Stewart F Parker

List of Publications by Year
in descending order

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326	8,281	61984	82547
papers	citations	43 h-index	72 g-index

337	337	337	8949
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct hydrodeoxygenation of raw woody biomass into liquid alkanes. Nature Communications, 2016, 7, 11162.	12.8	359
2	Selective production of arenes via direct lignin upgrading over a niobium-based catalyst. Nature Communications, 2017, 8, 16104.	12.8	346
3	Poisoning and deactivation of palladium catalysts. Journal of Molecular Catalysis A, 2001, 173, 275-286.	4.8	268
4	Unravelling exceptional acetylene and carbon dioxide adsorption within a tetra-amide functionalized metal-organic framework. Nature Communications, 2017, 8, 14085.	12.8	193
5	Breaking the Limit of Lignin Monomer Production via Cleavage of Interunit Carbonâ€“Carbon Linkages. CheM, 2019, 5, 1521-1536.	11.7	167
6	Vibrational Spectroscopy with Neutrons: A Review of New Directions. Applied Spectroscopy, 2011, 65, 1325-1341.	2.2	143
7	Inelastic neutron scattering study of reline: shedding light on the hydrogen bonding network of deep eutectic solvents. Physical Chemistry Chemical Physics, 2017, 19, 17998-18009.	2.8	132
8	Recent and future developments on TOSCA at ISIS. Journal of Physics: Conference Series, 2014, 554, 012003.	0.4	126
9	Hydrogen Spillover on Carbon-Supported Metal Catalysts Studied by Inelastic Neutron Scattering. Surface Vibrational States and Hydrogen Riding Modes. Journal of Physical Chemistry B, 2003, 107, 6838-6845.	2.6	118
10	From soft harmonic phonons to fast relaxational dynamics in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CH</mml:mi><mml:mn>3</mml:mn></mml:msub></mml: Physical Review B, 2015, 92, .	3.2	108
11	Heterolytic and heterotopic dissociation of hydrogen on ceria-supported gold nanoparticles. Combined inelastic neutron scattering and FT-IR spectroscopic study on the nature and reactivity of surface hydrogen species. Chemical Science, 2010, 1, 731.	7.4	99
12	Improved Description of the Surface Acidity of Î·-Alumina. Journal of Physical Chemistry B, 2005, 109, 11592-11601.	2.6	87
13	Spectroscopy and bonding in ternary metal hydride complexesâ€”Potential hydrogen storage media. Coordination Chemistry Reviews, 2010, 254, 215-234.	18.8	84
14	The neutron guide upgrade of the TOSCA spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 896, 68-74.	1.6	84
15	Vibrational dynamics of amorphous ice. Physical Review B, 1999, 59, 3569-3578.	3.2	80
16	The adsorption of atomic hydrogen on Cu(111) investigated by reflection-absorption infrared spectroscopy, electron energy loss spectroscopy and low energy electron diffraction. Surface Science, 1989, 215, 363-377.	1.9	78
17	Topological triplon modes and bound states in a Shastryâ€“Sutherland magnet. Nature Physics, 2017, 13, 736-741.	16.7	70
18	High-Pressure Experimental and DFT-D Structural Studies of the Energetic Material FOX-7. Journal of Physical Chemistry C, 2015, 119, 2322-2334.	3.1	69

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19	Heat-induced Bone Diagenesis Probed by Vibrational Spectroscopy. Scientific Reports, 2018, 8, 15935.	3.3	67
20	Deactivation of a Single-Site Gold-on-Carbon Acetylene Hydrochlorination Catalyst: An X-ray Absorption and Inelastic Neutron Scattering Study. ACS Catalysis, 2018, 8, 8493-8505.	11.2	63
21	Raman Spectrum of Î²-Carotene Using Laser Lines from Green (514.5 nm) to Near-Infrared (1064 nm): Implications for the Characterization of Conjugated Polyenes. Applied Spectroscopy, 1999, 53, 86-91.	2.2	62
22	Investigations of activated carbon catalyst supports from different natural sources. Physical Chemistry Chemical Physics, 2003, 5, 1941-1949.	2.8	62
