

Wiebke Lohstroh

List of Publications by Year in descending order

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86
papers

2,518
citations

172457

29
h-index

223800

46
g-index

88
all docs

88
docs citations

88
times ranked

2532
citing authors

#	ARTICLE	IF	CITATIONS
1	Altered thermodynamic and kinetic properties of MgH ₂ infiltrated in microporous scaffold. Chemical Communications, 2010, 46, 8353.	4.1	183
2	Thermal decomposition of Mg(BH ₄) ₂ under He flow and H ₂ pressure. Journal of Materials Chemistry, 2008, 18, 2611.	6.7	103
3	Diborane Release from LiBH ₄ /Silica-Gel Mixtures and the Effect of Additives. Journal of Physical Chemistry C, 2007, 111, 14026-14029.	3.1	97
4	Microscopic Dynamics of Polyethylene Glycol Chains Interacting with Silica Nanoparticles. Physical Review Letters, 2013, 110, 178001.	7.8	91
5	The instrument suite of the European Spallation Source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 957, 163402.	1.6	90
6	Thermodynamic Effects in Nanoscale NaAlH ₄ . ChemPhysChem, 2010, 11, 789-792.	2.1	88
7	LiBH ₄ ·Mg(BH ₄) ₂ : A Physical Mixture of Metal Borohydrides as Hydrogen Storage Material. Journal of Physical Chemistry C, 2011, 115, 6095-6101.	3.1	82
8	Structural and optical properties of Mg ₂ NiH _x switchable mirrors upon hydrogen loading. Physical Review B, 2004, 70, .	3.2	79
9	Self-Organized Layered Hydrogenation in Black Mg ₂ NiH _x Switchable Mirrors. Physical Review Letters, 2004, 93, 197404.	7.8	69
10	Synthesis of amorphous Mg(BH ₄) ₂ from MgB ₂ and H ₂ at room temperature. Journal of Alloys and Compounds, 2010, 508, 212-215.	5.5	66
11	Intriguing differences in hydrogen adsorption in CPO-27 materials induced by metal substitution. Journal of Materials Chemistry A, 2015, 3, 4827-4839.	10.3	61
12	From Molecular Dehydration to Excess Volumes of Phase-Separating PNIPAM Solutions. Journal of Physical Chemistry B, 2014, 118, 4253-4260.	2.6	55
13	Structure and Thermodynamic Properties of the NaMgH ₃ Perovskite: A Comprehensive Study. Chemistry of Materials, 2011, 23, 2317-2326.	6.7	54
14	Pressure Effect on the 2NaH + MgB ₂ Hydrogen Absorption Reaction. Journal of Physical Chemistry C, 2010, 114, 21816-21823.	3.1	53
15	Metal (boro-) hydrides for high energy density storage and relevant emerging technologies. International Journal of Hydrogen Energy, 2020, 45, 33687-33730.	7.1	53
16	Rate limiting steps of the phase transformations in Ti-doped NaAlH ₄ investigated by isotope exchange. Physical Review B, 2007, 75, .	3.2	52
17	Reaction steps in the Li-Mg-Ni-H hydrogen storage system. Journal of Alloys and Compounds, 2007, 446-447, 332-335.	5.5	45
18	Mg-Ni-H films as selective coatings: Tunable reflectance by layered hydrogenation. Applied Physics Letters, 2004, 84, 3651-3653.	3.3	42

