Anibal J Ramirez-Cuesta

List of Publications by Year
in descending order

224 papers	10,139 citations	31902 53 h-index	42291 92 g-index
232 all docs	232 docs citations	232 times ranked	10496 citing authors

#	Article	IF	Citations
1	Neutron vibrational spectroscopic evidence for short Hâ˜™â˜™H contacts in the RNiInH1.4; 1.6 (R = Ce, La) metal hydride. Journal of Alloys and Compounds, 2022, 894, 162381.	2.8	5
2	The characterisation of commercial 2D carbons: graphene, graphene oxide and reduced graphene oxide. Materials Advances, 2022, 3, 2810-2826.	2.6	16
3	Neutron Vibrational Spectroscopic Evidence for Short HÂ·Â·Â·H Contacts in the RNiInH_{1.4;1.6} (R = Ce, La) Metal Hydride. Neutron News, 2022, 33, 7-9.	0.1	1
4	Vibrational Spectroscopy of Hexahalo Complexes. Inorganic Chemistry, 2022, , .	1.9	1
5	High capacity ammonia adsorption in a robust metalâ€“organic framework mediated by reversible hostâ€“guest interactions. Chemical Communications, 2022, 58, 5753-5756.	2.2	6
6	Direct Observation of Ammonia Storage in UiO-66 Incorporating Cu(II) Binding Sites. Journal of the American Chemical Society, 2022, 144, 8624-8632.	6.6	24
7	Structural and Dynamic Analysis of Sulphur Dioxide Adsorption in a Series of Zirconiumâ€Based Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2022, 61, .	7.2	12
8	Direct photo-oxidation of methane to methanol over a mono-iron hydroxyl site. Nature Materials, 2022, 21, 932-938.	13.3	77
9	A unique Co@CoO catalyst for hydrogenolysis of biomass-derived 5-hydroxymethylfurfural to 2,5-dimethylfuran. Nature Communications, 2022, 13, .	5.8	66
10	Highly Efficient Proton Conduction in the Metalâ€“Organic Framework Material MFM-300(Cr)Â·SO₄(H₃O)₂. Journal of the American Chemical Society, 2022, 144, 11969-11974.	6.6	26
11	The ICEMAN, a heterogeneous platform for analysis of neutron scattering data. Neutron News, 2021, 32, 15-16.	0.1	3
12	Efficient Separation of Acetylene and Carbon Dioxide in a Decorated Zeolite. Angewandte Chemie, 2021, 133, 6600-6606.	1.6	17
13	High Ammonia Adsorption in MFM-300 Materials: Dynamics and Charge Transfer in Hostâ€“Guest Binding. Journal of the American Chemical Society, 2021, 143, 3153-3161.	6.6	67
14	Efficient Separation of Acetylene and Carbon Dioxide in a Decorated Zeolite. Angewandte Chemie - International Edition, 2021, 60, 6526-6532.	7.2	62
15	Control of zeolite microenvironment for propene synthesis from methanol. Nature Communications, 2021, 12, 822.	5.8	23
16	Alternative view of oxygen reduction on porous carbon electrocatalysts: The substance of complex oxygen-surface interactions. IScience, 2021, 24, 102216.	1.9	13
17	Study of Anharmonicity in Zirconium Hydrides Using Inelastic Neutron Scattering and Ab-Initio Computer Modeling. Inorganics, 2021, 9, 29.	1.2	3
18	Exceptional Packing Density of Ammonia in a Dual-Functionalized Metalâ€“Organic Framework. Journal of the American Chemical Society, 2021, 143, 6586-6592.	6.6	37

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19	Hydrogen in tungsten trioxide by membrane photoemission and density functional theory modeling. Physical Review B, 2021, 103, .	1.1	6
20	On the Structural Transformation of Ni/BaH2 During a N2-H2 Chemical Looping Process for Ammonia Synthesis: A Joint In Situ Inelastic Neutron Scattering and First-Principles Simulation Study. Topics in Catalysis, 2021, 64, 685-692.	1.3	11
21	Neutron Insights into Sorption Enhanced Methanol Catalysis. Topics in Catalysis, 2021, 64, 638-643.	1.3	3
22	Purification of Propylene and Ethylene by a Robust Metalâ€“Organic Framework Mediated by Hostâ€“Guest Interactions. Angewandte Chemie, 2021, 133, 15669-15675.	1.6	11
