

Lei Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

102
papers

21,393
citations

147726

31
h-index

40954

93
g-index

109
all docs

109
docs citations

109
times ranked

42497
citing authors

#	ARTICLE	IF	CITATIONS
1	A pneumonia outbreak associated with a new coronavirus of probable bat origin. <i>Nature</i> , 2020, 579, 270-273.	13.7	17,004
2	CD147-spike protein is a novel route for SARS-CoV-2 infection to host cells. <i>Signal Transduction and Targeted Therapy</i> , 2020, 5, 283.	7.1	806
3	Toward a Single-Layer Two-Dimensional Honeycomb Supramolecular Organic Framework in Water. <i>Journal of the American Chemical Society</i> , 2013, 135, 17913-17918.	6.6	349
4	Structure-Activity Relationship Studies of Novel Carbocyclic Influenza Neuraminidase Inhibitors. <i>Journal of Medicinal Chemistry</i> , 1998, 41, 2451-2460.	2.9	301
5	Large plasticity in magnesium mediated by pyramidal dislocations. <i>Science</i> , 2019, 365, 73-75.	6.0	264
6	Vacancy-Induced Synaptic Behavior in 2D WS ₂ Nanosheet-Based Memristor for Low-Power Neuromorphic Computing. <i>Small</i> , 2019, 15, e1901423.	5.2	252
7	Mechanism of Virus Inactivation by Cold Atmospheric-Pressure Plasma and Plasma-Activated Water. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	182
8	Structural basis of transfer between lipoproteins by cholesteryl ester transfer protein. <i>Nature Chemical Biology</i> , 2012, 8, 342-349.	3.9	123
9	Plasma-activated water: An alternative disinfectant for S protein inactivation to prevent SARS-CoV-2 infection. <i>Chemical Engineering Journal</i> , 2021, 421, 127742.	6.6	109
10	3D Structural Fluctuation of IgG1 Antibody Revealed by Individual Particle Electron Tomography. <i>Scientific Reports</i> , 2015, 5, 9803.	1.6	104
11	Morphology and structure of lipoproteins revealed by an optimized negative-staining protocol of electron microscopy. <i>Journal of Lipid Research</i> , 2011, 52, 175-184.	2.0	101
12	Ligand recognition and allosteric regulation of DRD1-Gs signaling complexes. <i>Cell</i> , 2021, 184, 943-956.e18.	13.5	94
13	On the origin of the synergy between the Pt nanoparticles and MnO ₂ nanosheets in Wonton-like 3D nanozyme oxidase mimics. <i>Biosensors and Bioelectronics</i> , 2018, 121, 159-165.	5.3	90
14	Contribution of biomimetic collagen-ligand interaction to intrafibrillar mineralization. <i>Science Advances</i> , 2019, 5, eaav9075.	4.7	79
15	IPET and FETR: Experimental Approach for Studying Molecular Structure Dynamics by Cryo-Electron Tomography of a Single-Molecule Structure. <i>PLoS ONE</i> , 2012, 7, e30249.	1.1	75
16	Tethered peptide activation mechanism of the adhesion GPCRs ADGRG2 and ADGRG4. <i>Nature</i> , 2022, 604, 771-778.	13.7	60
17	In situ-prepared homogeneous supramolecular organic framework drug delivery systems (sof-DDSs): Overcoming cancer multidrug resistance and controlled release. <i>Chinese Chemical Letters</i> , 2017, 28, 798-806.	4.8	57
18	Assessment of the Validity of the Double Superhelix Model for Reconstituted High Density Lipoproteins. <i>Journal of Biological Chemistry</i> , 2010, 285, 41161-41171.	1.6	56

