Xi Xie

List of Publications by Year
in descending order

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112	5,072	71102	102487
papers	citations	41 h-index	66 g-index

115	115	115	5810
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent Progress in Microneedlesâ€Mediated Diagnosis, Therapy, and Theranostic Systems. Advanced Healthcare Materials, 2022, 11, e2102547.	7.6	34
2	Environment tolerant, adaptable and stretchable organohydrogels: preparation, optimization, and applications. Materials Horizons, 2022, 9, 1356-1386.	12.2	75
3	Self-Healing, Self-Adhesive and Stable Organohydrogel-Based Stretchable Oxygen Sensor with High Performance at Room Temperature. Nano-Micro Letters, 2022, 14, 52.	27.0	53
4	Spin-Coating-Based Fabrication of Nanostraw Arrays for Cellular Nano-electroporation. ACS Applied Nano Materials, 2022, 5, 2057-2067.	5.0	6
5	Minimally invasive technology for continuous glucose monitoring. Bio-Design and Manufacturing, 2022, 5, 9-13.	7.7	7
6	A touch-actuated glucose sensor fully integrated with microneedle array and reverse iontophoresis for diabetes monitoring. Biosensors and Bioelectronics, 2022, 203, 114026.	10.1	71
7	Cellular nanointerface of vertical nanostructure arrays and its applications. Nanoscale Advances, 2022, 4, 1844-1867.	4.6	4
8	Integrated Strain Sensors with Stretchable Vertical Graphene Networks for Non-invasive Physiological Assessment. ACS Applied Electronic Materials, 2022, 4, 964-973.	4.3	8
9	Surgical Tumor-Derived Photothermal Nanovaccine for Personalized Cancer Therapy and Prevention. Nano Letters, 2022, 22, 3095-3103.	9.1	42
10	Smart Diaper Based on Integrated Multiplex Carbon Nanotube-Coated Electrode Array Sensors for In Situ Urine Monitoring. ACS Applied Nano Materials, 2022, 5, 4767-4778.	5.0	16
11	Monosaccharide-mediated rational synthesis of a universal plasmonic platform with broad spectral fluorescence enhancement for high-sensitivity cancer biomarker analysis. Journal of Nanobiotechnology, 2022, 20, 184.	9.1	2
12	An ultrastretchable, high-performance, and crosstalk-free proximity and pressure bimodal sensor based on ionic hydrogel fibers for human-machine interfaces. Materials Horizons, 2022, 9, 1935-1946.	12.2	67
13	Hydrogel- and organohydrogel-based stretchable, ultrasensitive, transparent, room-temperature and real-time NO₂ sensors and the mechanism. Materials Horizons, 2022, 9, 1921-1934.	12.2	47
14	Determination of Transdermal Rate of Metallic Microneedle Array through an Impedance Measurements-Based Numerical Check Screening Algorithm. Micromachines, 2022, 13, 718.	2.9	3
15	Deformable, transparent, highâ€performance, <scp>roomâ€temperature</scp> oxygen sensors based on <scp>ionâ€conductive</scp>, <scp>environmentâ€tolerant,</scp> and green organohydrogels. EcoMat, 2022, 4, .	11.9	14
16	Ultrasensitive, stretchable, and transparent humidity sensor based on ion-conductive double-network hydrogel thin films. Science China Materials, 2022, 65, 2540-2552.	6.3	13
17	Intelligent wireless theranostic contact lens for electrical sensing and regulation of intraocular pressure. Nature Communications, 2022, 13, 2556.	12.8	36
18	Semi-Implantable Bioelectronics. Nano-Micro Letters, 2022, 14, .	27.0	14

