Bryan C Chakoumakos

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184 96 10,052 53 h-index g-index citations papers 10,944 5.77 202 4.5 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
184	Filled skutterudite antimonides: Electron crystals and phonon glasses. <i>Physical Review B</i> , 1997 , 56, 150	81 3. 350	8 9 07
183	Localized vibrational modes in metallic solids. <i>Nature</i> , 1998 , 395, 876-878	50.4	486
182	Structural, magnetic, thermal, and transport properties of X8Ga16Ge30 (X=Eu,Sr,Ba) single crystals. <i>Physical Review B</i> , 2001 , 63,	3.3	397
181	Direct evidence of a zigzag spin-chain structure in the honeycomb lattice: A neutron and x-ray diffraction investigation of single-crystal Na2IrO3. <i>Physical Review B</i> , 2012 , 85,	3.3	271
180	Thermoelectric properties of thallium-filled skutterudites. <i>Physical Review B</i> , 2000 , 61, 2475-2481	3.3	257
179	Crystal Structure Refinements of Zircon-Type MVO4 (M = Sc, Y, Ce, Pr, Nd, Tb, Ho, Er, Tm, Yb, Lu). Journal of Solid State Chemistry, 1994 , 109, 197-202	3.3	256
178	Systematics of the pyrochlore structure type, ideal A2B2X6Y. <i>Journal of Solid State Chemistry</i> , 1984 , 53, 120-129	3.3	241
177	Temperature Dependence of Cation Distribution and Oxidation State in Magnetic MnHe Ferrite Nanocrystals. <i>Journal of the American Chemical Society</i> , 1998 , 120, 1800-1804	16.4	235
176	Phase transitions in perovskite at elevated temperatures - a powder neutron diffraction study. Journal of Physics Condensed Matter, 1999 , 11, 1479-1488	1.8	219
175	High-temperature phase transitions in SrZrO3. <i>Physical Review B</i> , 1999 , 59, 4023-4027	3.3	215
174	Neutron powder diffraction study of rhombohedral rare-earth aluminates and the rhombohedral to cubic phase transition. <i>Journal of Physics Condensed Matter</i> , 2000 , 12, 349-365	1.8	197
173	Synthesis of superparamagnetic MgFe2O4 nanoparticles by coprecipitation. <i>Journal of Magnetism and Magnetic Materials</i> , 1999 , 194, 1-7	2.8	194
172	A Mixed Alkali Metal Titanate with the Lepidocrocite-like Layered Structure. Preparation, Crystal Structure, Protonic Form, and Acid B ase Intercalation Properties. <i>Chemistry of Materials</i> , 1998 , 10, 4123	-4128	186
171	Low-temperature crystal and magnetic structure of R uCl3. <i>Physical Review B</i> , 2016 , 93,	3.3	174
170	Atomic Displacement Parameters and the Lattice Thermal Conductivity of Clathrate-like Thermoelectric Compounds. <i>Journal of Solid State Chemistry</i> , 1999 , 146, 528-532	3.3	169
169	Alpha-decayinduced fracturing in zircon: the transition from the crystalline to the metamict state. <i>Science</i> , 1987 , 236, 1556-9	33.3	168
168	Enhanced current density Jc and extended irreversibility in single-crystal Bi2Sr2Ca1Cu2O8 via linear defects from heavy ion irradiation. <i>Applied Physics Letters</i> , 1992 , 60, 2306-2308	3.4	167

(1996-2000)

167	Structural disorder and thermal conductivity of the semiconducting clathrate Sr8Ga16Ge30. <i>Journal of Alloys and Compounds</i> , 2000 , 296, 80-86	5.7	161
166	Excitations in the field-induced quantum spin liquid state of RuCl3. <i>Npj Quantum Materials</i> , 2018 , 3,	5	160
165	Continuous metal-insulator transition in the pyrochlore Cd2Os2O7. <i>Physical Review B</i> , 2001 , 63,	3.3	149
164	Superconductivity and hole doping in Pr0.5Ca0.5Ba2Cu3O7- delta thin films. <i>Physical Review Letters</i> , 1991 , 66, 1537-1540	7.4	145
163	CO2 Hydrate: Synthesis, Composition, Structure, Dissociation Behavior, and a Comparison to Structure I CH4 Hydrate. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 5529-5539	3.4	144
162	Thermal expansion of LaAlO3 and (La,Sr)(Al,Ta)O3, substrate materials for superconducting thin-film device applications. <i>Journal of Applied Physics</i> , 1998 , 83, 1979-1982	2.5	142
