on the Oxidation of Hydrosilylated Silicon Nanocrystals. *Journal of Materials Science and Technology*, **2014**, 30, 639-643	9.1	6
314	Influence of defects and impurities on the deteriorated border region in multicrystalline silicon ingots. *Crystal Research and Technology*, **2012**, 47, 7-12	1.3	6
313	Influence of vertical temperature gradients on wafer quality and cell efficiency of Seed-assisted high-performance multi-crystalline silicon. *Journal of Crystal Growth*, **2017**, 467, 65-70	1.6	6
312	Determination of the Boron and Phosphorus Ionization Energies in Compensated Silicon by Temperature-Dependent Luminescence. *Silicon*, **2017**, 9, 147-151	2.4	6
311	The coupling between localized surface plasmons and excitons via Purcell effect. *Nanoscale Research Letters*, **2012**, 7, 669	5	6
310	Quantitative Study of the Evolution of Oxygen and Vacancy Complexes in Czochralski Silicon. *Applied Physics Express*, **2012**, 5, 021302	2.4	6
309	Tailoring Effect of Enhanced Local Electric Field From Metal Nanoparticles on Electroluminescence of Silicon-Rich Silicon Nitride. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 4602504-4602504	3.8	6
308	Study on permanent deactivation of the light-induced degradation in p-type compensated crystalline silicon solar cells. *Solar Energy Materials and Solar Cells*, **2013**, 117, 29-33	6.4	6
307	Large-scale synthesis of water-soluble nanowires as versatile templates for nanotubes. *Chemical Communications*, **2011**, 47, 1006-8	5.8	6
306	Structural characterization of CuInS2 thin films from Cu–In metal inks. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 2399-2405	1.6	6
305	Role of Impurities in Solar Silicon **2012**, 79-125		6
304	Grown-in precipitates in heavily phosphorus-doped Czochralski silicon. *Journal of Applied Physics*, **2012**, 111, 033520	2.5	6
303	Transmission electron microscopy investigation of the micro-defects in Czochralski silicon. *Journal of Alloys and Compounds*, **2009**, 478, 758-762	5.7	6
302	Microcrystalline silicon thin film solar cells with microcrystalline silicon carbide window layers and silicon absorber layers both prepared by Hot-Wire CVD. *Physica Status Solidi - Rapid Research Letters* , **2010**, 4, 61-63	2.5	6
301	A chromium-free etchant for delineation of defects in heavily doped n-type silicon wafers. *Materials Science in Semiconductor Processing*, **2008**, 11, 131-136	4.3	6
300	Photoluminescence of Tb3+-doped SiNx films with different Si concentrations. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 146, 126-130	3.1	6

299	Micro-characterisation of Si wafers by high-pressure thermopower technique. *Physica B: Condensed Matter*, **2006**, 376-377, 177-180	2.8	6
298	Growth of misfit dislocation-free p/p+ thick epitaxial silicon wafers on Ge-B-codoped substrates. *Physica B: Condensed Matter*, **2006**, 376-377, 841-844	2.8	6
297	Influence of copper precipitation on the formation of denuded zone in Czochralski silicon. *Journal of Applied Physics*, **2007**, 102, 114506	2.5	6
296	Al-assisted Anodic Etched Porous Silicon. *Journal of Materials Science*, **2006**, 41, 5283-5286	4.3	6
295	Oxygen in Czochralski silicon used for solar cells. *Solar Energy Materials and Solar Cells*, **2002**, 72, 133-138	6.4	6
294	Transmission electron microscopy investigation of oxygen precipitation in Czochralski silicon annealed under high pressure. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2003**, 102, 84-87	3.1	6
293	Transmission electron microscopic observation of oxygen precipitates in nitrogen-doped silicon. *Microelectronic Engineering*, **2001**, 56, 205-208	2.5	6
292	Synthesis of colloidal NiO nanocrystals by a hot-injection approach with a protecting ligand. *Crystal Research and Technology*, **2016**, 51, 313-317	1.3	6
291	Aluminum-doped crystalline silicon and its photovoltaic application. *Superlattices and Microstructures*, **2016**, 99, 158-164	2.8	6
290	Investigation on the light and elevated temperature induced degradation of gallium-doped Cz-Si. *Solar Energy*, **2021**, 225, 407-411	6.8	6
289	Cesium-lead-bromide perovskites with balanced stoichiometry enabled by sodium-bromide doping for all-vacuum deposited silicon-based light-emitting diodes. *Journal of Materials Chemistry C*, **2021**, 9, 2016-2023	7.1	6
288	New Insight into the Metal-Catalyst-Free Direct Chemical Vapor Deposition Growth of Graphene on Silicon Substrates. *Journal of Physical Chemistry C*, **2021**, 125, 1774-1783	3.8	6
287	Characterization of silicon surface states at clean and copper contaminated condition via transient capacitance measurement. *Applied Physics Letters*, **2017**, 111, 152103	3.4	5
286	Effects of nitrogen doping on vacancy-oxygen complexes in neutron irradiated Czochralski silicon. *Materials Science in Semiconductor Processing*, **2019**, 98, 65-69	4.3	5
285	Silver-nickel oxide core-shell nanoparticle array electrode with enhanced lithium-storage performance. *Electrochimica Acta*, **2015**, 174, 893-899	6.7	5
284	Developing an aqueous approach for synthesizing Au and M@Au (M = Pd, CuPt) hybrid nanostars with plasmonic properties. *Physical Chemistry Chemical Physics*, **2015**, 17, 1265-72	3.6	5
283	Comparison on mechanical properties of heavily phosphorus- and arsenic-doped Czochralski silicon wafers. *AIP Advances*, **2018**, 8, 045301	1.5	5
282	Litchi-structural core-shell Si@C for high-performance lithium-ion battery anodes. *Ionics*, **2019**, 25, 5809-5818	2.7	5

