

Simon Billinge

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

220
papers

14,441
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58
h-index

116
g-index

241
ext. papers

16,486
ext. citations

8
avg, IF

6.65
L-index

#	Paper	IF	Citations
220	PDFfit2 and PDFgui: computer programs for studying nanostructure in crystals. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 335219	1.8	962
219	PDFgetX2: a GUI-driven program to obtain the pair distribution function from X-ray powder diffraction data. <i>Journal of Applied Crystallography</i> , 2004 , 37, 678-678	3.8	765
218	Structures of the ferroelectric phases of barium titanate. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 2368-2377		529
217	The problem with determining atomic structure at the nanoscale. <i>Science</i> , 2007 , 316, 561-5	33.3	525
216	Rapid-acquisition pair distribution function (RA-PDF) analysis. <i>Journal of Applied Crystallography</i> , 2003 , 36, 1342-1347	3.8	433
215	Direct Observation of Lattice Polaron Formation in the Local Structure of La _{1-x} CaxMnO ₃ . <i>Physical Review Letters</i> , 1996 , 77, 715-718	7.4	388
214	Beyond crystallography: the study of disorder, nanocrystallinity and crystallographically challenged materials with pair distribution functions. <i>Chemical Communications</i> , 2004 , 749-60	5.8	364
213	Structure of V(2)O(5)*nH(2)O xerogel solved by the atomic pair distribution function technique. <i>Journal of the American Chemical Society</i> , 2002 , 124, 10157-62	16.4	358
212	PDFFIT, a program for full profile structural refinement of the atomic pair distribution function. <i>Journal of Applied Crystallography</i> , 1999 , 32, 572-575	3.8	357
211	Synthesis and characterization of two-dimensional Nb ₄ C ₃ (MXene). <i>Chemical Communications</i> , 2014 , 50, 9517-20	5.8	321
210	Textural Mesoporosity and the Catalytic Activity of Mesoporous Molecular Sieves with Wormhole Framework Structures. <i>Journal of the American Chemical Society</i> , 1999 , 121, 8835-8842	16.4	308
209	Nature of Activated Manganese Oxide for Oxygen Evolution. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14887-904	16.4	295
208	Structure of methylammonium lead iodide within mesoporous titanium dioxide: active material in high-performance perovskite solar cells. <i>Nano Letters</i> , 2014 , 14, 127-33	11.5	258
207	Entropically stabilized local dipole formation in lead chalcogenides. <i>Science</i> , 2010 , 330, 1660-3	33.3	254
206	Control of electronic properties of 2D carbides (MXenes) by manipulating their transition metal layers. <i>Nanoscale Horizons</i> , 2016 , 1, 227-234	10.8	242
205	PDFgetN: a user-friendly program to extract the total scattering structure factor and the pair distribution function from neutron powder diffraction data. <i>Journal of Applied Crystallography</i> , 2000 , 33, 1192-1192	3.8	233
204	2D molybdenum and vanadium nitrides synthesized by ammoniation of 2D transition metal carbides (MXenes). <i>Nanoscale</i> , 2017 , 9, 17722-17730	7.7	192

