

Simon Billinge

List of Publications by Year in Descending Order

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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
citations

58
h-index

116
g-index

241
ext. papers

16,486
ext. citations

8
avg, IF

6.65
L-index

#	Paper	IF	Citations
220	Controlling desolvation through polymer-assisted grinding. <i>CrystEngComm</i> , 2022 , 24, 2305-2313	3.3	0
219	Mechanistic Insight into the Precursor Chemistry of ZrO and HfO Nanocrystals; towards Size-Tunable Syntheses.. <i>Jacs Au</i> , 2022 , 2, 827-838		0
218	Recent advances and applications of deep learning methods in materials science. <i>Npj Computational Materials</i> , 2022 , 8,	10.9	19
217	nmfMapping: a cloud-based web application for non-negative matrix factorization of powder diffraction and pair distribution function datasets.. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2022 , 78, 242-248	1.7	0
216	Hidden Local Symmetry Breaking in Silver Diamondoid Compounds is Root Cause of Ultralow Thermal Conductivity.. <i>Advanced Materials</i> , 2022 , e2202255	24	2
215	Powder diffraction. <i>Nature Reviews Methods Primers</i> , 2021 , 1,		2
214	Structural Analysis of Molecular Materials Using the Pair Distribution Function. <i>Chemical Reviews</i> , 2021 ,	68.1	11
213	Toward In Situ Synchrotron Mapping of Crystal Selection Processes during Crystal Growth. <i>Chemistry of Materials</i> , 2021 , 33, 3359-3367	9.6	1
212	Superatomic solid solutions. <i>Nature Chemistry</i> , 2021 , 13, 607-613	17.6	4
211	Validation of non-negative matrix factorization for rapid assessment of large sets of atomic pair distribution function data. <i>Journal of Applied Crystallography</i> , 2021 , 54, 768-775	3.8	4
210	Dual Orbital Degeneracy Lifting in a Strongly Correlated Electron System. <i>Physical Review Letters</i> , 2021 , 126, 186402	7.4	1
209	Lowering Ternary Oxide Synthesis Temperatures by Solid-State Cometathesis Reactions. <i>Chemistry of Materials</i> , 2021 , 33, 3692-3701	9.6	3
208	A cloud platform for atomic pair distribution function analysis: PDFitc. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2021 , 77, 2-6	1.7	9
207	Ferroelectric state and polarization switching behaviour of ultrafine BaTiO ₃ nanoparticles with large-scale size uniformity. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 5267-5276	7.1	0
206	Local and long-range atomic/magnetic structure of non-stoichiometric spinel iron oxide nanocrystallites. <i>IUCrJ</i> , 2021 , 8, 33-45	4.7	3
205	A high throughput optical method for studying compositional effects in electrocatalysts for CO reduction. <i>Nature Communications</i> , 2021 , 12, 1114	17.4	7
204	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

