

Anibal J Ramirez-Cuesta

List of Publications by Year in descending order

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224
papers

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31902

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232
all docs

232
docs citations

232
times ranked

10496
citing authors

#	ARTICLE	IF	CITATIONS
1	Supramolecular binding and separation of hydrocarbons within a functionalized porous metal-organic framework. <i>Nature Chemistry</i> , 2015, 7, 121-129.	6.6	530
2	Selectivity and direct visualization of carbon dioxide and sulfur dioxide in a decorated porous host. <i>Nature Chemistry</i> , 2012, 4, 887-894.	6.6	466
3	Reversible Structural Transition in MIL-53 with Large Temperature Hysteresis. <i>Journal of the American Chemical Society</i> , 2008, 130, 11813-11818.	6.6	402
4	Selective production of arenes via direct lignin upgrading over a niobium-based catalyst. <i>Nature Communications</i> , 2017, 8, 16104.	5.8	346
5	aCLIMAX 4.0.1, The new version of the software for analyzing and interpreting INS spectra. <i>Computer Physics Communications</i> , 2004, 157, 226-238.	3.0	295
6	Selective Adsorption of Sulfur Dioxide in a Robust Metal-Organic Framework Material. <i>Advanced Materials</i> , 2016, 28, 8705-8711.	11.1	214
7	An ultra-tunable platform for molecular engineering of high-performance crystalline porous materials. <i>Nature Communications</i> , 2016, 7, 13645.	5.8	205
8	Confinement of Iodine Molecules into Triple-Helical Chains within Robust Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2017, 139, 16289-16296.	6.6	199
9	L-Cysteine: Neutron spectroscopy, Raman, IR and ab initio study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2474-2481.	2.0	198
10	Methane hydrate formation in confined nanospace can surpass nature. <i>Nature Communications</i> , 2015, 6, 6432.	5.8	187
11	Control of zeolite pore interior for chemoselective alkyne/olefin separations. <i>Science</i> , 2020, 368, 1002-1006.	6.0	179
12	Reversible coordinative binding and separation of sulfur dioxide in a robust metal-organic framework with open copper sites. <i>Nature Materials</i> , 2019, 18, 1358-1365.	13.3	171
13	Reversible adsorption of nitrogen dioxide within a robust porous metal-organic framework. <i>Nature Materials</i> , 2018, 17, 691-696.	13.3	162
14	Direct Neutron Spectroscopy Observation of Cerium Hydride Species on a Cerium Oxide Catalyst. <i>Journal of the American Chemical Society</i> , 2017, 139, 9721-9727.	6.6	138
15	Hydrogenation of 9-ethylcarbazole as a prototype of a liquid hydrogen carrier. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 11609-11621.	3.8	135
16	Recent and future developments on TOSCA at ISIS. <i>Journal of Physics: Conference Series</i> , 2014, 554, 012003.	0.3	126
17	Hydrogen Spillover on Carbon-Supported Metal Catalysts Studied by Inelastic Neutron Scattering. Surface Vibrational States and Hydrogen Riding Modes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 6838-6845.	1.2	118
18	Capture of nitrogen dioxide and conversion to nitric acid in a porous metal-organic framework. <i>Nature Chemistry</i> , 2019, 11, 1085-1090.	6.6	116