281	Investigation on the impact of hydrogen on the passivation of silicon surface states in clean and copper contaminated conditions. *AIP Advances*, **2019**, 9, 105102	1.5	5
280	On the low carrier lifetime edge zone in multicrystalline silicon ingots. *Journal of Applied Physics*, **2014**, 115, 012007	2.5	5
279	Low-resistivity bulk silicon prepared by hot-pressing boron- and phosphorus-hyperdoped silicon nanocrystals. *AIP Advances*, **2014**, 4, 127108	1.5	5
278	Enhancing the photoluminescence intensity of silicon-rich nitride film by localized surface plasmon enhanced photo-excitation. *Optics Communications*, **2012**, 285, 1864-1867	2	5
277	Modulation effect of microstructures in silicon-rich oxide matrix on photoluminescence from silicon nanoclusters prepared by different fabrication techniques. *Applied Physics A: Materials Science and Processing*, **2013**, 113, 121-126	2.6	5
276	The modulation on luminescence of Er3+-doped silicon-rich oxide films by the structure evolution of silicon nanoclusters. *Nanoscale Research Letters*, **2013**, 8, 34	5	5
275	Germanium-doped crystalline silicon: A new substrate for photovoltaic application. *Journal of Crystal Growth*, **2013**, 362, 140-144	1.6	5
274	Twinned silicon and germanium nanocrystals: Formation, stability and quantum confinement. *AIP Advances*, **2015**, 5, 037140	1.5	5
273	Evolution of the sensitized Er(3+) emission by silicon nanoclusters and luminescence centers in silicon-rich silica. *Nanoscale Research Letters*, **2014**, 9, 456	5	5
272	Structure and magnetic properties of ′-Fe4N films grown on MgO-buffered Si (001). *Physica B: Condensed Matter*, **2012**, 407, 4783-4786	2.8	5
271	Optically and electrically pumped random lasing from ZnO films annealed at different temperatures. *Optics Communications*, **2012**, 285, 5323-5326	2	5
270	Large-scale synthesis of water-soluble Na2SiF6 nanotubes with polyacrylic acid as a surfactant. *Materials Research Bulletin*, **2012**, 47, 3923-3926	5.1	5
269	Comparison on electrically pumped random laser actions of hydrothermal and sputtered ZnO films. *Journal of Applied Physics*, **2013**, 114, 133105	2.5	5
268	Rapid-thermal-anneal-based internal gettering for germanium-doped Czochralski silicon. *Applied Physics A: Materials Science and Processing*, **2009**, 94, 905-910	2.6	5
267	Simple Synthesis of Flower-Likeln2S3Structures and Their Use as Templates to Prepare CuS Particles. *Journal of Nanomaterials*, **2011**, 2011, 1-5	3.2	5
266	Effect of iron on oxygen precipitation in nitrogen-doped Czochralski silicon. *Journal of Applied Physics*, **1998**, 84, 5502-5505	2.5	5
265	Flower-like silicon nanostructures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2007**, 38, 27-30	3	5
264	Enhanced red electroluminescence from a polycrystalline diamond film/Si heterojunction structure. *Applied Physics Letters*, **2007**, 90, 161123	3.4	5

263	Effect of nitrogen doping on denuded zone formed by rapid thermal process in Czochralski silicon wafer. *Physica B: Condensed Matter*, **2006**, 376-377, 216-219	2.8	5
262	Germanium-doped Czochralski silicon: Oxygen precipitates and their annealing behavior. *Materials Science in Semiconductor Processing*, **2006**, 9, 600-605	4.3	5
261	Stress-dependent transformation of interstitial oxygen in processed Ge-doped Cz-Si. *Nuclear Instruments & Methods in Physics Research B*, **2006**, 253, 205-209	1.2	5
260	Amorphous SiO x nanowires grown on silicon (100) substrates via rapid thermal process of nanodiamond films. *Thin Solid Films*, **2006**, 503, 18-21	2.2	5
259	Effect of high temperature□pressure on nitrogen-doped Czochralski silicon. *Journal of Physics Condensed Matter*, **2004**, 16, 473-481	1.8	5
258	Tiny silicon nano-wires synthesis on silicon wafers. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 24, 328-332	3	5
257	Defects in nitrogen-doped multicrystalline silicon. *Physica B: Condensed Matter*, **2004**, 344, 1-4	2.8	5
256	Reduction of oxygen during the crystal growth in heavily antimony-doped Czochralski silicon. *Journal of Crystal Growth*, **2003**, 256, 261-265	1.6	5
255	Behavior of oxidation-induced stacking faults in annealed Czochralski silicon doped by nitrogen. *Journal of Applied Physics*, **2003**, 93, 8926-8929	2.5	5
254	Thermal nitridation kinetics of silicon wafers in nitrogen atmosphere during annealing. *Thin Solid Films*, **2005**, 474, 326-329	2.2	5
253	Impact of carbon co-doping on the performance of crystalline silicon solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 154, 94-98	6.4	5
252	Unidirectional light scattering by up□down Janus dimers composed of gold nanospheres and silicon nanorods. *Optics Communications*, **2019**, 435, 362-366	2	5
251	Rapid fabrication of porous silicon/carbon microtube composites as anode materials for lithium-ion batteries.. *RSC Advances*, **2018**, 8, 41101-41108	3.7	5
250	NIR Light Driven Terahertz Wave Modulator with a Large Modulation Depth Based on a Silicon-PEDOT:PSS-Perovskite Hybrid System. *Advanced Materials Technologies*, **2020**, 5, 1901090	6.8	5
249	Formation kinetics and mechanism of metastable vacancy-dioxygen complex in neutron irradiated Czochralski silicon. *Superlattices and Microstructures*, **2017**, 107, 91-96	2.8	4
248	Design and Photovoltaic Properties of Graphene/Silicon Solar Cell. *Journal of Electronic Materials*, **2018**, 47, 5025-5032	1.9	4
247	Controllable Nitrogen Doping in Multicrystalline Silicon by Casting Under Low Cost Ambient Nitrogen. *Silicon*, **2018**, 10, 1717-1722	2.4	4
246	Synthesis of Co/SnO2 core-shell nanowire arrays and their electrochemical performance as anodes of lithium-ion batteries. *Ionics*, **2019**, 25, 4651-4658	2.7	4

245	Analysis of the photovoltaic properties of n-type compensated silicon solar cells with the Al-alloyed emitter. *Journal of Alloys and Compounds*, **2013**, 561, 28-32	5.7	4
244	Effect of germanium doping on the formation kinetics of vacancy-dioxygen complexes in high dose neutron irradiated crystalline silicon. *Journal of Applied Physics*, **2017**, 122, 095704	2.5	4
243	Ab-initio calculation study on the formation mechanism of boron-oxygen complexes in c-Si. *AIP Advances*, **2015**, 5, 077154	1.5	4
242	Temperature dependence of sensitized Er(3+) luminescence in silicon-rich oxynitride films. *Nanoscale Research Letters*, **2014**, 9, 489	5	4
241	Effect of Ge doping on the kinetics of iron–boron pair association and dissociation in photovoltaic silicon. *Journal of Crystal Growth*, **2012**, 348, 20-24	1.6	4
240	Electrically pumped random lasing from the light-emitting device based on two-fold-tandem SiO2/ZnO structure. *Applied Physics Letters*, **2013**, 102, 161112	3.4	4
239	Size-dependent coupling between localized surface plasmons and excitons in silicon nitride matrix. *Optics Letters*, **2013**, 38, 2832-4	3	4
238	Scanning infrared microscopy study of thermal processing induced defects in low resistivity Si wafers. *Semiconductor Science and Technology*, **2013**, 28, 085013	1.8	4
237	Improving the Solar Cell Module Performance by a Uniform Porous Antireflection Layer on Low Iron Solar Glass. *Applied Physics Express*, **2013**, 6, 032301	2.4	4
236	Electrically pumped simultaneous ultraviolet and visible random laser actions from ZnO-CdO interdiffused film. *Applied Physics Letters*, **2011**, 99, 261111	3.4	4
235	Characterization of a Czochralski grown silicon crystal doped with 1020 cm-3 germanium. *Crystal Research and Technology*, **2011**, 46, 10-13	1.3	4
234	Modulation of 1.5 μm dislocation-related luminescence emitted from a direct silicon bonded interface by external bias. *Applied Physics Letters*, **2010**, 96, 211120	3.4	4
233	Morphology and phase selective synthesis of EuF3 nanostructures by polyelectrolyte assisted chemical reaction and their optical properties. *Materials Chemistry and Physics*, **2009**, 115, 562-566	4.4	4
232	Oxygen precipitation in heavily phosphorus-doped silicon wafer annealed at high temperatures. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2009**, 159-160, 145-148	3.1	4
231	Surface plasmon enhanced light emission of silicon-rich silicon nitride: Dependence on metal island size. *Applied Surface Science*, **2011**, 257, 5591-5594	6.7	4
230	Investigation of nitrogen behaviors during Czochralski silicon crystal growth. *Journal of Crystal Growth*, **2011**, 318, 178-182	1.6	4
229	Aluminum doped silicon carbide thin films prepared by hot-wire CVD: Influence of the substrate temperature on material properties. *Thin Solid Films*, **2011**, 519, 4516-4518	2.2	4
228	CdSe Quantum Dots Sensitized Mesoporous TiO2Solar Cells with CuSCN as Solid-State Electrolyte. *Journal of Nanomaterials*, **2011**, 2011, 1-5	3.2	4

