Simon Billinge

List of Publications by Year
in descending order

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232 papers	18,827 citations	14653 66 h-index	12944 131 g-index
241 all docs	241 docs citations	241 times ranked	19624 citing authors

#	Article	IF	Citations
1	PDFfit2 and PDFgui: computer programs for studying nanostructure in crystals. Journal of Physics Condensed Matter, 2007, 19, 335219.	1.8	1,225
2	PDFgetX2: a GUI-driven program to obtain the pair distribution function from X-ray powder diffraction data. Journal of Applied Crystallography, 2004, 37, 678-678.	4.5	890
3	Structures of the ferroelectric phases of barium titanate. The Journal of Physical Chemistry, 1993, 97, 2368-2377.	2.9	620
4	The Problem with Determining Atomic Structure at the Nanoscale. Science, 2007, 316, 561-565.	12.6	614
5	Rapid-acquisition pair distribution function (RA-PDF) analysis. Journal of Applied Crystallography, 2003, 36, 1342-1347.	4.5	501
6	Synthesis and characterization of two-dimensional Nb₄C₃ (MXene). Chemical Communications, 2014, 50, 9517-9520.	4.1	481
7	PDFFIT, a program for full profile structural refinement of the atomic pair distribution function. Journal of Applied Crystallography, 1999, 32, 572-575.	4.5	448
8	Beyond crystallography: the study of disorder, nanocrystallinity and crystallographically challenged materials with pair distribution functions. Chemical Communications, 2004, , 749.	4.1	430
9	Direct Observation of Lattice Polaron Formation in the Local Structure ofLa1â^'xCaxMnO3. Physical Review Letters, 1996, 77, 715-718.	7.8	409
10	Structure of V2O5Â·nH2O Xerogel Solved by the Atomic Pair Distribution Function Technique. Journal of the American Chemical Society, 2002, 124, 10157-10162.	13.7	406
11	Control of electronic properties of 2D carbides (MXenes) by manipulating their transition metal layers. Nanoscale Horizons, 2016, 1, 227-234.	8.0	394
12	Nature of Activated Manganese Oxide for Oxygen Evolution. Journal of the American Chemical Society, 2015, 137, 14887-14904.	13.7	359
13	Textural Mesoporosity and the Catalytic Activity of Mesoporous Molecular Sieves with Wormhole Framework Structures. Journal of the American Chemical Society, 1999, 121, 8835-8842.	13.7	340
14	2D molybdenum and vanadium nitrides synthesized by ammoniation of 2D transition metal carbides (MXenes). Nanoscale, 2017, 9, 17722-17730.	5.6	327
15	Entropically Stabilized Local Dipole Formation in Lead Chalcogenides. Science, 2010, 330, 1660-1663.	12.6	308
16	Structure of Methylammonium Lead Iodide Within Mesoporous Titanium Dioxide: Active Material in High-Performance Perovskite Solar Cells. Nano Letters, 2014, 14, 127-133.	9.1	282
17	PDFgetN: a user-friendly program to extract the total scattering structure factor and the pair distribution function from neutron powder diffraction data. Journal of Applied Crystallography, 2000, 33, 1192-1192.	4.5	262
18	Structural analysis of complex materials using the atomic pair distribution function â€" a practical guide. Zeitschrift Fur Kristallographie - Crystalline Materials, 2003, 218, 132-143.	0.8	249