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19	Gate-opening effect in ZIF-8: the first experimental proof using inelastic neutron scattering. <i>Chemical Communications</i> , 2016, 52, 3639-3642.	2.2	106
20	Capture of heavy hydrogen isotopes in a metal-organic framework with active Cu(I) sites. <i>Nature Communications</i> , 2017, 8, 14496.	5.8	98
21	Study of Catalytic Sites on Ruthenium For Hydrogenation of <i>N</i> -ethylcarbazole: Implications of Hydrogen Storage via Reversible Catalytic Hydrogenation. <i>Journal of Physical Chemistry C</i> , 2010, 114, 9720-9730.	1.5	97
22	Simulation of Inelastic Neutron Scattering Spectra Using OCLIMAX. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 1974-1982.	2.3	95
23	Spin-phonon couplings in transition metal complexes with slow magnetic relaxation. <i>Nature Communications</i> , 2018, 9, 2572.	5.8	93
24	Integration of mesopores and crystal defects in metal-organic frameworks via templated electrosynthesis. <i>Nature Communications</i> , 2019, 10, 4466.	5.8	90
25	Negative Thermal Expansion in LnCo(CN) ₆ (Ln=La, Pr, Sm, Ho, Lu, Y): Mechanisms and Compositional Trends. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 5266-5270.	7.2	88
26	Local Vibrational Mechanism for Negative Thermal Expansion: A Combined Neutron Scattering and First-Principles Study. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 585-588.	7.2	87
27	Quantum rattling of molecular hydrogen in clathrate hydrate nanocavities. <i>Physical Review B</i> , 2007, 76, .	1.1	82
28	Evidence for CO ₂ reactive adsorption on nanoporous S- and N-doped carbon at ambient conditions. <i>Carbon</i> , 2016, 96, 856-863.	5.4	79
29	Hydrogen adsorption in the metal-organic frameworks Fe ₂ (dobdc) and Fe ₂ (O ₂)(dobdc). <i>Dalton Transactions</i> , 2012, 41, 4180.	1.6	78
30	Direct photo-oxidation of methane to methanol over a mono-iron hydroxyl site. <i>Nature Materials</i> , 2022, 21, 932-938.	13.3	77
31	Modulating supramolecular binding of carbon dioxide in a redox-active porous metal-organic framework. <i>Nature Communications</i> , 2017, 8, 14212.	5.8	75
32	Quantitative production of butenes from biomass-derived δ^3 -valerolactone catalysed by hetero-atomic MFI zeolite. <i>Nature Materials</i> , 2020, 19, 86-93.	13.3	74
33	Some New Insights into the Sensing Mechanism of Palladium Promoted Tin (IV) Oxide Sensor. <i>Journal of Physical Chemistry B</i> , 2001, 105, 5737-5742.	1.2	73
34	Discriminating the Role of Surface Hydride and Hydroxyl for Acetylene Semihydrogenation over Ceria through <i>In Situ</i> Neutron and Infrared Spectroscopy. <i>ACS Catalysis</i> , 2020, 10, 5278-5287.	5.5	70
35	<i>Dynamical properties and temperature induced molecular disordering of</i> LiBH_4 LiBD_4 <i>Physical Review B</i> , 2008, 78, .	1.1	69
36	Hydrogen-deuterium exchange experiments to probe the decomposition reaction of sodium alanate. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 4045.	1.3	67

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37	High Ammonia Adsorption in MFM-300 Materials: Dynamics and Charge Transfer in Host-Guest Binding. <i>Journal of the American Chemical Society</i> , 2021, 143, 3153-3161.	6.6	67
38	Atomically Dispersed Copper Sites in a Metal-Organic Framework for Reduction of Nitrogen Dioxide. <i>Journal of the American Chemical Society</i> , 2021, 143, 10977-10985.	6.6	66
39	A unique Co@CoO catalyst for hydrogenolysis of biomass-derived 5-hydroxymethylfurfural to 2,5-dimethylfuran. <i>Nature Communications</i> , 2022, 13, .	5.8	66
40	Structural information on ball milled magnesium hydride from vibrational spectroscopy and ab-initio calculations. <i>Journal of Alloys and Compounds</i> , 2005, 393, 1-4.	2.8	65
41	Hydrogen adsorption strength and sites in the metal organic framework MOF5: Comparing experiment and model calculations. <i>Chemical Physics</i> , 2008, 351, 72-76.	0.9	65
42	Quest for an Optimal Methane Hydrate Formation in the Pores of Hydrolytically Stable Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2020, 142, 13391-13397.	6.6	65
43	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.	3.7	62
44	Efficient Separation of Acetylene and Carbon Dioxide in a Decorated Zeolite. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6526-6532.	7.2	62
45	The rotational and translational dynamics of molecular hydrogen physisorbed in activated carbon: A direct probe of microporosity and hydrogen storage performance. <i>Carbon</i> , 2006, 44, 2724-2738.	5.4	61
46	Refinement of pore size at sub-angstrom precision in robust metal-organic frameworks for separation of xylenes. <i>Nature Communications</i> , 2020, 11, 4280.	5.8	61
47	Elucidation of the Reaction Mechanism for High-Temperature Water Gas Shift over an Industrial-Type Copper-Chromium-Iron Oxide Catalyst. <i>Journal of the American Chemical Society</i> , 2019, 141, 7990-7999.	6.6	60
48	Scrutinizing negative thermal expansion in MOF-5 by scattering techniques and ab initio calculations. <i>Dalton Transactions</i> , 2013, 42, 1996-2007.	1.6	59
49	Nature of Reactive Hydrogen for Ammonia Synthesis over a Ru/C12A7 Electride Catalyst. <i>Journal of the American Chemical Society</i> , 2020, 142, 7655-7667.	6.6	59
50	Molecular Aluminum Hydrides Identified by Inelastic Neutron Scattering during H ₂ Regeneration of Catalyst-Doped NaAlH ₄ . <i>Journal of Physical Chemistry B</i> , 2006, 110, 711-715.	1.2	58
51	Direct Evidence for Solid-like Hydrogen in a Nanoporous Carbon Hydrogen Storage Material at Supercritical Temperatures. <i>ACS Nano</i> , 2015, 9, 8249-8254.	7.3	57
52	Enhancement of Proton Conductivity in Nonporous Metal-Organic Frameworks: The Role of Framework Proton Density and Humidity. <i>Chemistry of Materials</i> , 2018, 30, 7593-7602.	3.2	55
53	A combined neutron scattering and simulation study on bioprotectant systems. <i>Chemical Physics</i> , 2005, 317, 258-266.	0.9	52
54	Identifying Atomic Scale Structure in Undoped/Doped Semicrystalline P3HT Using Inelastic Neutron Scattering. <i>Macromolecules</i> , 2017, 50, 2424-2435.	2.2	52