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19	An integrated micro-extracting system facilitates lesion-free biomacromolecules enrichment and detection. Materials and Design, 2022, 219, 110812.	7.0	0
20	Interrogation on the Cellular Nano-Interface and Biosafety of Repeated Nano-Electroporation by Nanostraw System. Biosensors, 2022, 12, 522.	4.7	1
21	Selfâ€Calibrated, Sensitive, and Flexible Temperature Sensor Based on 3D Chemically Modified Graphene Hydrogel. Advanced Electronic Materials, 2021, 7, 2001084.	5.1	24
22	Ultrastable, stretchable, highly conductive and transparent hydrogels enabled by salt-percolation for high-performance temperature and strain sensing. Journal of Materials Chemistry C, 2021, 9, 13668-13679.	5.5	77
23	Liquid-like Polymer Coating as a Promising Candidate for Reducing Electrode Contamination and Noise in Complex Biofluids. ACS Applied Materials & Interfaces, 2021, 13, 4450-4462.	8.0	15
24	Cardiomyocyte electrical-mechanical synchronized model for high-content, dose-quantitative and time-dependent drug assessment. Microsystems and Nanoengineering, 2021, 7, 26.	7.0	11
25	Recognition of high-specificity hERG K+ channel inhibitor-induced arrhythmia in cardiomyocytes by automated template matching. Microsystems and Nanoengineering, 2021, 7, 24.	7.0	3
26	Immunoengineered adjuvants for universal vaccines against respiratory viruses. Fundamental Research, 2021, 1, 189-192.	3.3	4
27	Ultrasensitive, Stretchable, and Fast-Response Temperature Sensors Based on Hydrogel Films for Wearable Applications. ACS Applied Materials & Interfaces, 2021, 13, 21854-21864.	8.0	113
28	In-Cell Nanoelectronics: Opening the Door to Intracellular Electrophysiology. Nano-Micro Letters, 2021, 13, 127.	27.0	21
29	Liquid-like polymer-based self-cleaning coating for effective prevention of liquid foods contaminations. Journal of Colloid and Interface Science, 2021, 589, 327-335.	9.4	25
30	Expansion of Rare Cancer Cells into Tumoroids for Therapeutic Regimen and Cancer Therapy. Advanced Therapeutics, 2021, 4, 2100017.	3.2	3
31	A Fully Integrated Closedâ€Loop System Based on Mesoporous Microneedlesâ€Iontophoresis for Diabetes Treatment. Advanced Science, 2021, 8, e2100827.	11.2	91
32	Tumor-on-a-chip: from bioinspired design to biomedical application. Microsystems and Nanoengineering, 2021, 7, 50.	7.0	103
33	Liquid-like layer coated intraocular lens for posterior capsular opacification prevention. Applied Materials Today, 2021, 23, 100981.	4.3	8
34	Highly Deformable and Stable Gas Sensor Based on Anti-Drying Ionic Organohydrogel for O2 Gas Detection. , 2021, , .		0
35	Tutorial: using nanoneedles for intracellular delivery. Nature Protocols, 2021, 16, 4539-4563.	12.0	47
36	Integrated Multiplex Sensing Bandage for In Situ Monitoring of Early Infected Wounds. ACS Sensors, 2021, 6, 3112-3124.	7.8	28

