Shuai Zhang

List of Publications by Year
in descending order

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53	1,914	257450 24	254184 43
papers	citations	h-index	g-index

53	53	53	3509
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microfluidic Synthesis of Hybrid Nanoparticles with Controlled Lipid Layers: Understanding Flexibility-Regulated Cellâ€“Nanoparticle Interaction. ACS Nano, 2015, 9, 9912-9921.	14.6	163
2	Building two-dimensional materials one row at a time: Avoiding the nucleation barrier. Science, 2018, 362, 1135-1139.	12.6	155
3	Morphologies, Preparations and Applications of Layered Double Hydroxide Micro-/Nanostructures. Materials, 2010, 3, 5220-5235.	2.9	127
4	Tuning crystallization pathways through sequence engineering of biomimetic polymers. Nature Materials, 2017, 16, 767-774.	27.5	116
5	Coexistence of ribbon and helical fibrils originating from hIAPP _{20â€“29} revealed by quantitative nanomechanical atomic force microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2798-2803.	7.1	104
6	Controlling protein assembly on inorganic crystals through designed protein interfaces. Nature, 2019, 571, 251-256.	27.8	85
7	Quantification of the Interaction Forces between Metals and Graphene by Quantum Chemical Calculations and Dynamic Force Measurements under Ambient Conditions. ACS Nano, 2013, 7, 1646-1651.	14.6	73
8	Quantitative biomolecular imaging by dynamic nanomechanical mapping. Chemical Society Reviews, 2014, 43, 7412-7429.	38.1	72
9	Modulating AÎ²_{33â€“42} Peptide Assembly by Graphene Oxide. Chemistry - A European Journal, 2014, 20, 7236-7240.	3.3	69
10	The role of self-assembling polypeptides in building nanomaterials. Physical Chemistry Chemical Physics, 2011, 13, 17435.	2.8	68
11	Co-assembly of human islet amyloid polypeptide (hIAPP)/insulin. Chemical Communications, 2012, 48, 191-193.	4.1	46
12	Hydrated Human Corneal Stroma Revealed by Quantitative Dynamic Atomic Force Microscopy at Nanoscale. ACS Nano, 2014, 8, 6873-6882.	14.6	45
13	In vitro single-cell dissection revealing the interior structure of cable bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8517-8522.	7.1	45
14	Electrospun UV-responsive supramolecular nanofibers from a cyclodextrinâ€“azobenzene inclusion complex. Journal of Materials Chemistry C, 2013, 1, 850-855.	5.5	43
15	Flexible and Insoluble Artificial Synapses Based on Chemical Crossâ€Linked Wool Keratin. Advanced Functional Materials, 2020, 30, 2002882.	14.9	42
16	Hierarchical Assembly of Peptoidâ€Based Cylindrical Micelles Exhibiting Efficient Resonance Energy Transfer in Aqueous Solution. Angewandte Chemie - International Edition, 2019, 58, 12223-12230.	13.8	34
17	The Importance of Being Capped: Terminal Capping of an Amyloidogenic Peptide Affects Fibrillation Propensity and Fibril Morphology. Biochemistry, 2014, 53, 6968-6980.	2.5	33
18	Isothermal Hybridization Kinetics of DNA Assembly of Twoâ€Dimensional DNA Origami. Small, 2013, 9, 2954-2959.	10.0	32

