

# Wei Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/210811/publications.pdf>

Version: 2024-02-01

64  
papers

2,767  
citations

159585

30  
h-index

182427

51  
g-index

66  
all docs

66  
docs citations

66  
times ranked

3391  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stretchable and self-healable hydrogel artificial skin. <i>National Science Review</i> , 2022, 9, .	9.5	40
2	Quantifying cation- $\pi$ interactions in marine adhesive proteins using single-molecule force spectroscopy. , 2022, 1, 100005.		12
3	A bottom-up design strategy for controllable self-assembly based on the isotropic double-well potential. <i>Physical Chemistry Chemical Physics</i> , 2022, , .	2.8	0
4	Fluorination Increases Hydrophobicity at the Macroscopic Level but not at the Microscopic Level. <i>Chinese Physics Letters</i> , 2022, 39, 038701.	3.3	8
5	Tuning Strain Stiffening of Protein Hydrogels by Charge Modification. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3032.	4.1	5
6	Strong and Reversible Covalent Double Network Hydrogel Based on Force-coupled Enzymatic Reactions. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	20
7	Strong and Reversible Covalent Double Network Hydrogel Based on Force-coupled Enzymatic Reactions. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	1
8	Mechanochemical Lithography. <i>Journal of the American Chemical Society</i> , 2022, 144, 9949-9958.	13.7	8
9	Temperature Dependence of Internal Friction of Peptides. <i>Journal of Physical Chemistry B</i> , 2021, 125, 2821-2832.	2.6	2
10	Enhanced sampling method with coarse graining of conformational space. <i>Physical Review E</i> , 2021, 103, 032404.	2.1	2
11	An ester bond underlies the mechanical strength of a pathogen surface protein. <i>Nature Communications</i> , 2021, 12, 5082.	12.8	20
12	Regulating Mechanical Properties of $\langle \text{polymer} \rangle$ Supramolecular Double-network $\langle \text{polymer} \rangle$ Hydrogel by Supramolecular Self-assembling Structures. <i>Chinese Journal of Chemistry</i> , 2021, 39, 2711-2717.	4.9	21
13	Stable, active CO <sub>2</sub> reduction to formate via redox-modulated stabilization of active sites. <i>Nature Communications</i> , 2021, 12, 5223.	12.8	145
14	Activation Pathways and Free Energy Landscapes of the SARS-CoV-2 Spike Protein. <i>ACS Omega</i> , 2021, 6, 23432-23441.	3.5	8
15	Temperature and Guanidine Hydrochloride Effects on the Folding Thermodynamics of WW Domain and Variants. <i>Journal of Physical Chemistry B</i> , 2021, 125, 11386-11391.	2.6	2
16	Hydrogel tapes for fault-tolerant strong wet adhesion. <i>Nature Communications</i> , 2021, 12, 7156.	12.8	122
17	Hidden Intermediate State and Second Pathway Determining Folding and Unfolding Dynamics of GB1 Protein at Low Forces. <i>Physical Review Letters</i> , 2020, 125, 198101.	7.8	24
18	Tunable Mechanical and Optoelectronic Properties of Organic Cocrystals by Unexpected Stacking Transformation from H- to J- and X-Aggregation. <i>ACS Nano</i> , 2020, 14, 10704-10715.	14.6	61