161	Magnetic and crystal structures of Sr2IrO4: A neutron diffraction study. <i>Physical Review B</i> , 2013 , 87,	3.3	140
160	Synthesis, Crystal Structure, and Ionic Conductivity of a Polycrystalline Lithium Phosphorus Oxynitride with the £13PO4 Structure. <i>Journal of Solid State Chemistry</i> , 1995 , 115, 313-323	3.3	136
159	High-temperature phase transitions in SrHfO3. <i>Physical Review B</i> , 1999 , 60, 2972-2975	3.3	123
158	Magnetic, transport, and structural properties of Fe1-xIrxSi. <i>Physical Review B</i> , 1994 , 50, 8207-8213	3.3	117
157	Structural disorder and magnetism of the semiconducting clathrate Eu8Ga16Ge30. <i>Journal of Alloys and Compounds</i> , 2001 , 322, 127-134	5.7	103
156	Superconductivity in SrCuO2-BaCuO2 Superlattices: Formation of Artificially Layered Superconducting Materials. <i>Science</i> , 1994 , 265, 2074-7	33.3	94
155	Four-circle single-crystal neutron diffractometer at the High Flux Isotope Reactor. <i>Journal of Applied Crystallography</i> , 2011 , 44, 655-658	3.8	83
154	Structural Characterization and Thermal Conductivity of Type-I Tin Clathrates. <i>Chemistry of Materials</i> , 2000 , 12, 1947-1953	9.6	82
153	Observation of phonon softening at the superconducting transition in Bi2Sr2CaCu2O8. <i>Physical Review Letters</i> , 1990 , 65, 2712-2715	7.4	82
152	Alpha-recoil damage in zirconolite (CaZrTi2O7). <i>Journal of Materials Research</i> , 1986 , 1, 564-576	2.5	82
151	Characterization and superconducting properties of phases in the BiBrtut system. <i>Journal of Materials Research</i> , 1989 , 4, 767-780	2.5	80
150	Structural investigations of several LnVO4 compounds. <i>Inorganica Chimica Acta</i> , 1996 , 248, 85-88	2.7	73

149	Structural phase transition of the spinel-type oxide LiMn2O4. Solid State Ionics, 1998, 109, 35-41	3.3	72
148	Thermoelectric and optical properties of the filled skutterudite YbFe4Sb12. <i>Physical Review B</i> , 2000 , 61, 4608-4614	3.3	71
147	Structural and crystal chemical properties of rare-earth titanate pyrochlores. <i>Journal of Alloys and Compounds</i> , 2014 , 605, 63-70	5.7	70
146	Disparate atomic displacements in skutterudite-type LaFe3CoSb12, a model for thermoelectric behavior. <i>Acta Crystallographica Section B: Structural Science</i> , 1999 , 55, 341-347		70
145	Effect of temperature and hydrogen concentration on the lattice parameter of beta titanium. <i>Materials Research Bulletin</i> , 2001 , 36, 1431-1440	5.1	68
144	Effects of oxygen and strontium vacancies on the superconductivity of single crystals of Bi2Sr2-xCuO6-y. <i>Physical Review B</i> , 1989 , 40, 6872-6877	3.3	68
143	The Metamict State. MRS Bulletin, 1987, 12, 58-66	3.2	67
142	Direct experimental evidence for atomic tunneling of europium in crystalline Eu8Ga16Ge30. <i>Physical Review Letters</i> , 2006 , 97, 017401	7.4	66
141	Thermoelectric properties of Tl2SnTe5 and Tl2GeTe5. Applied Physics Letters, 1999, 74, 3794-3796	3.4	64
140	Giant magnetoelectric effects achieved by tuning spin cone symmetry in Y-type hexaferrites. <i>Nature Communications</i> , 2017 , 8, 519	17.4	63
139	Synthesis and characterization of a new structure of gas hydrate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 6060-4	11.5	62
138	Synthesis and neutron powder diffraction study of the superconductor HgBa2Ca2Cu3O8 + Lby Tl substitution. <i>Physica C: Superconductivity and Its Applications</i> , 1995 , 243, 201-206	1.3	61
137	The IMAGINE instrument: first neutron protein structure and new capabilities for neutron macromolecular crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013 , 69, 2157-60		60