227	Performance of Silicon Nanowire Solar Cells with Phosphorus-Diffused Emitters. *Journal of Nanomaterials*, **2012**, 2012, 1-6	3.2	4
226	Electrical Transport Properties Through Nanoscale and Large-Area Contacts of ZnO/Si Diodes. *Current Nanoscience*, **2010**, 6, 219-225	1.4	4
225	Defect-Related White-Light Emission from ZnO in an n-Mg0.2Zn0.8O/n-ZnO/SiO x Heterostructure on n-Si. *Journal of Electronic Materials*, **2010**, 39, 652-655	1.9	4
224	Room temperature electroluminescence from a nanocrystalline diamond/Si heterojunction. *Diamond and Related Materials*, **2007**, 16, 306-310	3.5	4
223	A comparison of cathodoluminescence and photoluminescence of porous silicon and the influence of aging and electron irradiation of these properties. *Solid State Communications*, **2007**, 143, 197-201	1.6	4
222	Effects of defect, carrier concentration and annealing process on the photoluminescence of silicon pn diodes. *Materials Science in Semiconductor Processing*, **2007**, 10, 173-178	4.3	4
221	Variations of high-pressure thermoelectric and mechanical properties of Si single crystals under doping with N and P□ pre-treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 462, 347-350	5.3	4
220	Tailor of ZnO morphology by heterogeneous nucleation in the aqueous solution. *Materials Research Bulletin*, **2007**, 42, 1316-1322	5.1	4
219	Denuded zone in Czochralski silicon wafer with high carbon content. *Journal of Physics Condensed Matter*, **2006**, 18, 11131-11138	1.8	4
218	Oxygen precipitate denuded zone formation in Czochralski silicon wafer based on rapid thermal processing in nitrogen ambient. *Semiconductor Science and Technology*, **2007**, 22, 1302-1306	1.8	4
217	Effect of point defects on copper-related deep levels in p-type Czochralski silicon. *Journal of Applied Physics*, **2007**, 102, 073521	2.5	4
216	Scanning infrared microscopy investigation of copper precipitation in cast multicrystalline silicon. *Infrared Physics and Technology*, **2006**, 47, 240-245	2.7	4
215	Recombination activity of nickel in Czochralski silicon during rapid thermal process. *Materials Science in Semiconductor Processing*, **2006**, 9, 296-299	4.3	4
214	Effect of Rapid Thermal Process on Oxygen Precipitation in Heavily Boron-Doped Czochralski Silicon Wafer. *Japanese Journal of Applied Physics*, **2003**, 42, 7290-7291	1.4	4
213	Grown-in Defects in Heavily Boron-Doped Czochralski Silicon. *Japanese Journal of Applied Physics*, **2004**, 43, 4082-4086	1.4	4
212	Silicon nano-wires grown at low temperature. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 27, 309-313	3	4
211	Perovskite-Enhanced Silicon-Nanocrystal Optoelectronic Synaptic Devices for the Simulation of Biased and Correlated Random-Walk Learning. *Research*, **2020**, 2020, 7538450	7.8	4
210	Kinetics Study on Carrier Injection-Induced Degradation and Regeneration at Elevated Temperature in p-Type Cast-Monosilicon Passivated Emitter Rear Contact Solar Cells. *Solar Rrl*, **2021**, 5, 2100035	7.1	4

209	Hierarchical Carbon Shell Compositing Microscale Silicon Skeleton as High-Performance Anodes for Lithium-Ion Batteries. *ACS Applied Energy Materials*, **2021**, 4, 4976-4985	6.1	4
208	Experimental study of 3D solid-liquid interfaces and their influence on directional solidification silicon ingot. *Solar Energy Materials and Solar Cells*, **2021**, 224, 110991	6.4	4
207	Structure and conductivity enhanced treble-shelled porous silicon as an anode for high-performance lithium-ion batteries.. *RSC Advances*, **2019**, 9, 35392-35400	3.7	4
206	Light-soaking enhanced passivation of Al2O3 on crystalline silicon surface. *Solar Energy Materials and Solar Cells*, **2019**, 191, 350-355	6.4	4
205	All-vacuum deposited and thermally stable perovskite solar cells with F4-TCNQ/CuPc hole transport layer. *Nanotechnology*, **2020**, 31, 065401	3.4	4
204	Silicon-based inorganic-organic hybrid optoelectronic synaptic devices simulating cross-modal learning. *Science China Information Sciences*, **2021**, 64, 1	3.4	4
203	Electronic and thermoelectric properties of atomically thin CSi/C and CGe/C superlattices. *Nanotechnology*, **2018**, 29, 045402	3.4	4
202	A Review on Metastable Silicon Allotropes. *Materials*, **2021**, 14,	3.5	4
201	Inhomogeneous composition distribution in monolayer transition metal dichalcogenide alloys. *Materials Research Express*, **2017**, 4, 045004	1.7	3
200	Sample thickness effect of thermal vibration correction within X-ray dynamical theory for germanium-doped silicon. *Journal of Applied Physics*, **2017**, 121, 125704	2.5	3
199	Size-controlled synthesis of Au nanorings on Pd ultrathin nanoplates as efficient catalysts for hydrogenation. *CrystEngComm*, **2017**, 19, 6588-6593	3.3	3
198	Recombination activity of sub-grain boundaries and dislocation arrays in quasi-single crystalline silicon. *Applied Physics Express*, **2019**, 12, 051012	2.4	3
197	Photoelectric properties of reduced-graphene-oxide film and its photovoltaic application. *RSC Advances*, **2015**, 5, 39630-39634	3.7	3
196	Detailed study of SiOxNy:H/Si interface properties for high quality surface passivation of crystalline silicon. *Superlattices and Microstructures*, **2018**, 113, 13-19	2.8	3
195	Impact of germanium co-doping on oxygen precipitation in heavily boron-doped Czochralski silicon. *Superlattices and Microstructures*, **2016**, 99, 35-40	2.8	3
194	Correlation of efficient luminescence with crystal structures of y-Er2Si2O7 and □Er2Si2O7 in Er-doped silicon oxide films. *Journal of Materials Science*, **2019**, 54, 12668-12675	4.3	3
193	Defect control based on constitutional supercooling effect in cast multicrystalline silicon: Boron-indium co-doping. *Solar Energy Materials and Solar Cells*, **2019**, 203, 110189	6.4	3
192	Shape and size controlled synthesis of CuInS2 particles in polyalcohol system used as □printable ink□for thin films. *Journal of Sol-Gel Science and Technology*, **2012**, 62, 87-91	2.3	3

