## Richard M Ibberson

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7184778/publications.pdf

Version: 2024-02-01

116 papers 5,648 citations

38 h-index 79698 73 g-index

127 all docs

127 docs citations

127 times ranked

6045 citing authors

#	Article	IF	CITATIONS
1	Selection of silicon photomultipliers for a < sup > 6 < / sup > LiF: ZnS(Ag) scintillator based cold neutron detector. Journal of Physics Communications, 2018, 2, 045009.	1.2	8
2	Optimization ofÂ6LiF:ZnS(Ag) scintillator light yield using GEANT4. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 892, 59-69.	1.6	20
3	Spin glass behavior in frustrated quantum spin system CuAl <sub>2</sub> O <sub>4</sub> with a possible orbital liquid state. Journal of Physics Condensed Matter, 2017, 29, 13LT01.	1.8	27
4	The effect of temperature and pressure on the crystal structure of piperidine. Chemistry Central Journal, 2015, 9, 18.	2.6	17
5	Experimental characterization of the Advanced Liquid Hydrogen Cold Neutron Source spectrum of the NBSR reactor at the NIST Center for Neutron Research. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 792, 15-27.	1.6	7
6	Polychromatic energy-dispersive neutron diffraction at a continuous source. Journal of Applied Crystallography, 2013, 46, 1347-1352.	4.5	5
7	Does the modulated magnetic structure of BiFeO3change at low temperatures?. Journal of Physics Condensed Matter, 2011, 23, 279501.	1.8	3
8	Structure determination of α-La6W2O15. Journal of Solid State Chemistry, 2010, 183, 1297-1302.	2.9	19
9	A novel isomorphic phase transition in $\hat{l}^2$ -pyrochlore oxide KOs2O6: a study using high resolution neutron powder diffraction. Journal of Physics Condensed Matter, 2010, 22, 015403.	1.8	9
10	Isotopic Polymorphism in Pyridine. Angewandte Chemie - International Edition, 2009, 48, 755-757.	13.8	81
11	Structure and Phase Behavior of the Expandedâ€Metal Compound <sup>7</sup> Li(ND <sub>3</sub> ) <sub>4</sub> . Angewandte Chemie - International Edition, 2009, 48, 1435-1438.	13.8	18
12	Design and performance of the new supermirror guide on HRPD at ISIS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 600, 47-49.	1.6	64
13	Ab-initio structure determination of β-La2WO6. Journal of Solid State Chemistry, 2009, 182, 209-214.	2.9	26
14	Temperature- and Pressure-Induced Proton Transfer in the 1:1 Adduct Formed between Squaric Acid and 4,4 $\hat{a}$ $\in$ 2-Bipyridine. Journal of the American Chemical Society, 2009, 131, 3884-3893.	13.7	82
15	Accurate molecular structures of chlorothiazide and hydrochlorothiazide by joint refinement against powder neutron and X-ray diffraction data. Acta Crystallographica Section B: Structural Science, 2008, 64, 101-107.	1.8	15
16	Solid-state structures of the covalent hydrides germane and stannane. Acta Crystallographica Section B: Structural Science, 2008, 64, 312-317.	1,8	14
17	Polymorphism in cyclohexanol. Acta Crystallographica Section B: Structural Science, 2008, 64, 573-582.	1.8	32
18	<i>ExtSym</i> : a program to aid space-group determination from powder diffraction data. Journal of Applied Crystallography, 2008, 41, 1177-1181.	4.5	27