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55	Hydrogen in the Metal-Organic Framework Cr MIL-53. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10648-10655.	1.5	51
56	Hydrogen Dynamics in Nanoconfined Lithiumborohydride. <i>Journal of Physical Chemistry C</i> , 2013, 117, 3789-3798.	1.5	51
57	Purification of Propylene and Ethylene by a Robust Metal-Organic Framework Mediated by Host-Guest Interactions. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15541-15547.	7.2	51
58	In situ inelastic neutron scattering studies of the rotational and translational dynamics of molecular hydrogen adsorbed in single-wall carbon nanotubes (SWNTs). <i>Carbon</i> , 2005, 43, 895-906.	5.4	50
59	LDA or GGA? A combined experimental inelastic neutron scattering and ab initio lattice dynamics study of alkali metal hydrides. <i>Chemical Physics</i> , 2005, 317, 119-129.	0.9	50
60	Neutron scattering and hydrogen storage. <i>Materials Today</i> , 2009, 12, 54-61.	8.3	50
61	Understanding the breathing phenomena in nano-ZIF-7 upon gas adsorption. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20938-20946.	5.2	50
62	Characteristic features of water dynamics in restricted geometries investigated with quasi-elastic neutron scattering. <i>Chemical Physics</i> , 2016, 465-466, 1-8.	0.9	49
63	X-ray and Neutron Scattering Study of the Formation of Core-Shell-Type Polyoxometalates. <i>Journal of the American Chemical Society</i> , 2016, 138, 2638-2643.	6.6	49
64	Pore with gate: modulating hydrogen storage in metal-organic framework materials via cation exchange. <i>Faraday Discussions</i> , 2011, 151, 19.	1.6	48
65	Inelastic Incoherent Neutron Scattering Measurements of Intact Cells and Tissues and Detection of Interfacial Water. <i>Journal of the American Chemical Society</i> , 2004, 126, 4682-4688.	6.6	47
66	Host-guest selectivity in a series of isorecticular metal-organic frameworks: observation of acetylene-to-alkyne and carbon dioxide-to-amide interactions. <i>Chemical Science</i> , 2019, 10, 1098-1106.	3.7	47
67	Inelastic neutron scattering study on bioprotectant systems. <i>Journal of the Royal Society Interface</i> , 2005, 2, 527-532.	1.5	45
68	The Vibrational Spectrum and Ultimate Modulus of Polyethylene. <i>Macromolecules</i> , 2006, 39, 2683-2690.	2.2	44
69	Inelastic Neutron Scattering and Raman Spectroscopies and Periodic DFT Studies of Rb ₂ PtH ₆ and Rb ₂ PtD ₆ . <i>Journal of the American Chemical Society</i> , 2003, 125, 11656-11661.	6.6	43
70	The vibrational spectrum of magnesium hydride from inelastic neutron scattering and density functional theory. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 108, 38-41.	1.7	41
71	Direct Observation of H_2 Binding to a Metal Oxide Surface. <i>Physical Review Letters</i> , 2008, 101, 165302.	2.9	39
72	Pure Monte Carlo Simulation of Model Heterogeneous Substrates: From Random Surfaces to Many-Site Correlations. <i>Langmuir</i> , 1997, 13, 1064-1072.	1.6	38