23	Purification of Propylene and Ethylene by a Robust Metalâ€“Organic Framework Mediated by Hostâ€“Guest Interactions. Angewandte Chemie - International Edition, 2021, 60, 15541-15547.	7.2	51
24	Thermal neutron scattering measurements and modeling of yttrium-hydrides for high temperature moderator applications. Annals of Nuclear Energy, 2021, 157, 108224.	0.9	6
25	Atomically Dispersed Copper Sites in a Metalâ€“Organic Framework for Reduction of Nitrogen Dioxide. Journal of the American Chemical Society, 2021, 143, 10977-10985.	6.6	66
26	Low rotational barriers for the most dynamically active methyl groups in the proposed antiviral drugs for treatment of SARS-CoV-2, apilimod and tetrandrine. Chemical Physics Letters, 2021, 777, 138727.	1.2	9
27	Quantitative production of butenes from biomass-derived Î³-valerolactone catalysed by hetero-atomic MFI zeolite. Nature Materials, 2020, 19, 86-93.	13.3	74
28	Heterolytic Scission of Hydrogen Within a Crystalline Frustrated Lewis Pair. Inorganic Chemistry, 2020, 59, 15295-15301.	1.9	8
29	Quest for an Optimal Methane Hydrate Formation in the Pores of Hydrolytically Stable Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 13391-13397.	6.6	65
30	Calculation of the Thermal Neutron Scattering Cross-Section of Solids Using OCLIMAX. Journal of Chemical Theory and Computation, 2020, 16, 5212-5217.	2.3	14
31	Guest-Controlled Incommensurate Modulation in a Meta-Rigid Metalâ€“Organic Framework Material. Journal of the American Chemical Society, 2020, 142, 19189-19197.	6.6	24
32	Effect of Hydration on the Molecular Dynamics of Hydroxychloroquine Sulfate. ACS Omega, 2020, 5, 21231-21240.	1.6	8
33	Clathrate BaNi₂P₄: An Interplay of Heat and Charge Transport Due to Strong Hostâ€“Guest Interactions. Chemistry of Materials, 2020, 32, 7932-7940.	3.2	9
34	Refinement of pore size at sub-angstrom precision in robust metalâ€“organic frameworks for separation of xylenes. Nature Communications, 2020, 11, 4280.	5.8	61
35	Phonon Spectroscopy in Antimony and Tellurium Oxides. Journal of Physical Chemistry A, 2020, 124, 7869-7880.	1.1	6
36	Hydration-Induced Disorder Lowers the Energy Barriers for Methyl Rotation in Drug Molecules. Journal of Physical Chemistry Letters, 2020, 11, 10256-10261.	2.1	7

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37	Simulation of Inelastic Neutron Scattering Spectra Directly from Molecular Dynamics Trajectories. Journal of Chemical Theory and Computation, 2020, 16, 7702-7708.	2.3	14
38	Observation of binding of carbon dioxide to nitro-decorated metalâ€“organic frameworks. Chemical Science, 2020, 11, 5339-5346.	3.7	28
39	Control of zeolite pore interior for chemoselective alkyne/olefin separations. Science, 2020, 368, 1002-1006.	6.0	179
40	Inter-Kramers Transitions and Spinâ€“Phonon Couplings in a Lanthanide-Based Single-Molecule Magnet. Inorganic Chemistry, 2020, 59, 5218-5230.	1.9	25
41	The structure and vibrational spectroscopy of cryolite, Na₃AlF₆. RSC Advances, 2020, 10, 25856-25863.	1.7	7
42	Inelastic neutron scattering evidence for anomalous Hâ€“H distances in metal hydrides. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4021-4026.	3.3	24
43	Discriminating the Role of Surface Hydride and Hydroxyl for Acetylene Semihydrogenation over Ceria through In Situ Neutron and Infrared Spectroscopy. ACS Catalysis, 2020, 10, 5278-5287.	5.5	70
44	Nature of Reactive Hydrogen for Ammonia Synthesis over a Ru/C12A7 Electride Catalyst. Journal of the American Chemical Society, 2020, 142, 7655-7667.	6.6	59
45	Volatile Hydrogen Intermediates of CO2 Methanation by Inelastic Neutron Scattering. Catalysts, 2020, 10, 433.	1.6	9