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37	Three-dimensional gold nanoparticles-modified graphene hydrogel for high-sensitive NO2 and NH3 detection with enhanced resistance to humidity. Sensors and Actuators B: Chemical, 2021, 344, 130259.	7.8	16
38	Synchronized intracellular and extracellular recording of action potentials by three-dimensional nanoroded electroporation. Biosensors and Bioelectronics, 2021, 192, 113501.	10.1	15
39	Accurate and efficient intracellular delivery biosensing system by nanostrawed electroporation array. Biosensors and Bioelectronics, 2021, 194, 113583.	10.1	8
40	Wearable and Implantable Intraocular Pressure Biosensors: Recent Progress and Future Prospects. Advanced Science, 2021, 8, 2002971.	11.2	28
41	Ionâ€Conductive Hydrogelâ€Based Stretchable, Selfâ€Healing, and Transparent NO₂ Sensor with High Sensitivity and Selectivity at Room Temperature. Small, 2021, 17, e2104997.	10.0	55
42	Flexible Tongue Electrode Array System for In Vivo Mapping of Electrical Signals of Taste Sensation. ACS Sensors, 2021, 6, 4108-4117.	7.8	1
43	Microneedles for transdermal diagnostics: Recent advances and new horizons. Biomaterials, 2020, 232, 119740.	11.4	143
44	Anomalous dispersion of bioinspired flower-like microparticles for oil/water separation. Nanotechnology, 2020, 31, 095712.	2.6	5
45	Slippery Liquid-Attached Surface for Robust Biofouling Resistance. ACS Biomaterials Science and Engineering, 2020, 6, 358-366.	5.2	44
46	Ultrahigh Sensitivity of Flexible Thermistors Based on 3D Porous Graphene Characterized by Imbedded Microheaters. Advanced Electronic Materials, 2020, 6, 2000451.	5.1	7
47	Anti-biofouling NH3 gas sensor based on reentrant thorny ZnO/graphene hybrid nanowalls. Microsystems and Nanoengineering, 2020, 6, 41.	7.0	19
48	Vertical nanowire array-based biosensors: device design strategies and biomedical applications. Journal of Materials Chemistry B, 2020, 8, 7609-7632.	5.8	21
49	Intracellular recording of cardiomyocyte action potentials by nanobranched microelectrode array. Biosensors and Bioelectronics, 2020, 169, 112588.	10.1	26
50	Emerging Roles of 1D Vertical Nanostructures in Orchestrating Immune Cell Functions. Advanced Materials, 2020, 32, e2001668.	21.0	45
51	Microneedles loaded with anti-PD-1â€“cisplatin nanoparticles for synergistic cancer immuno-chemotherapy. Nanoscale, 2020, 12, 18885-18898.	5.6	67
52	Stretchable, Stable, and Room-Temperature Gas Sensors Based on Self-Healing and Transparent Organohydrogels. ACS Applied Materials & Interfaces, 2020, 12, 52070-52081.	8.0	57
53	Specific recognition of ion channel blocker by high-content cardiomyocyte electromechanical integrated correlation. Biosensors and Bioelectronics, 2020, 162, 112273.	10.1	23
54	Nanoneedle Platforms: The Many Ways to Pierce the Cell Membrane. Advanced Functional Materials, 2020, 30, 1909890.	14.9	58

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55	Antibody-free isolation and regulation of adherent cancer cells via hybrid branched microtube-sandwiched hydrodynamic system. Nanoscale, 2020, 12, 5103-5113.	5.6	8
56	Degradable porous nanoflower substrate-embedded microfluidic device for capture, release and in situ manipulation of cancer cells. Applied Materials Today, 2020, 19, 100617.	4.3	8
57	Constructing Electrophoretic Displays on Foldable Paper-Based Electrodes by a Facile Transferring Method. ACS Applied Electronic Materials, 2020, 2, 1335-1342.	4.3	13
58	Ultrasensitive and Stretchable Temperature Sensors Based on Thermally Stable and Self-Healing Organohydrogels. ACS Applied Materials & Interfaces, 2020, 12, 19069-19079.	8.0	145
59	Revealing the Role of Surface Co-modification in Boosting the Gas Sensing Performance of Graphene Using Experimental and Theoretical Evidences. Sensors and Actuators B: Chemical, 2020, 316, 128162.	7.8	6
60	Green Synthesis of 3D Chemically Functionalized Graphene Hydrogel for High-Performance NH₃ and NO₂ Detection at Room Temperature. ACS Applied Materials & Interfaces, 2020, 12, 20623-20632.	8.0	60
61	Recent Advances in Gas and Humidity Sensors Based on 3D Structured and Porous Graphene and Its Derivatives. , 2020, 2, 1381-1411.		50
62	Smartphone-powered iontophoresis-microneedle array patch for controlled transdermal delivery. Microsystems and Nanoengineering, 2020, 6, 112.	7.0	52
63	Biodegradable Therapeutic Microneedle Patch for Rapid Antihypertensive Treatment. ACS Applied Materials & Interfaces, 2019, 11, 30575-30584.	8.0	25
64	Intracellular Delivery and Sensing System Based on Electroplated Conductive Nanostraw Arrays. ACS Applied Materials & Interfaces, 2019, 11, 43936-43948.	8.0	56
65	Protection of Nanostructures-Integrated Microneedle Biosensor Using Dissolvable Polymer Coating. ACS Applied Materials & Interfaces, 2019, 11, 4809-4819.	8.0	42
66	Multifunctional Branched Nanostraw-Electroporation Platform for Intracellular Regulation and Monitoring of Circulating Tumor Cells. Nano Letters, 2019, 19, 7201-7209.	9.1	61
67	An intrinsically stretchable humidity sensor based on anti-drying, self-healing and transparent organohydrogels. Materials Horizons, 2019, 6, 595-603.	12.2	297
68	Functionalized Spiky Particles for Intracellular Biomolecular Delivery. ACS Central Science, 2019, 5, 960-969.	11.3	19
69	Hierarchical graphene/nanorods-based H2O2 electrochemical sensor with self-cleaning and anti-biofouling properties. Sensors and Actuators B: Chemical, 2019, 289, 15-23.	7.8	55
70	Rapid-response, reversible and flexible humidity sensing platform using a hydrophobic and porous substrate. Journal of Materials Chemistry B, 2019, 7, 2063-2073.	5.8	42
71	High-performance water desalination of heteroatom nitrogen- and sulfur-codoped open hollow tubular porous carbon electrodes via capacitive deionization. Environmental Science: Nano, 2019, 6, 3359-3373.	4.3	31
72	Layer dependence of the photoelectrochemical performance of a WSe₂ photocathode characterized using in situ microscale measurements. RSC Advances, 2019, 9, 30925-30931.	3.6	3

