Peng Shi

List of Publications by Year
in descending order

69 papers	3,070 citations	159358 30 h-index	161609 54 g-index
72 all docs	72 docs citations	72 times ranked	5255 citing authors

#	Article	IF	Citations
1	Fish Capsules: A System for Highâ€Throughput Screening of Combinatorial Drugs. Advanced Science, 2022, 9, e2104449.	5.6	11
2	Sequencing-free Analysis of Multiple Methylations on Gene-Specific mRNAs. Journal of the American Chemical Society, 2022, 144, 6010-6018.	6.6	9
3	Injectable Black Phosphorus Nanosheets for Wireless Nongenetic Neural Stimulation. Small, 2022, 18, e2105388.	5.2	8
4	3D Upconversion Barcodes for Combinatory Wireless Neuromodulation in Behaving Animals. Advanced Healthcare Materials, 2022, 11, e2200304.	3.9	5
5	Recent advances in cellular optogenetics for photomedicine. Advanced Drug Delivery Reviews, 2022, 188, 114457.	6.6	7
6	NaYbF₄@NaYF₄ Nanoparticles: Controlled Shell Growth and Shape-Dependent Cellular Uptake. ACS Applied Materials & Interfaces, 2021, 13, 2327-2335.	4.0	22
7	Profiling MicroRNAs with Associated Spatial Dynamics in Acute Tissue Slices. ACS Nano, 2021, 15, 4881-4892.	7.3	10
8	Cryomicroneedles for transdermal cell delivery. Nature Biomedical Engineering, 2021, 5, 1008-1018.	11.6	97
9	Mapping Drug-Induced Neuropathy through In-Situ Motor Protein Tracking and Machine Learning. Journal of the American Chemical Society, 2021, 143, 14907-14915.	6.6	11
10	Using brain functional magnetic resonance imaging to evaluate the effectiveness of acupuncture combined with mirror therapy on upper limb function in patients with cerebral ischemic stroke: a study protocol for a randomized, controlled trial. Trials, 2021, 22, 53.	0.7	2
11	An erythrocyte-delivered photoactivatable oxaliplatin nanoprodrug for enhanced antitumor efficacy and immune response. Chemical Science, 2021, 12, 14353-14362.	3.7	15
12	Multiexcitonic Emission in Zero-Dimensional Cs₂ZrCl₆:Sb³⁺ Perovskite Crystals. Journal of the American Chemical Society, 2021, 143, 17599-17606.	6.6	131
13	Flexible and fully implantable upconversion device for wireless optogenetic stimulation of the spinal cord in behaving animals. Nanoscale, 2020, 12, 2406-2414.	2.8	27
14	High-Efficiency Cellular Reprogramming by Nanoscale Puncturing. Nano Letters, 2020, 20, 5473-5481.	4.5	13
15	High-throughput intracellular biopsy of microRNAs for dissecting the temporal dynamics of cellular heterogeneity. Science Advances, 2020, 6, eaba4971.	4.7	20
16	Vascularized neural constructs for ex-vivo reconstitution of blood-brain barrier function. Biomaterials, 2020, 245, 119980.	5.7	36
17	Latest advances in MXene biosensors. JPhys Materials, 2020, 3, 031001.	1.8	38
18	Biohybrid Triboelectric Nanogenerator for Label-Free Pharmacological Fingerprinting in Cardiomyocytes. Nano Letters, 2020, 20, 4043-4050.	4.5	17