#	Article	IF	CITATIONS
19	ls Deuterium Always Smaller than Protium?. Angewandte Chemie - International Edition, 2008, 47, 4208-4210.	13.8	66
20	Structural origins of the differing grain conductivity values in BaZr0.9Y0.1O2.95 and indication of novel approach to counter defect association. Journal of Materials Chemistry, 2008, 18, 3414.	6.7	88
21	Structure and superconductivity of LiFeAs. Chemical Communications, 2008, , 5918.	4.1	278
22	Solid Phases of Cyclopentane:  Combined Experimental and Simulation Study. Journal of Physical Chemistry B, 2008, 112, 3746-3758.	2.6	39
23	Alloxanâ€"a new low-temperature phase determined by neutron powder diffraction. CrystEngComm, 2008, 10, 465.	2.6	11
24	Crystal Structures and Glassy Phase Transition Behavior of Cyclohexene. Crystal Growth and Design, 2008, 8, 512-518.	3.0	20
25	Charge disproportionation and collinear magnetic order in the frustrated triangular antiferromagnet <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>AgNiO</mml:mtext></mml:mrow><mml:n 2008,="" 77<="" b,="" physical="" review="" td=""><td>າn&gt;32²<td>nl:mħ&gt;</td></td></mml:n></mml:msub></mml:mrow></mml:math>	າn>32² <td>nl:mħ&gt;</td>	nl:mħ>
26	Temperature-dependent crystal structure analysis of methyl iodide by high-resolution neutron powder diffraction. Zeitschrift Für Kristallographie, 2007, 222, 416-419.	1.1	6
27	Processing control of phase separation, cation ordering, and the dielectric properties of Ba3(Co0.6Zn0.4)Nb2O9. Applied Physics Letters, 2007, 91, 142906.	3.3	11
28	Orbital Degeneracy Removed by Charge Order in Triangular Antiferromagnet <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>AgNiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> . Physical Review Letters, 2007, 99, 157204.	7.8	58
29	Charge Ordering as Alternative to Jahn-Teller Distortion. Physical Review Letters, 2007, 98, .	7.8	241
30	High-Temperature Processing of Ba <sub>3</sub> ZnTa <sub>2</sub> O <sub>9</sub> :  an In situ Study Using Synchrotron X-ray Powder Diffraction. Chemistry of Materials, 2007, 19, 4731-4740.	6.7	15
31	Oxygen Vacancy Ordering Phenomena in the Mixed-Conducting Hexagonal Perovskite Ba7Y2Mn3Ti2O20. Chemistry of Materials, 2007, 19, 2884-2893.	6.7	36
32	Cation ordering/disordering kinetics in Ba3CoNb2O9: An in situ study using synchrotron x-ray powder diffraction. Applied Physics Letters, 2007, 91, 222901.	3.3	15
33	Tetragonal superstructure and thermal history of Li0.3La0.567TiO3 (LLTO) solid electrolyte by neutron diffraction. Journal of Materials Chemistry, 2007, 17, 1300.	6.7	48
34	Neutron powder diffraction study of perdeuterodimethyl sulfone. Acta Crystallographica Section C: Crystal Structure Communications, 2007, 63, o292-o294.	0.4	4
35	Crystal structure, microwave dielectric properties and AC conductivity of B-cation deficient hexagonal perovskites La5MxTi4–xO15 (x = 0.5, 1; M = Zn, Mg, Ga, Al). Journal of Materials Chemistry, 2006, 16, 1038.	6.7	43
36	Neutron Diffraction Studies of U4O9: Comparison with EXAFS Results. Inorganic Chemistry, 2006, 45, 8408-8413.	4.0	37