136	The high-resolution powder diffractometer at the high flux isotope reactor. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 99, 531-535	2.6	59
135	Vortex fluctuations, magnetic penetration depth, and Hc2 in Hg- and Tl-based high-Tc superconductors. <i>Physical Review B</i> , 1993 , 48, 14031-14034	3.3	58
134	Existence of Ferroelectric Ice in the Universe. <i>Astrophysical Journal</i> , 2006 , 652, L57-L60	4.7	55
133	Interanionic O-H small middle dot small middle dot small middle dotO Interactions: The Charge Density Point of View The Oak Ridge National Laboratory is managed by Lockheed Martin Energy Research Corporation for the US Department of Energy (DE-AC05-96OR22464). Prof. M. Moret and	16.4	55
132	Dr. L. Carlucci are thanked for help in crystallizing large samples suitable for the neutron study. Chapter 1 Use of atomic displacement parameters in thermoelectric materials research rch Council Semiconductors and Semimetals, 2001; 70;41-36 - International Edition, 2000, 39, 2719-2722	0.6	53

131	When does a crystal conduct heat like a glass?. <i>Philosophical Magazine Letters</i> , 2000 , 80, 807-812	1	53
130	Epitaxial growth of single-crystal Ca1\subseteqsSrxCuO2 thin films by pulsed-laser deposition. <i>Applied Physics Letters</i> , 1993 , 62, 1679-1681	3.4	53
129	Hardness and elastic modulus of zircon as a function of heavy-particle irradiation dose: I. In situ Edecay event damage. <i>Radiation Effects and Defects in Solids</i> , 1991 , 118, 393-403	0.9	53
128	Neutron diffraction study of occupancy and positional order of oxygen ions in phase stabilized cubic bismuth oxides. <i>Solid State Ionics</i> , 2001 , 138, 293-304	3.3	52
127	Origin of the phase transition in IrTe2: Structural modulation and local bonding instability. <i>Physical Review B</i> , 2013 , 88,	3.3	51
126	Phonons and superconductivity in Bi2Sr2CaCu2O8. <i>Physical Review Letters</i> , 1992 , 69, 2272-2275	7.4	49
125	Neutron powder diffraction studies as a function of temperature of structure II hydrate formed from propane. <i>Canadian Journal of Physics</i> , 2003 , 81, 431-438	1.1	48
124	Novel synthesis process and structure refinements of Li4Mn5O12 for rechargeable lithium batteries. <i>Journal of Power Sources</i> , 1997 , 68, 613-617	8.9	47
123	Weakly (x=0) and randomly (x=0.033) coupled Ising antiferromagnetic planes in (Li1BxFex)NiPO4 compounds. <i>Physical Review B</i> , 1999 , 60, 1100-1110	3.3	46
122	Theoretical molecular orbital study of silanol-water interactions. <i>The Journal of Physical Chemistry</i> , 1986 , 90, 996-998		44
424			
121	Effects of composition and processing on the superconductivity of La1+zBa2-zCu3Oy. <i>Physica C: Superconductivity and Its Applications</i> , 1994 , 231, 80-90	1.3	42
120		1.3 7.4	41
	Superconductivity and Its Applications, 1994 , 231, 80-90 Theoretical and experimental study of relaxations in Al3Ti and Al3Zr ordered phases. <i>Physical</i>		
120	Superconductivity and Its Applications, 1994 , 231, 80-90 Theoretical and experimental study of relaxations in Al3Ti and Al3Zr ordered phases. <i>Physical Review Letters</i> , 1995 , 74, 4955-4958 Zero-dimensional Cs4EuX6 (X = Br, I) all-inorganic perovskite single crystals for gamma-ray	7.4	41
120	Superconductivity and Its Applications, 1994, 231, 80-90 Theoretical and experimental study of relaxations in Al3Ti and Al3Zr ordered phases. Physical Review Letters, 1995, 74, 4955-4958 Zero-dimensional Cs4EuX6 (X = Br, I) all-inorganic perovskite single crystals for gamma-ray spectroscopy. Journal of Materials Chemistry C, 2018, 6, 6647-6655 Structure and Thermal Expansivity of Tetrahydrofuran Deuterate Determined by Neutron Powder	7.4	41
