

Zhe Wang

List of Publications by Year in descending order

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47
papers

1,605
citations

394421

19
h-index

302126

39
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48
all docs

48
docs citations

48
times ranked

2622
citing authors

#	ARTICLE	IF	CITATIONS
1	Conceptual design of the grazing-incidence focusing small-angle neutron scattering (gif-SANS) instrument at CPHS. <i>Journal of Neutron Research</i> , 2021, 23, 201-205.	1.1	3
2	Size and shape fluctuations of ultrasoft colloids. <i>Physical Review Research</i> , 2021, 3, .	3.6	2
3	Quantitative production of butenes from biomass-derived $\hat{1}^3$ -valerolactone catalysed by hetero-atomic MFI zeolite. <i>Nature Materials</i> , 2020, 19, 86-93.	27.5	74
4	Revealing the detailed structure in flow-induced crystallization of semicrystalline polymers. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 25206-25214.	2.8	6
5	Phonon Spectroscopy in Antimony and Tellurium Oxides. <i>Journal of Physical Chemistry A</i> , 2020, 124, 7869-7880.	2.5	6
6	Cesium Substitution Disrupts Concerted Cation Dynamics in Formamidinium Hybrid Perovskites. <i>Chemistry of Materials</i> , 2020, 32, 6266-6277.	6.7	38
7	Demonstration of small-angle neutron scattering measurements with a nested neutron-focusing supermirror assembly. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 972, 164072.	1.6	4
8	Dynamic Equivalence between Soft Star Polymers and Hard Spheres. <i>ACS Macro Letters</i> , 2019, 8, 1467-1473.	4.8	5
9	Study of a nested neutron-focusing supermirror system for small-angle neutron scattering. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 940, 380-386.	1.6	10
10	Post-synthetic modulation of the charge distribution in a metal-organic framework for optimal binding of carbon dioxide and sulfur dioxide. <i>Chemical Science</i> , 2019, 10, 1472-1482.	7.4	62
11	Chain conformation of polymer melts with associating groups. <i>Journal of Physics Communications</i> , 2019, 3, 035007.	1.2	10
12	Capture of nitrogen dioxide and conversion to nitric acid in a porous metal-organic framework. <i>Nature Chemistry</i> , 2019, 11, 1085-1090.	13.6	116
13	Neutron Instruments for Research in Coordination Chemistry. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 1065-1089.	2.0	29
14	Local elasticity in nonlinear rheology of interacting colloidal glasses revealed by neutron scattering and rheometry. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 38-45.	2.8	7
15	Nanoscale Mobility of Aqueous Polyacrylic Acid in Dental Restorative Cements. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9904-9915.	8.0	23
16	Comparison of two multifunctional catalysts $[M/Nb_2O_5]$ ($M = Pd, Pt$) for one-pot hydrodeoxygenation of lignin. <i>Catalysis Science and Technology</i> , 2018, 8, 6129-6136.	4.1	26
17	Analysis of Small-Angle Neutron Scattering Spectra from Deformed Polymers with the Spherical Harmonic Expansion Method and a Network Model. <i>Macromolecules</i> , 2018, 51, 9011-9018.	4.8	10
18	Scaling Behavior of Anisotropy Relaxation in Deformed Polymers. <i>Physical Review Letters</i> , 2018, 121, 117801.	7.8	13