191	Density functional theory study of the impact of tin doping on oxygen diffusion in Czochralski silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 2199-2203	1.6	3
190	An etchant for delineation of flow pattern defects in heavily doped p-type silicon wafers. *Materials Science in Semiconductor Processing*, **2013**, 16, 893-898	4.3	3
189	Multistage Transformation and Lattice Fluctuation at AgCl-Ag Interface. *Journal of Physical Chemistry Letters*, **2017**, 8, 5853-5860	6.4	3
188	Cobalt Oxide@Tin Oxide@Silver Core–Shell Nanowire Arrays as Electrodes for Lithium-Ion Batteries. *Energy Technology*, **2017**, 5, 277-282	3.5	3
187	Enhanced broadband light absorption in silicon film by large-size lumpy silver particles. *Applied Physics A: Materials Science and Processing*, **2014**, 117, 573-577	2.6	3
186	Generation kinetics of boron-oxygen complexes in p-type compensated c-Si. *Applied Physics Letters*, **2014**, 104, 102108	3.4	3
185	Enhancement of orange-yellow electroluminescence extraction from SiNx light-emitting devices by silver nanostructures. *Optics Express*, **2013**, 21, 846-54	3.3	3
184	Optimization of the electroluminescence from SiNx-based light-emitting devices by modulating the size and morphology of silver nanostructures. *Optics Express*, **2013**, 21, 1675-86	3.3	3
183	Reduction of the efficiency droop in silicon nitride light-emitting devices by localized surface plasmons. *Applied Physics Letters*, **2013**, 102, 081108	3.4	3
182	Oxide precipitate nucleation at 300 °C in low resistivity n-type Czochralski Si. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 2592-2599	1.6	3
181	Formation of shallow junctions in gallium and phosphorus compensated silicon for cell performance improvement. *Scripta Materialia*, **2011**, 65, 871-874	5.6	3
180	Direct synthesis of indium nanoparticles and their application to prepare CuInS2 thin films and solar cells. *Journal of Sol-Gel Science and Technology*, **2011**, 58, 162-169	2.3	3
179	Influence of nickel precipitation on the formation of denuded zone in Czochralski silicon. *Journal of Alloys and Compounds*, **2010**, 502, 351-355	5.7	3
178	Si60 fullerene-like cage passivated by F and Cl. *Molecular Simulation*, **2010**, 36, 493-495	2	3
177	Iron precipitation in as-received Czochralski silicon during low temperature annealing. *Materials Science in Semiconductor Processing*, **2009**, 12, 185-188	4.3	3
176	Electric-field-induced random lasing from ZnO and Mg0.1Zn0.9O films optically pumped with an extremely low intensity. *Optics Express*, **2009**, 17, 18513-7	3.3	3
175	Effect of iron contamination on grain boundary states at a direct silicon bonded (110)/(100) interface. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 350-352	2.5	3
174	Effect of nickel contamination on grain boundary states at a direct silicon bonded (110)/(100) interface. *Scripta Materialia*, **2010**, 63, 1100-1103	5.6	3

173	Phosphorus gettering of precipitated Cu in single crystalline silicon based on rapid thermal process. *Journal of Crystal Growth*, **2010**, 312, 3069-3074	1.6	3
172	Effect of annealing atmosphere on the recombination activity of copper precipitates formed by rapid thermal process in conventional and nitrogen-doped Czochralski silicon wafers. *Journal of Applied Physics*, **2008**, 103, 014912	2.5	3
171	Electroluminescence of silicon-rich silicon nitride light-emitting devices **2008**,		3
170	Effect of point defects on the recombination activity of copper precipitates in p-type Czochralski silicon. *Journal of Materials Science: Materials in Electronics*, **2008**, 19, 32-35	2.1	3
169	Enhanced oxygen diffusion in Czochralski silicon at 450–650 °C. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 1148-1151	1.6	3
168	Electron-beam-induced current evidence for room-temperature photoluminescence of silicon pn diode. *Vacuum*, **2008**, 82, 1337-1340	3.7	3
167	Synthesis and characterization of CdS based sulfide coaxial cable and nanotubes by sacrificial approach. *Materials Letters*, **2006**, 60, 2004-2008	3.3	3
166	Rapid-thermal-processing-based internal gettering for heavily boron-doped Czochralski silicon. *Journal of Applied Physics*, **2006**, 100, 103530	2.5	3
165	Electroluminescent and carrier transport mechanisms of MgxZn1−xO–Si heterojunctions. *Journal of Applied Physics*, **2007**, 102, 083106	2.5	3
164	Effect of rapid thermal processing on high temperature oxygen precipitation behaviour in Czochralski silicon wafer. *Journal of Physics Condensed Matter*, **2004**, 16, 3563-3569	1.8	3
163	Extended defects in nitrogen-doped Czochralski silicon during diode process. *Physica B: Condensed Matter*, **2004**, 348, 226-230	2.8	3
162	The impact of nitrogen on power diode characteristics. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 91-92, 495-497	3.1	3
161	Stable Cu Catalysts Supported by Two-dimensional SiO with Strong Metal-Support Interaction.. *Advanced Science*, **2022**, e2104972	13.6	3
160	Tuning the Photon Sensitization Mechanism in Metal-Halide-Perovskite-Based Nanocomposite Films Toward Highly Efficient and Stable X-Ray Detection. *Advanced Optical Materials*,2102320	8.1	3
159	Efficient sensitized photoluminescence of Er silicate in silicon oxide films embedded with amorphous silicon clusters, part I: fabrication. *Optical Materials Express*, **2019**, 9, 4329	2.6	3
158	CVD Graphene on Textured Silicon: An Emerging Technologically Versatile Heterostructure for Energy and Detection Applications. *Advanced Materials Interfaces*,2100977	4.6	3
157	Performance Improvement of Gallium-Doped Passivated Emitter and Rear Cells by Two-Step Bias Application. *Solar Rrl*,2100738	7.1	3
156	Effects of co-doping nitrogen and germanium on dislocation gliding in Czochralski silicon: Implication for improving mechanical strength. *Journal of Applied Physics*, **2020**, 128, 235105	2.5	3