120 119 118	Theoretical and experimental study of relaxations in Al3Ti and Al3Zr ordered phases. <i>Physical Review Letters</i> , 1995 , 74, 4955-4958 Zero-dimensional Cs4EuX6 (X = Br, I) all-inorganic perovskite single crystals for gamma-ray spectroscopy. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 6647-6655 Structure and Thermal Expansivity of Tetrahydrofuran Deuterate Determined by Neutron Powder Diffraction. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 6026-6031 Crystal Chemistry of HgBa2Canli CunO2n+2+(h= 1, 2, 3, 4) Superconductors. <i>Journal of Solid State</i>	7.4 7.1 3.4	41 40 40
120 119 118	Theoretical and experimental study of relaxations in Al3Ti and Al3Zr ordered phases. <i>Physical Review Letters</i> , 1995 , 74, 4955-4958 Zero-dimensional Cs4EuX6 (X = Br, I) all-inorganic perovskite single crystals for gamma-ray spectroscopy. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 6647-6655 Structure and Thermal Expansivity of Tetrahydrofuran Deuterate Determined by Neutron Powder Diffraction. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 6026-6031 Crystal Chemistry of HgBa2Canfl CunO2n+2+(h= 1, 2, 3, 4) Superconductors. <i>Journal of Solid State Chemistry</i> , 1996 , 122, 221-230 Comparison of crystal structure parameters of natural and synthetic apatites from neutron powder	7.4 7.1 3.4 3.3	41 40 40 40

113	Symmetry-lowering lattice distortion at the spin reorientation in MnBi single crystals. <i>Physical Review B</i> , 2014 , 90,	3.3	38
112	Neutron powder diffraction study of the superconducting quaternary intermetallic compound YNi2B2C. <i>Physica C: Superconductivity and Its Applications</i> , 1994 , 227, 143-150	1.3	38
111	Magnetic properties of bio-synthesized zinc ferrite nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2011 , 323, 3043-3048	2.8	35
110	Low-Temperature Structure and Dynamics of Brucite. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 9458-9	456.7	35
109	Skutterudites: Their structural response to filling. <i>Journal of Alloys and Compounds</i> , 2006 , 407, 87-93	5.7	35
108	Hole filling and hole creation in the superconducting compounds Bi2Sr2-xRxCuO6+y (R=La, Pr, Nd, and Sm). <i>Physical Review B</i> , 1991 , 43, 12994-13000	3.3	35
107	Refinement of the structures of Sr3Al2O6 and the hydrogarnet Sr3Al2(O4D4)3 by Rietveld analysis of neutron powder diffraction data. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 1992 , 48, 414-419		35
106	Neutron diffraction study of the type I clathrate Ba8Al(x)Si(46-x): site occupancies, cage volumes, and the interaction between the guest and the host framework. <i>Inorganic Chemistry</i> , 2012 , 51, 1805-12	5.1	33
105	Refinement of the Structures of the Layer Silicates MCuSi4O10 (M = Ca, Sr, Ba) by Rietveld Analysis of Neutron Powder Diffraction Data. <i>Journal of Solid State Chemistry</i> , 1993 , 103, 105-113	3.3	33
104	Structure symmetry determination and magnetic evolution in Sr2Ir1\(\text{R}\)RhxO4. <i>Physical Review B</i> , 2015 , 92,	3.3	32
103	Crystal Chemical Constraints on the Formation of Actinide Pyrochlores. <i>Materials Research Society Symposia Proceedings</i> , 1984 , 44, 641		32
102	In situ growth of epitaxial Bi2Sr2CaCu2O8\(and Bi2Sr2CuO6\(alpha \) films by pulsed laser ablation. <i>Applied Physics Letters</i> , 1993 , 63, 409-411	3.4	30
101	Quaternary Iodide K(Ca,Sr)I3:Eu2+ Single-Crystal Scintillators for Radiation Detection: Crystal Structure, Electronic Structure, and Optical and Scintillation Properties. <i>Advanced Optical Materials</i> , 2016 , 4, 1518-1532	8.1	30
100	Insights into the structure of mixed CO2/CH4 in gas hydrates. <i>American Mineralogist</i> , 2015 , 100, 1203-1	2 <u>0</u> .8 ₉	27
99	Structure Refinement of Li4Mn5O12with Neutron and X-Ray Powder Diffraction Data. <i>Journal of Solid State Chemistry</i> , 1997 , 130, 74-80	3.3	27