23	The interaction of alumina with HCl: An infrared spectroscopy, temperature-programmed desorption and inelastic neutron scattering study. Catalysis Today, 2006, 114, 403-411.	4.4	60
24	Understanding the Interactions between Vibrational Modes and Excited State Relaxation in Y_{3â€“x}Ce_xAl₅O₁₂: Design Principles for Phosphors Based on 5dâ€“4f Transitions. Chemistry of Materials, 2018, 30, 1865-1877.	6.7	59
25	Room temperature methoxylation in zeolites: insight into a key step of the methanol-to-hydrocarbons process. Chemical Communications, 2016, 52, 2897-2900.	4.1	58
26	Characterization of Activated Carbon Using X-ray Photoelectron Spectroscopy and Inelastic Neutron Scattering Spectroscopy. Langmuir, 2002, 18, 4667-4673.	3.5	56
27	Assignment of the vibrational spectrum of l-cysteine. Chemical Physics, 2013, 424, 75-79.	1.9	56
28	Experimental and DFT-D Studies of the Molecular Organic Energetic Material RDX. Journal of Physical Chemistry C, 2013, 117, 8062-8071.	3.1	56
29	Vibrational Spectroscopic Analysis of Silicones:Â A Fourier Transform-Raman and Inelastic Neutron Scattering Investigation. Analytical Chemistry, 2003, 75, 742-746.	6.5	55
30	Bone mineral: evidence for hydroxy groups by inelastic neutron scattering. Physical Chemistry Chemical Physics, 2001, 3, 1514-1517.	2.8	54
31	Vibrational neutron spectroscopy of collagen and model polypeptides. Biophysical Journal, 1995, 69, 660-673.	0.5	53
32	High-pressure polymorphism in salicylamide. CrystEngComm, 2010, 12, 1065.	2.6	52
33	AbINS: The modern software for INS interpretation. Physica B: Condensed Matter, 2018, 551, 443-448.	2.7	51
34	Quantification of surface species present on a nickel/alumina methane reforming catalyst. Physical Chemistry Chemical Physics, 2010, 12, 3102.	2.8	50
35	High-Resolution Vibrational Inelastic Neutron Scattering:Â A New Spectroscopic Tool for Globular ProteinsâŠ¥. Journal of the American Chemical Society, 1997, 119, 9268-9273.	13.7	49
36	Inelastic neutron scattering spectra of the longitudinal acoustic modes of the normal alkanes from pentane to pentacosane. Journal of Chemical Physics, 1999, 111, 429-437.	3.0	46

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37	Polymers under extreme two-dimensional confinement: Poly(ethylene oxide) in graphite oxide. Soft Matter, 2011, 7, 7173.	2.7	46
38	Effect of acid pre-treatment on AuPd/SiO₂catalysts for the direct synthesis of hydrogen peroxide. Catalysis Science and Technology, 2013, 3, 812-818.	4.1	45
39	Evidence for a surface gold hydride on a nanostructured gold catalyst. Chemical Communications, 2016, 52, 533-536.	4.1	45
40	An infrared and inelastic neutron scattering spectroscopic investigation on the interaction of Î-alumina and methanol. Physical Chemistry Chemical Physics, 2005, 7, 3093.	2.8	44
41	The Vibrational Spectrum and Ultimate Modulus of Polyethylene. Macromolecules, 2006, 39, 2683-2690.	4.8	44
42	Amides Do Not Always Work: Observation of Guest Binding in an Amide-Functionalized Porous Metalâ€“Organic Framework. Journal of the American Chemical Society, 2016, 138, 14828-14831.	13.7	44
43	Neutron spectroscopy as a tool in catalytic science. Chemical Communications, 2017, 53, 12164-12176.	4.1	44
44	Inelastic Neutron Scattering, Infrared, and Raman Spectroscopic Studies of Mg2FeH6and Mg2FeD6. Inorganic Chemistry, 1997, 36, 5218-5221.	4.0	43
45	Neutron scattering, infra red, Raman spectroscopy and ab initio study of l-threonine. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2001, 57, 2513-2523.	3.9	43
46	Inelastic Neutron Scattering and Raman Spectroscopies and Periodic DFT Studies of Rb2PtH6and Rb2PtD6. Journal of the American Chemical Society, 2003, 125, 11656-11661.	13.7	43
47	In situ spectroscopic investigation of oxidative dehydrogenation and disproportionation of benzyl alcohol. Physical Chemistry Chemical Physics, 2013, 15, 12147.	2.8	43