155	The preparation and characterization of uniform nanoporous structure on glass. *Royal Society Open Science*, **2020**, 7, 192029	3.3	3
154	Electroluminescence from metal□oxide□semiconductor devices based on erbium silicate nanocrystals and silicon nanocrystals co-embedded in silicon oxide thin films. *Journal of Materials Science: Materials in Electronics*, **2021**, 32, 20659-20667	2.1	3
153	Low temperature iron gettering by grown-in defects in p-type Czochralski silicon. *Superlattices and Microstructures*, **2016**, 99, 192-196	2.8	3
152	Revisiting the effects of carbon-doping at 1017 cm□ level on dislocation behavior of Czochralski silicon: from room temperature to elevated temperatures. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 3114-3123	2.1	3
151	Influence of temperature gradient at interface on defect multiplication in seed-assisted multicrystalline silicon. *Solar Energy Materials and Solar Cells*, **2020**, 211, 110520	6.4	3
150	Microdefect Characteristics in Cast-Mono Silicon Wafers Induced by Slurry Sawing. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2000258	1.6	3
149	The devisable reflection-enhanced lumpy silver particle and its application in thin film amorphous silicon solar cell. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 3153-3159	2.1	3
148	Theoretical study on the improvement of the doping efficiency of Al in 4H-SiC by co-doping group-IVB elements. *Chinese Physics B*,	1.2	3
147	Electroluminescence from the light-emitting devices with erbium-doped SrTiO3 films on oxidized silicon substrate. *Optical Materials*, **2021**, 119, 111402	3.3	3
146	Stable and wide-wavelength tunable luminescence of CsPbX3 nanocrystals encapsulated in metal□rganic frameworks. *Journal of Materials Chemistry C*, **2022**, 10, 5550-5558	7.1	3
145	Oxygen Reduction Reaction: Tuning Surface Structure and Strain in Pd□Pt Core□Shell Nanocrystals for Enhanced Electrocatalytic Oxygen Reduction (Small 7/2017). *Small*, **2017**, 13,	11	2
144	Building a Bridge from Papermaking to Solar Fuels. *Angewandte Chemie*, **2019**, 131, 14992-14996	3.6	2
143	Defect-related electroluminescence from metal-oxide-semiconductor devices with ZrO2 films on silicon. *Superlattices and Microstructures*, **2016**, 99, 186-191	2.8	2
142	Impact of Carbon Codoping on Generation and Dissociation of Boron□Oxygen Defects in Czochralski Silicon. *Journal of Electronic Materials*, **2018**, 47, 5092-5098	1.9	2
141	An Innovative Light Trapping Structure Fabrication Method on Diamond-Wire-Sawing Multi-Crystalline Silicon Wafers. *ChemistrySelect*, **2018**, 3, 7561-7564	1.8	2
140	Effects of Iron Contamination and Hydrogen Passivation on the Electrical Properties of Oxygen Precipitates in CZ-Si. *Journal of Electronic Materials*, **2018**, 47, 5039-5044	1.9	2
139	Simulation to confirm the existence of distinct low-temperature regions in a Si melt using an insulating plate under the crucible bottom for the noncontact crucible method. *Journal of Crystal Growth*, **2019**, 524, 125160	1.6	2
138	Optimized phosphorus diffusion process and performance improvement of c-Si solar cell by eliminating SiP precipitates in the emitter. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 13820-13825	2.1	2

137	Phosphorus diffusion gettering of substitutional metal contaminants at a small-angle grain boundary in n-type silicon: The case of gold. *Journal of Crystal Growth*, **2013**, 380, 51-54	1.6	2
136	Room temperature visible electroluminescence from SrTiO3/p+-Si heterostructure. *Scripta Materialia*, **2013**, 69, 748-751	5.6	2
135	Boron deactivation in heavily boron-doped Czochralski silicon during rapid thermal anneal: Atomic level understanding. *Applied Physics Letters*, **2014**, 104, 032102	3.4	2
134	Visible and near-infrared electroluminescence from TiO2/p+-Si heterostructured device. *AIP Advances*, **2014**, 4, 047109	1.5	2
133	Dislocation-induced variation of generation kinetics of boron–oxygen complexes in silicon. *Journal of Crystal Growth*, **2012**, 359, 69-71	1.6	2
132	Crystal Growth of Indium-Doped Czochralski Silicon for Photovoltaic Application. *Japanese Journal of Applied Physics*, **2012**, 51, 105501	1.4	2
131	Electrically pumped random lasing in ZnO-based metal-insulator-semiconductor structured devices: Effect of ZnO film thickness. *Journal of Applied Physics*, **2013**, 113, 213103	2.5	2
130	Modulation of electrical characteristics at a Ni-contaminated silicon grain boundary by engineering the metal precipitates. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 1828-1831	1.6	2
129	Flow pattern defects in germanium-doped Czochralski silicon crystals. *Applied Physics A: Materials Science and Processing*, **2011**, 104, 349-355	2.6	2
128	Oxygen Precipitate Nucleation in Heavily Antimony-Doped Czochralski Silicon. *ECS Transactions*, **2010**, 27, 1027-1033	1	2
127	Oxygen precipitation in heavily phosphorus-doped Czochralski silicon: effect of nitrogen codoping. *Semiconductor Science and Technology*, **2009**, 24, 105030	1.8	2
126	Internal gettering for germanium-doped Czochralski silicon: Treated by rapid-thermal-anneal based processing simulation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2009**, 159-160, 235-238	3.1	2
125	Grown-in defects in heavily phosphorus-doped Czochralski silicon. *Physica B: Condensed Matter*, **2009**, 404, 4619-4621	2.8	2
124	Continuous wave spectroscopy of nonlinear dynamics of Si nanocrystals in a microdisk resonator. *Physical Review B*, **2011**, 84,	3.3	2
123	The origin of 0.78 eV line of the dislocation related luminescence in silicon. *Journal of Applied Physics*, **2012**, 112, 063528	2.5	2
122	Influence of oxygen precipitation on copper precipitation in Czochralski silicon. *Journal of Applied Physics*, **2012**, 111, 094907	2.5	2
121	Correlation Between Oxygen Precipitation and Extended Defects in Czochralski Silicon: Investigation by Means of Scanning Infrared Microscopy. *Journal of Electronic Materials*, **2010**, 39, 648-651	1.9	2
120	Ultraviolet light emissions from N2 microplasma electrically induced by metal–insulator–semiconductor devices. *Journal of Luminescence*, **2010**, 130, 1073-1075	3.8	2