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19	Trends in mica-mica adhesion reflect the influence of molecular details on long-range dispersion forces underlying aggregation and coalignment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7537-7542.	3.3	56
20	An optimized negative-staining protocol of electron microscopy for apoE4-POPC lipoprotein. <i>Journal of Lipid Research</i> , 2010, 51, 1228-1236.	2.0	52
21	Optimized negative-staining electron microscopy for lipoprotein studies. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013, 1830, 2150-2159.	1.1	50
22	HDL surface lipids mediate CETP binding as revealed by electron microscopy and molecular dynamics simulation. <i>Scientific Reports</i> , 2015, 5, 8741.	1.6	48
23	Magnetosubbands of semiconductor quantum wires with Rashba and Dresselhaus spin-orbit coupling. <i>Physical Review B</i> , 2006, 73, .	1.1	47
24	Calsyntenin-3 Molecular Architecture and Interaction with Neurexin 1 β . <i>Journal of Biological Chemistry</i> , 2014, 289, 34530-34542.	1.6	47
25	Molecular Architecture of Contactin-associated Protein-like 2 (CNTNAP2) and Its Interaction with Contactin 2 (CNTN2). <i>Journal of Biological Chemistry</i> , 2016, 291, 24133-24147.	1.6	47
26	Molecular packing control enables excellent performance and mechanical property of blade-cast all-polymer solar cells. <i>Nano Energy</i> , 2019, 59, 277-284.	8.2	47
27	Super-Resolution Visualization of Self-Assembling Helical Fibers Using Aggregation-Induced Emission Luminogens in Stimulated Emission Depletion Nanoscopy. <i>ACS Nano</i> , 2019, 13, 11863-11873.	7.3	45
28	Bioelectronics-Related 2D Materials Beyond Graphene: Fundamentals, Properties, and Applications. <i>Advanced Functional Materials</i> , 2020, 30, 2003732.	7.8	39
29	Surface Density-Induced Pleating of a Lipid Monolayer Drives Nascent High-Density Lipoprotein Assembly. <i>Structure</i> , 2015, 23, 1214-1226.	1.6	36
30	Three-dimensional structural dynamics and fluctuations of DNA-nanogold conjugates by individual-particle electron tomography. <i>Nature Communications</i> , 2016, 7, 11083.	5.8	36
31	Chemically Controlled Helical Polymorphism in Protein Tubes by Selective Modulation of Supramolecular Interactions. <i>Journal of the American Chemical Society</i> , 2019, 141, 19448-19457.	6.6	34
32	Mechanism of Single-Photon Upconversion Photoluminescence in All-Inorganic Perovskite Nanocrystals: The Role of Self-Trapped Excitons. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5989-5996.	2.1	34
33	Hierarchical Assembly of Plasmonic Nanostructures Using Virus Capsid Scaffolds on DNA Origami Templates. <i>ACS Nano</i> , 2014, 8, 7896-7904.	7.3	33
34	Peptide-Conjugation Induced Conformational Changes in Human IgG1 Observed by Optimized Negative-Staining and Individual-Particle Electron Tomography. <i>Scientific Reports</i> , 2013, 3, 1089.	1.6	30
35	Membrane-directed molecular assembly of the neuronal SNARE complex. <i>Journal of Cellular and Molecular Medicine</i> , 2011, 15, 31-37.	1.6	29
36	Ultrasensitive, Low-Voltage Operational, and Asymmetric Ionic Sensing Hydrogel for Multipurpose Applications. <i>Advanced Functional Materials</i> , 2020, 30, 1909616.	7.8	29