203	Structural analysis of complex materials using the atomic pair distribution function χ practical guide. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2003 , 218, 132-143	1	182
202	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2017 , 11, 3819-3831	16.7	181
201	Direct Observation of Dynamic Symmetry Breaking above Room Temperature in Methylammonium Lead Iodide Perovskite. <i>ACS Energy Letters</i> , 2016 , 1, 880-887	20.1	177
200	Two-Step Nucleation and Growth of InP Quantum Dots via Magic-Sized Cluster Intermediates. <i>Chemistry of Materials</i> , 2015 , 27, 1432-1441	9.6	176
199	Quantitative size-dependent structure and strain determination of CdSe nanoparticles using atomic pair distribution function analysis. <i>Physical Review B</i> , 2007 , 76,	3.3	160
198	Complex modeling: a strategy and software program for combining multiple information sources to solve ill posed structure and nanostructure inverse problems. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015 , 71, 562-8	1.7	152
197	Revealing the mechanisms behind SnO ₂ nanoparticle formation and growth during hydrothermal synthesis: an in situ total scattering study. <i>Journal of the American Chemical Society</i> , 2012 , 134, 6785-92	16.4	150
196	Imaging Dirac-mass disorder from magnetic dopant atoms in the ferromagnetic topological insulator Cr _x (Bi _{0.1} Sb _{0.9}) ₂ -xTe ₃ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 1316-21	11.5	147
195	Ab initio determination of solid-state nanostructure. <i>Nature</i> , 2006 , 440, 655-8	50.4	146
194	Atomic structures and gram scale synthesis of three tetrahedral quantum dots. <i>Journal of the American Chemical Society</i> , 2014 , 136, 10645-53	16.4	139
193	Structure of nanocrystalline materials using atomic pair distribution function analysis: Study of LiMoS ₂ . <i>Physical Review B</i> , 2002 , 65,	3.3	139
192	Intermediate-range structure of self-assembled cobalt-based oxygen-evolving catalyst. <i>Journal of the American Chemical Society</i> , 2013 , 135, 6403-6	16.4	138
191	Relationship between the atomic pair distribution function and small-angle scattering: implications for modeling of nanoparticles. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009 , 65, 232-9		138
190	Polyhedral units and network connectivity in calcium aluminosilicate glasses from high-energy X-Ray diffraction. <i>Physical Review Letters</i> , 2000 , 85, 3436-9	7.4	138
189	Neutron diffraction evidence of microscopic charge inhomogeneities in the CuO ₂ plane of superconducting La _{2-x} Sr _x CuO ₄ (0. <i>Physical Review Letters</i> , 2000 , 84, 5856-9	7.4	138
188	Orbital correlations in the pseudocubic O and rhombohedral R phases of LaMnO ₃ . <i>Physical Review Letters</i> , 2005 , 94, 177203	7.4	135
187	Structure of nanocrystalline Ti ₃ C ₂ MXene using atomic pair distribution function. <i>Physical Review Letters</i> , 2014 , 112, 125501	7.4	129
186	Atomic electron tomography: 3D structures without crystals. <i>Science</i> , 2016 , 353,	33.3	129

185	Polymorphism in magic-sized Au ₁₄₄ (SR) ₆₀ clusters. <i>Nature Communications</i> , 2016 , 7, 11859	17.4	126
184	Mercury binding sites in thiol-functionalized mesostructured silica. <i>Journal of the American Chemical Society</i> , 2005 , 127, 8492-8	16.4	118
183	Measuring Correlated Atomic Motion Using X-ray Diffraction. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 921-924	2.8	114
182	High Real-Space Resolution Measurement of the Local Structure of Ga _{1-x} In _x As Using X-Ray Diffraction. <i>Physical Review Letters</i> , 1999 , 83, 4089-4092	7.4	113
181	Lattice dynamics and correlated atomic motion from the atomic pair distribution function. <i>Physical Review B</i> , 2003 , 67,	3.3	105
180	Local structure of nanoporous carbons. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1999 , 79, 1519-1530		96
179	Fine-Scale Nanostructure in Ba ₂ O ₃ . <i>Chemistry of Materials</i> , 2006 , 18, 3242-3248	9.6	88
178	Improved measures of quality for the atomic pair distribution function. <i>Journal of Applied Crystallography</i> , 2003 , 36, 53-64	3.8	84
177	Role of framework sodium versus local framework structure in determining the hydrothermal stability of MCM-41 mesostructures. <i>Journal of the American Chemical Society</i> , 2002 , 124, 97-103	16.4	82
176	Application of Atomic Pair Distribution Function Analysis to Materials with Intrinsic Disorder. Three-Dimensional Structure of Exfoliated-Restacked WS ₂ : Not Just a Random Turbostratic Assembly of Layers. <i>Journal of the American Chemical Society</i> , 2000 , 122, 11571-11576	16.4	82
175	Understanding the formation and evolution of ceria nanoparticles under hydrothermal conditions. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9030-3	16.4	78
174	Reciprocal-space instrumental effects on the real-space neutron atomic pair distribution function. <i>Journal of Applied Crystallography</i> , 2004 , 37, 110-116	3.8	78
173	Simulation of nanoporous carbons: A chemically constrained structure. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1999 , 79, 1499-1518		76
172	Local vibrations and negative thermal expansion in ZrW ₂ O ₈ . <i>Physical Review Letters</i> , 2014 , 112, 045505	7.4	75
171	Pair distribution function computed tomography. <i>Nature Communications</i> , 2013 , 4, 2536	17.4	75
170	Characterisation of amorphous and nanocrystalline molecular materials by total scattering. <i>CrystEngComm</i> , 2010 , 12, 1366-1368	3.3	66
169	Structure of Sulfate Adsorption Complexes on Ferrihydrite. <i>Environmental Science and Technology Letters</i> , 2014 , 1, 97-101	11	65
168	Mechanisms for iron oxide formation under hydrothermal conditions: an in situ total scattering study. <i>ACS Nano</i> , 2014 , 8, 10704-14	16.7	65