203	Autonomous experimentation systems for materials development: A community perspective. <i>Matter</i> , 2021 , 4, 2702-2726	12.7	26
202	Modern crystallography and its foundations. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2021 , 77, 1	1.7	0
201	Linking far-from-equilibrium defect structures in ceramics to electromagnetic driving forces. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 8425-8434	13	0
200	Understanding electronic peculiarities in tetragonal FeSe as local structural symmetry breaking. <i>Physical Review B</i> , 2020 , 102,	3.3	10
199	sasPDF: pair distribution function analysis of nanoparticle assemblies from small-angle scattering data. <i>Journal of Applied Crystallography</i> , 2020 , 53, 699-709	3.8	6
198	Ultrafast x-ray diffraction study of melt-front dynamics in polycrystalline thin films. <i>Science Advances</i> , 2020 , 6, eaax2445	14.3	9
197	A thermal-gradient approach to variable-temperature measurements resolved in space. <i>Journal of Applied Crystallography</i> , 2020 , 53, 662-670	3.8	8
196	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
195	Structure-mining: screening structure models by automated fitting to the atomic pair distribution function over large numbers of models. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020 , 76, 395-409	1.7	9
194	Rapid desolvation-triggered domino lattice rearrangement in a metal-organic framework. <i>Nature Chemistry</i> , 2020 , 12, 90-97	17.6	60
193	Active Reaction Control of Cu Redox State Based on Real-Time Feedback from In Situ Synchrotron Measurements. <i>Journal of the American Chemical Society</i> , 2020 , 142, 18758-18762	16.4	6
192	Defect-Accommodating Intermediates Yield Selective Low-Temperature Synthesis of YMnO Polymorphs. <i>Inorganic Chemistry</i> , 2020 , 59, 13639-13650	5.1	7
191	Complete Strain Mapping of Nanosheets of Tantalum Disulfide. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 43173-43179	9.5	3
190	Two-orbital degeneracy lifted local precursor to a metal-insulator transition in MgTi ₂ O ₄ . <i>Physical Review B</i> , 2020 , 102,	3.3	3
189	Local Structural Effects Due to Micronization and Amorphization on an HIV Treatment Active Pharmaceutical Ingredient. <i>Molecular Pharmaceutics</i> , 2020 , 17, 2370-2389	5.6	8
188	Nanometre-scale structure from powder diffraction: total scattering and atomic pair distribution function analysis 2019 , 649-672		8
187	Local orbital degeneracy lifting as a precursor to an orbital-selective Peierls transition. <i>Nature Communications</i> , 2019 , 10, 3638	17.4	21
186	Quantitative Structural Characterization of Catalytically Active TiO ₂ Nanoparticles. <i>ACS Applied Nano Materials</i> , 2019 , 2, 6268-6276	5.6	9

185	Two-Dimensional Arrays of Transition Metal Nitride Nanocrystals. <i>Advanced Materials</i> , 2019 , 31, e1902393	3.1	59
184	Photoinduced dynamics of nematic order parameter in FeSe. <i>Physical Review B</i> , 2019 , 99,	3.3	10
183	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
182	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
181	Microporous Battery Electrodes from Molecular Cluster Precursors. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 11292-11297	9.5	4
180	Scalable Synthesis of Ultrathin Mn ₃ N ₂ Exhibiting Room-Temperature Antiferromagnetism. <i>Advanced Functional Materials</i> , 2019 , 29, 1809001	15.6	37
179	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
178	Room temperature local nematicity in FeSe superconductor. <i>Physical Review B</i> , 2019 , 100,	3.3	19
177	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
176	Zirconium Phosphate: The Pathway from Turbostratic Disorder to Crystallinity. <i>Inorganic Chemistry</i> , 2019 , 58, 14260-14274	5.1	8
175	Algorithm for distance list extraction from pair distribution functions. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019 , 75, 658-668	1.7	5
174	Size-Dependent Lattice Dynamics of Atomically Precise Cadmium Selenide Quantum Dots. <i>Physical Review Letters</i> , 2019 , 122, 026101	7.4	6
173	Stoichiometric Control over Ferroic Behavior in Ba(Ti _{1-x} Fe _x)O ₃ Nanocrystals. <i>Chemistry of Materials</i> , 2019 , 31, 1318-1335	9.6	21
172	Synthesis and Properties of Plasmonic Boron-Hyperdoped Silicon Nanoparticles. <i>Advanced Functional Materials</i> , 2019 , 29, 1807788	15.6	17
171	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
170	Early stage structural development of prototypical zeolitic imidazolate framework (ZIF) in solution. <i>Nanoscale</i> , 2018 , 10, 4291-4300	7.7	40
169	PDFgetN3: atomic pair distribution functions from neutron powder diffraction data using ad hoc corrections. <i>Journal of Applied Crystallography</i> , 2018 , 51, 1492-1497	3.8	16
168	Correlated local dipoles in PbTe. <i>Physical Review Materials</i> , 2018 , 2,	3.2	25