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19	Organic electrochemical transistor arrays for real-time mapping of evoked neurotransmitter release in vivo. ELife, 2020, 9, .	2.8	50
20	Phorbiplatin, a Highly Potent Pt(IV) Antitumor Prodrug That Can Be Controllably Activated by Red Light. CheM, 2019, 5, 3151-3165.	5.8	107
21	Intelligent Biohybrid Robotic Systems: A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct (Small 18/2019). Small, 2019, 15, 1970095.	5.2	0
22	A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct. Small, 2019, 15, e1900006.	5.2	27
23	Lowâ€Invasive Cell Injection based on Rotational Microrobot. Advanced Biology, 2019, 3, e1800274.	3.0	5
24	Energy transfer-based biodetection using optical nanomaterials. Journal of Materials Chemistry B, 2018, 6, 2924-2944.	2.9	35
25	A Cancer Cell-Selective and Low-Toxic Bifunctional Heterodinuclear Pt(IV)â€“Ru(II) Anticancer Prodrug. Inorganic Chemistry, 2018, 57, 2917-2924.	1.9	56
26	Coreâ€“Shellâ€“Shell Upconversion Nanoparticles with Enhanced Emission for Wireless Optogenetic Inhibition. Nano Letters, 2018, 18, 948-956.	4.5	130
27	Regeneration of cortical tissue from brain injury by implantation of defined molecular gradient of semaphorin 3A. Biomaterials, 2018, 157, 125-135.	5.7	28
28	High-throughput three-dimensional chemotactic assays reveal steepness-dependent complexity in neuronal sensation to molecular gradients. Nature Communications, 2018, 9, 4745.	5.8	33
29	High-throughput brain activity mapping and machine learning as a foundation for systems neuropharmacology. Nature Communications, 2018, 9, 5142.	5.8	34
30	Injectable Nanoreinforced Shape-Memory Hydrogel System for Regenerating Spinal Cord Tissue from Traumatic Injury. ACS Applied Materials & Interfaces, 2018, 10, 29299-29307.	4.0	49
31	Anti-counterfeiting patterns encrypted with multi-mode luminescent nanotaggants. Nanoscale, 2017, 9, 2701-2705.	2.8	149
32	Investigation of the Subcellular Neurotoxicity of Amyloidâ€Î²2 Using a Device Integrating Microfluidic Perfusion and Chemotactic Guidance. Advanced Healthcare Materials, 2017, 6, 1600895.	3.9	16
33	Bioelectronic Devices: Cell Generator: A Selfâ€Sustaining Biohybrid System Based on Energy Harvesting from Engineered Cardiac Microtissues (Adv. Funct. Mater. 20/2017). Advanced Functional Materials, 2017, 27, .	7.8	0
34	Cell Generator: A Selfâ€Sustaining Biohybrid System Based on Energy Harvesting from Engineered Cardiac Microtissues. Advanced Functional Materials, 2017, 27, 1606169.	7.8	10
35	Neural Stimulation: Multiplexed Optogenetic Stimulation of Neurons with Spectrumâ€Selective Upconversion Nanoparticles (Adv. Healthcare Mater. 17/2017). Advanced Healthcare Materials, 2017, 6, .	3.9	1
36	Tetherless near-infrared control of brain activity in behaving animals using fully implantable upconversion microdevices. Biomaterials, 2017, 142, 136-148.	5.7	74