48	The effect of particle size, morphology and support on the formation of palladium hydride in commercial catalysts. Chemical Science, 2019, 10, 480-489.	7.4	43
49	Characterisation of the adsorption sites of hydrogen on Pt/C fuel cell catalysts. Catalysis Today, 2006, 114, 418-421.	4.4	42
50	Hydrogen Bonding in Amorphous Calcium Carbonate and Molecular Reorientation Induced by Dehydration. Journal of Physical Chemistry C, 2018, 122, 3591-3598.	3.1	42
51	Application of inelastic neutron scattering to studies of CO2 reforming of methane over alumina-supported nickel and gold-doped nickel catalysts. Physical Chemistry Chemical Physics, 2012, 14, 15214.	2.8	40
52	A molecular view of cisplatin's mode of action: interplay with DNA bases and acquired resistance. Physical Chemistry Chemical Physics, 2015, 17, 5155-5171.	2.8	39
53	How Phonons Govern the Behavior of Short, Strong Hydrogen Bonds in Ureaâ˜Phosphoric Acid. Journal of the American Chemical Society, 2006, 128, 2963-2969.	13.7	38
54	Simultaneous Neutron Scattering and Raman Scattering. Applied Spectroscopy, 2009, 63, 727-732.	2.2	38

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55	The role of hydroxyl groups in low temperature carbon monoxide oxidation. Chemical Communications, 2011, 47, 1988.	4.1	38
56	Methanol diffusion in zeolite HY: a combined quasielastic neutron scattering and molecular dynamics simulation study. Physical Chemistry Chemical Physics, 2016, 18, 17294-17302.	2.8	38
57	Short-range structure of the brownmillerite-type oxide Ba₂In₂O₅and its hydrated proton-conducting form BaInO₃H. Journal of Materials Chemistry A, 2014, 2, 16915-16924.	10.3	37
58	Neutron Scattering Studies of Vapor Deposited Amorphous Ice. Physical Review Letters, 1997, 79, 1869-1872.	7.8	36
59	Inelastic neutron scattering spectroscopy of amino acids. Spectroscopy, 2008, 22, 297-307.	0.8	34
60	Characterization of Hydrous Palladium Oxide: Implications for Low-Temperature Carbon Monoxide Oxidation. Journal of Physical Chemistry C, 2010, 114, 14164-14172.	3.1	34
61	Polymorphism in Cisplatin Anticancer Drug. Journal of Physical Chemistry B, 2013, 117, 6421-6429.	2.6	34
62	An assessment of hydrocarbon species in the methanol-to-hydrocarbon reaction over a ZSM-5 catalyst. Faraday Discussions, 2017, 197, 447-471.	3.2	34
63	A spectroscopic study of the structure of amorphous hydrogenated carbon. Journal of Physics Condensed Matter, 1995, 7, 10059-10073.	1.8	33
64	Characterization of Î²-Palladium Hydride Formation in the Lindlar Catalyst and in Carbon-Supported Palladium. Journal of Physical Chemistry C, 2011, 115, 24485-24493.	3.1	33
65	The application of inelastic neutron scattering to investigate CO hydrogenation over an iron Fischerâ€“Tropsch synthesis catalyst. Journal of Catalysis, 2014, 312, 221-231.	6.2	33
66	Inelastic Neutron Scattering Investigation of the Nature of Surface Sites Occupied by Hydrogen on Highly Dispersed Platinum on Commercial Carbon Black Supports. Journal of Catalysis, 2000, 196, 174-179.	6.2	32
67	Incoherent inelastic neutron scattering measurements on ice VII: Are there two kinds of hydrogen bonds in ice?. Europhysics Letters, 2005, 72, 576-582.	2.0	32
68	Quantum Delocalization of Molecular Hydrogen in Alkali-Graphite Intercalates. Physical Review Letters, 2008, 101, 126101.	7.8	32
69	Complete assignment of the vibrational modes of C60 by inelastic neutron scattering spectroscopy and periodic-DFT. Physical Chemistry Chemical Physics, 2011, 13, 7789.	2.8	32
70	Inelastic Neutron Scattering Study of Pt II Complexes Displaying Anticancer Properties. ChemPhysChem, 2011, 12, 1334-1341.	2.1	31
71	Phonon driven proton transfer in crystals with short strong hydrogen bonds. Journal of Chemical Physics, 2006, 124, 234503.	3.0	30