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19	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 3819-3831.	14.6	246
20	Two-Step Nucleation and Growth of InP Quantum Dots via Magic-Sized Cluster Intermediates. Chemistry of Materials, 2015, 27, 1432-1441.	6.7	240
21	Complex modeling: a strategy and software program for combining multiple information sources to solve ill posed structure and nanostructure inverse problems. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, 562-568.	0.1	223
22	Direct Observation of Dynamic Symmetry Breaking above Room Temperature in Methylammonium Lead Iodide Perovskite. ACS Energy Letters, 2016, 1, 880-887.	17.4	221
23	Recent advances and applications of deep learning methods in materials science. Npj Computational Materials, 2022, 8, .	8.7	207
24	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. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1316-1321.	7.1	206
25	Quantitative size-dependent structure and strain determination of CdSe nanoparticles using atomic pair distribution function analysis. Physical Review B, 2007, 76, .	3.2	204
26	Atomic Structures and Gram Scale Synthesis of Three Tetrahedral Quantum Dots. Journal of the American Chemical Society, 2014, 136, 10645-10653.	13.7	182
27	Atomic electron tomography: 3D structures without crystals. Science, 2016, 353, .	12.6	181
28	Revealing the Mechanisms behind SnO₂ Nanoparticle Formation and Growth during Hydrothermal Synthesis: An In Situ Total Scattering Study. Journal of the American Chemical Society, 2012, 134, 6785-6792.	13.7	180
29	Structure of nanocrystalline materials using atomic pair distribution function analysis: Study ofLiMoS2. Physical Review B, 2002, 65, .	3.2	170
30	Ab initio determination of solid-state nanostructure. Nature, 2006, 440, 655-658.	27.8	169
31	Relationship between the atomic pair distribution function and small-angle scattering: implications for modeling of nanoparticles. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, 232-239.	0.3	168
32	Polymorphism in magic-sized Au144(SR)60 clusters. Nature Communications, 2016, 7, 11859.	12.8	167
33	Structure of Nanocrystalline<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Ti</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Using Atomic Pair Distribution Function. Physical Review Letters, 2014, 112, 125501.	7.8	161
34	Orbital Correlations in the PseudocubicOand RhombohedralRPhases ofLaMnO3. Physical Review Letters, 2005, 94, 177203.	7.8	159
35	Polyhedral Units and Network Connectivity in Calcium Aluminosilicate Glasses from High-Energy X-Ray Diffraction. Physical Review Letters, 2000, 85, 3436-3439.	7.8	157
36	Intermediate-Range Structure of Self-Assembled Cobalt-Based Oxygen-Evolving Catalyst. Journal of the American Chemical Society, 2013, 135, 6403-6406.	13.7	151

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37	Neutron Diffraction Evidence of Microscopic Charge Inhomogeneities in theCuO2Plane of SuperconductingLa2â^'xSrxCuO4(0â‰xâ‰0.30). Physical Review Letters, 2000, 84, 5856-5859.	7.8	149
38	Lattice dynamics and correlated atomic motion from the atomic pair distribution function. Physical Review B, 2003, 67, .	3.2	145
39	Autonomous experimentation systems for materials development: A community perspective. Matter, 2021, 4, 2702-2726.	10.0	143
40	Measuring Correlated Atomic Motion Using X-ray Diffraction. Journal of Physical Chemistry A, 1999, 103, 921-924.	2.5	131
41	Mercury Binding Sites in Thiol-Functionalized Mesostructured Silica. Journal of the American Chemical Society, 2005, 127, 8492-8498.	13.7	130
42	High Real-Space Resolution Measurement of the Local Structure ofGa1â^'xInxAsUsing X-Ray Diffraction. Physical Review Letters, 1999, 83, 4089-4092.	7.8	127
43	Local structure of nanoporous carbons. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 1519-1530.	0.6	112
44	The rise of the X-ray atomic pair distribution function method: a series of fortunate events. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180413.	3.4	110
45	Structural Analysis of Molecular Materials Using the Pair Distribution Function. Chemical Reviews, 2022, 122, 1208-1272.	47.7	105
46	Fine-Scale Nanostructure in Î³-Al2O3. Chemistry of Materials, 2006, 18, 3242-3248.	6.7	102
47	Signatures of the topological s +â^' superconducting order parameter in the type-II Weyl semimetal T d-MoTe2. Nature Communications, 2017, 8, 1082.	12.8	101
48	Improved measures of quality for the atomic pair distribution function. Journal of Applied Crystallography, 2003, 36, 53-64.	4.5	96
49	Pair distribution function computed tomography. Nature Communications, 2013, 4, 2536.	12.8	96
50	Role of Framework Sodium versus Local Framework Structure in Determining the Hydrothermal Stability of MCM-41 Mesostructures. Journal of the American Chemical Society, 2002, 124, 97-103.	13.7	95
51	Application of Atomic Pair Distribution Function Analysis to Materials with Intrinsic Disorder. Three-Dimensional Structure of Exfoliated-Restacked WS2:â€‰ Not Just a Random Turbostratic Assembly of Layers. Journal of the American Chemical Society, 2000, 122, 11571-11576.	13.7	93
52	Twoâ€Dimensional Arrays of Transition Metal Nitride Nanocrystals. Advanced Materials, 2019, 31, e1902393.	21.0	93
53	Rapid desolvation-triggered domino lattice rearrangement in a metalâ€“organic framework. Nature Chemistry, 2020, 12, 90-97.	13.6	93
54	Local Vibrations and Negative Thermal Expansion in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>ZrW</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>8</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2014, 112, 045505.	7.8	92

