Tailin Xu

List of Publications by Year
in descending order

97 papers	6,780 citations	66343 42 h-index	62596 80 g-index
98 all docs	98 docs citations	98 times ranked	6177 citing authors

#	Article	IF	Citations
1	Biodegradable Biomimic Copper/Manganese Silicate Nanospheres for Chemodynamic/Photodynamic Synergistic Therapy with Simultaneous Glutathione Depletion and Hypoxia Relief. ACS Nano, 2019, 13, 4267-4277.	14.6	513
2	An open source and reduce expenditure ROS generation strategy for chemodynamic/photodynamic synergistic therapy. Nature Communications, 2020, 11, 1735.	12.8	343
3	Fuelâ€Free Synthetic Microâ€/Nanomachines. Advanced Materials, 2017, 29, 1603250.	21.0	310
4	Reversible Swarming and Separation of Self-Propelled Chemically Powered Nanomotors under Acoustic Fields. Journal of the American Chemical Society, 2015, 137, 2163-2166.	13.7	258
5	Turning Erythrocytes into Functional Micromotors. ACS Nano, 2014, 8, 12041-12048.	14.6	247
6	Magnetoâ€“Acoustic Hybrid Nanomotor. Nano Letters, 2015, 15, 4814-4821.	9.1	239
7	Cellâ€Membraneâ€Coated Synthetic Nanomotors for Effective Biodetoxification. Advanced Functional Materials, 2015, 25, 3881-3887.	14.9	212
8	Enteric Micromotor Can Selectively Position and Spontaneously Propel in the Gastrointestinal Tract. ACS Nano, 2016, 10, 9536-9542.	14.6	211
9	Multifunctional conductive hydrogel-based flexible wearable sensors. TrAC - Trends in Analytical Chemistry, 2021, 134, 116130.	11.4	207
10	Programmable Fractal Nanostructured Interfaces for Specific Recognition and Electrochemical Release of Cancer Cells. Advanced Materials, 2013, 25, 3566-3570.	21.0	198
11	Ultrasound propulsion of micro-/nanomotors. Applied Materials Today, 2017, 9, 493-503.	4.3	182
12	Highly Efficient Freestyle Magnetic Nanoswimmer. Nano Letters, 2017, 17, 5092-5098.	9.1	182
13	Ultrasound-Modulated Bubble Propulsion of Chemically Powered Microengines. Journal of the American Chemical Society, 2014, 136, 8552-8555.	13.7	177
14	Multiscale Disordered Porous Fibers for Self-Sensing and Self-Cooling Integrated Smart Sportswear. ACS Nano, 2020, 14, 559-567.	14.6	162
15	Artificial intelligence biosensors: Challenges and prospects. Biosensors and Bioelectronics, 2020, 165, 112412.	10.1	153
16	Electrochemical hydrogen sulfide biosensors. Analyst, The, 2016, 141, 1185-1195.	3.5	143
17	Flexible and Superwettable Bands as a Platform toward Sweat Sampling and Sensing. Analytical Chemistry, 2019, 91, 4296-4300.	6.5	136
18	Graphene-Based Biosensors for Detection of Biomarkers. Micromachines, 2020, 11, 60.	2.9	132