72	Sample environment issues relevant to the acquisition of inelastic neutron scattering measurements of heterogeneous catalyst samples. Journal of Physics: Conference Series, 2014, 554, 012005.	0.4	30

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73	Understanding the Role of Molecular Diffusion and Catalytic Selectivity in Liquid-Phase Beckmann Rearrangement. ACS Catalysis, 2017, 7, 2926-2934.	11.2	30
74	Vibrational spectroscopy of N-phenylmaleimide. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 63, 544-549.	3.9	29
75	New fundamental experimental studies on Î±-Mg(BH4)2 and other borohydrides. Journal of Alloys and Compounds, 2011, 509, S688-S690.	5.5	29
76	The application of inelastic neutron scattering to investigate the â€˜dryâ€™ reforming of methane over an alumina-supported nickel catalyst operating under conditions where filamentous carbon formation is prevalent. RSC Advances, 2013, 3, 16577-16589.	3.6	29
77	Fourier Transform Raman and infrared spectroscopy of N-phenylmaleimide and methylene dianiline bismaleimide. Spectrochimica Acta Part A: Molecular Spectroscopy, 1990, 46, 315-321.	0.1	28
78	The adsorption and decomposition of silane on Cu(111). Surface Science, 1990, 225, 273-280.	1.9	28
79	INS-, SIMS- and XPS-investigation of diesel engine exhaust particles. Physical Chemistry Chemical Physics, 2000, 2, 1051-1058.	2.8	28
80	Vibrational spectroscopy of tetrahedral ternary metal hydrides: Mg2NiH4, Rb3ZnH5 and their deuteridesElectronic supplementary information (ESI) available: Force constants for the [ZnH4]2â€“ ion in D2d symmetry (Table S1) and the [NiH4]2â€“ ion in C1 symmetry (Table S2). See http://www.rsc.org/suppdata/cp/b1/b109975b/. Physical Chemistry Chemical Physics, 2002, 4, 1732-1737.	2.8	28
81	Persistent species formed during the carbon dioxide reforming of methane over a nickelâ€“alumina catalyst. Catalysis Today, 2010, 155, 319-325.	4.4	28
82	Structural and spectroscopic studies of a commercial glassy carbon. Chemical Physics, 2013, 427, 44-48.	1.9	28
83	The application of inelastic neutron scattering to investigate the steam reforming of methane over an alumina-supported nickel catalyst. Chemical Physics, 2013, 427, 54-60.	1.9	28
84	Characterization of the Hydrides in Strykerâ€™s Reagent: [HCu{P(C₆H₅)₃}]₆. Inorganic Chemistry, 2014, 53, 2963-2967.	4.0	28
85	mathvariant="normal">O</mml:mi><mml:mtext>â^’</mml:mtext><mml:mi mathvariant="normal">H</mml:mi></mml:mrow></mml:math>wag vibrations in hydrated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>Baln</mml:mi><mml:mi mathvariant="bold-italic">x</mml:mi></mml:msub><mml:msub><mml:mi>Zr</mml:mi><mml:mrow><mml:mn	3.2	27
86	How the Surface Structure Determines the Properties of CuH. Inorganic Chemistry, 2015, 54, 2213-2220.	4.0	27
87	An in-depth understanding of the bimetallic effects and coked carbon species on an active bimetallic Ni(Co)/Al₂O₃dry reforming catalyst. Physical Chemistry Chemical Physics, 2016, 18, 17311-17319.	2.8	27
88	Structure and vibrational spectroscopy of methanesulfonic acid. Royal Society Open Science, 2018, 5, 181363.	2.4	27
89	Potential of Bioapatite Hydroxyls for Research on Archeological Burned Bone. Analytical Chemistry, 2018, 90, 11556-11563.	6.5	27
90	Fourier Transform Raman Spectroscopy Using a Bench-Top FT-IR Spectrometer. Applied Spectroscopy, 1988, 42, 796-800.	2.2	26

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91	Inelastic neutron scattering spectra of polyethylene. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 1941.	1.7	26
92	Inelastic neutron scattering, IR and Raman spectroscopic studies of Mg2CoH5 and Mg2CoD5. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2595-2599.	1.7	26
93	Neutron spectroscopic study of hydrogen bonding dynamics in l-serine. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 2897-2904.	3.9	26