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37	Uncoupling protein 2 downregulation by hypoxia through repression of peroxisome proliferator-activated receptor β promotes chemoresistance of non-small cell lung cancer. <i>Oncotarget</i> , 2017, 8, 8083-8094.	0.8	29
38	LoTToR: An Algorithm for Missing-Wedge Correction of the Low-Tilt Tomographic 3D Reconstruction of a Single-Molecule Structure. <i>Scientific Reports</i> , 2020, 10, 10489.	1.6	26
39	Insights into the Tunnel Mechanism of Cholesteryl Ester Transfer Protein through All-atom Molecular Dynamics Simulations. <i>Journal of Biological Chemistry</i> , 2016, 291, 14034-14044.	1.6	25
40	Active DNA unwinding and transport by a membrane-adapted helicase nanopore. <i>Nature Communications</i> , 2019, 10, 5083.	5.8	25
41	Structural features of cholesteryl ester transfer protein: A molecular dynamics simulation study. <i>Proteins: Structure, Function and Bioinformatics</i> , 2013, 81, 415-425.	1.5	24
42	Novel binding patterns between ganoderic acids and neuraminidase: Insights from docking, molecular dynamics and MM/PBSA studies. <i>Journal of Molecular Graphics and Modelling</i> , 2016, 65, 27-34.	1.3	24
43	Watching Dynamic Self-Assembly of Web Buckles in Strained MoS ₂ Thin Films. <i>ACS Nano</i> , 2019, 13, 3106-3116.	7.3	24
44	Fully Mechanically Controlled Automated Electron Microscopic Tomography. <i>Scientific Reports</i> , 2016, 6, 29231.	1.6	19
45	Anti-toll-like receptor 2 antibody ameliorates hepatic injury, inflammation, fibrosis and steatosis in obesity-related metabolic disorder rats via regulating MAPK and NF- κ B pathways. <i>International Immunopharmacology</i> , 2020, 82, 106368.	1.7	19
46	Equilibrium conformation of polymer chains with noncircular cross section. <i>Physical Review E</i> , 2006, 74, 032801.	0.8	18
47	Membrane Fusion Involved in Neurotransmission: Glimpse from Electron Microscope and Molecular Simulation. <i>Frontiers in Molecular Neuroscience</i> , 2017, 10, 168.	1.4	18
48	Opposite effects of Zn addition on the creep resistance at low and high temperatures for as-cast Mg-15Gd alloy. <i>Scripta Materialia</i> , 2022, 213, 114598.	2.6	17
49	Heterogeneous oxidization of graphene nanosheets damages membrane. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	2.0	16
50	Novel 2D CaCl crystals with metallicity, room-temperature ferromagnetism, heterojunction, piezoelectricity-like property and monovalent calcium ions. <i>National Science Review</i> , 2021, 8, nwaa274.	4.6	16
51	Assessing the mechanisms of cholesteryl ester transfer protein inhibitors. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 1606-1617.	1.2	15
52	Web buckle-mediated room-temperature ferromagnetism in strained MoS ₂ thin films. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	14
53	Multicompartement Nanoparticles Bearing Hydrophilic/Hydrophobic Subdomains by Self-Assembly of Star Polymers in Aqueous Solution. <i>Macromolecules</i> , 2021, 54, 35-43.	2.2	14
54	Cold Atmospheric-Pressure Plasma Caused Protein Damage in Methicillin-Resistant <i>Staphylococcus aureus</i> Cells in Biofilms. <i>Microorganisms</i> , 2021, 9, 1072.	1.6	12

