Wenbin Niu

List of Publications by Year
in descending order

53 papers	1,914 citations	201385 27 h-index	253896 43 g-index
53 all docs	53 docs citations	53 times ranked	2091 citing authors

#	Article	IF	Citations
1	Photonic Janus Carbon Fibers with Structural Color Gradient for Multicolored, Wirelessly Wearable Thermal Management Devices. Advanced Materials Technologies, 2022, 7, 2101057.	3.0	5
2	Biomimetic Janus photonic soft actuator with structural color self-reporting. Materials Horizons, 2022, 9, 1243-1252.	6.4	18
3	Multicolor Invisible Patterns Encrypted in Doubleâ€Inverseâ€Opal Films Based on Thermally Induced Structural Deformation. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	1.2	2
4	Water rewriteable double-inverse opal photonic crystal films with ultrafast response time and robust writing capability. Chemical Engineering Journal, 2022, 439, 135761.	6.6	25
5	Biomimetic Chromotropic Photonicâ€Ionic Skin with Robust Resilience, Adhesion, and Stability. Advanced Functional Materials, 2022, 32, .	7.8	44
6	Mechanical nondiscoloring and antistretching photonic crystal films based on Zn²⁺ coordination and hydroxypropyl methylcellulose. Journal of Applied Polymer Science, 2021, 138, 49916.	1.3	4
7	Photonic Vitrimer Elastomer with Selfâ€Healing, High Toughness, Mechanochromism, and Excellent Durability based on Dynamic Covalent Bond. Advanced Functional Materials, 2021, 31, 2009017.	7.8	81
8	Cephalopod-Inspired Chromotropic Ionic Skin with Rapid Visual Sensing Capabilities to Multiple Stimuli. ACS Nano, 2021, 15, 3509-3521.	7.3	99
9	Lotus Seedpod Inspiration: Particle-Nested Double-Inverse Opal Films with Fast and Reversible Structural Color Switching for Information Security. ACS Applied Materials & Interfaces, 2021, 13, 26384-26393.	4.0	26
10	Bar-coating programmable mechanochromic bilayer PDMS film with angle-dependent and angle-independent structural colors. Dyes and Pigments, 2021, 189, 109264.	2.0	15
11	Flexible Multifunctional Photonic Crystal Fibers with Shape Memory Capability for Optical Waveguides and Electrical Sensors. Industrial & Engineering Chemistry Research, 2021, 60, 8442-8450.	1.8	8
12	Highly Flexible, Multicolored, and Multifunctional Single-Fiber-Based Microsensors for UV, Temperature, and Infrared Detection. Industrial & Engineering Chemistry Research, 2021, 60, 11151-11160.	1.8	1
13	Fast water-response double-inverse opal films with brilliant structural color. Chemical Engineering Journal, 2021, 426, 131213.	6.6	33
14	Interactively mechanochromic electronic textile sensor with rapid and durable electrical/optical response for visualized stretchable electronics. Chemical Engineering Journal, 2021, 426, 130870.	6.6	31
15	Magnetoresponsive Photonic Micromotors and Wireless Sensing Microdevices Based on Robust Magnetic Photonic Microspheres. Industrial & Engineering Chemistry Research, 2021, 60, 17575-17584.	1.8	4
16	Highly stretchable, breathable and negative resistance variation textile strain sensor with excellent mechanical stability for wearable electronics. Journal of Materials Science, 2020, 55, 2439-2453.	1.7	35
17	Solvent responsive single-material inverse opal polymer actuator with structural color switching. Journal of Materials Science, 2020, 55, 817-827.	1.7	26
18	Retroreflection and Wettability Controlled Smart Indicator Based on Responsive Bilayer Photonic Crystals for Traffic Warning. Advanced Optical Materials, 2020, 8, 2001367.	3.6	17