167	Signatures of the topological s superconducting order parameter in the type-II Weyl semimetal T-MoTe. <i>Nature Communications</i> , 2017 , 8, 1082	17.4	62
166	Correlating Size and Composition-Dependent Effects with Magnetic, Mössbauer, and Pair Distribution Function Measurements in a Family of Catalytically Active Ferrite Nanoparticles. <i>Chemistry of Materials</i> , 2015 , 27, 3572-3592	9.6	61
165	Data requirements for the reliable use of atomic pair distribution functions in amorphous pharmaceutical fingerprinting. <i>Pharmaceutical Research</i> , 2011 , 28, 1041-8	4.5	60
164	Rapid desolvation-triggered domino lattice rearrangement in a metal-organic framework. <i>Nature Chemistry</i> , 2020 , 12, 90-97	17.6	60
163	Two-Dimensional Arrays of Transition Metal Nitride Nanocrystals. <i>Advanced Materials</i> , 2019 , 31, e1902393	21	59
162	Local off-centering symmetry breaking in the high-temperature regime of SnTe. <i>Physical Review B</i> , 2014 , 89,	3.3	58
161	Structure of intercalated Cs in zeolite ITQ-4: an array of metal ions and correlated electrons confined in a pseudo-1D nanoporous host. <i>Physical Review Letters</i> , 2002 , 89, 075502	7.4	58
160	Study of Local Structure in Selected Organic-Inorganic Perovskites in the Pm3 m Phase. <i>Chemistry of Materials</i> , 2008 , 20, 1272-1277	9.6	57
159	Tuning the Surface Structure and Optical Properties of CdSe Clusters Using Coordination Chemistry. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 3075-3080	6.4	56
158	Search for a structural response to the intermediate phase in GexSe1-x glasses. <i>Physical Review B</i> , 2008 , 77,	3.3	56
157	Magnetism in semiconducting molybdenum dichalcogenides. <i>Science Advances</i> , 2018 , 4, eaat3672	14.3	56
156	Synthesis, crystal structure, and magnetism of Fe1.00(2)Se1.00(3) single crystals. <i>Physical Review B</i> , 2011 , 83,	3.3	55
155	Confirmation of disordered structure of ultrasmall CdSe nanoparticles from X-ray atomic pair distribution function analysis. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 8480-6	3.6	54
154	Probing local and long-range structure simultaneously: an in situ study of the high-temperature phase transition of alpha-AlF3. <i>Journal of the American Chemical Society</i> , 2004 , 126, 4756-7	16.4	50
153	The rise of the X-ray atomic pair distribution function method: a series of fortunate events. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019 , 377, 20180413	3	49
152	Cation Exchange Induced Transformation of InP Magic-Sized Clusters. <i>Chemistry of Materials</i> , 2017 , 29, 7984-7992	9.6	49
151	Nanoscale disorder and local electronic properties of CaCu3Ti4O12: An integrated study of electron, neutron, and x-ray diffraction, x-ray absorption fine structure, and first-principles calculations. <i>Physical Review B</i> , 2010 , 81,	3.3	49
150	The atomic pair distribution function: past and present. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2004 , 219,	1	49

