

# Naoki Fukata

## List of Publications by Year in descending order

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250  
papers

4,670  
citations

94269

37  
h-index

161609

54  
g-index

252  
all docs

252  
docs citations

252  
times ranked

5256  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical Properties of Si Nanowires as Revealed by in Situ Transmission Electron Microscopy and Molecular Dynamics Simulations. <i>Nano Letters</i> , 2012, 12, 1898-1904.	4.5	151
2	Hydrogen Molecules in Crystalline Silicon Treated with Atomic Hydrogen. <i>Physical Review Letters</i> , 1996, 77, 3161-3164.	2.9	142
3	Cation Vacancy-Initiated CO <sub>2</sub> Photoreduction over ZnS for Efficient Formate Production. <i>ACS Energy Letters</i> , 2019, 4, 1387-1393.	8.8	102
4	Doping and Raman Characterization of Boron and Phosphorus Atoms in Germanium Nanowires. <i>ACS Nano</i> , 2010, 4, 3807-3816.	7.3	99
5	Hot Electron Excitation from Titanium Nitride Using Visible Light. <i>ACS Photonics</i> , 2016, 3, 1552-1557.	3.2	98
6	Low-temperature (180±Å°C) formation of large-grained Ge (111) thin film on insulator using accelerated metal-induced crystallization. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	96
7	Enhanced photodegradation of methyl orange with TiO <sub>2</sub> nanoparticles using a triboelectric nanogenerator. <i>Nanotechnology</i> , 2013, 24, 295401.	1.3	88
8	Impurity Doping in Silicon Nanowires. <i>Advanced Materials</i> , 2009, 21, 2829-2832.	11.1	87
9	Nitrogen doping-mediated oxygen vacancies enhancing co-catalyst-free solar photocatalytic H <sub>2</sub> production activity in anatase TiO <sub>2</sub> nanosheet assembly. <i>Applied Catalysis B: Environmental</i> , 2021, 285, 119755.	10.8	86
10	Optical properties of polydimethylsiloxane (PDMS) during nanosecond laser processing. <i>Applied Surface Science</i> , 2016, 374, 96-103.	3.1	85
11	Phonon confinement effect of silicon nanowires synthesized by laser ablation. <i>Applied Physics Letters</i> , 2005, 86, 213112.	1.5	79
12	High Efficiency Hybrid Solar Cells Using Nanocrystalline Si Quantum Dots and Si Nanowires. <i>ACS Nano</i> , 2015, 9, 6891-6899.	7.3	78
13	Segregation Behaviors and Radial Distribution of Dopant Atoms in Silicon Nanowires. <i>Nano Letters</i> , 2011, 11, 651-656.	4.5	72
14	Characterization of Impurity Doping and Stress in Si/Ge and Ge/Si Core-Shell Nanowires. <i>ACS Nano</i> , 2012, 6, 8887-8895.	7.3	64
15	Lithium ion battery anodes using Si-Fe based nanocomposite structures. <i>Nano Energy</i> , 2016, 26, 37-42.	8.2	62
16	Superior photocatalytic performance of reduced graphene oxide wrapped electrospun anatase mesoporous TiO <sub>2</sub> nanofibers. <i>Journal of Alloys and Compounds</i> , 2014, 615, 643-650.	2.8	61
17	Hydrogen molecules and hydrogen-related defects in crystalline silicon. <i>Physical Review B</i> , 1997, 56, 6642-6647.	1.1	59
18	Inorganic/organic hybrid solar cells: optimal carrier transport in vertically aligned silicon nanowire arrays. <i>Nanoscale</i> , 2014, 6, 6092.	2.8	59