46	Studying Materials and Processes with VISION, VirtuES and ICEMAN ï¼•Modeling INS Data with DFT Methods. Hamon, 2020, 30, 154-159.	0.0	5
47	Large-Scale Phonon Calculations Using the Real-Space Multigrid Method. Journal of Chemical Theory and Computation, 2019, 15, 6859-6864.	2.3	9
48	Theoretical Study of Alkali-Metal Hydrides at High Pressures: A Case of NaH Supported by Inelastic Neutron Scattering (INS) Experiments at 1 and 2 GPa. Journal of Physical Chemistry A, 2019, 123, 10079-10085.	1.1	1
49	Spectroscopic Studies of the Magnetic Excitation and Spinâ€Phonon Couplings in a Singleâ€Molecule Magnet. Chemistry - A European Journal, 2019, 25, 15846-15857.	1.7	22
50	Hostâ€“guest selectivity in a series of isoreticular metalâ€“organic frameworks: observation of acetylene-to-alkyne and carbon dioxide-to-amide interactions. Chemical Science, 2019, 10, 1098-1106.	3.7	47
51	Post-synthetic modulation of the charge distribution in a metalâ€“organic framework for optimal binding of carbon dioxide and sulfur dioxide. Chemical Science, 2019, 10, 1472-1482.	3.7	62
52	Simple analytical model for fitting QENS data from liquids. Physica B: Condensed Matter, 2019, 566, 50-54.	1.3	22
53	New insights into the breathing phenomenon in ZIF-4. Journal of Materials Chemistry A, 2019, 7, 14552-14558.	5.2	15
54	Elucidation of the Reaction Mechanism for High-Temperature Water Gas Shift over an Industrial-Type Copperâ€“Chromiumâ€“Iron Oxide Catalyst. Journal of the American Chemical Society, 2019, 141, 7990-7999.	6.6	60

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55	Probing Magnetic Excitations in CoII Single-Molecule Magnets by Inelastic Neutron Scattering. European Journal of Inorganic Chemistry, 2019, 2019, 1055-1055.	1.0	0
56	Future directions for spectroscopy at the Spallation Neutron Source. Physica B: Condensed Matter, 2019, 564, 5-9.	1.3	2
57	Simulation of Inelastic Neutron Scattering Spectra Using OCLIMAX. Journal of Chemical Theory and Computation, 2019, 15, 1974-1982.	2.3	95
58	Capture of nitrogen dioxide and conversion to nitric acid in a porous metalâ€“organic framework. Nature Chemistry, 2019, 11, 1085-1090.	6.6	116
59	Integration of mesopores and crystal defects in metal-organic frameworks via templated electrosynthesis. Nature Communications, 2019, 10, 4466.	5.8	90
60	Reversible coordinative binding and separation of sulfur dioxide in a robust metalâ€“organic framework with open copper sites. Nature Materials, 2019, 18, 1358-1365.	13.3	171
61	Hydrogenâ€Release Reaction of a Complex Transition Metal Hydride with Covalently Bound Hydrogen and Hydride Ions. ChemPhysChem, 2019, 20, 1392-1397.	1.0	5
62	Neutron Instruments for Research in Coordination Chemistry. European Journal of Inorganic Chemistry, 2019, 2019, 1065-1089.	1.0	29
63	Probing Magnetic Excitations in Co^{II} Singleâ€Molecule Magnets by Inelastic Neutron Scattering. European Journal of Inorganic Chemistry, 2019, 2019, 1119-1127.	1.0	14
64	Neutron Scattering Investigations of Hydride Species in Heterogeneous Catalysis. ChemSusChem, 2019, 12, 5-5.	3.6	0
65	Neutron Scattering Investigations of Hydride Species in Heterogeneous Catalysis. ChemSusChem, 2019, 12, 93-103.	3.6	29
66	Direct observation of supramolecular binding of light hydrocarbons in vanadium(<scp>iii</scp>) and (<scp>iv</scp>) metalâ€“organic framework materials. Chemical Science, 2018, 9, 3401-3408.	3.7	22
67	Chemical Bonding and Transport Properties in Clathrates-I with Cuâ€“Znâ€“P Frameworks. Chemistry of Materials, 2018, 30, 3419-3428.	3.2	21
68	Evidence of Intermediate Hydrogen States in the Formation of a Complex Hydride. Inorganic Chemistry, 2018, 57, 867-872.	1.9	11
