Peng Jiang

List of Publications by Year
in descending order

69 papers	5,027 citations	136950 32 h-index	106344 65 g-index
69 all docs	69 docs citations	69 times ranked	5212 citing authors

#	Article	IF	Citations
1	Colloidal assembly to antireflection coatings. , 2022, , .		0
2	Macroporous Superhydrophobic Coatings with Switchable Wettability Enabled by Smart Shape Memory Polymers. Advanced Materials Interfaces, 2021, 8, 2002111.	3.7	12
3	Improved Surface Plasmon Resonance Sensing Sensitivity due to an Electrochemically Potential-Induced Gold Reconstruction. Journal of Electrochemical Science and Technology, 2021, 12, 167-172.	2.2	3
4	Monitoring electrochemical methanol oxidation and CO coverage using Pt deposited SPR sensor platform. International Journal of Energy Research, 2021, 45, 19535.	4.5	2
5	Elevated surface plasmon resonance sensing sensitivity of Au-covered silica sphere monolayer prepared by Langmuirâ€“Blodgett coating. Journal of Industrial and Engineering Chemistry, 2021, 99, 179-186.	5.8	5
6	Bio-Inspired Polymer Thin Films with Non-Close-Packed Nanopillars for Enhanced Bactericidal and Antireflective Properties. ACS Applied Polymer Materials, 2020, 2, 5808-5816.	4.4	16
7	Switchable Friction Coefficient on Shape Memory Photonic Crystals. MRS Advances, 2020, 5, 757-763.	0.9	2
8	An enhanced finite difference time domain method for two dimensional Maxwell's equations. Numerical Methods for Partial Differential Equations, 2020, 36, 1129-1144.	3.6	4
9	Evaporation-Induced Hierarchical Assembly of Rigid Silicon Nanopillars Fabricated by a Scalable Two-Level Colloidal Lithography Approach. ACS Applied Materials & Interfaces, 2019, 11, 40461-40469.	8.0	14
10	Reconfigurable Anticounterfeiting Coatings Enabled by Macroporous Shape Memory Polymers. ACS Applied Polymer Materials, 2019, 1, 36-46.	4.4	20
11	Chromogenic Photonic Crystal Sensors Enabled by Multistimuliâ€Responsive Shape Memory Polymers. Small, 2018, 14, e1703515.	10.0	72
12	Unconventional Shape Memory Mechanisms of Nanoporous Polymer Photonic Crystals: Implications for Nano-Optical Coatings and Devices. ACS Applied Nano Materials, 2018, 1, 6081-6090.	5.0	16
13	Self-assembled nanoparticle antireflection coatings on geometrically complex optical surfaces. Optics Letters, 2018, 43, 5238.	3.3	17
14	Controlling the Geometries of Si Nanowires through Tunable Nanosphere Lithography. ACS Applied Materials & Interfaces, 2017, 9, 7368-7375.	8.0	13
15	Reconfigurable Photonic Crystals Enabled by Multistimuli-Responsive Shape Memory Polymers Possessing Room Temperature Shape Processability. ACS Applied Materials & Interfaces, 2017, 9, 5457-5467.	8.0	59
16	Scalable parallel self-assembly of nanoparticle anti-reflection coatings. Thin Solid Films, 2017, 621, 156-164.	1.8	10
17	Programmable Macroporous Photonic Crystals Enabled by Swellingâ€Induced Allâ€Roomâ€Temperature Shape Memory Effects. Advanced Functional Materials, 2017, 27, 1703522.	14.9	31
18	Superhydrophobic hierarchical arrays fabricated by a scalable colloidal lithography approach. Journal of Colloid and Interface Science, 2017, 487, 484-492.	9.4	52