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19	Thiourea assisted one-pot easy synthesis of CdS/rGO composite by the wet chemical method: Structural, optical, and photocatalytic properties. <i>Ceramics International</i> , 2013, 39, 9207-9214.	2.3	57
20	Doping and hydrogen passivation of boron in silicon nanowires synthesized by laser ablation. <i>Applied Physics Letters</i> , 2006, 89, 203109.	1.5	55
21	Size-Tunable Silicon/Iron Oxide Hybrid Nanoparticles with Fluorescence, Superparamagnetism, and Biocompatibility. <i>Journal of the American Chemical Society</i> , 2011, 133, 18626-18633.	6.6	55
22	Controlled chemical etching for silicon nanocrystals with wavelength-tunable photoluminescence. <i>Chemical Communications</i> , 2009, , 3759.	2.2	53
23	In situ Blue titania via band shape engineering for exceptional solar H <sub>2</sub> production in rutile TiO <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120380.	10.8	53
24	Rapid synthesis of biocompatible gold nanoflowers with tailored surface textures with the assistance of amino acid molecules. <i>RSC Advances</i> , 2012, 2, 4608.	1.7	51
25	Phonon confinement and self-limiting oxidation effect of silicon nanowires synthesized by laser ablation. <i>Journal of Applied Physics</i> , 2006, 100, 024311.	1.1	50
26	Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. <i>Advanced Functional Materials</i> , 2015, 25, 5277-5284.	7.8	50
27	Probing the role of nickel dopant in aqueous colloidal ZnS nanocrystals for efficient solar-driven CO <sub>2</sub> reduction. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 1013-1020.	10.8	50
28	High-efficiency silicon hybrid solar cells employing nanocrystalline Si quantum dots and Si nanotips for energy management. <i>Nano Energy</i> , 2017, 35, 154-160.	8.2	49
29	Functionalization of Silicon Nanostructures for Energy-Related Applications. <i>Small</i> , 2017, 13, 1701713.	5.2	49
30	Visible and Infra-red Light Emission in Boron-Doped Wurtzite Silicon Nanowires. <i>Scientific Reports</i> , 2014, 4, 3603.	1.6	46
31	Phosphorus doping and hydrogen passivation of donors and defects in silicon nanowires synthesized by laser ablation. <i>Applied Physics Letters</i> , 2007, 90, 153117.	1.5	42
32	Optoelectronic Properties of Solution Grown ZnO n-p or p-n Core-Shell Nanowire Arrays. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 4287-4291.	4.0	42
33	Conversion of a 2D Lepidocrocite-Type Layered Titanate into Its 1D Nanowire Form with Enhancement of Cation Exchange and Photocatalytic Performance. <i>Inorganic Chemistry</i> , 2019, 58, 7989-7996.	1.9	41
34	Low-temperature UV ozone-treated high efficiency radial p-n junction solar cells: N-Si NW arrays embedded in a p-Si matrix. <i>Nano Energy</i> , 2015, 11, 219-225.	8.2	40
35	Hydrogen Passivation of Donors and Hydrogen States in Heavily Doped n-Type Silicon. <i>Japanese Journal of Applied Physics</i> , 1996, 35, 3937-3941.	0.8	39
36	Vacancy Formation Energy of Silicon Determined by a New Quenching Method. <i>Japanese Journal of Applied Physics</i> , 2001, 40, L854-L856.	0.8	39