167	Synthesis, characterization, and growth mechanism of motifs of ultrathin cobalt-substituted NaFeSi ₂ O ₆ nanowires. <i>CrystEngComm</i> , 2018 , 20, 223-236	3.3	3
166	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
165	Magnetism in semiconducting molybdenum dichalcogenides. <i>Science Advances</i> , 2018 , 4, eaat3672	14.3	56
164	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
163	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
162	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
161	Barium titanate nanoparticles: Short-range lattice distortions with long-range cubic order. <i>Physical Review B</i> , 2018 , 98,	3.3	8
160	Pair Distribution Function Analysis of ZrO ₂ Nanocrystals and Insights in the Formation of ZrO ₂ /BaTiO ₃ Nanocomposites. <i>Materials</i> , 2018 , 11,	3.5	13
159	Hollow organic capsules assemble into cellular semiconductors. <i>Nature Communications</i> , 2018 , 9, 1957	17.4	20
158	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2017 , 11, 3819-3831	16.7	181
157	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
156	Superconducting order from disorder in 2H-TaSe 2k S x. <i>Npj Quantum Materials</i> , 2017 , 2,	5	41
155	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
154	Robust Nanostructure from High Throughput Powder Diffraction Data. <i>Microscopy and Microanalysis</i> , 2017 , 23, 172-173	0.5	
153	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
152	Cation Exchange Induced Transformation of InP Magic-Sized Clusters. <i>Chemistry of Materials</i> , 2017 , 29, 7984-7992	9.6	49
151	Pressure tuning of structure, superconductivity, and novel magnetic order in the Ce-underdoped electron-doped cuprate T _{1.3} La _{0.7} Ce _x CuO ₄ (x=0.1). <i>Physical Review B</i> , 2017 , 96,	3.3	6
150	2D molybdenum and vanadium nitrides synthesized by ammoniation of 2D transition metal carbides (MXenes). <i>Nanoscale</i> , 2017 , 9, 17722-17730	7.7	192

149	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
148	Real-space investigation of short-range magnetic correlations in fluoride pyrochlores NaCaCo ₂ F ₇ and NaSrCo ₂ F ₇ with magnetic pair distribution function analysis. <i>Physical Review Materials</i> , 2017 , 1,	3.2	9
147	Verification of Anderson Superexchange in MnO via Magnetic Pair Distribution Function Analysis and ab Initio Theory. <i>Physical Review Letters</i> , 2016 , 116, 197204	7.4	23
146	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
145	Polymorphism in magic-sized Au ₁₄₄ (SR) ₆₀ clusters. <i>Nature Communications</i> , 2016 , 7, 11859	17.4	126
144	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
143	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
142	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
141	Celebrating 100 years of the Debye scattering equation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016 , 72, 589-590	1.7	16
140	Cooperative coupling of static magnetism and bulk superconductivity in the stripe phase of La _{2-x} BaxCuO ₄ : Pressure- and doping-dependent studies. <i>Physical Review B</i> , 2016 , 94,	3.3	8
139	Volume-wise destruction of the antiferromagnetic Mott insulating state through quantum tuning. <i>Nature Communications</i> , 2016 , 7, 12519	17.4	22
138	Assigned and unassigned distance geometry: applications to biological molecules and nanostructures. <i>Acta Crystallographica Section A</i> , 2016 , 72, 337-376	1.4	34
137	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
136	Structures of Hard Phases in Thermoplastic Polyurethanes. <i>Macromolecules</i> , 2016 , 49, 7350-7358	5.5	23
135	Atomic electron tomography: 3D structures without crystals. <i>Science</i> , 2016 , 353,	33.3	129
134	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
133	Investigating short-range magnetic correlations in real space with the magnetic pair distribution function (mPDF). <i>Neutron News</i> , 2016 , 27, 14-16	0.4	1
132	Novel trends in pair distribution function approaches on bulk systems with nanoscale heterogeneities. <i>Neutron News</i> , 2016 , 27, 27-31	0.4	1