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73	Stretchable Strain Vector Sensor Based on Parallelly Aligned Vertical Graphene. ACS Applied Materials & Interfaces, 2019, 11, 1294-1302.	8.0	64
74	Reduced Graphene Oxide Nanohybridâ€“Assembled Microneedles as Miniâ€Invasive Electrodes for Realâ€Time Transdermal Biosensing. Small, 2019, 15, e1804298.	10.0	74
75	Selfâ€Cleaning Ultraviolet Photodetectors Based on Tree Crownâ€Like Microtube Structure. Advanced Materials Interfaces, 2019, 6, 1801251.	3.7	6
76	Injectable Slippery Lubricant-Coated Spiky Microparticles with Persistent and Exceptional Biofouling-Resistance. ACS Central Science, 2019, 5, 250-258.	11.3	15
77	Hierarchical Spiky Microstrawsâ€Integrated Microfluidic Device for Efficient Capture and In Situ Manipulation of Cancer Cells. Advanced Functional Materials, 2019, 29, 1806484.	14.9	39
78	Fabrication of Various Structures of Nanostraw Arrays and Their Applications in Gene Delivery. Advanced Materials Interfaces, 2018, 5, 1701535.	3.7	32
79	Nanospikes functionalization as a universal strategy to disperse hydrophilic particles in non-polar media. Nanotechnology, 2018, 29, 185705.	2.6	1
80	Tape-Based Photodetector: Transfer Process and Persistent Photoconductivity. ACS Applied Materials & Interfaces, 2018, 10, 16596-16604.	8.0	21
81	Anomalous dispersion of magnetic spiky particles for enhanced oil emulsions/water separation. Nanoscale, 2018, 10, 1978-1986.	5.6	35
82	3D superhydrophobic reduced graphene oxide for activated NO₂ sensing with enhanced immunity to humidity. Journal of Materials Chemistry A, 2018, 6, 478-488.	10.3	116
83	Facile patterning and transferring method for constructing self-powered UV photodetectors. Applied Physics Express, 2018, 11, 116502.	2.4	8
84	Physical activation of innate immunity by spiky particles. Nature Nanotechnology, 2018, 13, 1078-1086.	31.5	158
85	Comprehensive Stability Improvement of Silver Nanowire Networks via Self-Assembled Mercapto Inhibitors. ACS Applied Materials & Interfaces, 2018, 10, 37699-37708.	8.0	64
86	Microneedle-Mediated Delivery of Lipid-Coated Cisplatin Nanoparticles for Efficient and Safe Cancer Therapy. ACS Applied Materials & Interfaces, 2018, 10, 33060-33069.	8.0	125
87	Electrostatic assembly of ultraviolet-curable cellulose-coated silver nanowires as transparent electrodes for nanogenerator. Applied Physics Express, 2018, 11, 075002.	2.4	10
88	Reduction of measurement noise in a continuous glucose monitor by coating the sensor with a zwitterionic polymer. Nature Biomedical Engineering, 2018, 2, 894-906.	22.5	150
89	Transdermal Delivery of Living and Biofunctional Probiotics through Dissolvable Microneedle Patches. ACS Applied Bio Materials, 2018, 1, 374-381.	4.6	18
90	Nanospikes-mediated Anomalous Dispersities of Hydropobic Micro-objects and their Application for Oil Emulsion Cleaning. Scientific Reports, 2018, 8, 12600.	3.3	6