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37	Hydrogen molecules trapped by multivacancies in silicon. <i>Physical Review B</i> , 1999, 60, 10852-10854.	1.1	38
38	Enhancement of the core near-band-edge emission induced by an amorphous shell in coaxial one-dimensional nanostructure: the case of SiC/SiO <sub>2</sub> core/shell self-organized nanowires. <i>Nanotechnology</i> , 2010, 21, 345702.	1.3	37
39	Doping and characterization of boron atoms in nanocrystalline silicon particles. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	35
40	Synthesis of silicon nanowires using laser ablation method and their manipulation by electron beam. <i>Science and Technology of Advanced Materials</i> , 2005, 6, 628-632.	2.8	34
41	Luminescence properties of SiC/SiO <sub>2</sub> core-shell nanowires with different radial structure. <i>Materials Letters</i> , 2012, 71, 137-140.	1.3	34
42	Codoping of boron and phosphorus in silicon nanowires synthesized by laser ablation. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	33
43	Clear Experimental Demonstration of Hole Gas Accumulation in Ge/Si Core-shell Nanowires. <i>ACS Nano</i> , 2015, 9, 12182-12188.	7.3	33
44	Electronic Level Scheme in Boron- and Phosphorus-Doped Silicon Nanowires. <i>Nano Letters</i> , 2012, 12, 3012-3017.	4.5	32
45	Preparing the Way for Doping Wurtzite Silicon Nanowires while Retaining the Phase. <i>Nano Letters</i> , 2013, 13, 5900-5906.	4.5	32
46	MOF-derived nanocrystalline ZnO with controlled orientation and photocatalytic activity. <i>Chemosphere</i> , 2022, 303, 134932.	4.2	32
47	Downshifting of highly energetic photons and energy transfer by Mn-doped perovskite CsPbCl <sub>3</sub> nanocrystals in hybrid organic/silicon nanostructured solar cells. <i>Nano Energy</i> , 2020, 77, 105163.	8.2	30
48	Formation of Hydrogen Molecules in n-Type Silicon. <i>Japanese Journal of Applied Physics</i> , 1996, 35, L1069-L1071.	0.8	29
49	Interstitial oxygen in GeSi alloys. <i>Physica B: Condensed Matter</i> , 2001, 308-310, 539-541.	1.3	29
50	In situ spectroscopic measurement of transmitted light related to defect formation in SiO <sub>2</sub> during femtosecond laser irradiation. <i>Applied Physics Letters</i> , 2003, 83, 3495-3497.	1.5	29
51	Aerosol-assisted synthesis of mesoporous organosilica microspheres with controlled organic contents. <i>Science and Technology of Advanced Materials</i> , 2009, 10, 025005.	2.8	29
52	Three Different Forms of Hydrogen Molecules in Silicon. <i>Japanese Journal of Applied Physics</i> , 1999, 38, L691-L693.	0.8	27
53	Flexible and Transparent Silicon Nanoparticle/Polymer Composites with Stable Luminescence. <i>Chemistry - an Asian Journal</i> , 2010, 5, 50-55.	1.7	26
54	Porous plasmonic nanocomposites for SERS substrates fabricated by two-step laser method. <i>Journal of Alloys and Compounds</i> , 2016, 665, 282-287.	2.8	26

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55	Fs-laser processing of medical grade polydimethylsiloxane (PDMS). <i>Applied Surface Science</i> , 2016, 374, 229-234.	3.1	26
56	Formation energy of vacancy in silicon determined by a new quenching method. <i>Physica B: Condensed Matter</i> , 2001, 308-310, 1125-1128.	1.3	25
57	Annealing behavior of hydrogen-defect complexes in carbon-doped Si quenched in hydrogen atmosphere. <i>Journal of Applied Physics</i> , 2000, 87, 8361-8367.	1.1	24
58	The synthesis and structural characterization of boron-doped silicon-nanocrystals with enhanced electroconductivity. <i>Nanotechnology</i> , 2009, 20, 365207.	1.3	24
59	Marimo-Bead-Supported Core-Shell Nanocomposites of Titanium Nitride and Chromium-Doped Titanium Dioxide as a Highly Efficient Water-Floatable Green Photocatalyst. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 31327-31339.	4.0	24
60	Evidence for trapped by carbon impurities in silicon. <i>Physica B: Condensed Matter</i> , 2001, 308-310, 197-201.	1.3	23
61	Phosphorus ion implantation in silicon nanocrystals embedded in SiO <sub>2</sub> . <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	23
62	Control of grain size and crystallinity of poly-Si films on quartz by Al-induced crystallization. <i>CrystEngComm</i> , 2017, 19, 2305-2311.	1.3	23
63	Generation of Electron Moiré Fringes on Designed Nanoporous Anodic Alumina Films and Their Replicated Ni Cone Arrays: Exploration of Domain Sizes and Nanopore Arrangements. <i>Journal of Physical Chemistry C</i> , 2009, 113, 9632-9637.	1.5	22
64	n-ZnO/p-Si 3D heterojunction solar cells in Si holey arrays. <i>Nanoscale</i> , 2012, 4, 737-741.	2.8	22
65	Recrystallization and Reactivation of Dopant Atoms in Ion-Implanted Silicon Nanowires. <i>ACS Nano</i> , 2012, 6, 3278-3283.	7.3	22
66	Interaction of Boron and Phosphorus Impurities in Silicon Nanowires during Low-Temperature Ozone Oxidation. <i>Journal of Physical Chemistry C</i> , 2013, 117, 20300-20307.	1.5	22
67	Au-Sn Catalyzed Growth of Ge <sub>1-x</sub> Sn <sub>x</sub> Nanowires: Growth Direction, Crystallinity, and Sn Incorporation. <i>Nano Letters</i> , 2019, 19, 6270-6277.	4.5	22
68	Efficiency enhancement of Si nanostructure hybrid solar cells by optimizing non-radiative energy transfer from Si quantum dots. <i>Nano Energy</i> , 2021, 82, 105728.	8.2	22
69	Phenyl-Modified Carbon Nitride Quantum Nanoflakes for Ultra-Highly Selective Sensing of Formic Acid: A Combined Experimental by QCM and Density Functional Theory Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 48595-48610.	4.0	22
70	Vertically Aligned Ge Nanowires on Flexible Plastic Films Synthesized by (111)-Oriented Ge Seeded Vapor-Liquid-Solid Growth. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 18120-18124.	4.0	21
71	Template-oriented synthesis of hydroxyapatite nanoplates for 3D bone printing. <i>Journal of Materials Chemistry B</i> , 2019, 7, 7228-7234.	2.9	21
72	Solution derived p-ZnO/n-Si nanowire heterojunctions for photodetection. <i>Chemical Physics Letters</i> , 2016, 658, 158-161.	1.2	20