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19	Stretchable Conductive Fibers of Ultrahigh Tensile Strain and Stable Conductance Enabled by a Worm-Shaped Graphene Microlayer. Nano Letters, 2019, 19, 6592-6599.	9.1	126
20	Integrated Smart Janus Textile Bands for Self-Pumping Sweat Sampling and Analysis. ACS Sensors, 2020, 5, 1548-1554.	7.8	120
21	Bioinspired superwettable micropatterns for biosensing. Chemical Society Reviews, 2019, 48, 3153-3165.	38.1	110
22	The role of sampling in wearable sweat sensors. Talanta, 2020, 212, 120801.	5.5	97
23	Target-Triggered Catalytic Hairpin Assembly-Induced Coreâ€“Satellite Nanostructures for High-Sensitive â€œOff-to-Onâ€•SERS Detection of Intracellular MicroRNA. Analytical Chemistry, 2018, 90, 10591-10599.	6.5	85
24	Superwettable Electrochemical Biosensor toward Detection of Cancer Biomarkers. ACS Sensors, 2018, 3, 72-78.	7.8	84
25	Multifunctional hydrogel as wound dressing for intelligent wound monitoring. Chemical Engineering Journal, 2022, 433, 134625.	12.7	84
26	Lateral flow biosensors based on the use of micro- and nanomaterials: a review on recent developments. Mikrochimica Acta, 2020, 187, 70.	5.0	81
27	Superwettable Microchips as a Platform toward Microgravity Biosensing. ACS Nano, 2017, 11, 621-626.	14.6	74
28	Fully integrated flexible biosensor for wearable continuous glucose monitoring. Biosensors and Bioelectronics, 2022, 196, 113760.	10.1	74
29	Biospired Janus Silk E-Textiles with Wetâ€“Thermal Comfort for Highly Efficient Biofluid Monitoring. Nano Letters, 2021, 21, 8880-8887.	9.1	71
30	Superwettable nanodendritic gold substrates for direct miRNA SERS detection. Nanoscale, 2018, 10, 20990-20994.	5.6	69
31	Electrochemical Sensors for Nitric Oxide Detection in Biological Applications. Electroanalysis, 2014, 26, 449-468.	2.9	65
32	Flexible, self-healable, adhesive and wearable hydrogel patch for colorimetric sweat detection. Journal of Materials Chemistry C, 2021, 9, 14938-14945.	5.5	65
33	Nanodendritic gold/graphene-based biosensor for tri-mode miRNA sensing. Chemical Communications, 2019, 55, 1742-1745.	4.1	63
34	Flexible Superwettable Tapes for On-Site Detection of Heavy Metals. Analytical Chemistry, 2018, 90, 14105-14110.	6.5	59
35	Cancer Cell Membrane Camouflaged Semiâ€Yolk@Spikyâ€Shell Nanomotor for Enhanced Cell Adhesion and Synergistic Therapy. Small, 2020, 16, e2003834.	10.0	54
36	Integrated Ultrasonic Aggregation-Induced Enrichment with Raman Enhancement for Ultrasensitive and Rapid Biosensing. Analytical Chemistry, 2020, 92, 7816-7821.	6.5	54

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37	Core@Satellite Janus Nanomotors with pHâ€Responsive Multiâ€phoretic Propulsion. Angewandte Chemie - International Edition, 2020, 59, 14368-14372.	13.8	52
38	Microdroplet-captured tapes for rapid sampling and SERS detection of food contaminants. Biosensors and Bioelectronics, 2020, 152, 112013.	10.1	50
39	An electrochemical wearable sensor for levodopa quantification in sweat based on a metalâ€“Organic framework/graphene oxide composite with integrated enzymes. Sensors and Actuators B: Chemical, 2022, 359, 131586.	7.8	48
40	Detection of coronavirus in environmental surveillance and risk monitoring for pandemic control. Chemical Society Reviews, 2021, 50, 3656-3676.	38.1	46
41	Hollow mesoporous carbon@Pt Janus nanomotors with dual response of H2O2 and near-infrared light for active cargo delivery. Applied Materials Today, 2019, 17, 85-91.	4.3	44
42	Renewable superwettable biochip for miRNA detection. Sensors and Actuators B: Chemical, 2018, 258, 715-721.	7.8	42
43	Controllable Swarming and Assembly of Micro/Nanomachines. Micromachines, 2018, 9, 10.	2.9	42
44	Dendritic Janus Nanomotors with Precisely Modulated Coverages and Their Effects on Propulsion. ACS Applied Materials & Interfaces, 2019, 11, 10426-10433.	8.0	42
45	Integrated individually electrochemical array for simultaneously detecting multiple Alzheimer's biomarkers. Biosensors and Bioelectronics, 2020, 162, 112253.	10.1	42
46	Freeâ€Blockage Mesoporous Anticancer Nanoparticles Based on ROSâ€Responsive Wetting Behavior of Nanopores. Small, 2017, 13, 1701942.	10.0	41
47	Wearable strain sensor for real-time sweat volume monitoring. IScience, 2021, 24, 102028.	4.1	41
48	Radiative Cooling and Solar Heating Janus Films for Personal Thermal Management. ACS Applied Materials & Interfaces, 2022, 14, 18877-18883.	8.0	41
49	Vapor-Driven Propulsion of Catalytic Micromotors. Scientific Reports, 2015, 5, 13226.	3.3	40
50	Flexible microfluidic nanoplasmonic sensors for refreshable and portable recognition of sweat biochemical fingerprint. Npj Flexible Electronics, 2022, 6, .	10.7	40
51	Smartphone-based tape sensors for multiplexed rapid urinalysis. Sensors and Actuators B: Chemical, 2020, 304, 127415.	7.8	37
52	Superhydrophilic cotton thread with temperature-dependent pattern for sensitive nucleic acid detection. Biosensors and Bioelectronics, 2016, 86, 951-957.	10.1	35
53	Cell micropatterns based on silicone-oil-modified slippery surfaces. Nanoscale, 2016, 8, 18612-18615.	5.6	33
54	Underwaterâ€Transparent Nanodendritic Coatings for Directly Monitoring Cancer Cells. Advanced Healthcare Materials, 2014, 3, 332-337.	7.6	32