#	Article	IF	Citations
19	Energy efficiency of smart windows made of photonic crystal. International Journal of Construction Management, 2017, 17, 100-112.	3.2	14
20	Bioinspired broadband midwavelength infrared antireflection coatings on silicon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 041807.	1.2	9
21	Rapid electrostatics-assisted layer-by-layer assembly of near-infrared-active colloidal photonic crystals. Journal of Colloid and Interface Science, 2016, 482, 89-94.	9.4	18
22	Outstanding surface plasmon resonance performance enabled by templated oxide gratings. Physical Chemistry Chemical Physics, 2016, 18, 26078-26087.	2.8	26
23	Scalable Nanomanufacturing of Broadband Antireflection Coatings on Semiconductors. , 2016, , 319-353.		0
24	Sensitive surface plasmon resonance enabled by templated periodic arrays of gold nanodonuts. Nanotechnology, 2016, 27, 195601.	2.6	8
25	Photonic Crystals: Optically Bistable Macroporous Photonic Crystals Enabled by Thermoresponsive Shape Memory Polymers (Advanced Optical Materials 11/2015). Advanced Optical Materials, 2015, 3, 1508-1508.	7.3	1
26	Optically Bistable Macroporous Photonic Crystals Enabled by Thermoresponsive Shape Memory Polymers. Advanced Optical Materials, 2015, 3, 1509-1516.	7.3	48
27	Chromogenic Photonic Crystals Enabled by Novel Vaporâ€Responsive Shapeâ€Memory Polymers. Advanced Materials, 2015, 27, 3696-3704.	21.0	155
28	Reconfigurable photonic crystals enabled by pressure-responsive shape-memory polymers. Nature Communications, 2015, 6, 7416.	12.8	238
29	Direct Writing of Three-Dimensional Macroporous Photonic Crystals on Pressure-Responsive Shape Memory Polymers. ACS Applied Materials & Interfaces, 2015, 7, 23650-23659.	8.0	64
30	BIOINSPIRED SELF-CLEANING ANTIREFLECTION COATINGS. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 65-95.	0.1	0
31	Self-assembled self-cleaning broadband anti-reflection coatings. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 439, 84-100.	4.7	92
32	Self-assembled biomimetic superhydrophobic hierarchical arrays. Journal of Colloid and Interface Science, 2013, 405, 51-57.	9.4	44
33	Scalable bottom-up fabrication of colloidal photonic crystals and periodic plasmonic nanostructures. Journal of Materials Chemistry C, 2013, 1, 6031.	5.5	50
34	Generalized Fabrication of Monolayer Nonclose-Packed Colloidal Crystals with Tunable Lattice Spacing. Langmuir, 2013, 29, 7674-7681.	3.5	21
35	Biomimetic Antireflection Surfaces. , 2013, , 305-331.		12
36	High surface plasmon resonance sensitivity enabled by optical disks. Optics Letters, 2012, 37, 3681.	3.3	36