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73	Multimodal switching of a redox-active macrocycle. <i>Nature Communications</i> , 2019, 10, 1007.	5.8	20
74	Hydrogenation effect on enhancement of photoluminescence of Er and Si nanocrystallites in Er-doped SiO <sub>2</sub> synthesized by laser ablation. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 84, 395-401.	1.1	19
75	Photosensitizer Encryption with Aggregation Enhanced Singlet Oxygen Production. <i>Journal of the American Chemical Society</i> , 2022, 144, 10830-10843.	6.6	19
76	CsH <sub>2</sub> * defect in crystalline silicon. <i>Physica B: Condensed Matter</i> , 2001, 302-303, 220-226.	1.3	18
77	Hydrogen-defect complexes formed by neutron irradiation of hydrogenated silicon observed by optical absorption measurement. <i>Journal of Applied Physics</i> , 2002, 91, 5831-5839.	1.1	18
78	Industrial mass-production of mesoporous silica spherical particles by a spray-drying process: investigation of synthetic conditions. <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 198-202.	0.5	18
79	Mechanical, Electrical, and Crystallographic Property Dynamics of Bent and Strained Ge/Si Core-Shell Nanowires As Revealed by <i>in situ</i> Transmission Electron Microscopy. <i>Nano Letters</i> , 2018, 18, 7238-7246.	4.5	18
80	Hybrid organic and inorganic solar cell based on a cyanine dye and quantum dots. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 375, 166-174.	2.0	18
81	Highly Air-Stable Solution-Processed and Low-Temperature Organic/Inorganic Nanostructure Hybrid Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 2637-2644.	2.5	18
82	Systematic optimization of triboelectric nanogenerator performance through surface micropatterning. <i>Nano Energy</i> , 2021, 83, 105856.	8.2	18
83	Formation of hydrogen-boron complexes in boron-doped silicon treated with a high concentration of hydrogen atoms. <i>Physical Review B</i> , 2005, 72, .	1.1	17
84	Active Mercury(II) Ion Removal: Stoichiometrically Controlled Thiol-Functionalized Mesoporous Silica by a Mass Production Spray Dry System. <i>Bulletin of the Chemical Society of Japan</i> , 2009, 82, 1039-1043.	2.0	17
85	<i>in situ</i> fabrication and optoelectronic analysis of axial CdS/p-Si nanowire heterojunctions in a high-resolution transmission electron microscope. <i>Nanotechnology</i> , 2015, 26, 154001.	1.3	17
86	Nanoscale aluminum plasmonic waveguide with monolithically integrated germanium detector. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	17
87	2D Mesoporous Channels of PMO; a Platform for Cluster-Like Pt Synthesis and Catalytic Activity in Nitrophenol Reduction. <i>Catalysts</i> , 2020, 10, 167.	1.6	17
88	Solar Cell Based on Hybrid Structural SiNW/Poly(3,4 ethylenedioxythiophene): Poly(styrenesulfonate)/Graphene. <i>Global Challenges</i> , 2020, 4, 2000010.	1.8	17
89	Classical Coulomb blockade of a silicon nanowire dot. <i>Applied Physics Letters</i> , 2008, 92, 213110.	1.5	16
90	Temperature dependent Al-induced crystallization of amorphous Ge thin films on SiO <sub>2</sub> substrates. <i>Journal of Crystal Growth</i> , 2013, 372, 189-192.	0.7	16