149	Nyquist-Shannon sampling theorem applied to refinements of the atomic pair distribution function. <i>Physical Review B</i> , 2011 , 84,	3-3	46
148	Tiopronin gold nanoparticle precursor forms aurophilic ring tetramer. <i>Inorganic Chemistry</i> , 2010 , 49, 10858-66	5-8	42
147	Local and average structures of the spin-glass pyrochlore Y ₂ Mo ₂ O ₇ from neutron diffraction and neutron pair distribution function analysis. <i>Physical Review B</i> , 2009 , 79,	3-3	42
146	Superconducting order from disorder in 2H-TaSe ₂ . <i>Npj Quantum Materials</i> , 2017 , 2,	5	41
145	Demonstration of thin film pair distribution function analysis (tPDF) for the study of local structure in amorphous and crystalline thin films. <i>IUCrJ</i> , 2015 , 2, 481-9	4-7	41
144	Early stage structural development of prototypical zeolitic imidazolate framework (ZIF) in solution. <i>Nanoscale</i> , 2018 , 10, 4291-4300	7-7	40
143	Lattice dynamics reveals a local symmetry breaking in the emergent dipole phase of PbTe. <i>Physical Review B</i> , 2012 , 86,	3-3	40
142	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A1310-A1314	3-9	39
141	Evolution of atomic structure during nanoparticle formation. <i>IUCrJ</i> , 2014 , 1, 165-71	4-7	39
140	Structures of alkali metals in silica gel nanopores: new materials for chemical reductions and hydrogen production. <i>Journal of the American Chemical Society</i> , 2007 , 129, 1386-92	16.4	39
139	Charge Density Wave Caused by Reducing ThSe ₃ by One Electron. Superstructure and Short-Range Order in ATh ₂ Se ₆ (A = K, Rb) Studied by X-ray Diffraction, Electron Diffraction, and Diffuse Scattering. <i>Journal of the American Chemical Society</i> , 1998 , 120, 10706-10714	16.4	38
138	Scalable Synthesis of Ultrathin Mn ₃ N ₂ Exhibiting Room-Temperature Antiferromagnetism. <i>Advanced Functional Materials</i> , 2019 , 29, 1809001	15.6	37
137	Modelling pair distribution functions (PDFs) of organic compounds: describing both intra- and intermolecular correlation functions in calculated PDFs. <i>Journal of Applied Crystallography</i> , 2015 , 48, 171-178	3.8	37
136	Seeking Supersolidity in Helium Layers. <i>Physics Magazine</i> , 2010 , 3,	1.1	36
135	Mesostructured Non-Oxidic Solids with Adjustable Worm-hole Shaped Pores: M-Ge-Q (Q=S, Se) Frameworks Based on Tetrahedral [Ge ₄ Q ₁₀] ₄ Clusters. <i>Advanced Materials</i> , 2000 , 12, 85-91	24	36
134	Neutron Scattering Studies of Compositional Heterogeneity in Sol-gel Processed Lead Zirconate Titanates. <i>Chemistry of Materials</i> , 1998 , 10, 3611-3619	9.6	36
133	Magnetic pair distribution function analysis of local magnetic correlations. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014 , 70, 3-11	1.7	35
132	Assigned and unassigned distance geometry: applications to biological molecules and nanostructures. <i>Acta Crystallographica Section A</i> , 2016 , 72, 337-376	1.4	34