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37	The growth-induced microstructural origin of the optical black state of Mg ₂ NiH _x thin films. Journal of Alloys and Compounds, 2006, 416, 2-10.	5.5	21
38	Hydrogen diffusion in bulk and nanocrystalline palladium: A quasielastic neutron scattering study. Physical Review B, 2016, 94, .	3.2	21
39	Strong Adverse Contribution of Conformational Dynamics to Streptavidin-Biotin Binding. Journal of Physical Chemistry B, 2020, 124, 324-335.	2.6	21
40	The dielectric function of Mg _y NiH _x thin films (). Journal of Alloys and Compounds, 2007, 430, 13-18.	5.5	20
41	Homogeneous and heterogeneous dynamics in native and denatured bovine serum albumin. Physical Chemistry Chemical Physics, 2018, 20, 5128-5139.	2.8	20
42	Double layer formation in Mg ²⁺ /TM switchable mirrors (TM: Ni, Co, Fe). Journal of Alloys and Compounds, 2005, 404-406, 490-493.	5.5	18
43	Magnesium Imide: Synthesis and Structure Determination of an Unconventional Alkaline Earth Imide from Decomposition of Magnesium Amide. Inorganic Chemistry, 2011, 50, 1116-1122.	4.0	18
44	Water Dynamics in a Concentrated Poly(<i>N</i> -isopropylacrylamide) Solution at Variable Pressure. Macromolecules, 2019, 52, 1942-1954.	4.8	18
45	Imprinting magnetic structures. Applied Physics Letters, 1998, 72, 2894-2896.	3.3	17
46	Structure of the Mg ₂ Ni switchable mirror: an EXAFS investigation. Materials Chemistry and Physics, 2005, 91, 1-9.	4.0	17
47	Photoactivation Reduces Side-Chain Dynamics of a LOV Photoreceptor. Biophysical Journal, 2016, 110, 1064-1074.	0.5	17
48	Alzheimer's peptide amyloid- β , fragment 22-40, perturbs lipid dynamics. Soft Matter, 2016, 12, 1444-1451.	2.7	17
49	Anomalies in the low frequency vibrational density of states for a polymer with intrinsic microporosity - the Boson peak of PIM-1. Physical Chemistry Chemical Physics, 2018, 20, 1355-1363.	2.8	17
50	Structure and Dynamics of Borohydrides Studied by Neutron Scattering Techniques: A Review. Journal of the Physical Society of Japan, 2020, 89, 051011.	1.6	17
51	Comparison of the Calculated and Experimental Scenarios for Solid-State Reactions Involving Ca(AlH ₄) ₂ . Journal of Physical Chemistry C, 2008, 112, 131-138.	3.1	16
52	Influence of Solvent on Poly(2-(Dimethylamino)Ethyl Methacrylate) Dynamics in Polymer-Concentrated Mixtures: A Combined Neutron Scattering, Dielectric Spectroscopy, and Calorimetric Study. Macromolecules, 2015, 48, 6724-6735.	4.8	16
53	Dynamic processes in biological membrane mimics revealed by quasielastic neutron scattering. Chemistry and Physics of Lipids, 2017, 206, 28-42.	3.2	16
54	Hydrogen release and structural transformations in LiNH ₂ -MgH ₂ systems. Journal of Alloys and Compounds, 2011, 509, S719-S723.	5.5	15