94	Identification of Surface States on Finely Divided Supported Palladium Catalysts by Means of Inelastic Incoherent Neutron Scattering. Langmuir, 2004, 20, 8254-8260.	3.5	26
95	Investigation of the Adsorption of Methanol on Alkali Metal Cation Exchanged Zeolite X by Inelastic Neutron Scattering. Journal of Physical Chemistry B, 2004, 108, 7902-7910.	2.6	26
96	Inelastic Neutron Scattering Studies of Methyl Chloride Synthesis over Alumina. Accounts of Chemical Research, 2014, 47, 1220-1227.	15.6	26
97	Different routes to methanol: inelastic neutron scattering spectroscopy of adsorbates on supported copper catalysts. Physical Chemistry Chemical Physics, 2016, 18, 17253-17258.	2.8	26
98	Electronâ€“Phonon Coupling in Luminescent Europium-Doped Hydride Perovskites Studied by Luminescence Spectroscopy, Inelastic Neutron Scattering, and First-Principles Calculations. Journal of Physical Chemistry C, 2018, 122, 10501-10509.	3.1	26
99	Comparison of two multifunctional catalysts [M/Nb₂O₅ (M = Pd, Pt)] for one-pot hydrodeoxygenation of lignin. Catalysis Science and Technology, 2018, 8, 6129-6136.	4.1	26
100	Spectroscopic and Ab Initio Characterization of the [ReH9]2-Ion. Inorganic Chemistry, 2006, 45, 10951-10957.	4.0	25
101	Inelastic Neutron Scattering Study of Water in Hydrated LTA-Type Zeolites. Journal of Physical Chemistry A, 2006, 110, 1190-1195.	2.5	25
102	Inelastic Incoherent Neutron Scattering in Catalysis Research. Advances in Catalysis, 2007, , 99-132.	0.2	25
103	Vibrational Analysis of an Industrial Feâ€Based Fischerâ€“Tropsch Catalyst Employing Inelastic Neutron Scattering. Angewandte Chemie - International Edition, 2013, 52, 5608-5611.	13.8	25
104	Adsorption of formate species on Cu(h,k,l) low index surfaces. Surface Science, 2016, 653, 45-54.	1.9	25
105	Inelastic neutron scattering investigation on the site occupation of atomic hydrogen on platinum particles of different size. Journal of Catalysis, 2004, 223, 44-53.	6.2	24
106	Infrared, Raman, and Inelastic Neutron Scattering Spectra of Dodecahedrane:Â anIhMolecule inThSite Symmetry. Journal of Physical Chemistry A, 2005, 109, 3418-3424.	2.5	24
107	Experimental arrangements suitable for the acquisition of inelastic neutron scattering spectra of heterogeneous catalysts. Review of Scientific Instruments, 2011, 82, 034101.	1.3	24
108	Assignment of the vibrational spectra of lithium hydroxide monohydrate, LiOHÂ·H2O. Journal of Chemical Physics, 2011, 134, 084503.	3.0	24

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109	Structure and dehydration mechanism of the proton conducting oxide Ba₂In₂O₅(H₂O)_x. Journal of Materials Chemistry A, 2016, 4, 1224-1232.	10.3	24
110	Hydrodeoxygenation of Guaiacol as a Bio-Oil Model Compound over Pillared Clay-Supported Nickelâ€“Molybdenum Catalysts. Journal of Physical Chemistry C, 2019, 123, 21429-21439.	3.1	24
111	Local structure and vibrational dynamics in indium-doped barium zirconate. Journal of Materials Chemistry A, 2019, 7, 7360-7372.	10.3	24
112	Profiling of human burned bones: oxidising versus reducing conditions. Scientific Reports, 2021, 11, 1361.	3.3	24
113	Iron benzene reactions: A matrix isolation MÃ¶ssbauer investigation. Journal of Organometallic Chemistry, 1984, 272, 411-416.	1.8	23
114	Conformational insights and vibrational study of a promising anticancer agent: the role of the ligand in Pd(<scp>II</scp>)â€“amine complexes. New Journal of Chemistry, 2015, 39, 6274-6283.	2.8	23
115	Molecular orientational melting within a lead-halide octahedron framework: The order-disorder transition in CH3NH3PbBr3. Physical Review B, 2017, 96, .	3.2	23
116	The effects of MTG catalysis on methanol mobility in ZSM-5. Catalysis Science and Technology, 2018, 8, 3304-3312.	4.1	23
117	Adsorbed States of Hydrogen on Platinum: A New Perspective. Chemistry - A European Journal, 2019, 25, 6496-6499.	3.3	23