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91	Synthesis of mesoporous antimony-doped tin oxide (ATO) thin films and investigation of their electrical conductivity. <i>CrystEngComm</i> , 2013, 15, 4404.	1.3	16
92	Modulation of Thermoelectric Power Factor via Radial Dopant Inhomogeneity in B-Doped Si Nanowires. <i>Journal of the American Chemical Society</i> , 2014, 136, 14100-14106.	6.6	16
93	Energy management in hybrid organic-silicon nanostructured solar cells by downshifting using CdZnS/ZnS and CdZnSe/ZnS quantum dots. <i>Nano Energy</i> , 2021, 89, 106470.	8.2	16
94	Metal-catalyzed electroless etching and nanoimprinting silicon nanowire-based solar cells: Silicon nanowire defect reduction and efficiency enhancement by two-step H <sub>2</sub> annealing. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 065001.	0.8	15
95	SERS analyses of thiamethoxam assisted by Ag films and nanostructures produced by laser techniques. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 397-403.	1.2	15
96	Hole gas accumulation in Si/Ge core-shell and Si/Ge/Si core-double shell nanowires. <i>Nanoscale</i> , 2018, 10, 21062-21068.	2.8	15
97	Cancer antigen 125 assessment using carbon quantum dots for optical biosensing for the early diagnosis of ovarian cancer. <i>RSC Advances</i> , 2021, 11, 31047-31057.	1.7	15
98	Electrochemical Design of Two-Dimensional Au Nanocone Arrays Using Porous Anodic Alumina Membranes with Conical Holes. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 4384-4387.	0.9	14
99	Doping and characterization of impurity atoms in Si and Ge nanowires. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 320-330.	0.8	14
100	Diffused back surface field formation in combination with two-step H <sub>2</sub> annealing for improvement of silicon nanowire-based solar cell efficiency. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 04CP01.	0.8	14
101	Phonon confinement in silicon nanowires synthesized by laser ablation. <i>Physica B: Condensed Matter</i> , 2006, 376-377, 864-867.	1.3	13
102	Observation of leakage sites in a hafnium silicon oxynitride gate dielectric of a metal-oxide-semiconductor field-effect transistor device by electron-beam-induced current. <i>Applied Physics Letters</i> , 2006, 89, 222104.	1.5	13
103	Dopant dependence on passivation and reactivation of carrier after hydrogenation. <i>Journal of Applied Physics</i> , 2007, 101, 046107.	1.1	13
104	Cathodoluminescence characterization of <sup>12</sup> -SiC nanowires and surface-related silicon dioxide. <i>Materials Science in Semiconductor Processing</i> , 2008, 11, 179-181.	1.9	13
105	Aerosol-assisted Fabrication of Porous Silica Spheres with a Hierarchical Pore System through Multicomponent Assembly. <i>Chemistry Letters</i> , 2009, 38, 78-79.	0.7	13
106	Effect of nanowire length on the performance of silicon nanowires based solar cell. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2014, 5, 045014.	0.7	13
107	Surface-Enhanced Raman Spectroscopy (SERS) of Mancozeb and Thiamethoxam Assisted by Gold and Silver Nanostructures Produced by Laser Techniques on Paper. <i>Applied Spectroscopy</i> , 2019, 73, 313-319.	1.2	13
108	Fabrication of high-performance ordered radial junction silicon nanopencil solar cells by fine-tuning surface carrier recombination and structure morphology. <i>Nano Energy</i> , 2019, 56, 604-611.	8.2	13