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55	Janus dendritic silica/carbon@Pt nanomotors with multiengines for H₂O₂, near-infrared light and lipase powered propulsion. Soft Matter, 2020, 16, 9553-9558.	2.7	31
56	An electrochemical aptasensor based on AuPt alloy nanoparticles for ultrasensitive detection of amyloid-Î² oligomers. Talanta, 2021, 231, 122360.	5.5	30
57	NIR powered Janus nanocarrier for deep tumor penetration. Applied Materials Today, 2020, 18, 100504.	4.3	29
58	Artificial Asymmetric Cilia Array of Dielectric Elastomer for Cargo Transportation. ACS Applied Materials & Interfaces, 2018, 10, 42979-42984.	8.0	27
59	Hydrophilic metal-organic frameworks integrated uricase for wearable detection of sweat uric acid. Analytica Chimica Acta, 2022, 1208, 339843.	5.4	25
60	Two-Dimensional Metalloporphyrinic Framework Nanosheet-Based Dual-Mechanism-Driven Ratiometric Electrochemiluminescent Biosensing of Protein Kinase Activity. ACS Applied Bio Materials, 2021, 4, 1616-1623.	4.6	24
61	Customizable Textile Sensors Based on Helical Coreâ€“Spun Yarns for Seamless Smart Garments. Langmuir, 2021, 37, 3122-3129.	3.5	24
62	Mini-pillar microarray for individually electrochemical sensing in microdroplets. Biosensors and Bioelectronics, 2020, 149, 111845.	10.1	23
63	Construction of dendritic Janus nanomotors with H₂O₂ and NIR light dual-propulsion via a Pickering emulsion. Soft Matter, 2020, 16, 4961-4968.	2.7	23
64	Integrating modification and detection in acoustic microchip for in-situ analysis. Biosensors and Bioelectronics, 2020, 158, 112185.	10.1	23
65	Ultra-Trace Protein Detection by Integrating Lateral Flow Biosensor with Ultrasound Enrichment. Analytical Chemistry, 2021, 93, 2996-3001.	6.5	22
66	Advanced micro/nanomotors for enhanced bioadhesion and tissue penetration. Applied Materials Today, 2021, 23, 101034.	4.3	21
67	Integrated Wound Recognition in Bandages for Intelligent Treatment. Advanced Healthcare Materials, 2020, 9, e2000941.	7.6	20
68	Near-infrared light-driven yolk@shell carbon@silica nanomotors for fuel-free triglyceride degradation. Nano Research, 2021, 14, 654-659.	10.4	20
69	Portable electrochemical micro-workstation platform for simultaneous detection of multiple Alzheimerâ€™s disease biomarkers. Mikrochimica Acta, 2022, 189, 91.	5.0	19
70	Integrated Microdroplets Array for Intelligent Electrochemical Fabrication. Advanced Functional Materials, 2020, 30, 1910329.	14.9	18
71	Acoustic aggregation-induced separation for enhanced fluorescence detection of Alzheimer's biomarker. Talanta, 2021, 233, 122517.	5.5	17
72	Powering bioanalytical applications in biomedicine with light-responsive Janus micro-/nanomotors. Mikrochimica Acta, 2022, 189, 116.	5.0	17