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73	Evidence for hydrogen transport in deuterated LiBH_4 from low-temperature Raman-scattering measurements and first-principles calculations. <i>Physical Review B</i> , 2009, 80, 114407.	4.1	37
74	Exceptional Packing Density of Ammonia in a Dual-Functionalized Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2021, 143, 6586-6592.	6.6	37
75	Hydrogen adsorption in a copper ZSM5 zeolite: An inelastic neutron scattering study. <i>Catalysis Today</i> , 2007, 120, 368-373.	2.2	35
76	Impurity Gas Analysis of the Decomposition of Complex Hydrides. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17220-17226.	1.5	35
77	In consideration of precursor states, spillover and Boudart's "collection zone" and of their role in catalytic processes. <i>Journal of Molecular Catalysis A</i> , 2000, 163, 221-232.	4.8	34
78	Hydrogen adsorption on two catalysts for the ortho- to parahydrogen conversion: Cr-doped silica and ferric oxide gel. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 17281-17293.	1.3	34
79	Dihydrogen in cation-substituted zeolites: An inelastic neutron scattering study. <i>Journal of Materials Chemistry</i> , 2007, 17, 2533-2539.	6.7	33
80	Vibrational Dynamics of LiBH_4 by Infrared Pump-Probe and 2D Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2009, 113, 12838-12846.	1.1	33
81	The combined inelastic neutron scattering and solid state DFT study of hydrogen atoms dynamics in a highly ordered kaolinite. <i>Physics and Chemistry of Minerals</i> , 2010, 37, 571-579.	0.3	33
82	Inelastic neutron scattering in spectroscopic studies of hydrogen on carbon-supported catalysts: experimental spectra and computed spectra of model systems. <i>Journal of Molecular Structure</i> , 2003, 651-653, 781-785.	1.8	32
83	Inelastic neutron scattering from hydrogen clathrate hydrates. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 104242.	0.7	32
84	Optimal Binding of Acetylene to a Nitro-Decorated Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2018, 140, 16006-16009.	6.6	31
85	Neutron Instruments for Research in Coordination Chemistry. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 1065-1089.	1.0	29
86	Neutron Scattering Investigations of Hydride Species in Heterogeneous Catalysis. <i>ChemSusChem</i> , 2019, 12, 93-103.	3.6	29
87	High Resolution Raman and Neutron Investigation of $\text{Mg}(\text{BH}_4)_2$ in an Extensive Temperature Range. <i>Journal of Physical Chemistry A</i> , 2010, 114, 2788-2793.	1.1	28
88	Structure of Spontaneously Formed Solid-Electrolyte Interphase on Lithiated Graphite Determined Using Small-Angle Neutron Scattering. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9816-9823.	1.5	28
89	Observation of binding of carbon dioxide to nitro-decorated metal-organic frameworks. <i>Chemical Science</i> , 2020, 11, 5339-5346.	3.7	28
90	Hydrogen self-dynamics in orthorhombic alkaline earth hydrides through incoherent inelastic neutron scattering. <i>Journal of Alloys and Compounds</i> , 2007, 427, 18-24.	2.8	27