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109	Structural Conversion of Cu-Titanate into Photoactive Plasmonic Cu-TiO <sub>2</sub> for H <sub>2</sub> Generation in Visible Light. ACS Sustainable Chemistry and Engineering, 2022, 10, 4143-4151.	3.2	13
110	Demonstration of spin valve effects in silicon nanowires. Journal of Applied Physics, 2011, 109, 07C508.	1.1	12
111	Porous Tubular Rutile TiO <sub>2</sub> Nanofibers: Synthesis, Characterization and Photocatalytic Properties. Journal of Nanoscience and Nanotechnology, 2014, 14, 3034-3040.	0.9	12
112	Effect of Shell Growth and Doping Conditions of Core-Shell Homojunction Si Nanowire Solar Cells. Journal of Nanoscience and Nanotechnology, 2015, 15, 4339-4346.	0.9	12
113	Defects and luminescence control of AlN ceramic by Si-doping. Scripta Materialia, 2016, 110, 109-112.	2.6	12
114	Pencil-shaped silicon nanowire synthesis and photovoltaic application. Japanese Journal of Applied Physics, 2017, 56, 085201.	0.8	12
115	Investigation of nanoscale voids in Sb-doped p-type ZnO nanowires. Nanotechnology, 2018, 29, 335204.	1.3	12
116	Controlling Catalyst-Free Formation and Hole Gas Accumulation by Fabricating Si/Ge Core-Shell and Si/Ge/Si Core-Double Shell Nanowires. ACS Nano, 2019, 13, 13403-13412.	7.3	12
117	Enhanced power conversion efficiency of an n-Si/PEDOT:PSS hybrid solar cell using nanostructured silicon and gold nanoparticles. RSC Advances, 2022, 12, 10514-10521.	1.7	12
118	Infrared spectra of hydrogen bound to group-III acceptors in Si: Homogeneous line broadening and sidebands. Physical Review B, 2002, 65, .	1.1	11
119	Impurity doping in silicon nanowires synthesized by laser ablation. Applied Physics A: Materials Science and Processing, 2008, 93, 589-592.	1.1	11
120	Boron distributions in individual core-shell Ge/Si and Si/Ge heterostructured nanowires. Nanoscale, 2016, 8, 19811-19815.	2.8	11
121	Improved Separation and Collection of Charge Carriers in Micro-Pyramidal-Structured Silicon/PEDOT:PSS Hybrid Solar Cells. Energies, 2017, 10, 420.	1.6	11
122	Formation energy of self-interstitials in carbon-doped Si determined by optical absorption due to hydrogen bound to self-interstitials. Journal of Applied Physics, 1999, 86, 1848-1853.	1.1	10
123	Formation and annihilation of H-point defect complexes in quenched Si doped with C. Journal of Applied Physics, 2000, 88, 4525.	1.1	10
124	Templateless Synthesis of Nanoporous Gold Sponge with Surface-enhanced Raman Scattering Activity. Chemistry Letters, 2010, 39, 372-373.	0.7	10
125	Synthesis of Continuous Mesoporous Ga-Doped Titania Films with Anatase Crystallized Framework. Journal of Nanoscience and Nanotechnology, 2011, 11, 6926-6933.	0.9	10
126	A single-electron transistor and an even-odd effect in chemically synthesized Ge nanowires. Journal of Applied Physics, 2011, 109, 036101.	1.1	10