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73	Enhanced Isothermal Amplification for Ultrafast Sensing of SARS-CoV-2 in Microdroplets. Analytical Chemistry, 2022, 94, 4135-4140.	6.5	16
74	Droplet array for open-channel high-throughput SERS biosensing. Talanta, 2020, 218, 121206.	5.5	15
75	Cost-Effective Screening of Antimicrobial Performance of Multiple Metalâ€“Organic Frameworks via a Droplet-Based Batch Synthesis Platform. ACS Sustainable Chemistry and Engineering, 2022, 10, 6476-6482.	6.7	15
76	Ruthenumâ€based Conjugated Polymer and Metalâ€organic Framework Nanocomposites for Glucose Sensing. Electroanalysis, 2021, 33, 1902-1910.	2.9	14
77	Core@Satellite Janus Nanomotors with pHâ€Responsive Multiâ€phoretic Propulsion. Angewandte Chemie, 2020, 132, 14474-14478.	2.0	12
78	Target-triggered regioselective assembly of nanoprobes for Raman imaging of dual cancer biomarkers in living cells. Sensors and Actuators B: Chemical, 2021, 330, 129319.	7.8	11
79	Ultra-trace enriching biosensing in nanoliter sample. Biosensors and Bioelectronics, 2022, 210, 114297.	10.1	11
80	Tunable Thermoresponsive Flexible Films for Adaptive Temperature Management and Visual Temperature Monitoring. ACS Applied Materials & Interfaces, 2022, 14, 29284-29291.	8.0	11
81	Dynamic Assembly of Microspheres under an Ultrasound Field. Chemistry - an Asian Journal, 2019, 14, 2440-2444.	3.3	10
82	On-demand mixing and dispersion in mini-pillar based microdroplets. Nanoscale, 2021, 13, 739-745.	5.6	9
83	Coexisting Cooperative Cognitive Microâ€/Nanorobots. Chemistry - an Asian Journal, 2019, 14, 2357-2368.	3.3	8
84	Amperometric Sarcosine Biosensors Based on Electrodeposited Conductive Films Contain Indoleâ€6â€carboxylic Acid. Electroanalysis, 2022, 34, 345-351.	2.9	8
85	Miniâ€pillar Based Multiâ€channel Electrochemical Platform for Studying the Multifactor Silver Electrodeposition. Electroanalysis, 2021, 33, 2401-2405.	2.9	7
86	Wireless USB-like electrochemical platform for individual electrochemical sensing in microdroplets. Analytica Chimica Acta, 2022, 1197, 339526.	5.4	7
87	Jigsaw-like mini-pillar platform for multi-mode biosensing. Chinese Chemical Letters, 2022, 33, 3879-3882.	9.0	7
88	Microscale synthesis system for regulation and prediction of metal organic framework morphologies. Materials Today Chemistry, 2022, 23, 100767.	3.5	5
89	Microâ€/Nanomachines: Fuelâ€Free Synthetic Microâ€/Nanomachines (Adv. Mater. 9/2017). Advanced Materials, 2017, 29, .	21.0	4
90	Bioinspired Transport Surface Driven by Air Flow. Advanced Materials Interfaces, 2020, 7, 2001331.	3.7	4

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91	Cancer Cells: Underwater-Transparent Nanodendritic Coatings for Directly Monitoring Cancer Cells (Adv. Healthcare Mater. 3/2014). Advanced Healthcare Materials, 2014, 3, 460-460.	7.6	1
92	Railâ€Assisted Dynamic Assembly of Metallic Nanowires. Advanced Intelligent Systems, 2019, 1, 1900100.	6.1	1
93	Controlling the micro/nanomotors motion and their application in precision medicine. Scientia Sinica Chimica, 2017, 47, 29-38.	0.4	1
94	Editorial: Integrated Point-of-Care Testing (POCT) Systems: Recent Progress and Applications. Frontiers in Bioengineering and Biotechnology, 2022, 10, 851675.	4.1	1
95	Cancer Therapy: Cancer Cell Membrane Camouflaged Semiâ€Yolk@Spikyâ€Shell Nanomotor for Enhanced Cell Adhesion and Synergistic Therapy (Small 39/2020). Small, 2020, 16, 2070215.	10.0	0
96	(Keynote) Artificial Intelligence Biosensors: Challenges and Prospects. ECS Meeting Abstracts, 2021, MA2021-01, 1385-1385.	0.0	0
97	(Invited) Intelligent Wearable Biosensorsâ€"Progress and Problem. ECS Meeting Abstracts, 2020, MA2020-01, 2006-2006.	0.0	0