131	Enhanced thermoelectric power and electronic correlations in RuSe ₂ . <i>APL Materials</i> , 2015 , 3, 041513	5.7	10
130	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
129	Algorithm for systematic peak extraction from atomic pair distribution functions. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015 , 71, 392-409	1.7	9
128	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
127	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
126	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
125	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
124	Nature of Activated Manganese Oxide for Oxygen Evolution. <i>Journal of the American Chemical Society</i> , 2015 , 137, 14887-904	16.4	295
123	Resonant spin tunneling in randomly oriented nanospheres of Mn ₁₂ acetate. <i>Physical Review B</i> , 2015 , 91,	3.3	3
122	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
121	Demonstration of thin film pair distribution function analysis (tfPDF) for the study of local structure in amorphous and crystalline thin films. <i>IUCrJ</i> , 2015 , 2, 481-9	4.7	41
120	Reconciliation of local and long-range tilt correlations in underdoped La _{2-x} BaxCuO ₄ (0 ≤ x ≤ 0.155). <i>Physical Review B</i> , 2015 , 91,	3.3	25
119	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
118	Imaging Dirac-mass disorder from magnetic dopant atoms in the ferromagnetic topological insulator Cr _x (Bi _{0.1} Sb _{0.9}) _{2-x} Te ₃ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 1316-21	11.5	147
117	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
116	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
115	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
114	Hollandites as a new class of multiferroics. <i>Scientific Reports</i> , 2014 , 4, 6203	4.9	26

113	Structure of Sulfate Adsorption Complexes on Ferrihydrite. <i>Environmental Science and Technology Letters</i> , 2014 , 1, 97-101	11	65
112	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
111	Local off-centering symmetry breaking in the high-temperature regime of SnTe. <i>Physical Review B</i> , 2014 , 89,	3.3	58
110	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
109	Bulk metallic glass-like scattering signal in small metallic nanoparticles. <i>ACS Nano</i> , 2014 , 8, 6163-70	16.7	23
108	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
107	Synthesis and characterization of two-dimensional Nb ₄ C ₃ (MXene). <i>Chemical Communications</i> , 2014 , 50, 9517-20	5.8	321
106	Local vibrations and negative thermal expansion in ZrW ₂ O ₈ . <i>Physical Review Letters</i> , 2014 , 112, 045505	7.4	75
105	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
104	Quantitative Structural Analysis of Nanoparticles Using Electron Pair Distribution Function (ePDF). <i>Microscopy and Microanalysis</i> , 2014 , 20, 630-631	0.5	1
103	Cu(Ir _{1-x} Crx)S ₂ as a model system for studying nanoscale phase coexistence at the metal-insulator transition. <i>Scientific Reports</i> , 2014 , 4, 4081	4.9	12
102	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
101	Structure of nanocrystalline Ti ₃ C ₂ MXene using atomic pair distribution function. <i>Physical Review Letters</i> , 2014 , 112, 125501	7.4	129
100	Nanoscale coherent intergrowthlike defects in a crystal of La _{1.9} Ca _{1.1} Cu ₂ O _{6+δ} made superconducting by high-pressure oxygen annealing. <i>Physical Review B</i> , 2014 , 90,	3.3	3
99	Intra-unit-cell nematic charge order in the titanium-oxypnictide family of superconductors. <i>Nature Communications</i> , 2014 , 5, 5761	17.4	22
98	Evolution of atomic structure during nanoparticle formation. <i>IUCrJ</i> , 2014 , 1, 165-71	4.7	39
97	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
96	Pair distribution function computed tomography. <i>Nature Communications</i> , 2013 , 4, 2536	17.4	75