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37	Multiplexed Optogenetic Stimulation of Neurons with Spectrumâ€Selective Upconversion Nanoparticles. Advanced Healthcare Materials, 2017, 6, 1700446.	3.9	58
38	Compartmentalized Platforms for Neuro-Pharmacological Research. Current Neuropharmacology, 2016, 14, 72-86.	1.4	25
39	Field-Effect Transistors: Ultrathin MXene-Micropattern-Based Field-Effect Transistor for Probing Neural Activity (Adv. Mater. 17/2016). Advanced Materials, 2016, 28, 3411-3411.	11.1	12
40	Ultrathin MXeneâ€Micropatternâ€Based Fieldâ€Effect Transistor for Probing Neural Activity. Advanced Materials, 2016, 28, 3333-3339.	11.1	474
41	Autonomous system for cross-organ investigation of ethanol-induced acute response in behaving larval zebrafish. Biomicrofluidics, 2016, 10, 024123.	1.2	17
42	A flexible object tracking system for planary motion. , 2016, , .		2
43	Controlled nanoparticle release from stable magnetic microbubble oscillations. NPG Asia Materials, 2016, 8, e260-e260.	3.8	43
44	Mechanically resilient, injectable, and bioadhesive supramolecular gelatin hydrogels crosslinked by weak host-guest interactions assist cell infiltration and in situ tissue regeneration. Biomaterials, 2016, 101, 217-228.	5.7	249
45	High-throughput mapping of brain-wide activity in awake and drug-responsive vertebrates. Lab on A Chip, 2015, 15, 680-689.	3.1	59
46	Large-scale Topographical Screen for Investigation of Physical Neural-Guidance Cues. Scientific Reports, 2015, 5, 8644.	1.6	66
47	Remote modulation of neural activities via near-infrared triggered release of biomolecules. Biomaterials, 2015, 65, 76-85.	5.7	65
48	An upconversion nanoprobe operating in the first biological window. Journal of Materials Chemistry B, 2015, 3, 3548-3555.	2.9	49
49	Interrogation of Cellular Innate Immunity by Diamond-Nanoneedle-Assisted Intracellular Molecular Fishing. Nano Letters, 2015, 15, 7058-7063.	4.5	35
50	Compartmentalized Synapse Microarray for High-Throughput Screening. Neuromethods, 2015, , 231-245.	0.2	1
51	Drug Delivery: Near-Infrared Light Responsive Multi-Compartmental Hydrogel Particles Synthesized Through Droplets Assembly Induced by Superhydrophobic Surface (Small 23/2014). Small, 2014, 10, 4984-4984.	5.2	2
52	Nearâ€Infrared Light Responsive Multiâ€Compartmental Hydrogel Particles Synthesized Through Droplets Assembly Induced by Superhydrophobic Surface. Small, 2014, 10, 4886-4894.	5.2	47
53	Micropatterning: Siteâ€Specific Differentiation of Neural Stem Cell Regulated by Micropatterned Multicomponent Interfaces (Adv. Healthcare Mater. 2/2014). Advanced Healthcare Materials, 2014, 3, 304-304.	3.9	0
54	Siteâ€Specific Differentiation of Neural Stem Cell Regulated by Micropatterned Multicomponent Interfaces. Advanced Healthcare Materials, 2014, 3, 214-220.	3.9	22

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55	Poking cells for efficient vector-free intracellular delivery. Nature Communications, 2014, 5, 4466.	5.8	104
56	Organ-targeted high-throughput in vivo biologics screen identifies materials for RNA delivery. Integrative Biology (United Kingdom), 2014, 6, 926-934.	0.6	26
57	NeuroArray: A Universal Interface for Patterning and Interrogating Neural Circuitry with Single Cell Resolution. Scientific Reports, 2014, 4, 4784.	1.6	54
58	Micropatterning of bioactive ligands for high-throughput study neuronal network functions. , 2013, , .		0
59	Concentration-Dependent Requirement for Local Protein Synthesis in Motor Neuron Subtype-Specific Response to Axon Guidance Cues. Journal of Neuroscience, 2012, 32, 1496-1506.	1.7	44
60	An electrically-stimulate optically-record microsystem based on active CMOS multi-electrode array for dissociated cell cultures. , 2011, , .		0
61	Synapse microarray identification of small molecules that enhance synaptogenesis. Nature Communications, 2011, 2, 510.	5.8	84
62	Combined microfluidics/protein patterning platform for pharmacological interrogation of axon pathfinding. Lab on A Chip, 2010, 10, 1005.	3.1	64
63	Self-Aligned Supported Lipid Bilayers for Patterning the Cellâ"Substrate Interface. Journal of the American Chemical Society, 2009, 131, 13204-13205.	6.6	25
64	Local presentation of L1 and Nâ€cadherin in multicomponent, microscale patterns differentially direct neuron function in vitro. Developmental Neurobiology, 2007, 67, 1765-1776.	1.5	59
65	Peptide-Directed Binding of Quantum Dots to Integrins in Human Fibroblast. IEEE Transactions on Nanobioscience, 2006, 5, 15-19.	2.2	12
66	Optical and Electrical Properties of Colloidal Quantum Dots in Electrolytic Environments: Using Biomolecular Links in Chemically-Directed Assembly of Quantum Dot Networks. Journal of Computational Electronics, 2005, 4, 21-25.	1.3	10
67	Semiconductor nanostructures in biological applications. Journal of Physics Condensed Matter, 2005, 17, R637-R656.	0.7	35
68	Tunable optical properties of colloidal quantum dots in electrolytic environments. , 2004, , .		1
69	Binding of semiconductor quantum dots to cellular integrins. IEEE Nanotechnology Magazine, 2004, 3, 86-92.	1.1	25