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55	Rapid Structure-Based Screening Informs Potential Agents for Coronavirus Disease (COVID-19) Outbreak*. Chinese Physics Letters, 2020, 37, 058701.	1.3	11
56	Assignment of the chiralities of double-walled carbon nanotubes using two radial breathing modes. Physical Review B, 2004, 70, .	1.1	10
57	Biaxial Strain-Mediated Room Temperature Ferromagnetism of ReS ₂ Web Buckles. Advanced Electronic Materials, 2019, 5, 1900814.	2.6	10
58	Synthesis, properties, and applications of large-scale two-dimensional materials by polymer-assisted deposition. Journal of Semiconductors, 2019, 40, 061003.	2.0	9
59	Visualizing Newly Synthesized RNA by Bioorthogonal Labeling-Primed DNA Amplification. Analytical Chemistry, 2020, 92, 8444-8449.	3.2	8
60	Molecular Insights into the Recruiting Between UCP2 and DDX5/UBAP2L in the Metabolic Plasticity of Non-Small-Cell Lung Cancer. Journal of Chemical Information and Modeling, 2021, 61, 3978-3987.	2.5	8
61	Binding profiles of cholesterol ester transfer protein with current inhibitors: a look at mechanism and drawback. Journal of Biomolecular Structure and Dynamics, 2018, 36, 2567-2580.	2.0	7
62	Janus Vitrification of Droplet via Cold Leidenfrost Phenomenon. Small, 2021, 17, e2007325.	5.2	7
63	Mechanism of Glycans Modulating Cholesteryl Ester Transfer Protein: Unveiled by Molecular Dynamics Simulation. Journal of Chemical Information and Modeling, 2022, 62, 5246-5257.	2.5	7
64	A Model of Lipid-Free Apolipoprotein A-I Revealed by Iterative Molecular Dynamics Simulation. PLoS ONE, 2015, 10, e0120233.	1.1	7
65	Quartz Crystal Microbalance Humidity Sensors Based on Structured Graphene Oxide Membranes with Magnesium Ions: Design, Mechanism and Performance. Membranes, 2022, 12, 125.	1.4	7
66	Single-chain tethered nanoparticles with tunable softness: scalable synthesis and unique self-assembly behavior. Polymer Chemistry, 2019, 10, 6183-6190.	1.9	6
67	Single-vesicle imaging quantifies calcium's regulation of nanoscale vesicle clustering mediated by $\hat{1}\pm$ -synuclein. Microsystems and Nanoengineering, 2020, 6, 38.	3.4	6
68	Bacteriophage Twort protein Gp168 is a $\hat{1}^2$ -clamp inhibitor by occupying the DNA sliding channel. Nucleic Acids Research, 2021, 49, 11367-11378.	6.5	6
69	Optimized Negative-Staining Protocol for Examining Lipid-Protein Interactions by Electron Microscopy. Methods in Molecular Biology, 2013, 974, 111-118.	0.4	5
70	Molecular insights into the binding variance of the SARS-CoV-2 spike with human, cat and dog ACE2 proteins. Physical Chemistry Chemical Physics, 2021, 23, 13752-13759.	1.3	5
71	Computational identification of potential chemoprophylactic agents according to dynamic behavior of peroxisome proliferator-activated receptor gamma. RSC Advances, 2021, 11, 147-159.	1.7	5
72	Understanding and Manipulating Helical Nanofilaments in Binary Systems with Achiral Dopants. Nano Letters, 2022, 22, 4569-4575.	4.5	5