98	Low temperature transport and structural properties of misch-metal-filled skutterudites. <i>Journal of Applied Physics</i> , 2007 , 102, 083702	2.5	27
97	Powder neutron diffraction studies of a carbonate fluorapatite. <i>Journal of Materials Research</i> , 2000 , 15, 511-517	2.5	27
96	Neutron diffraction study of the magnetic structures of CeMn2Ge2 and CeMn2Si2. <i>Journal of Applied Physics</i> , 1996 , 79, 5398	2.5	27

(2019-2003)

95	The amblygonite (LiAlPO4F)-montebrasite (LiAlPO4OH) solid solution: A combined powder and single-crystal neutron diffraction and solid-state 6Li MAS, CP MAS, and REDOR NMR study. American Mineralogist, 2003, 88, 195-210	2.9	26
94	Anomalous transport and structural properties of Sr1\(\mathbb{L}\)CuO2\(\mathbb{L}\)hin films. <i>Physica C:</i> Superconductivity and Its Applications, 1993 , 217, 146-150	1.3	26
93	2Flux growth and characterization of Ce-substituted Nd2Fe14B single crystals. <i>Journal of Magnetism and Magnetic Materials</i> , 2017 , 434, 1-9	2.8	25
92	Spin reorientation in TlFe1.6Se2 with complete vacancy ordering. <i>Physical Review Letters</i> , 2012 , 109, 077003	7.4	25
91	Neutron Diffraction Study of Structure I and Structure II Trimethylene Oxide Clathrate Deuterate. Journal of Physical Chemistry B, 2003 , 107, 6046-6050	3.4	25
90	SrCuO2/(Sr,Ca)CuO2 superlattice growth by pulsed-laser deposition. <i>Applied Physics Letters</i> , 1994 , 65, 2869-2871	3.4	23
89	A suite-level review of the neutron single-crystal diffraction instruments at Oak Ridge National Laboratory. <i>Review of Scientific Instruments</i> , 2018 , 89, 092802	1.7	22
88	Unusual phase transitions and magnetoelastic coupling in TlFe1.6Se2 single crystals. <i>Physical Review B</i> , 2011 , 83,	3.3	21
87	A novel germanate, Cu2Fe2Ge4O13, with a four tetrahedra oligomer. <i>Journal of Solid State Chemistry</i> , 2003 , 176, 175-179	3.3	21
86	Empirically testing vaterite structural models using neutron diffraction and thermal analysis. <i>Scientific Reports</i> , 2016 , 6, 36799	4.9	21
85	Soft antiphase tilt of oxygen octahedra in the hybrid improper multiferroic Ca3Mn1.9Ti0.1O7. <i>Physical Review B</i> , 2018 , 97,	3.3	19
84	High-pressure neutron diffraction study on HD isotope effects in brucite. <i>Physics and Chemistry of Minerals</i> , 2010 , 37, 741-749	1.6	19
83	Temperature-dependent single-crystal neutron diffraction study of natural chondrodite and clinohumites. <i>American Mineralogist</i> , 2001 , 86, 981-989	2.9	19
82	Growth mechanisms and superconductivity of ultrathin Y1Ba2Cu3O 7☑ epitaxial films on (001) MgO substrates. <i>Applied Physics Letters</i> , 1993 , 62, 3363-3365	3.4	19
81	Hardness and elastic modulus of zircon as a function of heavy-particle irradiation dose:. <i>Radiation Effects and Defects in Solids</i> , 1994 , 132, 131-141	0.9	19
80	Cerium Chloridefhethanol Adduct Crystals, CeCl3(CH3OH)4: Preparation, Crystallography, And Scintillation Properties. <i>Crystal Growth and Design</i> , 2008 , 8, 2070-2072	3.5	18
79	Temperature dependence of polyhedral cage volumes in clathrate hydrates. <i>Canadian Journal of Physics</i> , 2003 , 81, 183-189	1.1	18
78	Neutron Instruments for Research in Coordination Chemistry. <i>European Journal of Inorganic Chemistry</i> , 2019 , 2019, 1065-1089	2.3	18

77	Polymorphism, phase transitions, and thermal expansion of K3Lu(PO4)2. <i>Journal of Alloys and Compounds</i> , 2014 , 588, 182-189	5.7	17
76	Filled Skutterudite Antimonides: Validation of the Electron-Crystal Phonon-Glass Approach to New Thermoelectric Materials. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 478, 199		17
75	Ru3Sn7 with the Ir3Ge7 structure-type. Journal of Alloys and Compounds, 1998, 281, 157-159	5.7	17