69	Quantum Dynamics of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Trapped within Organic Clathrate Cages. Physical Review Letters, 2018, 120, 120402.	2.9	7
70	Vibrational spectroscopy with neutrons: Recent developments. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 190, 518-523.	2.0	22
71	Comparison of two multifunctional catalysts [M/Nb₂O₅ (M = Pd, Pt)] for one-pot hydrodeoxygenation of lignin. Catalysis Science and Technology, 2018, 8, 6129-6136.	2.1	26
72	Coupled Multimodal Dynamics of Hydrogen-Containing Ion Networks in Water-Deficient, Sodium Hydroxide-Aluminate Solutions. Journal of Physical Chemistry B, 2018, 122, 12097-12106.	1.2	12

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73	Optimal Binding of Acetylene to a Nitro-Decorated Metalâ€“Organic Framework. Journal of the American Chemical Society, 2018, 140, 16006-16009.	6.6	31
74	Enhancement of Proton Conductivity in Nonporous Metalâ€“Organic Frameworks: The Role of Framework Proton Density and Humidity. Chemistry of Materials, 2018, 30, 7593-7602.	3.2	55
75	Spinâ€“phonon couplings in transition metal complexes with slow magnetic relaxation. Nature Communications, 2018, 9, 2572.	5.8	93
76	Effect of magnetic fields on the methyl rotation in a paramagnetic cobalt(<scp>ii</scp>) complex. Quasielastic neutron scattering studies. Physical Chemistry Chemical Physics, 2018, 20, 21119-21126.	1.3	10
77	Exposing Key Vibrational Contributions to Properties of Organic Molecular Solids with High Signal, Low Frequency Neutron Spectroscopy and Ab Initio Simulations. Crystal Growth and Design, 2018, 18, 4815-4821.	1.4	5
78	Reversible adsorption of nitrogen dioxide within a robust porous metalâ€“organic framework. Nature Materials, 2018, 17, 691-696.	13.3	162
79	Properties of immobile hydrogen confined in microporous carbon. Carbon, 2017, 117, 383-392.	5.4	21
80	Identifying Atomic Scale Structure in Undoped/Doped Semicrystalline P3HT Using Inelastic Neutron Scattering. Macromolecules, 2017, 50, 2424-2435.	2.2	52
81	Modulating supramolecular binding of carbon dioxide in a redox-active porous metal-organic framework. Nature Communications, 2017, 8, 14212.	5.8	75
82	Understanding ZIFâ€8 Performance upon Gas Adsorption by Means of Inelastic Neutron Scattering. ChemistrySelect, 2017, 2, 2750-2753.	0.7	21
83	Capture of heavy hydrogen isotopes in a metal-organic framework with active Cu(I) sites. Nature Communications, 2017, 8, 14496.	5.8	98
84	Rapid Diffusion and Nanosegregation of Hydrogen in Magnesium Alloys from Exposure to Water. ACS Applied Materials & Interfaces, 2017, 9, 38125-38134.	4.0	14
85	Confinement of Iodine Molecules into Triple-Helical Chains within Robust Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2017, 139, 16289-16296.	6.6	199
86	Wide-angle diamond cell for neutron scattering. High Pressure Research, 2017, 37, 495-506.	0.4	20
87	Understanding the breathing phenomena in nano-ZIF-7 upon gas adsorption. Journal of Materials Chemistry A, 2017, 5, 20938-20946.	5.2	50
88	Selective production of arenes via direct lignin upgrading over a niobium-based catalyst. Nature Communications, 2017, 8, 16104.	5.8	346
89	Direct Neutron Spectroscopy Observation of Cerium Hydride Species on a Cerium Oxide Catalyst. Journal of the American Chemical Society, 2017, 139, 9721-9727.	6.6	138
90	An ultra-tunable platform for molecular engineering of high-performance crystalline porous materials. Nature Communications, 2016, 7, 13645.	5.8	205

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91	Hydrogen adsorption on two catalysts for the ortho- to parahydrogen conversion: Cr-doped silica and ferric oxide gel. Physical Chemistry Chemical Physics, 2016, 18, 17281-17293.	1.3	34