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37	Self-assembled nanoparticle antiglare coatings. Optics Letters, 2012, 37, 4380.	3.3	20
38	Surface plasmon resonance-enabled antibacterial digital versatile discs. Applied Physics Letters, 2012, 100, 063702.	3.3	10
39	Surface plasmon resonance and surface-enhanced Raman scattering sensing enabled by digital versatile discs. Applied Physics Letters, 2012, 100, .	3.3	35
40	The distributions of enhancement factors in closeâ€packed and noncloseâ€packed surfaceâ€enhanced Raman substrates. Journal of Raman Spectroscopy, 2012, 43, 389-395.	2.5	11
41	Biomimetic broadband antireflection gratings on solar-grade multicrystalline silicon wafers. Applied Physics Letters, 2011, 99, 191103.	3.3	42
42	Macroporous photonic crystal-based vapor detectors created by doctor blade coating. Applied Physics Letters, 2011, 98, .	3.3	27
43	Bioinspired assembly of surface-roughened nanoplatelets. Journal of Colloid and Interface Science, 2010, 344, 272-278.	9.4	23
44	Scalable fabrication of superhydrophobic hierarchical colloidal arrays. Journal of Colloid and Interface Science, 2010, 352, 558-565.	9.4	34
45	Templated Fabrication of Periodic Arrays of Metallic Attoliter Petri Dishes. Chemistry of Materials, 2010, 22, 1768-1775.	6.7	12
46	Self-Cleaning Diffractive Macroporous Films by Doctor Blade Coating. Langmuir, 2010, 26, 12598-12604.	3.5	63
47	Large-scale assembly of periodic nanostructures with metastable square lattices. Journal of Vacuum Science & Technology B, 2009, 27, 1043.	1.3	17
48	Electrophoretic deposition of biomimetic nanocomposites. Electrochemistry Communications, 2009, 11, 14-17.	4.7	19
49	Electrophoretic co-deposition of biomimetic nanoplateletâ€“polyelectrolyte composites. Electrochemistry Communications, 2009, 11, 1635-1638.	4.7	18
50	Bioinspired Assembly of Colloidal Nanoplatelets by Electric Field. Chemistry of Materials, 2009, 21, 2039-2044.	6.7	76
51	Bioinspired Selfâ€Cleaning Antireflection Coatings. Advanced Materials, 2008, 20, 3914-3918.	21.0	482
52	Acclaimed defects. Nature Photonics, 2008, 2, 9-11.	31.4	14
53	Large-scale assembly of colloidal nanoparticles and fabrication of periodic subwavelength structures. Nanotechnology, 2008, 19, 475604.	2.6	92
54	Biomimetic subwavelength antireflective gratings on GaAs. Optics Letters, 2008, 33, 2224.	3.3	79

#	Article	IF	Citations
55	Bioinspired broadband antireflection coatings on GaSb. Applied Physics Letters, 2008, 92, 141109.	3.3	77
56	Broadband moth-eye antireflection coatings on silicon. Applied Physics Letters, 2008, 92, .	3.3	447
57	Templated Fabrication of Periodic Binary Nanostructures. Journal of Physical Chemistry C, 2008, 112, 17586-17591.	3.1	15
58	Templated biomimetic multifunctional coatings. Applied Physics Letters, 2008, 92, .	3.3	58
59	Templated Fabrication of Periodic Metallic Nanopyramid Arrays. Chemistry of Materials, 2007, 19, 4551-4556.	6.7	92
60	Self-assembled biomimetic antireflection coatings. Applied Physics Letters, 2007, 91, .	3.3	90
61	Templated fabrication of large area subwavelength antireflection gratings on silicon. Applied Physics Letters, 2007, 91, .	3.3	137
62	Two-dimensional nonclose-packed colloidal crystals formed by spincoating. Applied Physics Letters, 2006, 89, 011908.	3.3	166
63	Wafer-scale fabrication of periodic polymer attolitre microvial arrays. Chemical Communications, 2005, , 1699.	4.1	4
64	Wafer-Scale Periodic Nanohole Arrays Templated from Two-Dimensional Nonclose-Packed Colloidal Crystals. Journal of the American Chemical Society, 2005, 127, 3710-3711.	13.7	185
65	Large-Scale Fabrication of Wafer-Size Colloidal Crystals, Macroporous Polymers and Nanocomposites by Spin-Coating. Journal of the American Chemical Society, 2004, 126, 13778-13786.	13.7	621
66	Colloidal photonic superlattices. Physical Review B, 2001, 64, .	3.2	76
67	Thickness Dependence of the Optical Properties of Ordered Silica-Air and Air-Polymer Photonic Crystals. Physical Review Letters, 1999, 83, 300-303.	7.8	313
68	Optical properties of planar colloidal crystals: Dynamical diffraction and the scalar wave approximation. Journal of Chemical Physics, 1999, 111, 345-354.	3.0	125
69	Preparation of Macroporous Metal Films from Colloidal Crystals. Journal of the American Chemical Society, 1999, 121, 7957-7958.	13.7	363