#	Article	IF	CITATIONS
37	New 10-Layer Hexagonal Perovskites: Relationship between Cation and Vacancy Ordering and Microwave Dielectric Loss. Chemistry of Materials, 2006, 18, 6227-6238.	6.7	28
38	Single-crystal X-ray and neutron powder diffraction investigation of the phase transition in tetrachlorobenzene. Acta Crystallographica Section B: Structural Science, 2006, 62, 287-295.	1.8	21
39	Structure determination and phase transition behaviour of dimethyl sulfate. Acta Crystallographica Section B: Structural Science, 2006, 62, 280-286.	1.8	5
40	Structure of Ce2RhIn8: an example of complementary use of high-resolution neutron powder diffraction and reciprocal-space mapping to study complex materials. Acta Crystallographica Section B: Structural Science, 2006, 62, 173-189.	1.8	30
41	The low-temperature phase III structure and phase transition behaviour of cyclohexanone. Acta Crystallographica Section B: Structural Science, 2006, 62, 592-598.	1.8	8
42	Order–disorder transition in monoclinic sulfur: a precise structural study by high-resolution neutron powder diffraction. Acta Crystallographica Section B: Structural Science, 2006, 62, 953-959.	1.8	14
43	In Situ Neutron and X-Ray Powder Diffraction Study of Cation Ordering and Domain Growth in the Dielectric Ceramic Ba3ZnTa2O9-Sr2GaTaO6. Journal of the American Ceramic Society, 2006, 89, 1827-1833.	3.8	6
44	Spin gap in Tl2Ru2O7 and the possible formation of Haldane chains in three-dimensional crystals. Nature Materials, 2006, 5, 471-476.	27.5	109
45	The crystal structures and phase behaviour of cyclohexene oxide. Chemical Physics Letters, 2006, 423, 454-458.	2.6	5
46	Does the modulated magnetic structure of BiFeO3change at low temperatures?. Journal of Physics Condensed Matter, 2006, 18, 2069-2075.	1.8	61
47	Charge ordering in Ag2BiO3. Solid State Sciences, 2006, 8, 267-276.	3.2	9
48	A neutron powder diffraction study of Fe and Ni distributions in synthetic pentlandite and violarite using 60Ni isotope. American Mineralogist, 2006, 91, 1442-1447.	1.9	23
49	Neutorn powder diffraction. , 2006, , 88-97.		2
50	Ba8CoNb6O24: A d0 Dielectric Oxide Host Containing Ordered d7 Cation Layers 1.88 nm Apart. Angewandte Chemie - International Edition, 2005, 44, 7733-7736.	13.8	33
51	Neutron powder diffraction studies of dimethyl sulfoxide. Acta Crystallographica Section C: Crystal Structure Communications, 2005, 61, o571-o573.	0.4	7
52	Probing the vortex state of PrRu4Sb12through muon spin rotation and relaxation. Physical Review B, 2005, 72, .	3.2	24
53	Variable temperature neutron powder diffraction study to determine the magnetic interactions in Sr2LnRuO6(Ln = Ho and Tb). Journal of Physics Condensed Matter, 2004, 16, 7611-7624.	1.8	17
54	Extensive lithium disorder in Li1.5Fe0.5Ti1.5(PO4)3Nasicon by neutron diffraction, and the Li1+xFexTi2â^'x(PO4)3phase diagram. Journal of Materials Chemistry, 2004, 14, 835-839.	6.7	50

#	Article	IF	CITATIONS
55	Orderâ€"Disorder of the Hydronium Ion and Low-Temperature Phase Transition of (H3O)Zr2(PO4)3 NASICON by Neutron Diffraction ChemInform, 2003, 34, no.	0.0	0
56	Ordering and quality factor in 0.95BaZn1/3Ta2/3O3–0.05SrGa1/2Ta1/2O3 production resonators. Journal of the European Ceramic Society, 2003, 23, 3021-3034.	5.7	42
57	Cuboctahedral oxygen clusters in U3O7. Journal of Nuclear Materials, 2003, 322, 87-89.	2.7	48
58	In Situ Measurement of Cation Order and Domain Growth in an Electroceramic. Chemistry of Materials, 2003, 15, 2527-2533.	6.7	32
59	Cation Ordering, Domain Growth, and Zinc Loss in the Microwave Dielectric Oxide Ba3ZnTa2O9-δ. Chemistry of Materials, 2003, 15, 586-597.	6.7	85
60	In situ neutron diffraction studies of single crystals and powders during microwave irradiation. Faraday Discussions, 2003, 122, 363-379.	3.2	34
61	The crystal structure of methane phase III. Journal of Chemical Physics, 2003, 119, 1586-1589.	3.0	51
62	Ba8ZnTa6O24: a high-Q microwave dielectric from a potentially diverse homologous series. Applied Physics Letters, 2003, 82, 4537-4539.	3.3	68
63	Deprotonation and order-disorder reactions as a function of temperature in a phengite 3T (Cima Pal,) Tj ETQq1 1 2003, 15, 357-363.	0.784314 ı 1.3	rgBT /Overlo 14
64	The crystal structure of \$gamma\$-phase p-dichlorobenzene at low temperature and high pressure by high-resolution neutron powder diffraction. Journal of Physics Condensed Matter, 2002, 14, 7287-7295.	1.8	2
65	Evaluation of a position sensitive neutron detector based on Li 6 Gd(BO 3 ) 3 scintillator., 2002,,.		6
66	Structural Characterization of the Redox Behavior in Copper-Exchanged Sodium Zeolite Y by High-Resolution Powder Neutron Diffraction. Chemistry of Materials, 2002, 14, 590-602.	6.7	74
67	Orderâ^'Disorder of the Hydronium Ion and Low-Temperature Phase Transition of (H3O)Zr2(PO4)3 NASICON by Neutron Diffraction. Journal of Physical Chemistry B, 2002, 106, 11916-11921.	2.6	15
68	The Crystal Structures of the Binary Mixed Valence Compound Bi(III)3Bi(V)O7 and Isotypic Bi3SbO7 as Determined by High Resolution X-Ray and Neutron Powder Diffraction. Journal of Solid State Chemistry, 2002, 163, 332-339.	2.9	19
69	Comparison of the crystal structure of the heavy-fermion materials CeCoIn 5 , CeRhIn 5 and CeIrIn 5. Applied Physics A: Materials Science and Processing, 2002, 74, s895-s897.	2.3	32
70	Formation of isomorphic Ir3+ and Ir4+ octamers and spin dimerization in the spinel Culr2S4. Nature, 2002, 416, 155-158.	27.8	315
71	Polymeric fullerene chains in RbC60 and KC60. Chemical Physics Letters, 2001, 347, 13-22.	2.6	22
72	Powder diffraction study on solid ozone. Solid State Sciences, 2001, 3, 195-202.	3.2	18

