

# Joachim Wuttke

## List of Publications by Year in descending order

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56

papers

1,784

citations

331670

21

h-index

265206

42

g-index

58

all docs

58

docs citations

58

times ranked

2099

citing authors

#	ARTICLE	IF	CITATIONS
1	Neutron and light scattering study of supercooled glycerol. Physical Review Letters, 1994, 72, 3052-3055.	7.8	203
2	Translational diffusion of hydration water correlates with functional motions in folded and intrinsically disordered proteins. Nature Communications, 2015, 6, 6490.	12.8	199
3	Fast dynamics of glass-forming glycerol. Physical Review E, 1995, 52, 4026-4034.	2.1	150
4	The NeXus data format. Journal of Applied Crystallography, 2015, 48, 301-305.	4.5	133
5	Slow Motion in a Metallic Liquid. Physical Review Letters, 1998, 80, 4454-4457.	7.8	92
6	Dynamical Coupling of Intrinsically Disordered Proteins and Their Hydration Water: Comparison with Folded Soluble and Membrane Proteins. Biophysical Journal, 2012, 103, 129-136.	0.5	79
7	SPHERES, JÄ½lich's high-flux neutron backscattering spectrometer at FRM II. Review of Scientific Instruments, 2012, 83, 075109.	1.3	76
8	Quasielastic neutron scattering in glass forming viscous liquids. Transport Theory and Statistical Physics, 1995, 24, 1075-1095.	0.4	62
9	Coherent dynamic structure factor of orthoterphenyl around the mode coupling crossover temperatureTc. Physical Review E, 1997, 56, 809-815.	2.1	62
10	Propylene carbonate reexamined: Mode-coupling $\hat{t}^2$ scaling without factorization?. Physical Review E, 2000, 61, 2730-2740.	2.1	46
11	A Polymer Surfactant Corona Dynamically Replaces Water in Solvent-Free Protein Liquids and Ensures Macromolecular Flexibility and Activity. Journal of the American Chemical Society, 2012, 134, 13168-13171.	13.7	45
12	Hindered Rotational Energy Barriers of BH <sub>4</sub> <sup>+</sup> Tetrahedra in $\hat{t}^2\text{-Mg(BH}_4\text{)}_2$ from Quasielastic Neutron Scattering and DFT Calculations. Journal of Physical Chemistry C, 2012, 116, 2013-2023.	3.1	43
13	Polarization oscillations in aerial fiber caused by wind and power-line current. IEEE Photonics Technology Letters, 2003, 15, 882-884.	2.5	42
14	Prospects of resonance spin echo. Physica B: Condensed Matter, 1999, 266, 75-86.	2.7	39
15	Dynamics in viscous orthoterphenyl: Results from coherent neutron scattering. Physical Review E, 1995, 52, 738-745.	2.1	33
16	Structural relaxation and mode coupling in a non-glassforming liquid: depolarized light scattering in benzene. New Journal of Physics, 2002, 4, 56-56.	2.9	31
17	Brillouin-scattering study of propylene carbonate: An evaluation of phenomenological and mode coupling analyses. Physical Review E, 2002, 65, 051503.	2.1	29
18	Structure and Dynamics of a Thermoresponsive Microgel around Its Volume Phase Transition Temperature. Journal of Physical Chemistry B, 2010, 114, 10285-10293.	2.6	29

#	ARTICLE	IF	CITATIONS
19	Signatures of the glass transition in a van der Waals liquid seen by neutrons and NMR. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 201, 223-236.	2.6	28
20	First scattering experiment on MIEZE: A fourier transform time-of-flight spectrometer using resonance coils. <i>Journal of Neutron Research</i> , 1998, 7, 65-74.	1.1	28
21	Laplaceâ€“Fourier Transform of the Stretched Exponential Function: Analytic Error Bounds, Double Exponential Transform, and Open-Source Implementation â€œlibkwwâ€•. <i>Algorithms</i> , 2012, 5, 604-628.	2.1	28
22	Hydrogen Rotational and Translational Diffusion in Calcium Borohydride from Quasielastic Neutron Scattering and DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2010, 114, 20249-20257.	3.1	23
23	Neutron Scattering and X-ray Investigation of the Structure and Dynamics of Poly(ethyl) Tj ETQq1 1 0.784314 rgBT <sub>4.8</sub> /Overlock <sub>21</sub> Tf 50 5		
24	Performance and future of a neutron resonance spinecho spectrometer. <i>Journal of Neutron Research</i> , 1996, 4, 261-273.	1.1	20
25	The (2:1) complex of picric acid with tetramethylpyrazine: The structure, IR spectra and tunnel splitting of methyl groups. <i>Journal of Molecular Structure</i> , 2010, 975, 298-302.	3.6	20
26	Multiple-scattering effects on smooth neutron-scattering spectra. <i>Physical Review E</i> , 2000, 62, 6531-6539.	2.1	19
27	Spin correlations in the extended kagome system YBaCo <sub>3</sub> O <sub>7</sub> . <i>Physical Review B</i> , 2011, 84, 104502.	3.2	18
28	Organic-inorganic hybrid crystals, (2,4,6-CH <sub>3</sub> PyH)3Sb <sub>2</sub> Cl <sub>9</sub> and (2,4,6-CH <sub>3</sub> PyH)3Bi <sub>2</sub> Cl <sub>9</sub> . Crystal structure characterization and tunneling of CH <sub>3</sub> groups studied by <sup>1</sup> H NMR and neutron spectroscopy. <i>Polyhedron</i> , 2018, 139, 249-256.	2.2	17
29	Hindered Water Motions in Hardened Cement Pastes Investigated over Broad Time and Length Scales. <i>ACS Applied Materials &amp; Interfaces</i> , 2009, 1, 2154-2162.	8.0	16
30	Universality classes for wetting in two-dimensional random-bond systems. <i>Physical Review B</i> , 1991, 44, 13042-13052.	3.2	15
31	Improved sample holder for multidetector neutron spectrometers. <i>Physica B: Condensed Matter</i> , 1999, 266, 112-114.	2.7	15
32	Fast relaxation in a metastable metallic melt. <i>Europhysics Letters</i> , 1996, 36, 379-384.	2.0	14
33	Structural, spectroscopic and theoretical studies on 3,4,7,8-tetramethyl-1,10-phenanthroline complex with picric acid. <i>Chemical Physics</i> , 2013, 410, 55-65.	1.9	14
34	Inelastic neutron scattering study of methyl groups rotation in some methylxanthines. <i>Journal of Chemical Physics</i> , 2007, 127, 214509.	3.0	11
35	Quasielastic neutron scattering studies on couplings of protein and water dynamics in hydrated elastin. <i>Journal of Chemical Physics</i> , 2020, 152, 245101.	3.0	9
36	Multiple Bragg reflection by a thick mosaic crystal. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014, 70, 429-440.	0.1	8

