

Xuan Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/197976/publications.pdf>

Version: 2024-02-01

49
papers

3,823
citations

257450
24
h-index

197818
49
g-index

53
all docs

53
docs citations

53
times ranked

6100
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoscale Forces and Their Uses in Self-Assembly. <i>Small</i> , 2009, 5, 1600-1630.	10.0	1,362
2	Directing cell motions on micropatterned ratchets. <i>Nature Physics</i> , 2009, 5, 606-612.	16.7	281
3	Maze Solving by Chemotactic Droplets. <i>Journal of the American Chemical Society</i> , 2010, 132, 1198-1199.	13.7	254
4	Drug delivery systems for programmed and on-demand release. <i>Advanced Drug Delivery Reviews</i> , 2018, 132, 104-138.	13.7	229
5	The Pathway to Intelligence: Using Stimuli-Responsive Materials as Building Blocks for Constructing Smart and Functional Systems. <i>Advanced Materials</i> , 2019, 31, e1804540.	21.0	169
6	Reaction-Diffusion Systems in Intracellular Molecular Transport and Control. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4170-4198.	13.8	155
7	Stimuli-Responsive Surfaces for Tunable and Reversible Control of Wettability. <i>Advanced Materials</i> , 2015, 27, 4062-4068.	21.0	119
8	Controlling Surface Charge Generated by Contact Electrification: Strategies and Applications. <i>Advanced Materials</i> , 2018, 30, e1802405.	21.0	117
9	Printing Tablets with Fully Customizable Release Profiles for Personalized Medicine. <i>Advanced Materials</i> , 2015, 27, 7847-7853.	21.0	116
10	Dynamic Self-Assembly in Ensembles of Camphor Boats. <i>Journal of Physical Chemistry B</i> , 2008, 112, 10848-10853.	2.6	99
11	Rationalizing the Triboelectric Series of Polymers. <i>Chemistry of Materials</i> , 2019, 31, 1473-1478.	6.7	80
12	LÃ©vy-like movement patterns of metastatic cancer cells revealed in microfabricated systems and implicated in vivo. <i>Nature Communications</i> , 2018, 9, 4539.	12.8	73
13	Using the gravitational energy of water to generate power by separation of charge at interfaces. <i>Chemical Science</i> , 2015, 6, 3347-3353.	7.4	64
14	On-demand fully customizable drug tablets via 3D printing technology for personalized medicine. <i>Journal of Controlled Release</i> , 2020, 322, 42-52.	9.9	63
15	Swarming in Shallow Waters. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 770-774.	4.6	56
16	Correlating Material Transfer and Charge Transfer in Contact Electrification. <i>Journal of Physical Chemistry C</i> , 2018, 122, 16154-16160.	3.1	54
17	Antiliquid-Interfering, Antibacteria, and Adhesive Wearable Strain Sensor Based on Superhydrophobic and Conductive Composite Hydrogel. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 46022-46032.	8.0	50
18	Cell motility on micropatterned treadmills and tracks. <i>Soft Matter</i> , 2007, 3, 672.	2.7	35