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91	Structure and Dynamics of Octamethyl-POSS Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5579-5592.	1.5	27
92	Comparison of two multifunctional catalysts [M/Nb ₂ O ₅ (M = Pd, Pt)] for one-pot hydrodeoxygenation of lignin. <i>Catalysis Science and Technology</i> , 2018, 8, 6129-6136.	2.1	26
93	Highly Efficient Proton Conduction in the Metal-Organic Framework Material MFM-300(Cr)-SO ₄ (H ₃ O) ₂ . <i>Journal of the American Chemical Society</i> , 2022, 144, 11969-11974.	6.6	26
94	Hydrogen site occupancies in single-walled carbon nanotubes studied by inelastic neutron scattering. <i>Journal of Physics Condensed Matter</i> , 2004, 16, L73-L78.	0.7	25
95	Mobility and dynamics in the complex hydrides LiAlH ₄ and LiBH ₄ . <i>Faraday Discussions</i> , 2011, 151, 213.	1.6	25
96	Inter-Kramers Transitions and Spin-Phonon Couplings in a Lanthanide-Based Single-Molecule Magnet. <i>Inorganic Chemistry</i> , 2020, 59, 5218-5230.	1.9	25
97	Infrared, Raman, and Inelastic Neutron Scattering Spectra of Dodecahedrane: A Molecule in Th Site Symmetry. <i>Journal of Physical Chemistry A</i> , 2005, 109, 3418-3424.	1.1	24
98	Experimental evidence of librational vibrations determining the stability of calcium borohydride. <i>Physical Review B</i> , 2011, 83, .	1.1	24
99	Interaction of methanol with the flexible metal-organic framework MIL-53(Fe) observed by inelastic neutron scattering. <i>Chemical Physics</i> , 2013, 427, 30-37.	0.9	24
100	Penicillin's catalytic mechanism revealed by inelastic neutrons and quantum chemical theory. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 20447-20455.	1.3	24
101	Guest-Controlled Incommensurate Modulation in a Meta-Rigid Metal-Organic Framework Material. <i>Journal of the American Chemical Society</i> , 2020, 142, 19189-19197.	6.6	24
102	Inelastic neutron scattering evidence for anomalous H-H distances in metal hydrides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4021-4026.	3.3	24
103	Direct Observation of Ammonia Storage in UiO-66 Incorporating Cu(II) Binding Sites. <i>Journal of the American Chemical Society</i> , 2022, 144, 8624-8632.	6.6	24
104	Structure and spectroscopy of hydrogen adsorbed in a nickel metal-organic framework. <i>Chemical Physics</i> , 2013, 427, 3-8.	0.9	23
105	Control of zeolite microenvironment for propene synthesis from methanol. <i>Nature Communications</i> , 2021, 12, 822.	5.8	23
106	Direct observation of supramolecular binding of light hydrocarbons in vanadium(III) and (IV) metal-organic framework materials. <i>Chemical Science</i> , 2018, 9, 3401-3408.	3.7	22
107	Vibrational spectroscopy with neutrons: Recent developments. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 190, 518-523.	2.0	22
108	Spectroscopic Studies of the Magnetic Excitation and Spin-Phonon Couplings in a Single-Molecule Magnet. <i>Chemistry - A European Journal</i> , 2019, 25, 15846-15857.	1.7	22

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109	Simple analytical model for fitting QENS data from liquids. <i>Physica B: Condensed Matter</i> , 2019, 566, 50-54.	1.3	22
110	Hydrogen dynamics in heavy alkali metal hydrides obtained through inelastic neutron scattering. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 5731-5743.	0.7	21
111	Neutron Vibrational Spectroscopy Gives New Insights into the Structure of Poly(p-phenylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10	6.8	21
112	Properties of immobile hydrogen confined in microporous carbon. <i>Carbon</i> , 2017, 117, 383-392.	5.4	21
113	Understanding ZIFs Performance upon Gas Adsorption by Means of Inelastic Neutron Scattering. <i>ChemistrySelect</i> , 2017, 2, 2750-2753.	0.7	21
114	Chemical Bonding and Transport Properties in Clathrates-I with Cu-Zn-P Frameworks. <i>Chemistry of Materials</i> , 2018, 30, 3419-3428.	3.2	21
115	Wide-angle diamond cell for neutron scattering. <i>High Pressure Research</i> , 2017, 37, 495-506.	0.4	20
116	Diborane release and structure distortion in borohydrides. <i>Dalton Transactions</i> , 2013, 42, 719-725.	1.6	19
117	The Role of Ti in Alanates and Borohydrides: Catalysis and Metathesis. <i>Journal of Physical Chemistry C</i> , 2014, 118, 77-84.	1.5	19
118	Simulation of benzene formation from acetylene on palladium and oxygen-covered palladium surfaces. <i>Surface Science</i> , 1995, 340, 109-118.	0.8	18
119	An inelastic neutron scattering study of the interaction of dihydrogen with the cobalt site of a cobalt aluminophosphate catalyst. <i>Journal of Molecular Catalysis A</i> , 2001, 167, 217-224.	4.8	18
120	Efficient Separation of Acetylene and Carbon Dioxide in a Decorated Zeolite. <i>Angewandte Chemie</i> , 2021, 133, 6600-6606.	1.6	17
121	Phonon density of states in different clathrate hydrates measured by inelastic neutron scattering. <i>Journal of Physics: Conference Series</i> , 2012, 340, 012051.	0.3	16
122	The characterisation of commercial 2D carbons: graphene, graphene oxide and reduced graphene oxide. <i>Materials Advances</i> , 2022, 3, 2810-2826.	2.6	16
123	Structure and Dynamics of Maleic Anhydride. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3064-3070.	1.1	15
124	Hydrogen Dynamics in Lightweight Tetrahydroborates. <i>Zeitschrift Fur Physikalische Chemie</i> , 2010, 224, 263-278.	1.4	15
125	The Combined Inelastic Neutron Scattering (INS) and Solid-State DFT Study of Hydrogen-Atoms Dynamics in Kaolinite-dimethylsulfoxide Intercalate. <i>Clays and Clay Minerals</i> , 2010, 58, 52-61.	0.6	15
126	Low energy structural dynamics and constrained libration of Li(NH ₃) ₄ , the lowest melting point metal. <i>Chemical Communications</i> , 2014, 50, 10778-10781.	2.2	15