92	Nanoconfinement Inside Molecular Metal Oxide Clusters: Dynamics and Modified Encapsulation Behavior. Chemistry - A European Journal, 2016, 22, 14073-14073.	1.7	3
93	Hydrogen release reactions of Al-based complex hydrides enhanced by vibrational dynamics and valences of metal cations. Chemical Communications, 2016, 52, 11807-11810.	2.2	10
94	Selective Adsorption of Sulfur Dioxide in a Robust Metalâ€“Organic Framework Material. Advanced Materials, 2016, 28, 8705-8711.	11.1	214
95	Nanoconfinement Inside Molecular Metal Oxide Clusters: Dynamics and Modified Encapsulation Behavior. Chemistry - A European Journal, 2016, 22, 14131-14136.	1.7	6
96	Characteristic features of water dynamics in restricted geometries investigated with quasi-elastic neutron scattering. Chemical Physics, 2016, 465-466, 1-8.	0.9	49
97	Gate-opening effect in ZIF-8: the first experimental proof using inelastic neutron scattering. Chemical Communications, 2016, 52, 3639-3642.	2.2	106
98	X-ray and Neutron Scattering Study of the Formation of Coreâ€“Shell-Type Polyoxometalates. Journal of the American Chemical Society, 2016, 138, 2638-2643.	6.6	49
99	Evidence for CO2 reactive adsorption on nanoporous S- and N-doped carbon at ambient conditions. Carbon, 2016, 96, 856-863.	5.4	79
100	Structure of Spontaneously Formed Solid-Electrolyte Interphase on Lithiated Graphite Determined Using Small-Angle Neutron Scattering. Journal of Physical Chemistry C, 2015, 119, 9816-9823.	1.5	28
101	Methane hydrate formation in confined nanospace can surpass nature. Nature Communications, 2015, 6, 6432.	5.8	187
102	Direct Evidence for Solid-like Hydrogen in a Nanoporous Carbon Hydrogen Storage Material at Supercritical Temperatures. ACS Nano, 2015, 9, 8249-8254.	7.3	57
103	The free-energy barrier to hydride transfer across a dipalladium complex. Faraday Discussions, 2015, 177, 99-109.	1.6	6
104	Supramolecular binding and separation of hydrocarbons within a functionalized porous metalâ€“organic framework. Nature Chemistry, 2015, 7, 121-129.	6.6	530
105	The use of direct geometry spectrometers in molecular spectroscopy. Journal of Physics: Conference Series, 2014, 554, 012004.	0.3	10
106	Low energy structural dynamics and constrained libration of Li(NH₃)₄, the lowest melting point metal. Chemical Communications, 2014, 50, 10778-10781.	2.2	15
107	Understanding compositionâ€“property relationships in Tiâ€“Crâ€“Vâ€“Mo alloys for optimisation of hydrogen storage in pressurised tanks. Physical Chemistry Chemical Physics, 2014, 16, 16563-16572.	1.3	8
108	The Role of Ti in Alanates and Borohydrides: Catalysis and Metathesis. Journal of Physical Chemistry C, 2014, 118, 77-84.	1.5	19

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109	Structure and Dynamics of Octamethyl-POSS Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 5579-5592.	1.5	27
110	Inelastic neutron scattering study of binding of para-hydrogen in an ultra-microporous metalâ€“organic framework. Chemical Physics, 2014, 428, 111-116.	0.9	10
111	Recent and future developments on TOSCA at ISIS. Journal of Physics: Conference Series, 2014, 554, 012003.	0.3	126
112	Hydrogen gas sample environment for TOSCA. Journal of Physics: Conference Series, 2014, 554, 012006.	0.3	7
113	Cryogenic sample environment on TOSCA. Journal of Physics: Conference Series, 2014, 554, 012007.	0.3	1
114	High-resolution inelastic neutron scattering and neutron powder diffraction study of the adsorption of dihydrogen by the Cu(II) metalâ€“organic framework material HKUST-1. Chemical Physics, 2013, 427, 9-17.	0.9	14
115	Local probes show that framework modification in zeolites occurs on ammonium exchange without calcination. Journal of Materials Chemistry A, 2013, 1, 7415.	5.2	13