119	Fairly pure ultraviolet electroluminescence from p-Si-based SiOx/ZnO/SiOx double-barrier device. *Optics Communications*, **2010**, 283, 1359-1362	2	2
118	Copper precipitation in nitrogen-doped Czochralski silicon. *Journal of Applied Physics*, **2008**, 104, 013508	2.5	2
117	Evolution of nitrogen pairs and nitrogen-oxygen complexes in nitrogen-doped Czochralski silicon. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 3090-3094		2
116	Effect of Nitrogen Doping on Oxygen Precipitate Profiles in Czochralski Silicon Wafer. *Japanese Journal of Applied Physics*, **2006**, 45, 4903-4907	1.4	2
115	Enhancement of oxygen precipitation in Czochralski silicon wafers by high-temperature anneals. *Physica B: Condensed Matter*, **2006**, 376-377, 169-172	2.8	2
114	Crystal growth and oxygen precipitation behavior of 300 mm nitrogen-doped Czochralski silicon. *Journal of Crystal Growth*, **2006**, 292, 257-259	1.6	2
113	Dislocation Formation in Czochralski Si Crystal Growth Using an Annealed Heavily B-Doped Si Seed. *Japanese Journal of Applied Physics*, **2003**, 42, L1299-L1301	1.4	2
112	Bipolar Structure in Thermally Treated Czochralski Silicon Wafer. *Japanese Journal of Applied Physics*, **2003**, 42, 1129-1132	1.4	2
111	Oxidation-induced stacking faults and related grown-in oxygen precipitates in nitrogen-doped Czochralski silicon. *Semiconductor Science and Technology*, **2003**, 18, 393-397	1.8	2
110	Effect of oxygen precipitation on voids in bulk silicon. *Microelectronic Engineering*, **2003**, 66, 289-296	2.5	2
109	Oxygen precipitation in Czochralski silicon annealed at 450°C under a high pressure of 1 GPa. *Physica B: Condensed Matter*, **2003**, 327, 60-64	2.8	2
108	Effect of heat treatment on the optical and electrical properties of nitrogen-doped silicon samples. *Microelectronic Engineering*, **2003**, 66, 297-304	2.5	2
107	Blue emission of porous silicon intensified by boron deposition. *Journal of Materials Science*, **2005**, 40, 5071-5073	4.3	2
106	Electrical Activity of Nitrogen–Oxygen Complexes in Silicon. *Physica Status Solidi (B): Basic Research*, **2000**, 221, 641-645	1.3	2
105	Influence of Dislocations on Nitrogen–Oxygen Complex in Silicon. *Physica Status Solidi A*, **1999**, 171, 203-207		2
104	Deformation of 4H-SiC: The role of dopants. *Applied Physics Letters*, **2022**, 120, 052105	3.4	2
103	Confinement effect and low-defect density-induced long lifetime Er silicate nanowire embedded in silicon oxide film. *Optics Express*, **2020**, 28, 13216-13223	3.3	2
102	Comprehensive understanding on germanium-doping effects on oxygen precipitation in Czochralski silicon wafers with a prior rapid thermal anneal. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	2

101	On the mechanism underlying the elimination of nitrogen-oxygen shallow thermal donors in nitrogen-doped Czochralski silicon at elevated temperatures. *Journal of Applied Physics*, **2021**, 129, 145702	2.5	2
100	Ga-Doped Intermetallic Pd3Pb Nanocubes as a Highly Efficient and Durable Oxygen Reduction Reaction Electrocatalyst. *ChemistrySelect*, **2021**, 6, 3891-3896	1.8	2
99	Suppress of dislocations induced by feedstocks weight in cast-mono crystalline silicon. *Solar Energy*, **2021**, 223, 125-131	6.8	2
98	Understanding the Influence of Cation and Anion Migration on Mixed-Composition Perovskite Solar Cells via Transient Ion Drift. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2100225	2.5	2
97	Silicon Nanocrystals: Size-Dependent Structures and Optical Absorption of Boron-Hyperdoped Silicon Nanocrystals (Advanced Optical Materials 5/2016). *Advanced Optical Materials*, **2016**, 4, 646-646	8.1	2
96	Cu-Li2O@Si core-shell nanowall arrays: Facile voltage-controlled synthesis and enhanced lithium-storage capabilities. *Journal of Alloys and Compounds*, **2016**, 689, 56-62	5.7	2
95	Effects of Antimony- and Tin-Doping on the Mechanical Propertiesof Czochralski Silicon: Revealing the Role of Electrical Activity of Antimony. *Silicon*, **2020**, 12, 1433-1439	2.4	2
94	Facile Synthesis of PdCuRu Porous Nanoplates as Highly Efficient Electrocatalysts for Hydrogen Evolution Reaction in Alkaline Medium. *Metals*, **2021**, 11, 1451	2.3	2
93	The effect and mechanism of current injection to suppress light and elevated temperature induced degradation in p-type cast-mono and multicrystalline silicon Passivated Emitter and Rear cells. *Solar Energy*, **2022**, 235, 12-18	6.8	2
92	Polarized Laser Switching with Giant Contrast in MOF-Based Mixed-Matrix Membrane.. *Advanced Science*, **2022**, e2200953	13.6	2
91	Compensation of p-type doping in Al-doped 4H-SiC. *Journal of Applied Physics*, **2022**, 131, 185703	2.5	2
90	Thermal history effect on the nucleation of oxygen precipitates in germanium doped Cz-silicon studied by high-energy X-ray diffraction. *Journal of Crystal Growth*, **2017**, 479, 46-51	1.6	1
89	Evolution from random lasing to erbium-related electroluminescence from metal-insulator-semiconductor structured light-emitting device with erbium-doped ZnO film on silicon. *Journal of Applied Physics*, **2020**, 127, 055705	2.5	1
88	Effects of vacancy defects on the mechanical properties in neutron irradiated Czochralski silicon. *Journal of Physics Condensed Matter*, **2020**, 32, 275702	1.8	1
87	Fabrication of stabilized and dispersive copper nanowires ink. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 14989-14994	2.1	1
86	Enhanced internal gettering in n/n+ epitaxial silicon wafer: coaction of nitrogen impurity and vacancy on oxygen precipitation in substrate. *Journal of Materials Science: Materials in Electronics*, **2014**, 25, 3486-3491	2.1	1
85	Defects in TiO2 films on p+-Si studied by positron annihilation spectroscopy. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2012**, 177, 625-628	3.1	1
84	Iron-boron pair dissociation in silicon under strong illumination. *AIP Advances*, **2013**, 3, 082124	1.5	1