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55	Magnetism in semiconducting molybdenum dichalcogenides. Science Advances, 2018, 4, eaat3672.	10.3	92
56	Reciprocal-space instrumental effects on the real-space neutron atomic pair distribution function. Journal of Applied Crystallography, 2004, 37, 110-116.	4.5	90
57	Understanding the Formation and Evolution of Ceria Nanoparticles Under Hydrothermal Conditions. Angewandte Chemie - International Edition, 2012, 51, 9030-9033.	13.8	88
58	Simulation of nanoporous carbons: A chemically constrained structure. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 1499-1518.	0.6	81
59	Structure of Sulfate Adsorption Complexes on Ferrihydrite. Environmental Science and Technology Letters, 2014, 1, 97-101.	8.7	79
60	Characterisation of amorphous and nanocrystalline molecular materials by total scattering. CrystEngComm, 2010, 12, 1366-1368.	2.6	78
61	Correlating Size and Composition-Dependent Effects with Magnetic, MÃ¶ssbauer, and Pair Distribution Function Measurements in a Family of Catalytically Active Ferrite Nanoparticles. Chemistry of Materials, 2015, 27, 3572-3592.	6.7	77
62	Mechanisms for Iron Oxide Formation under Hydrothermal Conditions: An in Situ Total Scattering Study. ACS Nano, 2014, 8, 10704-10714.	14.6	75
63	Superconducting order from disorder in 2H-TaSe 2â^' x S x. Npj Quantum Materials, 2017, 2, .	5.2	73
64	Data Requirements for the Reliable Use of Atomic Pair Distribution Functions in Amorphous Pharmaceutical Fingerprinting. Pharmaceutical Research, 2011, 28, 1041-1048.	3.5	72
65	Local off-centering symmetry breaking in the high-temperature regime of SnTe. Physical Review B, 2014, 89, .	3.2	72
66	Confirmation of disordered structure of ultrasmall CdSe nanoparticles from X-ray atomic pair distribution function analysis. Physical Chemistry Chemical Physics, 2013, 15, 8480.	2.8	71
67	Study of Local Structure in Selected Organicâ€“Inorganic Perovskites in the Pm3Ì…m Phase. Chemistry of Materials, 2008, 20, 1272-1277.	6.7	70
68	Structure of Intercalated Cs in Zeolite ITQ-4: An Array of Metal Ions and Correlated Electrons Confined in a Pseudo-1D Nanoporous Host. Physical Review Letters, 2002, 89, 075502.	7.8	67
69	The atomic pair distribution function: past and present. Zeitschrift Fur Kristallographie - Crystalline Materials, 2004, 219, .	0.8	67
70	Cation Exchange Induced Transformation of InP Magic-Sized Clusters. Chemistry of Materials, 2017, 29, 7984-7992.	6.7	67
71	Scalable Synthesis of Ultrathin Mn₃N₂ Exhibiting Roomâ€Temperature Antiferromagnetism. Advanced Functional Materials, 2019, 29, 1809001.	14.9	67
72	Tuning the Surface Structure and Optical Properties of CdSe Clusters Using Coordination Chemistry. Journal of Physical Chemistry Letters, 2011, 2, 3075-3080.	4.6	62