118	Control of zeolite microenvironment for propene synthesis from methanol. Nature Communications, 2021, 12, 822.	12.8	23
119	Rotational dynamics of methyl groups in durene: A crystallographic, spectroscopic, and molecular mechanics investigation. Journal of Chemical Physics, 1999, 110, 516-527.	3.0	22
120	INS and IR and NMR Spectroscopic Study of C1â^'C4 Alcohols Adsorbed on Alkali Metal-Exchanged Zeolite X. Journal of Physical Chemistry B, 2004, 108, 15013-15026.	2.6	22
121	Vibrational spectra of synthetic crandallite-type mineralsâ€”optical and inelastic neutron scattering spectra. Journal of Raman Spectroscopy, 2006, 37, 208-216.	2.5	22
122	Characterisation of carbon supported platinum-ruthenium fuel cell catalysts of different degree of alloying. Surface Science, 2008, 602, 3611-3616.	1.9	22
123	Structure determination of adsorbed hydrogen on a real catalyst. Chemical Communications, 2010, 46, 2959.	4.1	22
124	The fine structure of Pearlman's catalyst. Physical Chemistry Chemical Physics, 2015, 17, 5274-5278.	2.8	22
125	Vibrational spectroscopy with neutrons: Recent developments. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 190, 518-523.	3.9	22
126	Band vs. polaron: vibrational motion and chemical expansion of hydride ions as signatures for the electronic character in oxyhydride barium titanate. Journal of Materials Chemistry A, 2019, 7, 16211-16221.	10.3	22

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127	The Vibrational Inelastic Neutron Scattering Spectrum of Dodecahedrane: Experiment and DFT Simulation. Angewandte Chemie - International Edition, 2000, 39, 514-516.	13.8	21
128	Osteometrics in burned human skeletal remains by neutron and optical vibrational spectroscopy. RSC Advances, 2016, 6, 68638-68641.	3.6	21
129	A review of the theory of Fourier-transform Raman spectroscopy. Spectrochimica Acta Part A: Molecular Spectroscopy, 1994, 50, 1841-1856.	0.1	20
130	Vibrational spectroscopy of N-methylmaleimide. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1995, 51, 2067-2072.	3.9	20
131	Inelastic neutron scattering spectra of the transverse acoustic modes of the normal alkanes. Physical Chemistry Chemical Physics, 2002, 4, 716-721.	2.8	20
132	Vibrational Properties of Polyanionic Hydrides SrAl₂H₂ and SrAlSiH:â€‰ New Insights into Alâ^'H Bonding Interactions. Inorganic Chemistry, 2007, 46, 6987-6991.	4.0	20
133	Full Longitudinal Acoustic Mode (LAM) Spectrum of an N-Alkane:â€‰ Comparison of Observed and Computed Incoherent Inelastic Neutron Scattering Spectrum of N-Octadecane. Journal of Physical Chemistry B, 1998, 102, 5955-5956.	2.6	19
134	Interaction of thiophene with a molybdenum disulfide catalystâ€"an inelastic neutron scattering study. Physical Chemistry Chemical Physics, 1999, 1, 3357-3363.	2.8	19
135	Influence of Particle Size and Water Coverage on the Thermodynamic Properties of Water Confined on the Surface of SnO₂ Cassiterite Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 21105-21112.	3.1	19
136	Monte carlo simulations of the TOSCA spectrometer: Assessment of current performance and future upgrades. EPJ Web of Conferences, 2015, 83, 03013.	0.3	19
137	An investigation of the effect of carbon support on ruthenium/carbon catalysts for lactic acid and butanone hydrogenation. Physical Chemistry Chemical Physics, 2016, 18, 17259-17264.	2.8	19
138	First analysis of ancient burned human skeletal remains probed by neutron and optical vibrational spectroscopy. Science Advances, 2019, 5, eaaw1292.	10.3	19
139	Chemosteometric regression models of heat exposed human bones to determine their preâ€burnt metric dimensions. American Journal of Physical Anthropology, 2020, 173, 734-747.	2.1	19
140	Neutrons for Cultural Heritageâ€"Techniques, Sensors, and Detection. Sensors, 2020, 20, 502.	3.8	19