131	Quantitative nanostructure characterization using atomic pair distribution functions obtained from laboratory electron microscopes. <i>Zeitschrift für Kristallographie</i> , 2012 , 227, 248-256		32
130	Proton-Electron Conductivity in Thin Films of a Cobalt-Oxygen Evolving Catalyst. <i>ACS Applied Energy Materials</i> , 2019 , 2, 3-12	6.1	30
129	Detection and characterization of nanoparticles in suspension at low concentrations using the X-ray total scattering pair distribution function technique. <i>Nanoscale</i> , 2015 , 7, 5480-7	7.7	30
128	Stabilization of reactive CoO cubane oxygen-evolution catalysts within porous frameworks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 11630-11639	11.5	29
127	Magnetic structure determination from the magnetic pair distribution function (mPDF): ground state of MnO. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015 , 71, 325-34	1.7	29
126	Symmetry Breaking in Nanostructure Development of Carbogenic Molecular Sieves: Effects of Morphological Pattern Formation on Oxygen and Nitrogen Transport. <i>Chemistry of Materials</i> , 1996 , 8, 2159-2171	9.6	29
125	Towards atomistic understanding of polymorphism in the solvothermal synthesis of ZrO nanoparticles. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016 , 72, 645-650	1.7	28
124	Nanoscale structural domains in the phonon-glass thermoelectric material $\text{Pb}_{1-x}\text{Sn}_x\text{Te}$. <i>Physical Review B</i> , 2007 , 75,	3.3	28
123	Improved Models for Metallic Nanoparticle Cores from Atomic Pair Distribution Function (PDF) Analysis. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 29498-29506	3.8	28
122	Toward Phase Quantification at the Nanoscale Using the Total Scattering Pair Distribution Function (TSPDF) Method: Recrystallization of Cryomilled Sulfamerazine. <i>Crystal Growth and Design</i> , 2013 , 13, 4239-4244	3.5	27
121	Hollandites as a new class of multiferroics. <i>Scientific Reports</i> , 2014 , 4, 6203	4.9	26
120	Using a machine learning approach to determine the space group of a structure from the atomic pair distribution function. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019 , 75, 633-643	1.7	26
119	Autonomous experimentation systems for materials development: A community perspective. <i>Matter</i> , 2021 , 4, 2702-2726	12.7	26
118	Recrystallization, Phase Composition, and Local Structure of Amorphous Lactose from the Total Scattering Pair Distribution Function. <i>Crystal Growth and Design</i> , 2016 , 16, 210-220	3.5	25
117	Reconciliation of local and long-range tilt correlations in underdoped $\text{La}_{2-x}\text{BaxCuO}_4$ ($0 \leq x \leq 0.155$). <i>Physical Review B</i> , 2015 , 91,	3.3	25
116	Evidence for short-range-ordered charge stripes far above the charge-ordering transition in $\text{La}_{1.67}\text{Sr}_{0.33}\text{NiO}_4$. <i>Physical Review Letters</i> , 2013 , 111, 096404	7.4	25
115	In-Situ Monitoring of Particle Growth at PEMFC Cathode under Accelerated Cycling Conditions. <i>Electrochemical and Solid-State Letters</i> , 2012 , 15, B72		25
114	Correlated local dipoles in PbTe. <i>Physical Review Materials</i> , 2018 , 2,	3.2	25