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91	Hollow Nanoneedle-Electroporation System To Extract Intracellular Protein Repetitively and Nondestructively. ACS Sensors, 2018, 3, 1675-1682.	7.8	38
92	Microfluidic Fabrication of Colloidal Nanomaterials-Encapsulated Microcapsules for Biomolecular Sensing. Nano Letters, 2017, 17, 2015-2020.	9.1	78
93	pH-sensitive polymeric nanoparticles for co-delivery of doxorubicin and curcumin to treat cancer via enhanced pro-apoptotic and anti-angiogenic activities. Acta Biomaterialia, 2017, 58, 349-364.	8.3	155
94	Laser heating of metallic nanoparticles for photothermal ablation applications. AIP Advances, 2017, 7, .	1.3	28
95	Analgesic Microneedle Patch for Neuropathic Pain Therapy. ACS Nano, 2017, 11, 395-406.	14.6	106
96	A Facile and Versatile Method to Endow Biomaterial Devices with Zwitterionic Surface Coatings. Advanced Healthcare Materials, 2017, 6, 1601091.	7.6	51
97	Cleavable Multifunctional Targeting Mixed Micelles with Sequential pH-Triggered TAT Peptide Activation for Improved Antihepatocellular Carcinoma Efficacy. Molecular Pharmaceutics, 2017, 14, 3644-3659.	4.6	31
98	Slippery surface based on lubricant infused hierarchical silicon nanowire film. RSC Advances, 2017, 7, 55812-55818.	3.6	9
99	TiO ₂ nanowire-templated hierarchical nanowire network as water-repelling coating. Royal Society Open Science, 2017, 4, 171431.	2.4	6
100	Redox-sensitive Pluronic F127-tocopherol micelles: synthesis, characterization, and cytotoxicity evaluation. International Journal of Nanomedicine, 2017, Volume 12, 2635-2644.	6.7	58
101	Niosome Encapsulation of Curcumin: Characterization and Cytotoxic Effect on Ovarian Cancer Cells. Journal of Nanomaterials, 2016, 2016, 1-9.	2.7	68
102	PCLâ€“F68â€“PCL/PLGAâ€“PEGâ€“PLGA mixed micelles mediated delivery of mitoxantrone for reversing multidrug resistant in breast cancer. RSC Advances, 2016, 6, 35318-35327.	3.6	7
103	pH-sensitive micelles based on acid-labile pluronic F68â€“curcumin conjugates for improved tumor intracellular drug delivery. International Journal of Pharmaceutics, 2016, 502, 28-37.	5.2	67
104	iRGD-mediated reduction-responsive DSPEâ€“PEG/LAâ€“PLGAâ€“TPGS mixed micelles used in the targeted delivery and triggered release of docetaxel in cancer. RSC Advances, 2016, 6, 28331-28342.	3.6	6
105	Determining the Time Window for Dynamic Nanowire Cell Penetration Processes. ACS Nano, 2015, 9, 11667-11677.	14.6	66
106	Fabrication of sub-cell size â€œspikyâ€•nanoparticles and their interfaces with biological cells. Journal of Materials Chemistry B, 2015, 3, 5155-5160.	5.8	19
107	Fabrication and properties of a supramolecular hybrid hydrogel doped with CdTe quantum dots. RSC Advances, 2015, 5, 58746-58754.	3.6	19
108	Quantification of nanowire penetration into living cells. Nature Communications, 2014, 5, 3613.	12.8	129

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109	Nanostrawâ€“Electroporation System for Highly Efficient Intracellular Delivery and Transfection. ACS Nano, 2013, 7, 4351-4358.	14.6	257
110	Mechanical Model of Vertical Nanowire Cell Penetration. Nano Letters, 2013, 13, 6002-6008.	9.1	161
111	Tunable supramolecular hydrogel for in situ encapsulation and sustained release of bioactive lysozyme. Journal of Colloid and Interface Science, 2011, 359, 399-406.	9.4	42
112	A novel route to inâ€situ incorporation of silver nanoparticles into supramolecular hydrogel networks. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 740-749.	2.1	27