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127	Bonding and electronic states of boron in silicon nanowires characterized by an infrared synchrotron radiation beam. <i>Nanoscale</i> , 2015, 7, 7246-7251.	2.8	10
128	Efficiency enhancement of silicon nanowire solar cells by using UV/Ozone treatments and micro-grid electrodes. <i>Applied Surface Science</i> , 2018, 439, 1057-1064.	3.1	10
129	Three-dimensional radial junction solar cell based on ordered silicon nanowires. <i>Nanotechnology</i> , 2019, 30, 344001.	1.3	10
130	Surface-Enhanced Raman Spectroscopy (SERS) of Neonicotinoid Insecticide Thiacloprid Assisted by Silver and Gold Nanostructures. <i>Applied Spectroscopy</i> , 2020, 74, 357-364.	1.2	10
131	ESR Spectra from Platinum-Hydrogen Pair in Silicon. <i>Japanese Journal of Applied Physics</i> , 2002, 41, L609-L611.	0.8	9
132	Top-gated germanium nanowire quantum dots in a few-electron regime. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	9
133	Synthesis and characterization of Zn-doped mesoporous SnO <sub>2</sub> by using thermally-stable block copolymer templates. <i>Dalton Transactions</i> , 2013, 42, 6366.	1.6	9
134	SERS substrates of doped germanium nanowires decorated with silver nanoparticles. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2014, 187, 102-107.	1.7	9
135	Interfacial intermixing of Ge/Si core-shell nanowires by thermal annealing. <i>Nanoscale</i> , 2020, 12, 7572-7576.	2.8	9
136	Self-organized direction growth of germanium film on insulator obtained by high speed continuous wave laser annealing. <i>Materials Letters</i> , 2021, 288, 129328.	1.3	9
137	Complexes of platinum and hydrogen in silicon observed by optical absorption and electron spin resonance. <i>Physical Review B</i> , 2002, 66, .	1.1	8
138	Platinum-hydrogen complexes in silicon observed by measurements of optical absorption and electron spin resonance. <i>Applied Physics Letters</i> , 2002, 81, 40-42.	1.5	8
139	In situ spectroscopic measurement of defect formation in SiO <sub>2</sub> induced by femtosecond laser irradiation. <i>Physica B: Condensed Matter</i> , 2003, 340-342, 986-989.	1.3	8
140	Complexes of point defects and impurities in electron-irradiated n-type Cz-Si pre-doped with hydrogen. <i>Physica Status Solidi (B): Basic Research</i> , 2003, 235, 115-120.	0.7	8
141	Growth Temperature Influence on the Luminescence of Eu,Si-Codoped AlN Phosphors. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, R126-R130.	0.9	8
142	Electron Excitation Memory Induced by Light Irradiation of Hydrogenated Si Nanocrystals Embedded in SiO <sub>2</sub> . <i>Japanese Journal of Applied Physics</i> , 2013, 52, 115201.	0.8	8
143	Diameter-controlled growth and impurity doping of silver colloid-seeded silicon microwires to nanowires for the realization of solar cell materials. <i>Materials Express</i> , 2013, 3, 85-91.	0.2	8
144	Formation and migration energies of a vacancy and an interstitial in a high-purity Si crystal determined by detecting complexes of point defects and hydrogen: Evaluation of activation energies of self-diffusion. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 091302.	0.8	8

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145	Quantifying mean inner potential of ZnO nanowires by off-axis electron holography. <i>Micron</i> , 2015, 78, 67-72.	1.1	8
146	Laser-assisted approach for synthesis of plasmonic Ag/ZnO nanostructures. <i>Superlattices and Microstructures</i> , 2017, 109, 886-896.	1.4	8
147	Thermal conductivity of Si nanowires with $\hat{\gamma}$ -modulated dopant distribution by self-heated 3i% method and its length dependence. <i>Journal of Applied Physics</i> , 2018, 124, 065105.	1.1	8
148	Single grain growth of Si thin film on insulating substrate by limited region aluminum induced crystallization. <i>Materials Letters</i> , 2019, 252, 100-102.	1.3	8
149	Ag and Au nanostructures for surface-enhanced Raman spectroscopy of Mospilan 20 SP (acetamiprid). <i>Journal of Raman Spectroscopy</i> , 2020, 51, 2398-2407.	1.2	8
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