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73	Nyquist-Shannon sampling theorem applied to refinements of the atomic pair distribution function. Physical Review B, 2011, 84, .	3.2	62
74	Search for a structural response to the intermediate phase inGexSe1âˆ’xglasses. Physical Review B, 2008, 77, .	3.2	61
75	Synthesis, crystal structure, and magnetism of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math>-Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1.00</mml:mn><mml:mo>(</mml:mo><mml:mn>2</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:msub></mml:math>	3.2	61
76	Network-Forming Liquids from Metalâ€“Bis(acetamide) Frameworks with Low Melting Temperatures. Journal of the American Chemical Society, 2021, 143, 2801-2811.	13.7	60
77	Probing Local and Long-Range Structure Simultaneously:â€‰ An In Situ Study of the High-Temperature Phase Transition of Î±-AlF3. Journal of the American Chemical Society, 2004, 126, 4756-4757.	13.7	59
78	Nanoscale disorder and local electronic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CaCu</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:m	3.2	58
	An integrated study of electron, neutron, and x-ray diffraction, x-ray absorption fine structu. Physical Review B, 2010, 81, .		
79	Early stage structural development of prototypical zeolitic imidazolate framework (ZIF) in solution. Nanoscale, 2018, 10, 4291-4300.	5.6	56
80	Lattice dynamics reveals a local symmetry breaking in the emergent dipole phase of PbTe. Physical Review B, 2012, 86, .	3.2	55
81	Magnetic pair distribution function analysis of local magnetic correlations. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 3-11.	0.1	52
82	Demonstration of thin film pair distribution functionÂanalysis (tfPDF) for the study of local structure in amorphous and crystalline thin films. IUCrJ, 2015, 2, 481-489.	2.2	50
83	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. Journal of the Electrochemical Society, 2015, 162, A1310-A1314.	2.9	50
84	Modelling pair distribution functions (PDFs) of organic compounds: describing both intra- and intermolecular correlation functions in calculated PDFs. Journal of Applied Crystallography, 2015, 48, 171-178.	4.5	47
85	Using a machine learning approach to determine the space group of a structure from the atomic pair distribution function. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, 633-643.	0.1	47
86	LATTICE EFFECTS IN HIGH-T_{C} SUPERCONDUCTORS. , 1996, , 265-373.		46
87	Structures of Alkali Metals in Silica Gel Nanopores:Â New Materials for Chemical Reductions and Hydrogen Production. Journal of the American Chemical Society, 2007, 129, 1386-1392.	13.7	46
88	Tiopronin Gold Nanoparticle Precursor Forms Aurophilic Ring Tetramer. Inorganic Chemistry, 2010, 49, 10858-10866.	4.0	46
89	Evolution of atomic structure during nanoparticle formation. IUCrJ, 2014, 1, 165-171.	2.2	46
90	Assigned and unassigned distance geometry: applications to biological molecules and nanostructures. 4or, 2016, 14, 337-376.	1.6	45

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91	Charge Density Wave Caused by Reducing ThSe3 by One Electron. Superstructure and Short-Range Order in ATh2Se6 (A = K, Rb) Studied by X-ray Diffraction, Electron Diffraction, and Diffuse Scattering. Journal of the American Chemical Society, 1998, 120, 10706-10714.	13.7	44
92	Local and average structures of the spin-glass pyrochlore<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mtext>Y</mml:mtext><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mrow> neutron diffraction and neutron pair distribution function analysis. Physical Review B, 2009, 79, .	3.2	44
93	Mesostructured Non-Oxidic Solids with Adjustable Worm-hole Shaped Pores: M-Ge-Q (Q = S, Se) Frameworks Based on Tetrahedral [Ge4Q10]4- Clusters. Advanced Materials, 2000, 12, 85-91.	21.0	43
94	Correlated local dipoles in PbTe. Physical Review Materials, 2018, 2, .	2.4	43
95	Magnetic structure determination from the magnetic pair distribution function (mPDF): ground state of MnO. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, 325-334.	0.1	42
96	Local orbital degeneracy lifting as a precursor to an orbital-selective Peierls transition. Nature Communications, 2019, 10, 3638.	12.8	42
97	Quantitative nanostructure characterization using atomic pair distribution functions obtained from laboratory electron microscopes. Zeitschrift FÃ¼r Kristallographie, 2012, 227, 248-256.	1.1	41
98	Towards atomistic understanding of polymorphism in the solvothermal synthesis of ZrO₂nanoparticles. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, 645-650.	0.1	41
99	Improved Models for Metallic Nanoparticle Cores from Atomic Pair Distribution Function (PDF) Analysis. Journal of Physical Chemistry C, 2018, 122, 29498-29506.	3.1	41
100	Stabilization of reactive Co ₄ O ₄ cubane oxygen-evolution catalysts within porous frameworks. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11630-11639.	7.1	41
101	Neutron Scattering Studies of Compositional Heterogeneity in Solâˆ’Gel Processed Lead Zirconate Titanates. Chemistry of Materials, 1998, 10, 3611-3619.	6.7	39
102	The nanostructure problem. Physics Magazine, 0, 3, .	0.1	39
103	Protonâ€“Electron Conductivity in Thin Films of a Cobaltâ€“Oxygen Evolving Catalyst. ACS Applied Energy Materials, 2019, 2, 3-12.	5.1	39
104	Volume-wise destruction of the antiferromagnetic Mott insulating state through quantum tuning. Nature Communications, 2016, 7, 12519.	12.8	36
105	Structures of Hard Phases in Thermoplastic Polyurethanes. Macromolecules, 2016, 49, 7350-7358.	4.8	36
106	Detection and characterization of nanoparticles in suspension at low concentrations using the X-ray total scattering pair distribution function technique. Nanoscale, 2015, 7, 5480-5487.	5.6	35
107	Hollandites as a new class of multiferroics. Scientific Reports, 2014, 4, 6203.	3.3	35
108	A high throughput optical method for studying compositional effects in electrocatalysts for CO2 reduction. Nature Communications, 2021, 12, 1114.	12.8	35