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19	Spinâ€“phonon couplings in transition metal complexes with slow magnetic relaxation. <i>Nature Communications</i> , 2018, 9, 2572.	12.8	93
20	Spatial-Temporal Characteristics of Confined Polymer Motion Determine Proton Conduction of Polyoxometalateâ€“Poly(ethylene glycol) Hybrid Nanocomposites. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5772-5777.	4.6	32
21	Reversible adsorption of nitrogen dioxide within a robust porous metalâ€“organic framework. <i>Nature Materials</i> , 2018, 17, 691-696.	27.5	162
22	Insight into the Selectivity of Isopropanol Conversion at Strontium Titanate (100) Surfaces: A Combination Kinetic and Spectroscopic Study. <i>ACS Catalysis</i> , 2017, 7, 8118-8129.	11.2	19
23	Understanding the breathing phenomena in nano-ZIF-7 upon gas adsorption. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20938-20946.	10.3	50
24	Reconstruction of three-dimensional anisotropic structure from small-angle scattering experiments. <i>Physical Review E</i> , 2017, 96, 022612.	2.1	16
25	Selective production of arenes via direct lignin upgrading over a niobium-based catalyst. <i>Nature Communications</i> , 2017, 8, 16104.	12.8	346
26	Fingerprinting Molecular Relaxation in Deformed Polymers. <i>Physical Review X</i> , 2017, 7, .	8.9	41
27	Nanoconfinement Inside Molecular Metal Oxide Clusters: Dynamics and Modified Encapsulation Behavior. <i>Chemistry - A European Journal</i> , 2016, 22, 14073-14073.	3.3	3
28	Nanoconfinement Inside Molecular Metal Oxide Clusters: Dynamics and Modified Encapsulation Behavior. <i>Chemistry - A European Journal</i> , 2016, 22, 14131-14136.	3.3	6
29	X-ray and Neutron Scattering Study of the Formation of Coreâ€“Shell-Type Polyoxometalates. <i>Journal of the American Chemical Society</i> , 2016, 138, 2638-2643.	13.7	49
30	Dynamical behaviors of structural, constrained and free water in calcium- and magnesium-silicate-hydrate gels. <i>Journal of Colloid and Interface Science</i> , 2016, 469, 157-163.	9.4	15
31	Wang<i>etÂal.</i>Reply. <i>Physical Review Letters</i> , 2015, 115, 149802.	7.8	2
32	Pressure Effect on the Boson Peak in Deeply Cooled Confined Water: Evidence of a Liquid-Liquid Transition. <i>Physical Review Letters</i> , 2015, 115, 235701.	7.8	13
33	Dynamic crossover in deeply cooled water confined in MCM-41 at 4 kbar and its relation to the liquid-liquid transition hypothesis. <i>Journal of Chemical Physics</i> , 2015, 143, 114508.	3.0	24
34	The Boson peak in confined water: An experimental investigation of the liquid-liquid phase transition hypothesis. <i>Frontiers of Physics</i> , 2015, 10, 1.	5.0	10
35	Magnetic proximity effect and interlayer exchange coupling of ferromagnetic/topological insulator/ferromagnetic trilayer. <i>Physical Review B</i> , 2015, 91, .	3.2	44
36	Liquidâ€“Liquid Phase Transition and Its Phase Diagram in Deeply-Cooled Heavy Water Confined in a Nanoporous Silica Matrix. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2009-2014.	4.6	27

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37	Hydration-dependent dynamic crossover phenomenon in protein hydration water. <i>Physical Review E</i> , 2014, 90, 042705.	2.1	12
38	One role of hydration water in proteins: key to the "softening" of short time intraprotein collective vibrations of a specific length scale. <i>Soft Matter</i> , 2014, 10, 4298-4303.	2.7	12
39	Evidence of the existence of the high-density and low-density phases in deeply-cooled confined heavy water under high pressures. <i>Journal of Chemical Physics</i> , 2014, 141, 014501.	3.0	15
40	Boson Peak in Deeply Cooled Confined Water: A Possible Way to Explore the Existence of the Liquid-to-Liquid Transition in Water. <i>Physical Review Letters</i> , 2014, 112, 237802.	7.8	24
41	Tunable THz surface plasmon polariton based on a topological insulator/layered superconductor hybrid structure. <i>Physical Review B</i> , 2014, 89, .	3.2	3
42	Inelastic X-ray Scattering Studies of the Short-Time Collective Vibrational Motions in Hydrated Lysozyme Powders and Their Possible Relation to Enzymatic Function. <i>Journal of Physical Chemistry B</i> , 2013, 117, 1186-1195.	2.6	21
43	Search for the first-order liquid-to-liquid phase transition in low-temperature confined water by neutron scattering. <i>AIP Conference Proceedings</i> , 2013, , .	0.4	3
44	Effect of a floating electrode on an atmospheric-pressure non-thermal arc discharge. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	12
45	Evaluation of the Two-Dimensional Temperature Field and Instability of a Dual-Jet DC Arc Plasma Based on the Image Chain Coding Technique. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2884-2885.	1.3	15
46	Volt-Ampere and Thermal Features of a Direct-Current Dual-Jet Plasma Generator With a Cold Gas Injection. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 2906-2913.	1.3	12
47	Resolution of VISION, a crystal-analyzer spectrometer. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 604, 719-728.	1.6	79