141	Inelastic neutron scattering of large molecular systems: The case of the original benzylic amide [2]catenane. Journal of Chemical Physics, 1998, 109, 11094-11100.	3.0	18
142	Inelastic neutron scattering of model compounds for surface formates Potassium formate, copper formate and formic acid. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2569-2575.	1.7	17
143	Adsorbed states of dihydrogen on a carbon supported ruthenium catalyst Inelastic neutron scattering study. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 1489-1493.	1.7	17
144	INS-, XPS- and SIMS-investigations on the controlled post-oxidation of pigment blacks. Carbon, 2001, 39, 1663-1676.	10.3	17

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145	Vibrational dynamics and phonon dispersion of polycrystalline ice XII and of high-density amorphous ice. Physical Review B, 2008, 77, .	3.2	17
146	Vibrational Spectra of Triiodomesitylene: Combination of DFT Calculations and Experimental Studies. Effects of the Environment. Journal of Physical Chemistry A, 2008, 112, 11124-11141.	2.5	17
147	The application of inelastic neutron scattering to explore the significance of a magnetic transition in an iron based Fischer-Tropsch catalyst that is active for the hydrogenation of CO. Journal of Chemical Physics, 2015, 143, 174703.	3.0	17
148	Investigation of ZSM-5 catalysts for dimethylether conversion using inelastic neutron scattering. Applied Catalysis A: General, 2019, 569, 1-7.	4.3	17
149	Water in Deep Eutectic Solvents: New Insights From Inelastic Neutron Scattering Spectroscopy. Frontiers in Physics, 2022, 10, .	2.1	17
150	An inelastic neutron scattering spectroscopic investigation of the adsorption of ethene and propene on carbon. Physical Chemistry Chemical Physics, 2000, 2, 4447-4451.	2.8	16
151	Inelastic neutron scattering, Raman spectroscopy and periodic DFT study of purine. Vibrational Spectroscopy, 2004, 35, 173-177.	2.2	16
152	The vibrational spectrum of indole: An inelastic neutron scattering study. Chemical Physics, 2008, 345, 230-238.	1.9	16
153	The thermodynamic properties of hydrated Î³-Al2O3 nanoparticles. Journal of Chemical Physics, 2013, 139, 244705.	3.0	16
154	Hydrogen motions in defective graphene: the role of surface defects. Physical Chemistry Chemical Physics, 2016, 18, 24820-24824.	2.8	16
155	Application of Inelastic Neutron Scattering to the Methanol-to-Gasoline Reaction Over a ZSM-5 Catalyst. Catalysis Letters, 2016, 146, 1242-1248.	2.6	16
156	Examining the temporal behavior of the hydrocarbonaceous overlayer on an iron based Fischerâ€“Tropsch catalyst. RSC Advances, 2019, 9, 2608-2617.	3.6	16
157	The characterisation of commercial 2D carbons: graphene, graphene oxide and reduced graphene oxide. Materials Advances, 2022, 3, 2810-2826.	5.4	16
158	Analysis of Carbon Black-Filled Polymers by Vibrational Spectroscopy. Applied Spectroscopy, 1994, 48, 669-673.	2.2	15
159	Structure and Dynamics of Maleic Anhydride. Journal of Physical Chemistry A, 2001, 105, 3064-3070.	2.5	15
160	Inelastic neutron scattering studies of hydrogen on fuel cell catalysts. Vibrational Spectroscopy, 2004, 35, 179-182.	2.2	15
161	Inelastic incoherent neutron scattering study of the molecular properties of pure hydrogen peroxide and its water mixtures of different concentration. Journal of Chemical Physics, 2014, 140, 164504.	3.0	15
162	Understanding the Role of Designed Solid Acid Sites in the Lowâ€Temperature Production of Ïµâ€Caprolactam. ChemCatChem, 2017, 9, 1897-1900.	3.7	15

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163	Vibrational spectroscopy of metal methanesulfonates: Mâ€‰=â€‰Na, Cs, Cu, Ag, Cd. Royal Society Open Science, 2018, 5, 171574.	2.4	15
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