116	Origin of the large anharmonicity in the phonon modes of LiBH4. Chemical Physics, 2013, 427, 22-29.	0.9	6
117	Chemical spectroscopy using neutrons. Chemical Physics, 2013, 427, 1-2.	0.9	2
118	Structure and spectroscopy of hydrogen adsorbed in a nickel metalâ€“organic framework. Chemical Physics, 2013, 427, 3-8.	0.9	23
119	Interaction of methanol with the flexible metal-organic framework MIL-53(Fe) observed by inelastic neutron scattering. Chemical Physics, 2013, 427, 30-37.	0.9	24
120	Negative Thermal Expansion in LnCo(CN)₆ (Ln=La, Pr, Sm, Ho, Lu, Y): Mechanisms and Compositional Trends. Angewandte Chemie - International Edition, 2013, 52, 5266-5270.	7.2	88
121	Penicillin's catalytic mechanism revealed by inelastic neutrons and quantum chemical theory. Physical Chemistry Chemical Physics, 2013, 15, 20447-20455.	1.3	24
122	Raman scattering study of Î±-MgH2 and Î³-MgH2. Solid State Communications, 2013, 154, 77-80.	0.9	13
123	Catalyst-free synthesis of sodium amide nanoparticles encapsulated in silica gel. Chemical Physics, 2013, 427, 61-65.	0.9	3
124	Hydrogen Dynamics in Nanoconfined Lithiumborohydride. Journal of Physical Chemistry C, 2013, 117, 3789-3798.	1.5	51
125	Diborane release and structure distortion in borohydrides. Dalton Transactions, 2013, 42, 719-725.	1.6	19
126	Scrutinizing negative thermal expansion in MOF-5 by scattering techniques and ab initio calculations. Dalton Transactions, 2013, 42, 1996-2007.	1.6	59

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127	Proton vibrational dynamics in lithium imide investigated through incoherent inelastic and Compton neutron scattering. Journal of Chemical Physics, 2012, 137, 204309.	1.2	4
128	Understanding Vibrational Anharmonicity and Phonon Dispersion in Solid Ammonia Borane. Journal of Physical Chemistry C, 2012, 116, 5926-5931.	1.5	10
129	Selectivity and direct visualization of carbon dioxide and sulfur dioxide in a decorated porous host. Nature Chemistry, 2012, 4, 887-894.	6.6	466
130	On the effect of thermal treatment and hydrogen vibrational dynamics in sodium alanates: An inelastic neutron scattering study. Journal of Alloys and Compounds, 2012, 523, 108-113.	2.8	8
131	Hydrogen-storage materials dispersed into nanoporous substrates studied through incoherent inelastic neutron scattering. Journal of Alloys and Compounds, 2012, 538, 91-99.	2.8	13
132	Hydrogen adsorption in the metalâ€“organic frameworks Fe2(dobdc) and Fe2(O2)(dobdc). Dalton Transactions, 2012, 41, 4180.	1.6	78
133	Phonon density of states in different clathrate hydrates measured by inelastic neutron scattering. Journal of Physics: Conference Series, 2012, 340, 012051.	0.3	16
134	A combined experimental inelastic neutron scattering, Raman and ab initio lattice dynamics study of Î±-lithium amidoborane. Physical Chemistry Chemical Physics, 2011, 13, 12249.	1.3	11
135	Raman and Inelastic Neutron Scattering Study on a Melt-Infiltrated Composite of NaAlH₄ and Nanoporous Carbon. Journal of Physical Chemistry A, 2011, 115, 7503-7510.	1.1	10
136	Vibrational Properties of CaAlH₅ and Î±-AlH₃ with Different AlH₆ Networks Studied by Inelastic Neutron Scattering. Inorganic Chemistry, 2011, 50, 8007-8011.	1.9	7
137	Impurity Gas Analysis of the Decomposition of Complex Hydrides. Journal of Physical Chemistry C, 2011, 115, 17220-17226.	1.5	35
138	Mobility and dynamics in the complex hydrides LiAlH4 and LiBH4. Faraday Discussions, 2011, 151, 213.	1.6	25
139	Pore with gate: modulating hydrogen storage in metal-organic framework materials via cation exchange. Faraday Discussions, 2011, 151, 19.	1.6	48