74	Existence of ferroelectric ice on planets neutron diffraction study. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009 , 600, 279-281	1.2	16
73	A sapphire cell for high-pressure, low-temperature neutron-scattering experiments on gas hydrates. <i>Canadian Journal of Physics</i> , 2003 , 81, 381-385	1.1	16
72	DEMAND, a Dimensional Extreme Magnetic Neutron Diffractometer at the High Flux Isotope Reactor. <i>Crystals</i> , 2019 , 9, 5	2.3	15
71	Site Mixing for Engineering Magnetic Topological Insulators. <i>Physical Review X</i> , 2021 , 11,	9.1	14
70	The existence of memory effect on hydrogen ordering in ice: The effect makes ice attractive. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	13
69	Magnetism in BaCoS2. Journal of Applied Physics, 1997, 81, 4620-4622	2.5	13
68	Structural and crystal chemical properties of alkali rare-earth double phosphates. <i>Journal of Alloys and Compounds</i> , 2016 , 655, 253-265	5.7	12
67	Crystal structure, electronic structure, temperature-dependent optical and scintillation properties of CsCe2Br7. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 11366-11376	7.1	12
66	Atomic Displacement Parameters: A Useful Tool in the Search for New Thermoelectric Materials?. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 545, 13		12
65	Epitaxial growth of Ba1⊠KxBiO3 thin films by pulsed-laser deposition. <i>Applied Physics Letters</i> , 1993 , 62, 414-416	3.4	12
64	Evolution of the nuclear and magnetic structures of TlFe1.6Se2 with temperature. <i>Physical Review B</i> , 2012 , 85,	3.3	11
63	Connections between Crystallographic Data and New Thermoelectric Compounds. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 711		11
62	Significance of otolith calcium carbonate crystal structure diversity to microchemistry studies. <i>Reviews in Fish Biology and Fisheries</i> , 2019 , 29, 569-588	6	10
61	Single-crystal CeCl3(CH3OH)4: A new metal-organic cerium chloride methanol adduct for scintillator applications. <i>Applied Physics Letters</i> , 2008 , 93, 244104	3.4	10
60	Model-free reconstruction of magnetic correlations in frustrated magnets. <i>IUCrJ</i> , 2018 , 5, 410-416	4.7	10

59	Spin-lattice coupling mediated multiferroicity in (ND4)2FeCl5ID2O. <i>Physical Review B</i> , 2016 , 94,	3.3	10
58	Neutron diffraction from aligned stacks of lipid bilayers using the WAND instrument. <i>Journal of Applied Crystallography</i> , 2018 , 51, 235-241	3.8	9
57	Effect of Alloy Composition on the Structure of Zr Based Metal Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 575, 193		9
56	Structural evolution of the amorphous solids produced by heating crystalline MgHPO4 🛮 3H2O. <i>Journal of Materials Research</i> , 1992 , 7, 2646-2649	2.5	9
55	An Investigation of Uranium L-Edges of Metamict and Annealed Betafite. <i>Materials Research Society Symposia Proceedings</i> , 1985 , 50, 387		9
54	WAND-A versatile wide angle neutron powder/single crystal diffractometer. <i>Review of Scientific Instruments</i> , 2018 , 89, 092801	1.7	9
53	Intertwined Magnetic and Nematic Orders in Semiconducting KFe_{0.8}Ag_{1.2}Te_{2}. <i>Physical Review Letters</i> , 2019 , 122, 087201	7.4	8
52	Combined X-ray and neutron diffraction Rietveld refinement in iron-substituted nano-hydroxyapatite. <i>Journal of Materials Science</i> , 2013 , 48, 3535-3545	4.3	8
51	H/D isotope effects in brucite at low temperatures. American Mineralogist, 2013, 98, 1-6	2.9	8
50	The effect of Ca substitution on the structure and the Raman active phonons in. <i>Journal of Physics Condensed Matter</i> , 1998 , 10, 2515-2524	1.8	8
49	Crystal structure, electronic structure, optical and scintillation properties of self-activated Cs4YbI6. <i>Journal of Luminescence</i> , 2018 , 201, 460-465	3.8	8
