

Kui-Qing Peng

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7392610/publications.pdf>

Version: 2024-02-01

52
papers

7,997
citations

159358

30
h-index

189595

50
g-index

57
all docs

57
docs citations

57
times ranked

6139
citing authors

#	ARTICLE	IF	CITATIONS
1	Aligned Single-Crystalline Si Nanowire Arrays for Photovoltaic Applications. <i>Small</i> , 2005, 1, 1062-1067.	5.2	791
2	Synthesis of Large-Area Silicon Nanowire Arrays via Self-Assembling Nanoelectrochemistry. <i>Advanced Materials</i> , 2002, 14, 1164.	11.1	686
3	Fabrication of Single-Crystalline Silicon Nanowires by Scratching a Silicon Surface with Catalytic Metal Particles. <i>Advanced Functional Materials</i> , 2006, 16, 387-394.	7.8	589
4	Silicon Nanowires for Photovoltaic Solar Energy Conversion. <i>Advanced Materials</i> , 2011, 23, 198-215.	11.1	546
5	Preparation of Large-Area Uniform Silicon Nanowires Arrays through Metal-Assisted Chemical Etching. <i>Journal of Physical Chemistry C</i> , 2008, 112, 4444-4450.	1.5	504
6	Uniform, Axial-Orientation Alignment of One-Dimensional Single-Crystal Silicon Nanostructure Arrays. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 2737-2742.	7.2	439
7	Motility of Metal Nanoparticles in Silicon and Induced Anisotropic Silicon Etching. <i>Advanced Functional Materials</i> , 2008, 18, 3026-3035.	7.8	427
8	Silicon nanowires for rechargeable lithium-ion battery anodes. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	372
9	Dendrite-Assisted Growth of Silicon Nanowires in Electroless Metal Deposition. <i>Advanced Functional Materials</i> , 2003, 13, 127-132.	7.8	356
10	High-Performance Silicon Nanohole Solar Cells. <i>Journal of the American Chemical Society</i> , 2010, 132, 6872-6873.	6.6	313
11	Ordered silicon nanowire arrays via nanosphere lithography and metal-induced etching. <i>Applied Physics Letters</i> , 2007, 90, 163123.	1.5	286
12	Metal-Particle-Induced, Highly Localized Site-Specific Etching of Si and Formation of Single-Crystalline Si Nanowires in Aqueous Fluoride Solution. <i>Chemistry - A European Journal</i> , 2006, 12, 7942-7947.	1.7	270
13	Silicon nanowires for advanced energy conversion and storage. <i>Nano Today</i> , 2013, 8, 75-97.	6.2	266
14	Silicon nanowire array photoelectrochemical solar cells. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	255
15	Platinum Nanoparticle Decorated Silicon Nanowires for Efficient Solar Energy Conversion. <i>Nano Letters</i> , 2009, 9, 3704-3709.	4.5	248
16	Fabrication of Large-Area Silicon Nanowire p-n Junction Diode Arrays. <i>Advanced Materials</i> , 2004, 16, 73-76.	11.1	239
17	Surface-Dominated Transport Properties of Silicon Nanowires. <i>Advanced Functional Materials</i> , 2008, 18, 3251-3257.	7.8	180
18	Silicon/Hematite Core/Shell Nanowire Array Decorated with Gold Nanoparticles for Unbiased Solar Water Oxidation. <i>Nano Letters</i> , 2014, 14, 18-23.	4.5	162