113	Local Environment of Terbium(III) Ions in Layered Nanocrystalline Zirconium(IV) Phosphonate-Phosphate Ion Exchange Materials. <i>Inorganic Chemistry</i> , 2017 , 56, 8837-8846	5.1	24
112	Verification of Anderson Superexchange in MnO via Magnetic Pair Distribution Function Analysis and <i>ab initio</i> Theory. <i>Physical Review Letters</i> , 2016 , 116, 197204	7.4	23
111	Bulk metallic glass-like scattering signal in small metallic nanoparticles. <i>ACS Nano</i> , 2014 , 8, 6163-70	16.7	23
110	Cu(x)UTe ₃ : stabilization of UTe ₃ in the ZrSe ₃ structure type via copper insertion. The artifact of Te-Te chains and evidence for distortions due to long range modulations. <i>Journal of the American Chemical Society</i> , 2001 , 123, 4755-62	16.4	23
109	Local atomic and magnetic structure of dilute magnetic semiconductor (Ba,K)(Zn,Mn) ₂ As ₂ . <i>Physical Review B</i> , 2016 , 94,	3.3	23
108	Structures of Hard Phases in Thermoplastic Polyurethanes. <i>Macromolecules</i> , 2016 , 49, 7350-7358	5.5	23
107	Intra-unit-cell nematic charge order in the titanium-oxypnictide family of superconductors. <i>Nature Communications</i> , 2014 , 5, 5761	17.4	22
106	Detailed mapping of the local Ir ⁴⁺ dimers through the metal-insulator transitions of CuIr ₂ S ₄ thiospinel by X-ray atomic pair distribution function measurements. <i>Physical Review Letters</i> , 2011 , 106, 045501	7.4	22
105	Accurate Structure Determination of Mo ₆ Sylz Nanowires from Atomic Pair Distribution Function (PDF) Analysis. <i>Chemistry of Materials</i> , 2006 , 18, 100-106	9.6	22
104	Volume-wise destruction of the antiferromagnetic Mott insulating state through quantum tuning. <i>Nature Communications</i> , 2016 , 7, 12519	17.4	22
103	Local orbital degeneracy lifting as a precursor to an orbital-selective Peierls transition. <i>Nature Communications</i> , 2019 , 10, 3638	17.4	21
102	Crystal structure solution from experimentally determined atomic pair distribution functions. <i>Journal of Applied Crystallography</i> , 2010 , 43, 623-629	3.8	21
101	Stoichiometric Control over Ferroic Behavior in Ba(Ti _{1-x} Fex)O ₃ Nanocrystals. <i>Chemistry of Materials</i> , 2019 , 31, 1318-1335	9.6	21
100	Network-Forming Liquids from Metal-Bis(acetamide) Frameworks with Low Melting Temperatures. <i>Journal of the American Chemical Society</i> , 2021 , 143, 2801-2811	16.4	20
99	Hollow organic capsules assemble into cellular semiconductors. <i>Nature Communications</i> , 2018 , 9, 1957	17.4	20
98	Room temperature local nematicity in FeSe superconductor. <i>Physical Review B</i> , 2019 , 100,	3.3	19
97	Recent advances and applications of deep learning methods in materials science. <i>Npj Computational Materials</i> , 2022 , 8,	10.9	19
96	Evidence for Anomalous Bond Softening and Disorder Below 2 nm Diameter in Carbon-Supported Platinum Nanoparticles from the Temperature-Dependent Peak Width of the Atomic Pair Distribution Function. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 7226-7230	3.8	18