95	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
94	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
93	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
92	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
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	Local structural evidence for strong electronic correlations in spinel LiRh ₂ O ₄ . <i>Physical Review B</i> , 2013 , 88,	3.3	15
89	Evidence for short-range-ordered charge stripes far above the charge-ordering transition in La _{1.67} Sr _{0.33} NiO ₄ . <i>Physical Review Letters</i> , 2013 , 111, 096404	7.4	25
88	Lattice dynamics reveals a local symmetry breaking in the emergent dipole phase of PbTe. <i>Physical Review B</i> , 2012 , 86,	3.3	40
87	Quantitative nanostructure characterization using atomic pair distribution functions obtained from laboratory electron microscopes. <i>Zeitschrift für Kristallographie</i> , 2012 , 227, 248-256		32
86	Local structure of ReO ₃ at ambient pressure from neutron total-scattering study. <i>Physical Review B</i> , 2012 , 86,	3.3	12
85	Understanding the Formation and Evolution of Ceria Nanoparticles Under Hydrothermal Conditions. <i>Angewandte Chemie</i> , 2012 , 124, 9164-9167	3.6	10
84	Understanding the formation and evolution of ceria nanoparticles under hydrothermal conditions. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9030-3	16.4	78
83	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
82	In-Situ Monitoring of Particle Growth at PEMFC Cathode under Accelerated Cycling Conditions. <i>Electrochemical and Solid-State Letters</i> , 2012 , 15, B72		25
81	Pair Distribution Function Technique: Principles and Methods. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2012 , 183-193	0.2	1
80	Diverse structural and magnetic properties of differently prepared MnAs nanoparticles. <i>ACS Nano</i> , 2011 , 5, 2970-8	16.7	15
79	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
78	Synthesis, crystal structure, and magnetism of Fe _{1.00(2)} Se _{1.00(3)} single crystals. <i>Physical Review B</i> , 2011 , 83,	3.3	55

77	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
76	Nyquist-Shannon sampling theorem applied to refinements of the atomic pair distribution function. <i>Physical Review B</i> , 2011 , 84,	3.3	46
75	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
74	Local structural investigation of SmFeAsO _{1-x} F(x) high temperature superconductors. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 272201	1.8	7
73	Quantitative nanoparticle structures from electron crystallography data. <i>Physical Review B</i> , 2010 , 81,	3.3	5
72	Magnetic phase transition in V ₂ O ₃ nanocrystals. <i>Physical Review B</i> , 2010 , 82,	3.3	18
71	Nanoscale disorder and local electronic properties of CaCu ₃ Ti ₄ O ₁₂ : 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
70	Advances in Scattering Probes for Materials. <i>MRS Bulletin</i> , 2010 , 35, 495-503	3.2	4
69	Tiopronin gold nanoparticle precursor forms aurophilic ring tetramer. <i>Inorganic Chemistry</i> , 2010 , 49, 10858-66	4.2	42
68	Entropically stabilized local dipole formation in lead chalcogenides. <i>Science</i> , 2010 , 330, 1660-3	33.3	254
67	Characterisation of amorphous and nanocrystalline molecular materials by total scattering. <i>CrystEngComm</i> , 2010 , 12, 1366-1368	3.3	66
66	Seeking Supersolidity in Helium Layers. <i>Physics Magazine</i> , 2010 , 3,	1.1	36
65	Crystal structure solution from experimentally determined atomic pair distribution functions. <i>Journal of Applied Crystallography</i> , 2010 , 43, 623-629	3.8	21
64	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
63	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
62	Study of Local Structure in Selected Organic/Inorganic Perovskites in the Pm ₃ m Phase. <i>Chemistry of Materials</i> , 2008 , 20, 1272-1277	9.6	57
61	Search for a structural response to the intermediate phase in Ge _x Se _{1-x} glasses. <i>Physical Review B</i> , 2008 , 77,	3.3	56
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