#	ARTICLE	IF	CITATIONS
19	Gas sensing properties of single crystalline porous silicon nanowires. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	145
20	High-Performance Silicon Nanowire Array Photoelectrochemical Solar Cells through Surface Passivation and Modification. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9861-9865.	7.2	127
21	Morphological selection of electroless metal deposits on silicon in aqueous fluoride solution. <i>Electrochimica Acta</i> , 2004, 49, 2563-2568.	2.6	93
22	Simultaneous gold deposition and formation of silicon nanowire arrays. <i>Journal of Electroanalytical Chemistry</i> , 2003, 558, 35-39.	1.9	86
23	Metal-Assisted Chemical Etching of Silicon in Oxidizing HF Solutions: Origin, Mechanism, Development, and Black Silicon Solar Cell Application. <i>Advanced Functional Materials</i> , 2020, 30, 2005744.	7.8	83
24	A surface-enhanced Raman spectroscopy substrate for highly sensitive label-free immunoassay. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	67
25	Fabrication and photovoltaic property of ordered macroporous silicon. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	53
26	Metal-Catalyzed Electroless Etching of Silicon in Aerated HF/H ₂ O Vapor for Facile Fabrication of Silicon Nanostructures. <i>Nano Letters</i> , 2014, 14, 4212-4219.	4.5	46
27	Fabrication of Silicon Nanowire Arrays by Macroscopic Galvanic Cell-Driven Metal Catalyzed Electroless Etching in Aerated HF Solution. <i>Advanced Materials</i> , 2014, 26, 1410-1413.	11.1	39
28	Continuous-flow Mass Production of Silicon Nanowires via Substrate-Enhanced Metal-Catalyzed Electroless Etching of Silicon with Dissolved Oxygen as an Oxidant. <i>Scientific Reports</i> , 2014, 4, 3667.	1.6	34
29	Oxidant Concentration Modulated Metal/Silicon Interface Electrical Field Mediates Metal-Assisted Chemical Etching of Silicon. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801132.	1.9	32
30	Structural Evidence for Actin-like Filaments in <i>Toxoplasma gondii</i> Using High-Resolution Low-Voltage Field Emission Scanning Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2003, 9, 330-335.	0.2	31
31	Metal-organic framework-derived walnut-like hierarchical Co-O-nanosheets as an advanced binder-free electrode material for flexible supercapacitor. <i>Journal of Energy Storage</i> , 2022, 49, 104150.	3.9	31
32	Broadband optical absorption enhancement in silicon nanofunnel arrays for photovoltaic applications. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	29
33	Carbon induced galvanic etching of silicon in aerated HF/H ₂ O vapor. <i>Corrosion Science</i> , 2019, 157, 268-273.	3.0	17
34	Single crystalline ordered silicon wire/Pt nanoparticle hybrids for solar energy harvesting. <i>Electrochemistry Communications</i> , 2010, 12, 509-512.	2.3	16
35	Gold-Sensitized Silicon/ZnO Core/Shell Nanowire Array for Solar Water Splitting. <i>Frontiers in Chemistry</i> , 2019, 7, 206.	1.8	16
36	Controllable Patterning of Hybrid Silicon Nanowire and Nanohole Arrays by Laser Interference Lithography. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 2000024.	1.2	11

#	ARTICLE	IF	CITATIONS
37	Plasmon enhanced broadband optical absorption in ultrathin silicon nanobowl array for photoactive devices applications. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	10
38	Fabrication of Pt nanowires with a diffraction-unlimited feature size by high-threshold lithography. <i>Applied Physics Letters</i> , 2015, 107, 133104.	1.5	9
39	Light trapping in randomly arranged silicon nanorocket arrays for photovoltaic applications. <i>Nanotechnology</i> , 2015, 26, 375401.	1.3	9
40	Rapid Formation of Uniform Cracks in Metal-Assisted Etched Silicon Nanowire Array Membranes: Implications for Transfer of Nanowires and Flexible Devices. <i>ACS Applied Nano Materials</i> , 2022, 5, 2779-2786.	2.4	8
41	Fabrication and photoelectrochemical properties of silicon/nickel oxide core/shell nanowire arrays. <i>RSC Advances</i> , 2015, 5, 88209-88213.	1.7	7
42	Surface Plasmon Enhanced Light Trapping in Metal/Silicon Nanobowl Arrays for Thin Film Photovoltaics. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-8.	1.5	5
43	Metal Particle Evolution Behavior during Metal Assisted Chemical Etching of Silicon. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 084002.	0.9	5
44	Cell spreading behaviors on hybrid nanopillar and nanohole arrays. <i>Nanotechnology</i> , 2022, 33, 045101.	1.3	4
45	Controlled Fabrication of Wafer-Scale Zigzag Silicon Nanowire Arrays by Metal-Assisted Chemical Etching through Synergistic Effect of Viscosity and Temperature. <i>ECS Journal of Solid State Science and Technology</i> , 2022, 11, 054006.	0.9	4
46	Optical absorption enhancement with low structural-parameter sensitivity in three-dimensional silicon nanocavity array for solar photovoltaics. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 010302.	0.8	1
47	Hole-Mediated Anisotropic Chemical Etching of Crystalline Silicon in HF Solutions: From Pyramidal to Porous Structures. <i>ECS Journal of Solid State Science and Technology</i> , 2019, 8, P277-P284.	0.9	1
48	Silicon surface patterning via galvanic microcontact imprinting lithography. <i>RSC Advances</i> , 2021, 11, 22473-22478.	1.7	1
49	Characterization and Synthesis of Some One-dimensional Heterojunctions. <i>Microscopy and Microanalysis</i> , 2003, 9, 330-331.	0.2	0
50	Size dependence in one-dimensional nano-materials and one-dimensional heterojunctions. <i>Materials Research Society Symposia Proceedings</i> , 2006, 931, 1.	0.1	0
51	Silicon Nanostructures Prepared by Metal-catalyzed Electroless Etching for Solar Energy Conversion. , 2013, , .		0
52	Retraction: Hole-Mediated Anisotropic Chemical Etching of Crystalline Silicon in HF Solutions: From Pyramidal to Porous Structures [<i>i>ECS J. Solid State Sci. Technol.,</i>8, P277 (2019)]. <i>ECS Journal of Solid State Science and Technology</i>, 2019, 8, X3-X3.</i>	0.9	0