#	Article	IF	CITATIONS
73	Phase inhomogeneities and lattice expansion nearTcin the Mg11B2superconductor. Journal of Physics Condensed Matter, 2001, 13, L795-L802.	1.8	15
74	Order–Disorder and Mobility of Li+ in the β′- and β-LiZr2(PO4)3 Ionic Conductors: A Neutron Diffraction Study. Journal of Solid State Chemistry, 2000, 152, 340-347.	2.9	46
75	Crystal structures and phase behaviour of acetaldehyde-d4: a study by high-resolution neutron powder diffraction and calorimetry. Journal of Molecular Structure, 2000, 520, 265-272.	3.6	8
76	The crystal structures of m -xylene and p -xylene, C 8 D $10$ , at 4.5 K. Journal of Molecular Structure, 2000, 524, 121-128.	3.6	15
77	Neutron scattering studies of phase segregation in Pr0.7Ca0.3MnO3. Physica B: Condensed Matter, 2000, 276-278, 551-553.	2.7	14
78	Distortion of Host Lattice in Clathrate Hydrate as a Function of Guest Molecule and Temperature. Journal of Physical Chemistry A, 2000, 104, 10623-10630.	2.5	68
79	Neutron diffraction study on hydrogen bond structure in K3H(SeO4)2and K3D(SeO4)2crystals. Journal of Physics Condensed Matter, 2000, 12, 8559-8565.	1.8	24
80	Low-Temperature Oxygen Migration and Negative Thermal Expansion in ZrW2-xMoxO8. Journal of the American Chemical Society, 2000, 122, 8694-8699.	13.7	88
81	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
82	Structure of the Trimethylaluminum Dimer As Determined by Powder Neutron Diffraction at Low Temperature. Organometallics, 2000, 19, 4398-4401.	2.3	61
83	Neutron powder and ab initio structure of ortho-xylene: the influence of crystal packing on phenyl ring geometry at 2 K. Chemical Communications, 2000, , 539-540.	4.1	8
84	Lithium location in NASICON-type Li+ conductors by neutron diffraction. I. Triclinic α′-LiZr2(PO4)3. Solid State Ionics, 1999, 123, 173-180.	2.7	104
85	The influence of pressure and temperature on the crystal structure of acetone. Chemical Communications, 1999, , 751-752.	4.1	70
86	Structural behavior, crystal chemistry, and phase transitions in substituted leucite; high-resolution neutron powder diffraction studies. American Mineralogist, 1997, 82, 16-29.	1.9	117
87	Time-of-flight neutron diffraction study on the cryolite type phases of Li6NBr3. Journal of Alloys and Compounds, 1997, 261, 123-131.	5.5	11
88	The crystal structure determination of dimethylsulphide by high-resolution neutron powder diffraction. Journal of Molecular Structure, 1997, 415, 259-266.	3.6	8
89	Cation site ordering in phengite 3T from the Dora-Maira massif (western Alps): a variable-temperature neutron powder diffraction study. European Journal of Mineralogy, 1997, 9, 1183-1190.	1.3	51
90	The lattice evolution of the spin-Peierls material CuGeO3 studied by neutron scattering. Physica B: Condensed Matter, 1995, 213-214, 288-290.	2.7	10