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73	Effect of optical phonons scattering on electronic current in metallic carbon nanotubes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 385-390.	0.9	4
74	Asymmetric Small Protein Structure Determination by Individual Particle Electron Tomography. <i>Biophysical Journal</i> , 2012, 102, 394a.	0.2	4
75	Mutation-induced spatial differences in neuraminidase structure and sensitivity to neuraminidase inhibitors. <i>Chinese Physics B</i> , 2018, 27, 018704.	0.7	4
76	Role of glycans in cholesteryl ester transfer protein revealed by molecular dynamics simulation. <i>Proteins: Structure, Function and Bioinformatics</i> , 2018, 86, 882-891.	1.5	4
77	Catalytic Reduction of Organic Dyes by Multilayered Graphene Platelets and Silver Nanoparticles in Polyacrylic Acid Hydrogel. <i>Materials</i> , 2021, 14, 2274.	1.3	4
78	Long-wavelength optical phonons in single-walled boron nitride nanotubes. <i>Physica B: Condensed Matter</i> , 2008, 403, 4196-4201.	1.3	3
79	Spontaneously periodic wave generation in coupled excitable media. <i>Physical Review E</i> , 2009, 79, 056213.	0.8	3
80	Graphitic-like Hexagonal Phase of Alkali Halides in Quasi-Two-Dimensional Confined Space under Ambient Conditions. <i>ACS Nano</i> , 2022, 16, 2046-2053.	7.3	3
81	Lubricating bacteria model for the growth of bacterial colonies exposed to ultraviolet radiation. <i>Physical Review E</i> , 2005, 72, 051913.	0.8	2
82	THE OPTIMAL CONFIGURATION OF GEL SHEET GOVERNED BY ITS CONCENTRATION. <i>International Journal of Modern Physics B</i> , 2012, 26, 1250084.	1.0	2
83	Lipoprotein in cholesterol transport: Highlights and recent insights into its structural basis and functional mechanism. <i>Chinese Physics B</i> , 2018, 27, 028702.	0.7	2
84	Selectivity mechanism of magnesium and calcium in cation-binding pocket structures of phosphotyrosine. <i>Physical Review E</i> , 2020, 101, 022410.	0.8	2
85	TAB1 binding induced p38 α conformation change: an accelerated molecular dynamics simulation study. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10506-10513.	1.3	2
86	Bio-macromolecular dynamic structures and functions, illustrated with DNA, antibody, and lipoprotein. <i>Chinese Physics B</i> , 2018, 27, 028708.	0.7	1
87	Selective transport properties of graphene oxide membranes for various cations observed in situ using quartz crystal microbalance. <i>Applied Surface Science</i> , 2021, 541, 148502.	3.1	1
88	Structural Basis and Functional Mechanism of Lipoprotein in Cholesterol Transport. , 0, , .		1
89	Sequence Matching between Hemagglutinin and Neuraminidase through Sequence Analysis Using Machine Learning. <i>Viruses</i> , 2022, 14, 469.	1.5	1
90	The rhombic honeycomb "a new mode of self-assembly in liquid crystalline soft matter. <i>Chemical Communications</i> , 2022, 58, 7054-7057.	2.2	1

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91	Organelle Interaction and Drug Discovery: Towards Correlative Nanoscopy and Molecular Dynamics Simulation. <i>Frontiers in Pharmacology</i> , 0, 13, .	1.6	1
92	Structure and Function of Cholesteryl Ester Transfer Protein in Cholesterol Transferring. <i>Biophysical Journal</i> , 2013, 104, 166a.	0.2	0
93	A 3-D Image of an Individual Protein. <i>Biophysical Journal</i> , 2013, 104, 176a.	0.2	0
94	Visualizing Biological Samples in Liquid Solution by Electron Microscopy. <i>Biophysical Journal</i> , 2014, 106, 598a.	0.2	0
95	Determination of the Dynamic Structures of Igg Antibody by Individual-Particle Electron Tomography. <i>Biophysical Journal</i> , 2014, 106, 251a.	0.2	0
96	Determination of the Dynamic Structures of Nacent Discoidal High-Density Lipoprotein (HDL) Bound to Lecithin Cholesterol Acyltransferase (LCAT) and Paraoxonase 1 (PON1). <i>Biophysical Journal</i> , 2014, 106, 46a.	0.2	0
97	Three Dimensional Dynamics and Fluctuations of DNA-Nanogold Dimers by Individual-Particle Electron Tomography. <i>Biophysical Journal</i> , 2016, 110, 184a.	0.2	0
98	Interface Colloidal Deposition of Nanoparticle Wire Structures. <i>Particle and Particle Systems Characterization</i> , 2018, 35, 1800098.	1.2	0
99	Novel Potent Neutralizing Antibodies Revealed the Domain I of HCMV Glycoprotein B for Vaccine Design. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
100	Dynamic Behavior of Biomaterials Uncovered by Cryo-electron Microscopy. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2021, 24, 1007-1016.	0.6	0
101	Receptor Dynamics in Molecular Recognition by Cryo-EM and Molecular Simulation. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2021, 24, 1696-1701.	0.6	0
102	Title is missing!. <i>Progress in Biochemistry and Biophysics</i> , 2012, 39, 972-978.	0.3	0