140	Neutron Compton scattering investigation of sodium hydride: From bulk material to encapsulated nanoparticulates in amorphous silica gel. Journal of Chemical Physics, 2011, 134, 114511.	1.2	14
141	Experimental evidence of librational vibrations determining the stability of calcium borohydride. Physical Review B, 2011, 83, .	1.1	24
142	The combined inelastic neutron scattering and solid state DFT study of hydrogen atoms dynamics in a highly ordered kaolinite. Physics and Chemistry of Minerals, 2010, 37, 571-579.	0.3	33
143	Formation of Crystalline Sodium Hydride Nanoparticles Encapsulated Within an Amorphous Framework. Journal of Cluster Science, 2010, 21, 543-549.	1.7	7
144	Local Vibrational Mechanism for Negative Thermal Expansion: A Combined Neutron Scattering and Firstâ€Principles Study. Angewandte Chemie - International Edition, 2010, 49, 585-588.	7.2	87

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145	Hydrogenation of 9-ethylcarbazole as a prototype of a liquid hydrogen carrier. International Journal of Hydrogen Energy, 2010, 35, 11609-11621.	3.8	135
146	Hydrogen in the Metalâ"Organic Framework Cr MIL-53. Journal of Physical Chemistry C, 2010, 114, 10648-10655.	1.5	51
147	Study of Catalytic Sites on Ruthenium For Hydrogenation of N-ethylcarbazole: Implications of Hydrogen Storage via Reversible Catalytic Hydrogenation. Journal of Physical Chemistry C, 2010, 114, 9720-9730.	1.5	97
148	Hydrogen Dynamics in Lightweight Tetrahydroborates. Zeitschrift Fur Physikalische Chemie, 2010, 224, 263-278.	1.4	15
149	The Combined Inelastic Neutron Scattering (INS) and Solid-State DFT Study of Hydrogen-Atoms Dynamics in Kaolinite-dimethylsulfoxide Intercalate. Clays and Clay Minerals, 2010, 58, 52-61.	0.6	15
150	High Resolution Raman and Neutron Investigation of Mg(BH₄)₂ in an Extensive Temperature Range. Journal of Physical Chemistry A, 2010, 114, 2788-2793.	1.1	28
151	Inelastic neutron scattering of Na-zeolite A with in situ ammoniation: an examination of initial coordination. Physical Chemistry Chemical Physics, 2010, 12, 9661.	1.3	4
152	Lattice dynamics and molecular rotations in solid hydrogen deuteride: Inelastic neutron scattering study. Physical Review B, 2009, 79, .	1.1	4
153	Evidence for hydrogen transport in deuterated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>LiBH</mml:mtext></mml:mrow><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>from low-temperature Raman-scattering measurements and first-principles calculations. Physical Review B, 2009, 80, .	1.1	37
154	Molecular Vibrations as the Origin of Solid State Effects in Borohydrides. Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	0
155	Time and Frequency Resolved Hydrogen Dynamics in deuterated LiBH₄. Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	0
156	Neutron scattering and hydrogen storage. Materials Today, 2009, 12, 54-61.	8.3	50
157	Vibrational Dynamics of LiBH₄ by Infrared Pumpâ"Probe and 2D Spectroscopy. Journal of Physical Chemistry A, 2009, 113, 12838-12846.	1.1	33
158	Inelastic neutron scattering and DFT study of 1,6-anhydro-Î²-d-glucopyranose (levoglucosan). Journal of Molecular Structure, 2008, 874, 108-120.	1.8	9
159	Hydrogen adsorption strength and sites in the metal organic framework MOF5: Comparing experiment and model calculations. Chemical Physics, 2008, 351, 72-76.	0.9	65
160	Reversible Structural Transition in MIL-53 with Large Temperature Hysteresis. Journal of the American Chemical Society, 2008, 130, 11813-11818.	6.6	402
161	Inelastic neutron scattering from hydrogen clathrate hydrates. Journal of Physics Condensed Matter, 2008, 20, 104242.	0.7	32
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