

# Wenbin Niu

## List of Publications by Year in descending order

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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	Extremely Stretchable, Stable, and Durable Strain Sensors Based on Double-Network Organogels. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 32640-32648.	4.0	107
2	Cephalopod-Inspired Chromotropic Ionic Skin with Rapid Visual Sensing Capabilities to Multiple Stimuli. <i>ACS Nano</i> , 2021, 15, 3509-3521.	7.3	99
3	Encoding and Decoding of Invisible Complex Information in a Dual-Response Bilayer Photonic Crystal with Tunable Wettability. <i>Advanced Functional Materials</i> , 2019, 29, 1906799.	7.8	96
4	Extremely stretchable, sticky and conductive double-network ionic hydrogel for ultra-stretchable and compressible supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 387, 124105.	6.6	92
5	Applications of atomic layer deposition in solar cells. <i>Nanotechnology</i> , 2015, 26, 064001.	1.3	86
6	New Encryption Strategy of Photonic Crystals with Bilayer Inverse Heterostructure Guided from Transparency Response. <i>Advanced Functional Materials</i> , 2019, 29, 1903743.	7.8	85
7	A facile and general approach for the multicolor tuning of lanthanide-ion doped NaYF <sub>4</sub> upconversion nanoparticles within a fixed composition. <i>Journal of Materials Chemistry</i> , 2010, 20, 9113.	6.7	82
8	Photonic Vitriimer Elastomer with Self-Healing, High Toughness, Mechanochromism, and Excellent Durability based on Dynamic Covalent Bond. <i>Advanced Functional Materials</i> , 2021, 31, 2009017.	7.8	81
9	Synthesis of colour tunable lanthanide-ion doped NaYF <sub>4</sub> upconversion nanoparticles by controlling temperature. <i>Chemical Communications</i> , 2010, 46, 3908.	2.2	75
10	3-Dimensional photonic crystal surface enhanced upconversion emission for improved near-infrared photoresponse. <i>Nanoscale</i> , 2014, 6, 817-824.	2.8	69
11	Extremely Stretchable and Self-Healable Electrical Skin with Mechanical Adaptability, an Ultrawide Linear Response Range, and Excellent Temperature Tolerance. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 24639-24647.	4.0	67
12	Interactively Full-Color Changeable Electronic Fiber Sensor with High Stretchability and Rapid Response. <i>Advanced Functional Materials</i> , 2020, 30, 2000356.	7.8	66
13	Multicolor output and shape controlled synthesis of lanthanide-ion doped fluorides upconversion nanoparticles. <i>Dalton Transactions</i> , 2011, 40, 3305.	1.6	64
14	Utilizing the amidation reaction to address the "cooperative effect" of carboxylic acid/amine on the size, shape, and multicolor output of fluoride upconversion nanoparticles. <i>Journal of Materials Chemistry</i> , 2011, 21, 10894.	6.7	52
15	Hollow silica opals/cellulose acetate nanocomposite films with structural colors for anti-counterfeiting of banknotes. <i>Journal of Materials Chemistry C</i> , 2019, 7, 7411-7417.	2.7	44
16	Rapid fabrication of vivid noniridescent structural colors on fabrics with robust structural stability by screen printing. <i>Dyes and Pigments</i> , 2020, 176, 108226.	2.0	44
17	Biomimetic Chromotropic Photonic-Ionic Skin with Robust Resilience, Adhesion, and Stability. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	44
18	Highly manufacturable graphene oxide biosensor for sensitive Interleukin-6 detection. <i>RSC Advances</i> , 2015, 5, 39245-39251.	1.7	43