#	ARTICLE	IF	CITATIONS
19	Stretchable hydrogels with low hysteresis and anti-fatigue fracture based on polyprotein cross-linkers. <i>Nature Communications</i> , 2020, 11, 4032.	12.8	129
20	Structure and sequence features of mussel adhesive protein lead to its salt-tolerant adhesion ability. <i>Science Advances</i> , 2020, 6, .	10.3	47
21	Insights into the Kinetic Partitioning Folding Dynamics of the Human Telomeric G-Quadruplex from Molecular Simulations and Machine Learning. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 5936-5947.	5.3	8
22	Bioinspired Suprahelical Frameworks as Scaffolds for Artificial Photosynthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 45192-45201.	8.0	7
23	Smart Adhesive Peptide Nanofibers for Cell Capture and Release. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 6800-6807.	5.2	6
24	Strong and Injectable Hydrogels Based on Multivalent Metal Ion-Peptide Cross-linking. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 962-969.	2.6	6
25	H <sub>2</sub> Activation by Heterobimetallic Gold(I)/Platinum(0) Complex: Theoretical Understanding of Electronic Processes and Prediction on More Active Species. <i>Journal of Physical Chemistry C</i> , 2020, 124, 4525-4533.	3.1	5
26	Molecular engineering of metal coordination interactions for strong, tough, and fast-recovery hydrogels. <i>Science Advances</i> , 2020, 6, eaaz9531.	10.3	111
27	Origin of subdiffusions in proteins: Insight from peptide systems. <i>Physical Review E</i> , 2020, 102, 062424.	2.1	5
28	Consequences of Hydrophobic Nanotube Binding on the Functional Dynamics of Signaling Protein Calmodulin. <i>ACS Omega</i> , 2019, 4, 10494-10501.	3.5	3
29	Bioinspired Ice Growth Inhibitors Based on Self-Assembling Peptides. <i>ACS Macro Letters</i> , 2019, 8, 1383-1390.	4.8	27
30	Chirality-Dependent Adsorption between Amphipathic Peptide and POPC Membrane. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4760.	4.1	11
31	Direct Measurement of Length Scale Dependence of the Hydrophobic Free Energy of a Single Collapsed Polymer Nanosphere. <i>Physical Review Letters</i> , 2019, 122, 047801.	7.8	21
32	Surface-assisted assembly of a histidine-rich lipidated peptide for simultaneous exfoliation of graphite and functionalization of graphene nanosheets. <i>Nanoscale</i> , 2019, 11, 2999-3012.	5.6	39
33	Binding of Copper Ions with Octapeptide Region in Prion Protein: Simulations with Charge Transfer Model. <i>Journal of Physical Chemistry B</i> , 2019, 123, 5216-5228.	2.6	2
34	Tuning of the dynamics of metal ion crosslinked hydrogels by network structures. <i>Soft Matter</i> , 2019, 15, 4423-4427.	2.7	14
35	Role of substrate-product frustration on enzyme functional dynamics. <i>Physical Review E</i> , 2019, 100, 052409.	2.1	9
36	Strong dual-crosslinked hydrogels for ultrasound-triggered drug delivery. <i>Nano Research</i> , 2019, 12, 115-119.	10.4	54