48	A New Scintillator for Fast Neutron Detection: Single-Crystal \${rm CeCl}_{3}({rm CH}_{3}{rm OH})_{4}\$. <i>IEEE Transactions on Nuclear Science</i> , 2010 , 57, 1692-1696	1.7	7
47	Influence of neutron irradiation damage on the equilibrium properties of the polycrystalline Bi1.8Pb0.3Sr2Ca2Cu3O10 superconductor. <i>Physical Review B</i> , 1995 , 51, 8551-8559	3.3	7
46	An X-ray Absorption Spectroscopy Investigation of the Ta Site in Alpha-Recoil Damaged Natural Pyrochlores. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 84, 645		7
45	Magnetic correlations and structure in bixbyite across the spin-glass transition. <i>Physical Review B</i> , 2019 , 100,	3.3	6
44	Otoliths of sub-adult Lake Sturgeon Acipenser fulvescens contain aragonite and vaterite calcium carbonate polymorphs. <i>Journal of Fish Biology</i> , 2019 , 94, 810-814	1.9	6
43	New family of cerium halide based materials: CeX3IROH compounds containing planes, chains, and tetradecanuclear rings. <i>Inorganic Chemistry</i> , 2012 , 51, 10503-11	5.1	6
42	New crystal structural families of lanthanide chloride [Alcohol/water complexes. <i>Inorganica Chimica Acta</i> , 2012 , 384, 23-28	2.7	6

41	Intercage guest correlations and guest clusters in high-pressure clathrate hydrates. <i>Physical Review B</i> , 2009 , 80,	3.3	6
40	Incommensurate fluctuations in Bi2Sr2CaCu2O8. <i>Journal of Superconductivity and Novel Magnetism</i> , 1997 , 10, 389-392		6
39	Neutron diffraction and phase evolution of the mechanically alloyed intermetallic compound FeZn13. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 2739-2745	2.3	6
38	Variation of Superlattice Structure of the Bi2Sr2\(\mathbb{R}\)CuO6-y Superconductor with Composition and Thermal History. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 156, 329		6
37	Influence of ontogenetic development, temperature, and pCO on otolith calcium carbonate polymorph composition in sturgeons. <i>Scientific Reports</i> , 2021 , 11, 13878	4.9	6
36	Discovery of New Compounds and Scintillators of the A4BX6 Family: Crystal Structure, Thermal, Optical, and Scintillation Properties. <i>Crystal Growth and Design</i> , 2018 , 18, 5220-5230	3.5	5
35	Large spin-driven dielectric response and magnetoelectric coupling in the buckled honeycomb Fe4Nb2O9. <i>Physical Review Materials</i> , 2020 , 4,	3.2	5
34	Crystal Growth and Elemental Homogeneity of the Multicomponent Rare-Earth Garnet (Lu1/6Y1/6Ho1/6Dy1/6Tb1/6Gd1/6)3Al5O12. <i>Crystal Growth and Design</i> , 2020 , 20, 6769-6776	3.5	5
33	Investigating Petrologic Indicators of Magmatic Processes in Volcanic Rocks. Petalite under pressure: Elastic behavior and phase stability. <i>American Mineralogist</i> , 2015 , 100, 714-721	2.9	4
32	The observation of scintillation in a hydrated inorganic compound: CeCl3I6H2O. <i>Applied Physics Letters</i> , 2013 , 103, 141909	3.4	4
31	Raman spectroscopic studies on structure I and structure Iltrimethylene oxide hydrate. <i>Canadian Journal of Physics</i> , 2005 , 83, 941-949	1.1	4
30	Structural disorder and charge transfer in the superconductor (Pb0.5Cu0.5)(Sr0.5La0.5)2CuO5 + © Physica C: Superconductivity and Its Applications, 1996 , 269, 115-123	1.3	4
29	Characterization of Radiation Damage at the Nb Site in Natural Pyrochlores and Samarskites by X-Ray Absorption Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 127, 261		4
28	An Investigation of Metamict And Annealed Natural Pyrochlores by X-RAY Absorption Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 1984 , 44, 655		4
27	Probing Phase Transitions and Magnetism in Minerals with Neutrons. <i>Elements</i> , 2021 , 17, 181-188	3.8	4