83	Carbon effect on the survival of vacancies in Czochralski silicon during rapid thermal anneal. *Journal of Applied Physics*, **2017**, 122, 045705	2.5	1
82	Room-Temperature Near-Infrared Electroluminescence from Boron-Diffused Silicon Pn-Junction Diodes. *Frontiers in Materials*, **2015**, 2,	4	1
81	Investigating the Effect of Thermal Annealing Process on the Photovoltaic Performance of the Graphene-Silicon Solar Cell. *International Journal of Photoenergy*, **2015**, 2015, 1-6	2.1	1
80	Effect of Dopant Compensation on the Behavior of Dissolved Iron and Iron-Boron Related Complexes in Silicon. *International Journal of Photoenergy*, **2015**, 2015, 1-6	2.1	1
79	Structural and luminescent properties of electron-irradiated silicon **2014**,		1
78	Retarded oxygen diffusion in heavily phosphorus-doped Czochralski silicon: experiments and first-principles calculations. *Journal of Physics Condensed Matter*, **2012**, 24, 495802	1.8	1
77	Anomalous Magnetization Behavior of Fe-N Films Deposited by Reactive Pulsed Laser Deposition. *IEEE Transactions on Magnetics*, **2012**, 48, 2899-2902	2	1
76	Hydrogenation of interface states at a clean grain boundary in the direct silicon bonded wafer. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 990-993	1.6	1
75	Hydrogen passivation of Fe-related deep energy levels at a direct silicon-bonded (110)/(100) grain boundary. *Scripta Materialia*, **2011**, 64, 653-656	5.6	1
74	Enhancement effect of nitrogen co-doping on oxygen precipitation in heavily phosphorus-doped Czochralski silicon during high-temperature annealing. *Journal of Crystal Growth*, **2009**, 311, 3273-3277	1.6	1
73	Electrically pumped wavelength-tunable blue random lasing from CdZnO films on silicon. *Applied Physics Letters*, **2012**, 100, 231101	3.4	1
72	An Etchant for Delineation of Flow Pattern Defects in Heavily Doped n-type Silicon Wafers. *ECS Transactions*, **2012**, 44, 751-757	1	1
71	High temperature nucleation of oxygen precipitates in Germanium-doped Czochralski silicon. *Thin Solid Films*, **2010**, 518, 2334-2337	2.2	1
70	Diamond nanocrystals and amorphous SiOx nanowires formed by rapid thermal annealing of carbon film. *Thin Solid Films*, **2007**, 515, 6707-6712	2.2	1
69	Recombination activity of nickel in nitrogen-doped Czochralski silicon treated by rapid thermal processing. *Materials Science in Semiconductor Processing*, **2007**, 10, 222-226	4.3	1
68	Dissolution of oxygen precipitates in germanium-doped Czochralski silicon during rapid thermal annealing. *Journal of Crystal Growth*, **2007**, 308, 247-251	1.6	1
67	Study of photoconductivity and photoluminescence of organic/porous silicon complexes. *Applied Surface Science*, **2007**, 253, 4566-4569	6.7	1
66	Nitrogen-doped Czochralski silicon treated in rapid thermal process. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 134, 193-201	3.1	1

65	Blue light emission of porous silicon subjected to RTP treatments. *Science Bulletin*, **2006**, 51, 2696-2699		1
64	STUDY OF OPTICAL PROPERTIES OF POROUS SILICON PRODUCED BY METAL-AID. *Modern Physics Letters B*, **2007**, 21, 1989-1997	1.6	1
63	Stress dependent structure of annealed nitrogen-doped Cz-Si. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 134, 218-221	3.1	1
62	Investigation of thermal donors in Czochralski silicon annealed at 450°C under high pressure of 1GPa. *Physica B: Condensed Matter*, **2003**, 339, 204-207	2.8	1
61	Microstructure of high temperature–pressure treated nitrogen-doped Czochralski silicon. *Journal of Alloys and Compounds*, **2004**, 382, 275-277	5.7	1
60	PdPtRu nanocages with tunable compositions for boosting the methanol oxidation reaction. *Nanoscale Advances*,	5.1	1
59	Efficient Sensitized Photoluminescence from Erbium Chloride Silicate via Interparticle Energy Transfer.. *Materials*, **2022**, 15,	3.5	1
58	Sn-Doped BiO nanosheets for highly efficient electrochemical CO reduction toward formate production. *Nanoscale*, **2021**, 13, 19610-19616	7.7	1
57	Anti-reflection effect of large-area ZnO nano-needle array on multi-crystalline silicon solar cells. *Materials Science in Semiconductor Processing*, **2022**, 138, 106299	4.3	1
56	Strain effect in Pd@PdAg twinned nanocrystals towards ethanol oxidation electrocatalysis. *Nanoscale Advances*,	5.1	1
55	Improved Efficiency for Silicon-Based Perovskite Light-Emitting Diodes via Interfacial Hydrophilic Modification. *Advanced Materials Interfaces*, **2021**, 8, 2101448	4.6	1
54	Improving CdTe-Based Thin-Film Solar Cell Efficiency with the Oxygenated CdSe Layer Prepared by Sputtering Process. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 2000560	1.6	1
53	Flash Solid-Solid Synthesis of Silicon Oxide Nanorods. *Small*, **2020**, 16, e2001435	11	1
52	Au-Doped intermetallic Pd3Pb wavy nanowires as highly efficient electrocatalysts toward the oxygen reduction reaction. *CrystEngComm*, **2020**, 22, 6478-6484	3.3	1
51	A microscopic TEM study of the defect layers in cast-mono crystalline silicon wafers induced by diamond-wire sawing. *AIP Advances*, **2021**, 11, 045103	1.5	1
50	Toward Wafer-Scale Production of 2D Transition Metal Chalcogenides. *Advanced Electronic Materials*, **2021**, 7, 2100278	6.4	1
49	Cobalt Oxide–Tin Core–Shell Nanowire Arrays as High-Performance Electrodes for Lithium-Ion Batteries. *Energy Technology*, **2016**, 4, 1435-1439	3.5	1
48	Graphene Quantum Dots: Highly Pure and Luminescent Graphene Quantum Dots on Silicon Directly Grown by Chemical Vapor Deposition (Part. Part. Syst. Charact. 1/2016). *Particle and Particle Systems Characterization*, **2016**, 33, 2-2	3.1	1