#	ARTICLE	IF	CITATIONS
19	Designing Non-charging Surfaces from Non-conductive Polymers. <i>Advanced Materials</i> , 2016, 28, 3024-3029.	21.0	35
20	Solidâ€œLiquid Charge Transfer for Generating Droplets with Tunable Charge. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9956-9960.	13.8	31
21	Customizable drug tablets with constant release profiles via 3D printing technology. <i>International Journal of Pharmaceutics</i> , 2021, 598, 120370.	5.2	27
22	Estimating chemical reactivity and cross-influence from collective chemical knowledge. <i>Chemical Science</i> , 2012, 3, 1497.	7.4	26
23	Rupturing cancer cells by the expansion of functionalized stimuli-responsive hydrogels. <i>NPG Asia Materials</i> , 2018, 10, e465-e465.	7.9	26
24	Universal Nature-Inspired Coatings for Preparing Noncharging Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 32220-32226.	8.0	25
25	Soft stimuli-responsive grippers and machines with high load-to-weight ratios. <i>Materials Horizons</i> , 2019, 6, 160-168.	12.2	24
26	Performing Logical Operations with Stimuliâ€œResponsive Building Blocks. <i>Advanced Materials</i> , 2017, 29, 1606483.	21.0	23
27	Eco-Friendly, Direct Deposition of Metal Nanoparticles on Graphite for Electrochemical Energy Conversion and Storage. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 36525-36534.	8.0	23
28	Smart Composite Hydrogels with pH-Responsiveness and Electrical Conductivity for Flexible Sensors and Logic Gates. <i>Polymers</i> , 2019, 11, 1564.	4.5	20
29	Phase transition dynamics and mechanism for backbone-thermoresponsive hyperbranched polyethers. <i>Polymer Chemistry</i> , 2014, 5, 4022.	3.9	19
30	Anomalous Charging Behavior of Inorganic Materials. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11414-11421.	3.1	16
31	The Relationship between Static Charge and Shape. <i>ACS Central Science</i> , 2020, 6, 704-714.	11.3	14
32	Tomography and Staticâ€œMechanical Properties of Adherent Cells. <i>Advanced Materials</i> , 2012, 24, 5719-5726.	21.0	9
33	Pristine graphene oxide film-based contactless actuators driven by electrostatic forces. <i>Journal of Materials Chemistry C</i> , 2017, 5, 9534-9539.	5.5	9
34	Reversible and Continuously Tunable Control of Charge of Close Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 6142-6147.	4.6	9
35	Metal Nanowire-Based Hybrid Electrodes Exhibiting High Charge/Discharge Rates and Long-Lived Electrocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36350-36357.	8.0	8
36	Charging Organic Liquids by Static Charge. <i>Journal of the American Chemical Society</i> , 2020, 142, 21004-21016.	13.7	8

#	ARTICLE	IF	CITATIONS
37	Small-scale soft grippers with environmentally responsive logic gates. <i>Materials Horizons</i> , 2022, 9, 1431-1439.	12.2	8
38	Performing calculus: Asymmetric adaptive stimuli-responsive material for derivative control. <i>Science Advances</i> , 2021, 7, .	10.3	6
39	Solidâ€œLiquid Charge Transfer for Generating Droplets with Tunable Charge. <i>Angewandte Chemie</i> , 2016, 128, 10110-10114.	2.0	5
40	A novel synthetic strategy for styreneâ€œbutadieneâ€œstyrene tri-block copolymer with high <i>cis</i>-1,4 units via changing catalytic active centres. <i>Royal Society Open Science</i> , 2019, 6, 190536.	2.4	5
41	Nonconductive Noncharging Composites: Tunable and Stretchable Materials for Adaptive Prevention of Charging by Contact Electrification. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 5274-5285.	8.0	5
42	Graphiteâ€œAligned Ni/Ni(OH) ₂ Nanowireâ€œBased Aqueous Asymmetric Supercapacitors Exhibiting Excellent Cycle Stability, High Rate Performance, and Wide Operation Voltage. <i>ChemistrySelect</i> , 2019, 4, 13543-13550.	1.5	4
43	Stimuli-responsive attachment for enabling the targeted release of carriers. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4317-4326.	5.9	3
44	Signal Amplification: A Sharp Impermeableâ€œPermeable Transition for Highly Sensitive Lowâ€œCost Detection. <i>Advanced Materials Technologies</i> , 2018, 3, 1800042.	5.8	2
45	Synthesis of Novel pH-Tunable Thermoresponsive Hydroxyl-Terminated Hyperbranched Polyether. <i>Polymers</i> , 2019, 11, 895.	4.5	1
46	Micropatterning: Tomography and Staticâ€œMechanical Properties of Adherent Cells (<i>Adv. Mater.</i>) Tj ETQq0 0 0 rgBT, /Overlock 10 Tf 50 3	21.0	0
47	Selective Reduction Sites on Commercial Graphite Foil for Building Multimetallic Nanoâ€œAssemblies for Energy Conversion. <i>ChemistrySelect</i> , 2020, 5, 13269-13277.	1.5	0
48	Micropatterned substrates: Tools for studying cell motility and aiding rational drug design. <i>FASEB Journal</i> , 2011, 25, .	0.5	0
49	Self-Assembly of Graphene Oxide Flakes for Smart and Multifunctional Coating with Reversible Formation of Wrinkling Patterns. <i>Soft Matter</i> , 2022, , .	2.7	0