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109	Verification of Anderson Superexchange in MnO via Magnetic Pair Distribution Function Analysis andabÂinitioTheory. Physical Review Letters, 2016, 116, 197204.	7.8	34
110	Hollow organic capsules assemble into cellular semiconductors. Nature Communications, 2018, 9, 1957.	12.8	34
111	Cluster-mining: an approach for determining core structures of metallic nanoparticles from atomic pair distribution function data. Acta Crystallographica Section A: Foundations and Advances, 2020, 76, 24-31.	0.1	34
112	Symmetry Breaking in Nanostructure Development of Carbogenic Molecular Sieves:Â Effects of Morphological Pattern Formation on Oxygen and Nitrogen Transport. Chemistry of Materials, 1996, 8, 2159-2171.	6.7	32
113	NanoscaleÎ±-structural domains in the phonon-glass thermoelectric materialÎ²â^'Zn4Sb3. Physical Review B, 2007, 75, .	3.2	30
114	Toward Phase Quantification at the Nanoscale Using the Total Scattering Pair Distribution Function (TSPDF) Method: Recrystallization of Cryomilled Sulfamerazine. Crystal Growth and Design, 2013, 13, 4239-4244.	3.0	30
115	Evidence for Short-Range-Ordered Charge Stripes Far above the Charge-Ordering Transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>La</mml:mi><mml:mn>1.67</mml:mn></mml:msub><mml:msub><mml:mi>Sr</mml:mi><mml: Physical Review Letters, 2013, 111, 096404.	7.8	30
116	Local atomic and magnetic structure of dilute magnetic semiconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mi>Ba</mml:mi></mml:mrow> Physical Review B, 2016, 94, .	3.2	30
117	Local Environment of Terbium(III) Ions in Layered Nanocrystalline Zirconium(IV) Phosphonateâ€“Phosphate Ion Exchange Materials. Inorganic Chemistry, 2017, 56, 8837-8846.	4.0	30
118	CuxUTe3:Â Stabilization of UTe3in the ZrSe3Structure Type via Copper Insertion. The Artifact of Teâ^'Te Chains and Evidence for Distortions Due to Long Range Modulations. Journal of the American Chemical Society, 2001, 123, 4755-4762.	13.7	29
119	PDFgetN3: atomic pair distribution functions from neutron powder diffraction data using adÂhoc corrections. Journal of Applied Crystallography, 2018, 51, 1492-1497.	4.5	29
120	In-Situ Monitoring of Particle Growth at PEMFC Cathode under Accelerated Cycling Conditions. Electrochemical and Solid-State Letters, 2012, 15, B72.	2.2	28
121	Reconciliation of local and long-range tilt correlations in underdopedLa2â^'xBaxCuO4(0â‰xâ‰0.155). Physical Review B, 2015, 91, .	3.2	28
122	Recrystallization, Phase Composition, and Local Structure of Amorphous Lactose from the Total Scattering Pair Distribution Function. Crystal Growth and Design, 2016, 16, 210-220.	3.0	28
123	Bulk Metallic Glass-like Scattering Signal in Small Metallic Nanoparticles. ACS Nano, 2014, 8, 6163-6170.	14.6	26
124	Anthracene as a Launchpad for a Phosphinidene Sulfide and for Generation of a Phosphorusâ€“Sulfur Material Having the Composition P₂S, a Vulcanized Red Phosphorus That Is Yellow. Journal of the American Chemical Society, 2019, 141, 431-440.	13.7	26
125	Understanding electronic peculiarities in tetragonal FeSe as local structural symmetry breaking. Physical Review B, 2020, 102, .	3.2	26
126	Crystal structure solution from experimentally determined atomic pair distribution functions. Journal of Applied Crystallography, 2010, 43, 623-629.	4.5	25