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19	Inorganic Photonic Microspheres with Localized Concentric Ordering for Deep Pattern Encoding and Triple Sensory Microsensor. Small, 2020, 16, e2003638.	5.2	10
20	Interactively Fullâ€Color Changeable Electronic Fiber Sensor with High Stretchability and Rapid Response. Advanced Functional Materials, 2020, 30, 2000356.	7.8	66
21	Rotational Periodicity Display of the Tunable Wettability Pattern in a Photoswitch Based on a Response Bilayer Photonic Crystal. ACS Applied Materials & Interfaces, 2020, 12, 9664-9672.	4.0	39
22	Extremely stretchable, sticky and conductive double-network ionic hydrogel for ultra-stretchable and compressible supercapacitors. Chemical Engineering Journal, 2020, 387, 124105.	6.6	92
23	Rapid fabrication of vivid noniridescent structural colors on fabrics with robust structural stability by screen printing. Dyes and Pigments, 2020, 176, 108226.	2.0	44
24	Bilayer Heterostructure Photonic Crystal Composed of Hollow Silica and Silica Sphere Arrays for Information Encryption. Langmuir, 2020, 36, 1379-1385.	1.6	33
25	Multicolored Photonic Crystal Carbon Fiber Yarns and Fabrics with Mechanical Robustness for Thermal Management. ACS Applied Materials & Interfaces, 2019, 11, 32261-32268.	4.0	27
26	New Encryption Strategy of Photonic Crystals with Bilayer Inverse Heterostructure Guided from Transparency Response. Advanced Functional Materials, 2019, 29, 1903743.	7.8	85
27	A flexible and robust dual-network supramolecular elastic film with solvent resistance and brilliant structural colors. New Journal of Chemistry, 2019, 43, 11517-11523.	1.4	6
28	Encoding and Decoding of Invisible Complex Information in a Dualâ€Response Bilayer Photonic Crystal with Tunable Wettability. Advanced Functional Materials, 2019, 29, 1906799.	7.8	96
29	Two-way rewritable and stable photonic patterns enabled by near-infrared laser-responsive shape memory photonic crystals. Journal of Materials Chemistry C, 2019, 7, 1896-1903.	2.7	26
30	Multicolored one-dimensional photonic crystal coatings with excellent mechanical robustness, strong substrate adhesion, and liquid and particle impalement resistance. Journal of Materials Chemistry C, 2019, 7, 3463-3470.	2.7	13
31	Extremely Stretchable and Self-Healable Electrical Skin with Mechanical Adaptability, an Ultrawide Linear Response Range, and Excellent Temperature Tolerance. ACS Applied Materials & Interfaces, 2019, 11, 24639-24647.	4.0	67
32	Large-Area and Water Rewriteable Photonic Crystal Films Obtained by the Thermal Assisted Airâ€“Liquid Interface Self Assembly. ACS Applied Materials & Interfaces, 2019, 11, 22777-22785.	4.0	38
33	Hollow silica opals/cellulose acetate nanocomposite films with structural colors for anti-counterfeiting of banknotes. Journal of Materials Chemistry C, 2019, 7, 7411-7417.	2.7	44
34	Polyacrylic Acidâ€Based Coordination Supramolecular Elastomer with High Strength, Excellent Fatigueâ€Resistance, and Selfâ€Recovery Properties. Macromolecular Chemistry and Physics, 2019, 220, 1800571.	1.1	8
35	A two-step approach for size controlled preparation of monodisperse polysaccharide-based nanospheres. Materials Research Express, 2019, 6, 055013.	0.8	1
36	Electrophilic substitution reaction as a facile and general approach for reactive removal of native ligands from nanocrystals surface. Nanotechnology, 2019, 30, 015701.	1.3	0

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37	Vanadiumâ€Sensitized Photon Upconversion of Lanthanide Ions (Er, Tm, Ho, Eu, Nd) in Yb₃Al₅O₁₂ for In Vivo Imaging. Particle and Particle Systems Characterization, 2018, 35, 1800267.	1.2	4
38	Extremely Stretchable, Stable, and Durable Strain Sensors Based on Double-Network Organogels. ACS Applied Materials & Interfaces, 2018, 10, 32640-32648.	4.0	107
39	Rewritable and highly stable photonic patterns for optical storage and display enabled by direct-pressure-programmed shape memory photonic crystals. Journal of Materials Chemistry C, 2018, 6, 8385-8394.	2.7	31
40	Reconfigurable photonic crystals with optical bistability enabled by â€œcoldâ€•programming and thermo-recoverable shape memory polymers. RSC Advances, 2017, 7, 22461-22467.	1.7	14
41	Applications of atomic layer deposition in solar cells. Nanotechnology, 2015, 26, 064001.	1.3	86
42	Highly manufacturable graphene oxide biosensor for sensitive Interleukin-6 detection. RSC Advances, 2015, 5, 39245-39251.	1.7	43
43	NaYF₄:Yb,Erâ€“MoS₂: from synthesis and surface ligand stripping to negative infrared photoresponse. Chemical Communications, 2015, 51, 9030-9033.	2.2	17
44	Synergetically Enhanced Nearâ€Infrared Photoresponse of Reduced Graphene Oxide by Upconversion and Gold Plasmon. Small, 2014, 10, 3637-3643.	5.2	31
45	Growth of Reduced Graphene Oxide. Materials Research Society Symposia Proceedings, 2014, 1702, 1.	0.1	0
46	3-Dimensional photonic crystal surface enhanced upconversion emission for improved near-infrared photoresponse. Nanoscale, 2014, 6, 817-824.	2.8	69
47	Multicolor tunability and upconversion enhancement of fluoride nanoparticles by oxygen dopant. Nanoscale, 2013, 5, 8164.	2.8	19
48	Modulation of the emission intensity and color output of NaYF4â€‰:â€‰Yb3+,Er3+ nanocrystals by OHâˆ’. CrystEngComm, 2013, 15, 3919.	1.3	14
49	Strong red and NIR emission in NaYF4:Yb3+,Tm3+/QDs nanoheterostructures. Journal of Materials Chemistry C, 2013, 1, 1168-1173.	2.7	37
50	Utilizing the amidation reaction to address the â€œcooperative effectâ€•of carboxylic acid/amine on the size, shape, and multicolor output of fluoride upconversion nanoparticles. Journal of Materials Chemistry, 2011, 21, 10894.	6.7	52
51	Multicolor output and shape controlled synthesis of lanthanide-ion doped fluorides upconversion nanoparticles. Dalton Transactions, 2011, 40, 3305.	1.6	64
52	Synthesis of colour tunable lanthanide-ion doped NaYF4 upconversion nanoparticles by controlling temperature. Chemical Communications, 2010, 46, 3908.	2.2	75
53	A facile and general approach for the multicolor tuning of lanthanide-ion doped NaYF4 upconversion nanoparticles within a fixed composition. Journal of Materials Chemistry, 2010, 20, 9113.	6.7	82