#	ARTICLE	IF	CITATIONS
19	Rotational Periodicity Display of the Tunable Wettability Pattern in a Photoswitch Based on a Response Bilayer Photonic Crystal. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 9664-9672.	4.0	39
20	Large-Area and Water Rewriteable Photonic Crystal Films Obtained by the Thermal Assisted Air-Liquid Interface Self Assembly. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 22777-22785.	4.0	38
21	Strong red and NIR emission in NaYF <sub>4</sub> :Yb <sup>3+</sup> ,Tm <sup>3+</sup> /QDs nanoheterostructures. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1168-1173.	2.7	37
22	Highly stretchable, breathable and negative resistance variation textile strain sensor with excellent mechanical stability for wearable electronics. <i>Journal of Materials Science</i> , 2020, 55, 2439-2453.	1.7	35
23	Bilayer Heterostructure Photonic Crystal Composed of Hollow Silica and Silica Sphere Arrays for Information Encryption. <i>Langmuir</i> , 2020, 36, 1379-1385.	1.6	33
24	Fast water-response double-inverse opal films with brilliant structural color. <i>Chemical Engineering Journal</i> , 2021, 426, 131213.	6.6	33
25	Synergetically Enhanced Near-Infrared Photoresponse of Reduced Graphene Oxide by Upconversion and Gold Plasmon. <i>Small</i> , 2014, 10, 3637-3643.	5.2	31
26	Rewritable and highly stable photonic patterns for optical storage and display enabled by direct-pressure-programmed shape memory photonic crystals. <i>Journal of Materials Chemistry C</i> , 2018, 6, 8385-8394.	2.7	31
27	Interactively mechanochromic electronic textile sensor with rapid and durable electrical/optical response for visualized stretchable electronics. <i>Chemical Engineering Journal</i> , 2021, 426, 130870.	6.6	31
28	Multicolored Photonic Crystal Carbon Fiber Yarns and Fabrics with Mechanical Robustness for Thermal Management. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 32261-32268.	4.0	27
29	Two-way rewritable and stable photonic patterns enabled by near-infrared laser-responsive shape memory photonic crystals. <i>Journal of Materials Chemistry C</i> , 2019, 7, 1896-1903.	2.7	26
30	Solvent responsive single-material inverse opal polymer actuator with structural color switching. <i>Journal of Materials Science</i> , 2020, 55, 817-827.	1.7	26
31	Lotus Seedpod Inspiration: Particle-Nested Double-Inverse Opal Films with Fast and Reversible Structural Color Switching for Information Security. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 26384-26393.	4.0	26
32	Water rewriteable double-inverse opal photonic crystal films with ultrafast response time and robust writing capability. <i>Chemical Engineering Journal</i> , 2022, 439, 135761.	6.6	25
33	Multicolor tunability and upconversion enhancement of fluoride nanoparticles by oxygen dopant. <i>Nanoscale</i> , 2013, 5, 8164.	2.8	19
34	Biomimetic Janus photonic soft actuator with structural color self-reporting. <i>Materials Horizons</i> , 2022, 9, 1243-1252.	6.4	18
35	NaYF <sub>4</sub> :Yb,Er-MoS <sub>2</sub> : from synthesis and surface ligand stripping to negative infrared photoresponse. <i>Chemical Communications</i> , 2015, 51, 9030-9033.	2.2	17
36	Retroreflection and Wettability Controlled Smart Indicator Based on Responsive Bilayer Photonic Crystals for Traffic Warning. <i>Advanced Optical Materials</i> , 2020, 8, 2001367.	3.6	17

#	ARTICLE	IF	CITATIONS
37	Bar-coating programmable mechanochromic bilayer PDMS film with angle-dependent and angle-independent structural colors. <i>Dyes and Pigments</i> , 2021, 189, 109264.	2.0	15
38	Modulation of the emission intensity and color output of NaYF <sub>4</sub> :Yb <sup>3+</sup> ,Er <sup>3+</sup> nanocrystals by OH <sup>-</sup> . <i>CrystEngComm</i> , 2013, 15, 3919.	1.3	14
39	Reconfigurable photonic crystals with optical bistability enabled by cold-programming and thermo-recoverable shape memory polymers. <i>RSC Advances</i> , 2017, 7, 22461-22467.	1.7	14
40	Multicolored one-dimensional photonic crystal coatings with excellent mechanical robustness, strong substrate adhesion, and liquid and particle impalement resistance. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3463-3470.	2.7	13
41	Inorganic Photonic Microspheres with Localized Concentric Ordering for Deep Pattern Encoding and Triple Sensory Microsensor. <i>Small</i> , 2020, 16, e2003638.	5.2	10
42	Polyacrylic Acid-Based Coordination Supramolecular Elastomer with High Strength, Excellent Fatigue Resistance, and Self-Recovery Properties. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1800571.	1.1	8
43	Flexible Multifunctional Photonic Crystal Fibers with Shape Memory Capability for Optical Waveguides and Electrical Sensors. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 8442-8450.	1.8	8
44	A flexible and robust dual-network supramolecular elastic film with solvent resistance and brilliant structural colors. <i>New Journal of Chemistry</i> , 2019, 43, 11517-11523.	1.4	6
45	Photonic Janus Carbon Fibers with Structural Color Gradient for Multicolored, Wirelessly Wearable Thermal Management Devices. <i>Advanced Materials Technologies</i> , 2022, 7, 2101057.	3.0	5
46	Vanadium-Sensitized Photon Upconversion of Lanthanide Ions (Er, Tm, Ho, Eu, Nd) in Yb <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> for In Vivo Imaging. <i>Particle and Particle Systems Characterization</i> , 2018, 35, 1800267.	1.2	4
47	Mechanical nondiscoloring and antistretching photonic crystal films based on Zn <sup>2+</sup> coordination and hydroxypropyl methylcellulose. <i>Journal of Applied Polymer Science</i> , 2021, 138, 49916.	1.3	4
48	Magneto-responsive Photonic Micromotors and Wireless Sensing Microdevices Based on Robust Magnetic Photonic Microspheres. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 17575-17584.	1.8	4
49	Multicolor Invisible Patterns Encrypted in Double-Inverse Opal Films Based on Thermally Induced Structural Deformation. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	1.2	2
50	A two-step approach for size controlled preparation of monodisperse polysaccharide-based nanospheres. <i>Materials Research Express</i> , 2019, 6, 055013.	0.8	1
51	Highly Flexible, Multicolored, and Multifunctional Single-Fiber-Based Microsensors for UV, Temperature, and Infrared Detection. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 11151-11160.	1.8	1
52	Growth of Reduced Graphene Oxide. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1702, 1.	0.1	0
53	Electrophilic substitution reaction as a facile and general approach for reactive removal of native ligands from nanocrystals surface. <i>Nanotechnology</i> , 2019, 30, 015701.	1.3	0