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37	Simulation-guided optimization of small-angle analyzer geometry in the neutron backscattering spectrometer SPHERES. <i>Review of Scientific Instruments</i> , 2013, 84, 115108.	1.3	6
38	Guidelines for collaborative development of sustainable data treatment software. <i>Journal of Neutron Research</i> , 2022, 24, 33-72.	1.1	6
39	The structure of diaminodurene and the dynamics of the methyl groups. <i>Journal of Chemical Physics</i> , 2009, 130, 164519.	3.0	5
40	Hyperfine interaction in Co <sub>2</sub> SiO <sub>4</sub> investigated by high resolution neutron spectroscopy. <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 3148-3152.	2.3	5
41	Crossover from localized to diffusive water dynamics in carbon nanohorns: A comprehensive quasielastic neutron-scattering analysis. <i>Physical Review E</i> , 2016, 93, 022104.	2.1	5
42	Substrate Locking Promotes Dimer-Dimer Docking of an Enzyme Antibiotic Target. <i>Structure</i> , 2018, 26, 948-959.e5.	3.3	5
43	Self-absorption coefficient for tubular samples. <i>Physica B: Condensed Matter</i> , 2000, 292, 194-195.	2.7	4
44	Hydrogen release from sodium alanate observed by time-resolved neutron backscattering. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 254214.	1.8	4
45	Comment on “Elastic incoherent neutron scattering operating by varying instrumental energy resolution: Principle, simulations, and experiments of the resolution elastic neutron scattering (RENS)”. [Rev. Sci. Instrum. 82, 105115 (2011)]. <i>Review of Scientific Instruments</i> , 2012, 83, 107101.	1.3	4
46	No case against scattering theory. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E8318-E8318.	7.1	4
47	The zig-zag walk with scattering and absorption on the real half line and in a lattice model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 215203.	2.1	3
48	Comment on “Short time dynamics of glass-forming liquids” [J. Chem. Phys. 103, 1152 (1995)]. <i>Journal of Chemical Physics</i> , 1996, 104, 8169-8170.	3.0	2
49	Reply to “Comment on ‘Fast dynamics of glass-forming glycerol’”. <i>Physical Review E</i> , 1997, 55, 2071-2071.	2.1	2
50	Fast relaxation in viscous liquids. , 2000, , 481-495.		2
51	Nanosecond structural dynamics of intrinsically disordered $\tilde{\beta}^2$ -casein micelles by neutron spectroscopy. <i>Biophysical Journal</i> , 2021, 120, 5408-5420.	0.5	2
52	Rasch-Modell, suffiziente Statistik, Transformationsgruppen und Methodenkritik: Anmerkungen zu BÄ¼chter & Pallack (2012/13) und Vohns (2012). <i>Journal Fur Mathematik-Didaktik</i> , 2014, 35, 283-293.	1.5	1
53	Hyperfine interaction in cobalt by high-resolution neutron spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 025801.	1.8	1
54	ErhÃ¶hter Dokumentationsbedarf bei Imputation fehlender Daten. <i>Psychologische Rundschau</i> , 2008, 59, 178-179.	0.2	1

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55	Multiple Bragg reflection by a thick mosaic crystal. II. Simplified transport equation solved on a grid. Acta Crystallographica Section A: Foundations and Advances, 2020, 76, 376-389.	0.1	1
56	Dynamics of water confined in mesoporous magnesium carbonate. Journal of Chemical Physics, 2016, 145, 234503.	3.0	0