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127	New insights into the breathing phenomenon in ZIF-4. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14552-14558.	5.2	15
128	STM investigation and Monte-Carlo modelling of spillover in a supported metal catalyst. <i>Journal of Molecular Catalysis A</i> , 2001, 167, 171-179.	4.8	14
129	Extraction of the density of phonon states in LiH and NaH. <i>Physica B: Condensed Matter</i> , 2004, 350, E983-E986.	1.3	14
130	Dihydrogen in zeolite CaX: An inelastic neutron scattering study. <i>Journal of Alloys and Compounds</i> , 2007, 446-447, 393-396.	2.8	14
131	Changes in vibrational modes of water and bioprotectants in solution. <i>Biophysical Chemistry</i> , 2007, 125, 138-142.	1.5	14
132	Neutron Compton scattering investigation of sodium hydride: From bulk material to encapsulated nanoparticles in amorphous silica gel. <i>Journal of Chemical Physics</i> , 2011, 134, 114511.	1.2	14
133	High-resolution inelastic neutron scattering and neutron powder diffraction study of the adsorption of dihydrogen by the Cu(II) metal-organic framework material HKUST-1. <i>Chemical Physics</i> , 2013, 427, 9-17.	0.9	14
134	Rapid Diffusion and Nanosegregation of Hydrogen in Magnesium Alloys from Exposure to Water. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38125-38134.	4.0	14
135	Probing Magnetic Excitations in Co ^{II} Single-Molecule Magnets by Inelastic Neutron Scattering. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 1119-1127.	1.0	14
136	Calculation of the Thermal Neutron Scattering Cross-Section of Solids Using OCLIMAX. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 5212-5217.	2.3	14
137	Simulation of Inelastic Neutron Scattering Spectra Directly from Molecular Dynamics Trajectories. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 7702-7708.	2.3	14
138	Direct observation of molecular hydrogen binding to magnesium oxide (100) surfaces. <i>Physica B: Condensed Matter</i> , 2006, 385-386, 144-146.	1.3	13
139	Hydrogen-storage materials dispersed into nanoporous substrates studied through incoherent inelastic neutron scattering. <i>Journal of Alloys and Compounds</i> , 2012, 538, 91-99.	2.8	13
140	Local probes show that framework modification in zeolites occurs on ammonium exchange without calcination. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7415.	5.2	13
141	Raman scattering study of $\hat{1}\pm$ -MgH ₂ and $\hat{1}^3$ -MgH ₂ . <i>Solid State Communications</i> , 2013, 154, 77-80.	0.9	13
142	Alternative view of oxygen reduction on porous carbon electrocatalysts: The substance of complex oxygen-surface interactions. <i>IScience</i> , 2021, 24, 102216.	1.9	13
143	Concentration dependence of vibrational properties of bioprotectant/water mixtures by inelastic neutron scattering. <i>Journal of the Royal Society Interface</i> , 2007, 4, 167-173.	1.5	12
144	Coupled Multimodal Dynamics of Hydrogen-Containing Ion Networks in Water-Deficient, Sodium Hydroxide-Aluminate Solutions. <i>Journal of Physical Chemistry B</i> , 2018, 122, 12097-12106.	1.2	12

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145	Structural and Dynamic Analysis of Sulphur Dioxide Adsorption in a Series of Zirconium-Based Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	12
146	On Modeling, Simulation and Statistical Properties of Realistic Three Dimensional Porous Networks. <i>Journal of Porous Materials</i> , 2001, 8, 61-76.	1.3	11
147	A combined experimental inelastic neutron scattering, Raman and ab initio lattice dynamics study of δ -lithium amidoborane. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 12249.	1.3	11
148	Evidence of Intermediate Hydrogen States in the Formation of a Complex Hydride. <i>Inorganic Chemistry</i> , 2018, 57, 867-872.	1.9	11
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