47	A unique ligand effect in Pt-based core–shell nanocubes to boost oxygen reduction electrocatalysis. *Journal of Materials Chemistry A*,	13	1
46	Enhanced oxygen reduction activity of Pt shells on PdCu truncated octahedra with different compositions.. *RSC Advances*, **2018**, 8, 34853-34859	3.7	1
45	Effect of Small-Angle Grain Boundary on the Mechanical Properties in Direct Silicon Bonded Wafer. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800118	1.6	1
44	Sensitized electroluminescence from erbium doped silicon rich oxynitride light emitting devices. *Journal of Luminescence*, **2021**, 235, 118009	3.8	1
43	Recent Progress on the Scanning Tunneling Microscopy and Spectroscopy Study of Semiconductor Heterojunctions. *Small*, **2021**, e2100655	11	1
42	Evaluation of large-scale recycled seed for cast monocrystalline silicon: Defect multiplication mechanisms and feasibility. *Solar Energy Materials and Solar Cells*, **2021**, 230, 111266	6.4	1
41	Enhanced photoluminescence of silicon quantum dots in the presence of both energy transfer enhancement and emission enhancement mechanisms assisted by the double plasmon modes of gold nanorods. *Nanoscale Advances*, **2021**, 3, 4810-4815	5.1	1
40	Revealing the Correlation of Light Soaking Effect with Ion Migration in Perovskite Solar Cells. *Solar Rrl*,2200050	7.1	1
39	Electroluminescence from light-emitting device with erbium-doped TiO2 film sputtered onp+-Si substrate: Enhancement effect of codoping zirconium. *Thin Solid Films*, **2022**, 748, 139160	2.2	1
38	Crystal growth and resistivity modulation of n-type phosphorus-doped cast mono-like silicon. *Solar Energy*, **2022**, 236, 294-300	6.8	1
37	High-responsivity graphene/hyperdoped-silicon heterostructure infrared photodetectors. *Optics and Laser Technology*, **2022**, 153, 108291	4.2	1
36	Doping-dependent nucleation of basal plane dislocations in 4H-SiC. *Journal Physics D: Applied Physics*, **2022**, 55, 334002	3	1
35	Density functional theory study on the boron and phosphorus doping of germanium quantum dots. *RSC Advances*, **2017**, 7, 50935-50941	3.7	0
34	Effect of rapid thermal treatment on photoluminescence of surface passivated porous silicon. *Journal of Luminescence*, **2008**, 128, 317-320	3.8	0
33	Effects of rapid thermal processing on oxide precipitation in conventional and nitrogen-doped Czochralski silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 670-676	1.6	0
32	One-dimensional silicon nanostructures fabricated by thermal evaporation. *Materials Science and Engineering C*, **2006**, 26, 800-804	8.3	0
31	A New Design of Side Heater for 3D Solid-liquid Interface Improvement in G8 Directional Solidification Silicon Ingot Growth. *Silicon*,1	2.4	0
30	Carrier Injection and Annealing-Enhanced Electrical Performance in Tunnel Oxide-Passivated Contact Silicon Solar Cells. *Physica Status Solidi (A) Applications and Materials Science*,2100614	1.6	0

29	Nitrogen Impurity in Crystalline Silicon **2019**, 463-494		0
28	Hydrogen passivation of iron-acceptor pairs in boron and gallium co-doped crystalline silicon. *Applied Physics Express*, **2020**, 13, 011002	2.4	0
27	Facile Synthesis of Pd@PtM (= Rh, Ni, Pd, Cu) Multimetallic Nanorings as Efficient Catalysts for Ethanol Oxidation Reaction. *Frontiers in Chemistry*, **2021**, 9, 683450	5	0
26	Technoeconomically competitive four-terminal perovskite/graphene-silicon tandem solar cells with over 20% efficiency. *Journal of Energy Chemistry*, **2021**, 63, 477-477	12	0
25	Numerical Simulation of a Novel Method for PVT Growth of SiC by Adding a Graphite Block. *Crystals* , **2021**, 11, 1581	2.3	0
24	Hyperdoped Crystalline Silicon for Infrared Photodetectors by Pulsed Laser Melting: A Review. *Physica Status Solidi (A) Applications and Materials Science*,2100772	1.6	0
23	Rapid thermal processing induced vacancy-oxygen complexes in Czochralski-grown Si1−xGex. *Journal of Materials Science: Materials in Electronics*, **2015**, 26, 7666-7672	2.1	
22	Defect-Related Electroluminescence in the 1.2–1.7 μm Range from Boron-Implanted Silicon at Room Temperature. *Journal of Electronic Materials*, **2018**, 47, 4970-4974	1.9	
21	Effect of scattering from localized surface plasmon resonance on improving the luminescence efficiency of silicon nitride light-emitting devices. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	
20	On the mechanism of carrier scattering at oxide precipitates in Czochralski silicon. *Journal of Materials Science: Materials in Electronics*, **2015**, 26, 2589-2594	2.1	
19	Study of sulphidation of Cu2S nanoparticle precursor films with an air-stable process. *Journal of Materials Science: Materials in Electronics*, **2012**, 23, 1263-1267	2.1	
18	Effects of two-step rapid thermal processing in different ambients on denuded zone and oxygen precipitation in Czochralski silicon. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 3080-3085		
17	Effect of vacancies on copper precipitation in n-type Czochralski silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2662-2665	1.6	
16	Hydrofluoric acid free synthesis of macropores on silicon by chemical vapor deposition and their photoluminescence. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 494-498	3	
15	Effect of ramping anneals under inert or oxidizing ambient on the formation of oxygen precipitate denuded zone in nitrogen-doped Czochralski silicon wafers. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 1934-1939	1.6	
14	Preface: phys. stat. sol. (a) 203/4. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 657-658	1.6	
13	Effect of oxygen precipitates and induced dislocations on oxidation-induced stacking faults in nitrogen-doped Czochralski silicon. *Journal of Applied Physics*, **2004**, 96, 3031-3033	2.5	
12	Oxygen precipitation kinetics of Czochralski silicon preannealed under high pressure. *Physica B: Condensed Matter*, **2003**, 340-342, 1041-1045	2.8	

11	Bipolar structure of carrier concentration in hydrogen pre-annealing Czochralski silicon wafer. *Physica B: Condensed Matter*, **2003**, 340-342, 601-604	2.8
10	Effect of Germanium Codoping on the Grown-In Oxide Precipitates in Nitrogen-Doped Czochralski Silicon. *Physica Status Solidi (A) Applications and Materials Science*,2100642	1.6
9	Nitrogen Impurity in Crystalline Silicon **2019**, 1-32	
8	Growth of Crystalline Silicon for Solar Cells: Czochralski Si **2019**, 129-174	
7	Efficient sensitized photoluminescence of Er silicate in silicon oxide films embedded with amorphous silicon clusters, part II: photoluminescence. *Optical Materials Express*, **2019**, 9, 4339	2.6
6	Effects of dopants on the growth of oxidation-induced stacking faults in heavily doped n-type Czochralaki silicon. *Wuli Xuebao/Acta Physica Sinica*, **2015**, 64, 096105	0.6
5	Growth of Crystalline Silicon for Solar Cells: Czochralski Si **2017**, 1-45	
4	Oxygen precipitation in Ge-doped Czochralski-silicon at 900 °C investigated by in situ high energy x-ray diffraction. *AIP Advances*, **2020**, 10, 105324	1.5
3	Kinetic suppression of boron–oxygen complexes in p-type Czochralski silicon by tin doping. *Applied Physics Express*, **2019**, 12, 011005	2.4
2	Effect of oxygen concentration on minority carrier lifetime at the bottom of quasi-single crystalline silicon. *Materials Science in Semiconductor Processing*, **2021**, 123, 105497	4.3
1	Participation of nitrogen impurities in the growth of grown-in oxide precipitates in nitrogen-doped Czochralski silicon. *Journal of Applied Physics*, **2022**, 131, 155703	2.5