#	ARTICLE	IF	CITATIONS
37	Principles Governing Catalytic Activity of Self-Assembled Short Peptides. <i>Journal of the American Chemical Society</i> , 2019, 141, 223-231.	13.7	47
38	Maleimide-thiol adducts stabilized through stretching. <i>Nature Chemistry</i> , 2019, 11, 310-319.	13.6	154
39	Single-Molecule Force Spectroscopy Reveals Self-Assembly Enhanced Surface Binding of Hydrophobins. <i>Chemistry - A European Journal</i> , 2018, 24, 9224-9228.	3.3	16
40	Rationally designed synthetic protein hydrogels with predictable mechanical properties. <i>Nature Communications</i> , 2018, 9, 620.	12.8	145
41	Mesoscale Graphene-like Honeycomb Mono- and Multilayers Constructed via Self-Assembly of Coclusters. <i>Journal of the American Chemical Society</i> , 2018, 140, 1805-1811.	13.7	69
42	Single-Molecule Force Spectroscopy Reveals Multiple Binding Modes between DOPA and Different Rutile Surfaces. <i>ChemPhysChem</i> , 2017, 18, 1466-1469.	2.1	29
43	Single-molecule study of the synergistic effects of positive charges and Dopa for wet adhesion. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4416-4420.	5.8	57
44	Single-Molecule Mechanics of Catechol-Iron Coordination Bonds. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 979-989.	5.2	67
45	Multiporous Supramolecular Microspheres for Artificial Photosynthesis. <i>Chemistry of Materials</i> , 2017, 29, 4454-4460.	6.7	32
46	Mg <sup>2+</sup> -Dependent High Mechanical Anisotropy of Three-Way Junction pRNA as Revealed by Single-Molecule Force Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9376-9380.	13.8	20
47	Consequences of Energetic Frustration on the Ligand-Coupled Folding/Dimerization Dynamics of Allosteric Protein S100A12. <i>Journal of Physical Chemistry B</i> , 2017, 121, 9799-9806.	2.6	5
48	Single Molecule Study of Force-Induced Rotation of Carbon-Carbon Double Bonds in Polymers. <i>ACS Nano</i> , 2017, 11, 194-203.	14.6	34
49	Electrically Controllable Actuators Based on Supramolecular Peptide Hydrogels. <i>Advanced Functional Materials</i> , 2016, 26, 9053-9062.	14.9	102
50	Polymer-Supramolecular Polymer Double-Network Hydrogel. <i>Advanced Functional Materials</i> , 2016, 26, 9044-9052.	14.9	106
51	Molecular simulations of metal-coupled protein folding. <i>Current Opinion in Structural Biology</i> , 2015, 30, 25-31.	5.7	45
52	Energy landscape views for interplays among folding, binding, and allostery of calmodulin domains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10550-10555.	7.1	150
53	Atomistic Picture for the Folding Pathway of a Hybrid-1 Type Human Telomeric DNA G-quadruplex. <i>PLoS Computational Biology</i> , 2014, 10, e1003562.	3.2	55
54	Single-molecule force spectroscopy reveals force-enhanced binding of calcium ions by gelsolin. <i>Nature Communications</i> , 2014, 5, 4623.	12.8	36

#	ARTICLE	IF	CITATIONS
55	Single Molecule Evidence for the Adaptive Binding of DOPA to Different Wet Surfaces. <i>Langmuir</i> , 2014, 30, 4358-4366.	3.5	116
56	Designing the mechanical properties of peptide-based supramolecular hydrogels for biomedical applications. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014, 57, 849-858.	5.1	36
57	An enzyme-assisted nanoparticle crosslinking approach to enhance the mechanical strength of peptide-based supramolecular hydrogels. <i>Chemical Communications</i> , 2013, 49, 8653.	4.1	40
58	Energy landscape and multiroute folding of topologically complex proteins adenylate kinase and Zouf-knot. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 17789-17794.	7.1	134
59	Low Folding Cooperativity of Hp35 Revealed by Single-Molecule Force Spectroscopy and Molecular Dynamics Simulation. <i>Biophysical Journal</i> , 2012, 102, 1944-1951.	0.5	14
60	Single-Molecule Experiments Reveal the Flexibility of a Per-ARNT-Sim Domain and the Kinetic Partitioning in the Unfolding Pathway under Force. <i>Biophysical Journal</i> , 2012, 102, 2149-2157.	0.5	25
61	Mechanistic insight of photo-induced aggregation of chicken egg white lysozyme: The interplay between hydrophobic interactions and formation of intermolecular disulfide bonds. <i>Proteins: Structure, Function and Bioinformatics</i> , 2011, 79, 2505-2516.	2.6	41
62	Confinement effects on the kinetics and thermodynamics of protein dimerization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5517-5522.	7.1	69
63	Metal-Coupled Folding of Cys <sub>2</sub> His <sub>2</sub> Zinc-Finger. <i>Journal of the American Chemical Society</i> , 2008, 130, 892-900.	13.7	115
64	Modeling hydrogen exchange of proteins by a multiscale method. <i>Chinese Physics B</i> , 0, , .	1.4	3