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19	The Ultrastructures and Mechanical Properties of the Descementâ€™s Membrane in Fuchs Endothelial Corneal Dystrophy. Scientific Reports, 2016, 6, 23096.	3.3	32
20	Identification of a Novel Parallel Î²â€Strand Conformation within Molecular Monolayer of Amyloid Peptide. Advanced Science, 2016, 3, 1500369.	11.2	31
21	Assembly of a patchy protein into variable 2D lattices via tunable multiscale interactions. Nature Communications, 2020, 11, 3770.	12.8	31
22	Nanoparticle-Mediated Assembly of Peptoid Nanosheets Functionalized with Solid-Binding Proteins: Designing Heterostructures for Hierarchy. Nano Letters, 2021, 21, 1636-1642.	9.1	31
23	Scanning ion conductance microscopy studies of amyloid fibrils at nanoscale. Nanoscale, 2012, 4, 3105.	5.6	27
24	Mixed poly (ethylene glycol) and oligo (ethylene glycol) layers on gold as nonfouling surfaces created by backfilling. Biointerphases, 2011, 6, 180-188.	1.6	25
25	Engineering Biomolecular Selfâ€Assembly at Solidâ€“Liquid Interfaces. Advanced Materials, 2021, 33, e1905784.	21.0	25
26	2Dâ€Oriented Selfâ€Assembly of Peptides Induced by Hydrated Electrons. Chemistry - A European Journal, 2012, 18, 14614-14617.	3.3	24
27	Direct Observation of the Orientational Anisotropy of Buried Hydroxyl Groups inside Muscovite Mica. Journal of the American Chemical Society, 2019, 141, 2135-2142.	13.7	23
28	Sequenceâ€“Structureâ€“Binding Relationships Reveal Adhesion Behavior of the Car9 Solid-Binding Peptide: An Integrated Experimental and Simulation Study. Journal of the American Chemical Society, 2020, 142, 2355-2363.	13.7	21
29	In Situ TEM and AFM Investigation of Morphological Controls during the Growth of Single Crystal BaWO₄. Crystal Growth and Design, 2018, 18, 1367-1375.	3.0	20
30	Programmable two-dimensional nanocrystals assembled from POSS-containing peptoids as efficient artificial light-harvesting systems. Science Advances, 2021, 7, .	10.3	20
31	2D amyloid aggregation of human islet amyloid polypeptide at the solidâ€“liquid interface. Soft Matter, 2012, 8, 1616-1622.	2.7	19
32	Disentangling Rotational Dynamics and Ordering Transitions in a System of Self-Organizing Protein Nanorods via Rotationally Invariant Latent Representations. ACS Nano, 2021, 15, 6471-6480.	14.6	19
33	Hierarchical Self-Assembly Pathways of Peptoid Helices and Sheets. Biomacromolecules, 2022, 23, 992-1008.	5.4	19
34	Peptoid-directed assembly of CdSe nanoparticles. Nanoscale, 2021, 13, 1273-1282.	5.6	18
35	Collagen coated tantalum substrate for cell proliferation. Colloids and Surfaces B: Biointerfaces, 2012, 95, 10-15.	5.0	17
36	Quantifying the Dynamics of Protein Self-Organization Using Deep Learning Analysis of Atomic Force Microscopy Data. Nano Letters, 2021, 21, 158-165.	9.1	17

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37	Optimizing the surface density of polyethylene glycol chains by grafting from binary solvent mixtures. Applied Surface Science, 2015, 341, 134-141.	6.1	15
38	Nanostructure and mechanical properties of the osteocyte lacunar-canalicular network-associated bone matrix revealed by quantitative nanomechanical mapping. Nano Research, 2015, 8, 3250-3260.	10.4	15
39	The Vibration Behavior of Subâ€Micrometer Gas Vesicles in Response to Acoustic Excitation Determined via Laser Doppler Vibrometry. Advanced Functional Materials, 2020, 30, 2000239.	14.9	15
40	Building the First Hydration Shell of Deprotonated Glycine by the MCMM and ab Initio Methods. Journal of Physical Chemistry B, 2011, 115, 6213-6221.	2.6	14
41	Modulation of fibrillation of hIAPP core fragments by chemical modification of the peptide backbone. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 274-285.	2.3	14
42	A self-assembled nanopatch with peptideâ€“organic multilayers and mechanical properties. Nanoscale, 2015, 7, 2250-2254.	5.6	13
43	Scaffolded multimers of hIAPP20â€“29 peptide fragments fibrillate faster and lead to different fibrils compared to the free hIAPP20â€“29 peptide fragment. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1890-1897.	2.3	11
44	Ion-dependent proteinâ€“surface interactions from intrinsic solvent response. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10
45	Impact of Nanoparticle Size and Surface Chemistry on Peptoid Self-Assembly. ACS Nano, 2022, 16, 8095-8106.	14.6	9
46	Direct force producing uniform ultra-thin chitosan films by atomic force microscopy. RSC Advances, 2012, 2, 2732.	3.6	6
47	An Investigation into the Formation of Annular Aggregates of Human Islet Amyloid Polypeptide on Tantalum Oxide Surfaces. Chemistry - A European Journal, 2012, 18, 2493-2497.	3.3	6
48	Rotational dynamics and transition mechanisms of surface-adsorbed proteins. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2020242119.	7.1	6
49	Chemically Tunable Aspect Ratio Control and Laser Refrigeration of Hexagonal Sodium Yttrium Fluoride Upconverting Materials. Crystal Growth and Design, 2022, 22, 3605-3612.	3.0	4
50	Nanostructural Biomaterials and Applications. Journal of Nanomaterials, 2016, 2016, 1-2.	2.7	2
51	Hierarchical Assembly of Peptoidâ€Based Cylindrical Micelles Exhibiting Efficient Resonance Energy Transfer in Aqueous Solution. Angewandte Chemie, 2019, 131, 12351-12358.	2.0	1
52	Editorial: Material Surfaces and Interfaces at the Nanoscale: From Theory to Application. Frontiers in Chemistry, 2021, 9, 656661.	3.6	1
53	Visualizing Solution Structure at Solid-Liquid Interfaces using Three-Dimensional Fast Force Mapping. Journal of Visualized Experiments, 2021, , .	0.3	1