#	Article	IF	CITATIONS
91	Neutron scattering study of K1â^'x(NH4)xH2PO4 mixed crystals. Physica B: Condensed Matter, 1995, 213-214, 390-392.	2.7	0
92	Phase transitions of scandium triacetate. Physica B: Condensed Matter, 1995, 213-214, 402-404.	2.7	0
93	A neutron-diffraction study of tetrahydrofuran and acetone clathrate hydrates. Physica B: Condensed Matter, 1995, 213-214, 405-407.	2.7	36
94	Critical phenomenon in a molecular-ionic crystal (CD3ND3)2 [SnCl6]. Physica B: Condensed Matter, 1995, 213-214, 414-416.	2.7	1
95	High-resolution time-of-flight measurements of the lattice parameter and thermal expansion of the icosahedral phase Al62Cu25.5Fe12.5. Journal of Applied Crystallography, 1994, 27, 1010-1014.	4.5	13
96	The ab initio crystal structure determination of $\hat{l}_{\pm}$ -malonic acid from neutron powder diffraction data. Chemical Physics Letters, 1993, 201, 75-78.	2.6	23
97	Neutron diffraction investigation of V site preference in RCo10V2 compounds. Journal of Alloys and Compounds, 1993, 196, L1-L2.	5.5	3
98	High-pressure, low-temperature structural studies of orientationally ordered C60. Journal of Physics Condensed Matter, 1993, 5, 7923-7928.	1.8	50
99	The low-temperature orthorhombic structure of YCu. Journal of Physics Condensed Matter, 1993, 5, L39-L42.	1.8	9
100	Neutron and X-ray single-crystal study of the AlPdMn icosahedral phase. Journal of Physics Condensed Matter, 1992, 4, 10149-10168.	1.8	258
101	Accurate determination of hydrogen atom positions in $\hat{l}\pm$ -toluene by neutron powder diffraction. Journal of the Chemical Society Chemical Communications, 1992, , 1438-1439.	2.0	12
102	The heat capacity of solid C60. Solid State Communications, 1992, 83, 711-715.	1.9	181
103	A strong isotope effect in the phase transition behaviour of ammonium hexachlorotellurate. Physica B: Condensed Matter, 1992, 180-181, 594-596.	2.7	12
104	The crystal structure analysis of deuterated benzene and deuterated nitromethane by pulsed-neutron powder diffraction: a comparison with single crystal neutron diffraction analysis. Physica B: Condensed Matter, 1992, 180-181, 597-600.	2.7	38
105	High resolution neutron powder diffraction investigation of the low temperature crystal structure of molecular iodine (I2). Physica B: Condensed Matter, 1992, 180-181, 639-641.	2.7	5
106	Investigation of the unusual magnetic spiral arrangement in BiFeO3. Physica B: Condensed Matter, 1992, 180-181, 117-118.	2.7	146
107	The magnetic and structural transitions in CrN and (CrMo)N. Physica B: Condensed Matter, 1992, 180-181, 329-332.	2.7	29
108	Structural transformation in Tb0.1Y0.9Cu. Physica B: Condensed Matter, 1992, 180-181, 354-356.	2.7	4

#	Article	IF	CITATION
109	Neutron diffraction investigation of Si site preference in RENi10Si2 compounds. Solid State Communications, 1991, 78, 473-476.	1.9	15
110	Neutron scattering study of crystal structure and proton diffusion in protonic conductors with hydrogen bonds. Physica B: Condensed Matter, 1991, 174, 268-271.	2.7	14
111	Crystal structure and bonding of ordered C60. Nature, 1991, 353, 147-149.	27.8	959
112	High-resolution neutron powder diffraction studies of the structure of CsDSO4. Acta Crystallographica Section B: Structural Science, 1991, 47, 161-166.	1.8	71
113	Nitrogen atom location in rhombohedral and hexagonal RE2Fe17Nxcompounds. Journal of Physics Condensed Matter, 1991, 3, 1219-1226.	1.8	86
114	The crystal structure of 4-methyl pyridine at 4.5 K. Zeitschrift Fur Kristallographie - Crystalline Materials, 1990, 193, 243-250.	0.8	2
115	On the preferential site occupation of Fe in RFe4Al8and related compounds. Journal of Physics Condensed Matter, 1990, 2, 1677-1681.	1.8	49
116	On the preferential site occupation of T â‰; Cr or Mn in rare earth compounds of the type RT4Al8. Journal of the Less Common Metals, 1990, 166, 329-334.	0.8	43