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127	Intra-unit-cell nematic charge order in the titanium-oxypnictide family of superconductors. Nature Communications, 2014, 5, 5761.	12.8	25
128	Celebrating 100 years of the Debye scattering equation. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, 589-590.	0.1	25
129	Room temperature local nematicity in FeSe superconductor. Physical Review B, 2019, 100, .	3.2	25
130	Stoichiometric Control over Ferroic Behavior in Ba(Ti_{1â€“x}Fe_x)O₃ Nanocrystals. Chemistry of Materials, 2019, 31, 1318-1335.	6.7	25
131	Teaching diffraction using computer simulations over the Internet. Journal of Applied Crystallography, 2001, 34, 767-770.	4.5	24
132	Detailed Mapping of the Local<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>Ir</mml:mi><mml:mrow><mml:mn>4</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:ms through the Metal-Insulator Transitions of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>CuIr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>Thiospinel by X-Ray A	7.8	24
133	Total-Scattering Pair-Distribution Function of Organic Material from Powder Electron Diffraction Data. Microscopy and Microanalysis, 2015, 21, 459-471.	0.4	24
134	Modelling and validation of particle size distributions of supported nanoparticles using the pair distribution function technique. Journal of Applied Crystallography, 2017, 50, 741-748.	4.5	24
135	Accurate Structure Determination of Mo6Sylz Nanowires from Atomic Pair Distribution Function (PDF) Analysis. Chemistry of Materials, 2006, 18, 100-106.	6.7	23
136	Towards solution and refinement of organic crystal structures by fitting to the atomic pair distribution function. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, 62-72.	0.1	23
137	Emphanitic anharmonicity in PbSe at high temperature and anomalous electronic properties in the PbQ(Q=S,Se,Te) system. Physical Review B, 2018, 98, .	3.2	23
138	Synthesis and Properties of Plasmonic Boronâ€Hyperdoped Silicon Nanoparticles. Advanced Functional Materials, 2019, 29, 1807788.	14.9	23
139	A cloud platform for atomic pair distribution function analysis: PDFitc. Acta Crystallographica Section A: Foundations and Advances, 2021, 77, 2-6.	0.1	23
140	Magnetic phase transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mtext>V</mml:mtext><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mtext> Physical Review B, 2010, 82, .	3.2	22
141	Structureâ€“property insights into nanostructured electrodes for Li-ion batteries from local structural and diffusional probes. Journal of Materials Chemistry A, 2018, 6, 127-137.	10.3	22
142	Defect-Accommodating Intermediates Yield Selective Low-Temperature Synthesis of YMnO₃ Polymorphs. Inorganic Chemistry, 2020, 59, 13639-13650.	4.0	22
143	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. Journal of Physical Chemistry C, 2013, 117, 7226-7230.	3.1	21
144	Towards a robust ad hoc data correction approach that yields reliable atomic pair distribution functions from powder diffraction data. Journal of Physics Condensed Matter, 2013, 25, 454202.	1.8	21

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145	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. Journal of Applied Crystallography, 2014, 47, 561-565.	4.5	21
146	Perovskites at the nanoscale: from fundamentals to applications. Nanoscale, 2016, 8, 6206-6208.	5.6	21
147	Recent results on assigned and unassigned distance geometry with applications to protein molecules and nanostructures. Annals of Operations Research, 2018, 271, 161-203.	4.1	21
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