26	Spin-valley locking and bulk quantum Hall effect in a noncentrosymmetric Dirac semimetal BaMnSb. <i>Nature Communications</i> , 2021 , 12, 4062	17.4	4
25	Ultrasound Studies of Clathrate Thermoelectrics. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 1331		3
24	Rare-earth tri-halides methanol-adduct single-crystal scintillators for gamma ray and neutron detection 2009 ,		2

23	Formation and properties of artificially-layered SrCuO2/BaCuO2 superconducting superlattices. Journal of Superconductivity and Novel Magnetism, 1995 , 8, 519-522		2
22	Formation and properties of novel artificially layered cuprate superconductors using pulsed-laser deposition 1996 ,		2
21	Growth of Epitaxial ZnS Films by Pulsed-Laser Ablation. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 242, 243		2
20	Noncollinear magnetic structure and magnetoelectric coupling in buckled honeycomb Co4Nb2O9: A single-crystal neutron diffraction study. <i>Physical Review B</i> , 2020 , 102,	3.3	2
19	Sr3Ir2O7F2: Topochemical conversion of a relativistic Mott state into a spin-orbit driven band insulator. <i>Physical Review B</i> , 2018 , 98,	3.3	2
18	National School on Neutron and X-ray Scattering. Synchrotron Radiation News, 2013, 26, 9-12	0.6	1
17	When Does a Crystal Conduct Heat Like a Glass?. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 691, 1		1
16	Crystal structure systematics from oxide phase diagrams by contouring them with Zoltail tetrahedral sharing coefficient. <i>Journal of Materials Research</i> , 1995 , 10, 1772-1778	2.5	1
15	Structural Analysis of Amorphous Phosphates Using High Performance Liquid Chromatography. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 321, 13		1
14	: reverse Monte Carlo refinement of diffuse scattering and correlated disorder from single crystals Journal of Applied Crystallography, 2021 , 54, 1867-1885	3.8	1
13	Morphology and composition of Goldeye (Hiodontidae; Hiodon alosoides) otoliths. <i>Journal of Morphology</i> , 2021 , 282, 511-519	1.6	1
12	Quantifying fish otolith mineralogy for trace-element chemistry studies <i>Scientific Reports</i> , 2022 , 12, 2727	4.9	1
11	Texture Analysis of Polycrystalline Vaterite Spherulites from Lake Sturgeon Otoliths. <i>Scientific Reports</i> , 2019 , 9, 7151	4.9	О
10	Formation of artificially-Layered Thin-Film Compounds Using Pulsed-Laser Deposition. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 388, 57		O
9	Structure and Dynamics of Propylene Oxide and Trimethylene Oxide Clathrate Hydrates. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 840, Q2.1.1		
8	Evidence for pseudo-gap behavior in defect-doped infinite layer (Ca, Sr)CuO2 thin films. <i>Physica Status Solidi (B): Basic Research</i> , 2003 , 236, 143-150	1.3	
7	Thermoelectric Properties of Two Ternary Tellurides. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 545, 391		
6	Structural Chemistry of Some Phases in The YC-Ni-B System. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 376, 547		

- Ionic Conductivities of Lithium Phosphorus Oxynitride Glasses, Polycrystals and Thin Films.

 Materials Research Society Symposia Proceedings, 1994, 369, 445
- Epitaxial Growth of Metal Fluoride Thin Films by Pulsed-Laser Deposition. *Materials Research Society Symposia Proceedings*, **1995**, 397, 259
- Oxidation and Reduction of Bi2Sr1.85Cuo6-Y Crystals. *Materials Research Society Symposia Proceedings*, **1989**, 169, 217
- The Effects of Oxygen and Strontium Vacancies on the Superconductivity of Single Crystals of Bi2sr2-Xcuo6-Y. *Materials Research Society Symposia Proceedings*, **1989**, 169, 99
- Physical Properties of Bi2sr2cuo6, the Semiconducting Phase, Structurally Distinct from the N=L Bi-Cuprate Superconductor. *Materials Research Society Symposia Proceedings*, **1989**, 169, 103