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55	Solution Structure and Conformational Flexibility in the Active State of the Orange Carotenoid Protein. Part II: Quasielastic Neutron Scattering. <i>Journal of Physical Chemistry B</i> , 2019, 123, 9536-9545.	2.6	15
56	A quasielastic and inelastic neutron scattering study of the alkaline and alkaline-earth borohydrides LiBH_4 and $\text{Mg}(\text{BH}_4)_2$ and the mixture $\text{LiBH}_4 + \text{Mg}(\text{BH}_4)_2$. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 718-728.	2.8	15
57	In-situ neutron diffraction study of magnesium amide/lithium hydride stoichiometric mixtures with lithium hydride excess. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 5448-5453.	7.1	13
58	Effect of NaH/MgB ₂ ratio on the hydrogen absorption kinetics of the system $\text{NaH} + \text{MgB}_2$. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 5030-5036.	7.1	12
59	Hydrogen dynamics in $\hat{1}^2\text{-Mg}(\text{BH}_4)_2$ on the picosecond timescale. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14323-14332.	2.8	12
60	In-Situ Deposition of Alkali and Alkaline Earth Hydride Thin Films To Investigate the Formation of Reactive Hydride Composites. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13895-13901.	3.1	11
61	Applying Polymer Blend Dynamics Concepts to a Simplified Industrial System. A Combined Effort by Dielectric Spectroscopy and Neutron Scattering. <i>Macromolecules</i> , 2018, 51, 6692-6706.	4.8	11
62	Effect of a Ti-Based Additive on the Desorption in Isotope-Labeled $\text{LiB}(\text{H,D})_4 \leftrightarrow \text{Mg}(\text{H,D})_2$ Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11877-11885.	3.1	10
63	Molecular Mobility of a Polymer of Intrinsic Microporosity Revealed by Quasielastic Neutron Scattering. <i>Macromolecules</i> , 2020, 53, 6731-6739.	4.8	10
64	Impact of Sulfur on the melt dynamics of glass forming $\text{Ti}_{75}\text{Ni}_{25}$. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	10
65	Complex molecular dynamics of a symmetric model discotic liquid crystal revealed by broadband dielectric, thermal and neutron spectroscopy. <i>Soft Matter</i> , 2020, 16, 2005-2016.	2.7	9
66	Critical composition dependence of the hydrogenation of $\text{Mg}_{2\pm\hat{1}}\text{Ni}$ thin films. <i>Journal of Alloys and Compounds</i> , 2007, 428, 34-39.	5.5	8
67	Magnetocaloric effect in $\text{Fe}_{3.2}\text{P}$: Magnetic and phonon degrees of freedom. <i>Physical Review B</i> , 2019, 99, .	3.2	8
68	Investigation of Molecular Dynamics of a PTB7:PCBM Polymer Blend with Quasi-Elastic Neutron Scattering. <i>ACS Applied Polymer Materials</i> , 2020, 2, 3797-3804.	4.4	8
69	Structural and magnetic properties of La/Fe multilayers. <i>Applied Physics A: Materials Science and Processing</i> , 1996, 63, 183-190.	2.3	7
70	Hydrogen-controlled interlayer exchange coupling in Fe/LaH _x multilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 2001, 237, 77-89.	2.3	7
71	Microstructural origin of the optical black state in Mg_2NiH_x thin films. <i>Journal of Alloys and Compounds</i> , 2005, 404-406, 481-484.	5.5	7
72	Neutron spectroscopy study of the diffusivity of hydrogen in MoS_2 . <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 7961-7973.	2.8	7

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73	Diffusivelike Motions in a Solvent-Free Protein-Polymer Hybrid. <i>Physical Review Letters</i> , 2021, 126, 088102.	7.8	7
74	Pressure Dependence of Water Dynamics in Concentrated Aqueous Poly(<i>N</i> -isopropylacrylamide) Solutions with a Methanol Cosolvent. <i>Macromolecules</i> , 2021, 54, 4387-4400.	4.8	7
75	CSPEC: The cold chopper spectrometer of the ESS, a detailed overview prior to commissioning. <i>Review of Scientific Instruments</i> , 2021, 92, 105104.	1.3	7
76	Thermochromic metal-hydride bilayer devices. <i>Journal of Alloys and Compounds</i> , 2005, 404-406, 465-468.	5.5	6
77	Imprinting artificial magnetic structures (invited). <i>Journal of Applied Physics</i> , 1999, 85, 5873-5876.	2.5	5
78	Imprinted spiral structures as neutron polarizers. <i>Physica B: Condensed Matter</i> , 1999, 267-268, 352-354.	2.7	5
79	Hydrogen Storage Materials. <i>Neutron Scattering Applications and Techniques</i> , 2015, , 205-239.	0.2	5
80	The fragile magnetic structures of Fe/CeH ₂ multilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 210, 357-365.	2.3	4
81	Dynamics of tetrahydrofuran as minority component in a mixture with poly(2-(dimethylamino)ethyl) Tj ETQq1 1 0.784314 rgBT /Over <i>Physics</i> , 2015, 143, 094505.	3.0	4
82	Magnetic spiral structures in La/Fe multilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 198-199, 440-442.	2.3	3
83	The Influence of the Blend Ratio, Solvent Additive, and Post-production Treatment on the Polymer Dynamics in PTB7:PCBM Blend Films. <i>Macromolecules</i> , 2021, 54, 6534-6542.	4.8	3
84	High-pressure cell for in situ neutron studies of hydrogen storage materials. <i>Journal of Neutron Research</i> , 2020, 21, 125-135.	1.1	2
85	High Hydrogen Mobility in an Amide-Borohydride Compound Studied by Quasielastic Neutron Scattering. <i>Advanced Engineering Materials</i> , 2021, 23, 2100620.	3.5	1
86	Quasielastic neutron scattering study on proton dynamics assisted by water and ammonia molecules confined in MIL-53. <i>Structural Dynamics</i> , 2021, 8, 054501.	2.3	1