95	Magnetic phase transition in V2O3 nanocrystals. <i>Physical Review B</i> , 2010 , 82,	3.3	18
94	Determination of standard uncertainties in fits to pair distribution functions. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2004 , 60, 315-7		18
93	Calibration and data collection protocols for reliable lattice parameter values in electron pair distribution function studies. <i>Journal of Applied Crystallography</i> , 2015 , 48, 244-251	3.8	17
92	Towards solution and refinement of organic crystal structures by fitting to the atomic pair distribution function. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016 , 72, 62-72	1.7	17
91	Towards a robust ad hoc data correction approach that yields reliable atomic pair distribution functions from powder diffraction data. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 454202	1.8	17
90	Planar nets of Ti atoms comprising squares and rhombs in the new binary antimonide Ti2Sb. <i>Journal of the American Chemical Society</i> , 2004 , 126, 8295-302	16.4	17
89	Cluster-mining: an approach for determining core structures of metallic nanoparticles from atomic pair distribution function data. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020 , 76, 24-31	1.7	17
88	Synthesis and Properties of Plasmonic Boron-Hyperdoped Silicon Nanoparticles. <i>Advanced Functional Materials</i> , 2019 , 29, 1807788	15.6	17
87	Anthracene as a Launchpad for a Phosphinidene Sulfide and for Generation of a Phosphorus-Sulfur Material Having the Composition PS, a Vulcanized Red Phosphorus That Is Yellow. <i>Journal of the American Chemical Society</i> , 2019 , 141, 431-440	16.4	17
86	Structure-property insights into nanostructured electrodes for Li-ion batteries from local structural and diffusional probes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 127-137	13	17
85	Emphanitic anharmonicity in PbSe at high temperature and anomalous electronic properties in the PbQ(Q=S,Se,Te) system. <i>Physical Review B</i> , 2018 , 98,	3.3	17
84	Recent results on assigned and unassigned distance geometry with applications to protein molecules and nanostructures. <i>Annals of Operations Research</i> , 2018 , 271, 161-203	3.2	17
83	Structural Evolution of Iron Antimonides from Amorphous Precursors to Crystalline Products Studied by Total Scattering Techniques. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9652-8	16.4	16
82	PDFgetN3: atomic pair distribution functions from neutron powder diffraction data using adhoc corrections. <i>Journal of Applied Crystallography</i> , 2018 , 51, 1492-1497	3.8	16
81	Robust structure and morphology parameters for CdS nanoparticles by combining small-angle X-ray scattering and atomic pair distribution function data in a complex modeling framework. <i>Journal of Applied Crystallography</i> , 2014 , 47, 561-565	3.8	16
80	Unlocking the structure of mixed amorphous-crystalline ceramic oxide films synthesized under low temperature electromagnetic excitation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18434-18441	13	16
79	LATTICE EFFECTS IN HIGH-TC SUPERCONDUCTORS 1996 , 265-373		16
78	Celebrating 100 years of the Debye scattering equation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016 , 72, 589-590	1.7	16

77	Modelling and validation of particle size distributions of supported nanoparticles using the pair distribution function technique. <i>Journal of Applied Crystallography</i> , 2017 , 50, 741-748	3.8	15
76	On the estimation of statistical uncertainties on powder diffraction and small-angle scattering data from two-dimensional X-ray detectors. <i>Journal of Applied Crystallography</i> , 2014 , 47, 1273-1283	3.8	15
75	Local structural evidence for strong electronic correlations in spinel LiRh ₂ O ₄ . <i>Physical Review B</i> , 2013 , 88,	3.3	15
74	Diverse structural and magnetic properties of differently prepared MnAs nanoparticles. <i>ACS Nano</i> , 2011 , 5, 2970-8	16.7	15
73	Total-scattering pair-distribution function of organic material from powder electron diffraction data. <i>Microscopy and Microanalysis</i> , 2015 , 21, 459-71	0.5	13
72	The Liga algorithm for ab initio determination of nanostructure. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2008 , 64, 631-40		13
71	PDF from X-ray powder diffraction for nanometer-scale atomic structure analysis of quasicrystalline alloys. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2005 , 220, 962-967	1	13
70	Pair Distribution Function Analysis of ZrO ₂ Nanocrystals and Insights in the Formation of ZrO ₂ /Ba ₂ Cu ₃ O ₇ Nanocomposites. <i>Materials</i> , 2018 , 11,	3.5	13
69	Cu(Ir _{1-x} Cr _x)S ₂ model system for studying nanoscale phase coexistence at the metal-insulator transition. <i>Scientific Reports</i> , 2014 , 4, 4081	4.9	12
68	Local structure of ReO ₃ at ambient pressure from neutron total-scattering study. <i>Physical Review B</i> , 2012 , 86,	3.3	12
67	Structural compliance, misfit strain, and stripe nanostructures in cuprate superconductors. <i>Physical Review B</i> , 2002 , 66,	3.3	11
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