

Simon Billinge

List of Publications by Year in descending order

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232
papers

18,827
citations

14655

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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 Nb ₄ C ₃ (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 of La _{1-x} CaxMnO ₃ . Physical Review Letters, 1996, 77, 715-718.	7.8	409
10	Structure of V ₂ O ₅ ·nH ₂ O 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 – a practical guide. Zeitschrift Fur Kristallographie - Crystalline Materials, 2003, 218, 132-143.	0.8	249

#	ARTICLE	IF	CITATIONS
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 SnO ₂ 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 of LiMoS ₂ . 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 Au ₁₄₄ (SR) ₆₀ clusters. Nature Communications, 2016, 7, 11859.	12.8	167
33	Structure of Nanocrystalline Ti_3C_2 Using Atomic Pair Distribution Function. Physical Review Letters, 2014, 112, 125501.	7.8	161
34	Orbital Correlations in the Pseudocubic and Rhombohedral Phases of LaMnO ₃ . 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 the CuO ₂ Plane of Superconducting La _{2-x} Sr _x CuO ₄ (0 ≤ x ≤ 0.30). <i>Physical Review Letters</i> , 2000, 84, 5856-5859.	7.8	149
38	Lattice dynamics and correlated atomic motion from the atomic pair distribution function. <i>Physical Review B</i> , 2003, 67, .	3.2	145
39	Autonomous experimentation systems for materials development: A community perspective. <i>Matter</i> , 2021, 4, 2702-2726.	10.0	143
40	Measuring Correlated Atomic Motion Using X-ray Diffraction. <i>Journal of Physical Chemistry A</i> , 1999, 103, 921-924.	2.5	131
41	Mercury Binding Sites in Thiol-Functionalized Mesostructured Silica. <i>Journal of the American Chemical Society</i> , 2005, 127, 8492-8498.	13.7	130
42	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.	7.8	127
43	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.	0.6	112
44	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.	3.4	110
45	Structural Analysis of Molecular Materials Using the Pair Distribution Function. <i>Chemical Reviews</i> , 2022, 122, 1208-1272.	47.7	105
46	Fine-Scale Nanostructure in γ -Al ₂ O ₃ . <i>Chemistry of Materials</i> , 2006, 18, 3242-3248.	6.7	102
47	Signatures of the topological $s + d$ superconducting order parameter in the type-II Weyl semimetal Td-MoTe ₂ . <i>Nature Communications</i> , 2017, 8, 1082.	12.8	101
48	Improved measures of quality for the atomic pair distribution function. <i>Journal of Applied Crystallography</i> , 2003, 36, 53-64.	4.5	96
49	Pair distribution function computed tomography. <i>Nature Communications</i> , 2013, 4, 2536.	12.8	96
50	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.	13.7	95
51	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.	13.7	93
52	Two-Dimensional Arrays of Transition Metal Nitride Nanocrystals. <i>Advanced Materials</i> , 2019, 31, e1902393.	21.0	93
53	Rapid desolvation-triggered domino lattice rearrangement in a metal-organic framework. <i>Nature Chemistry</i> , 2020, 12, 90-97.	13.6	93
54	Local Vibrations and Negative Thermal Expansion in ZrW_2O_8 . <i>Physical Review Letters</i> , 2014, 112, 045505.	7.8	92

#	ARTICLE	IF	CITATIONS
55	Magnetism in semiconducting molybdenum dichalcogenides. <i>Science Advances</i> , 2018, 4, eaat3672.	10.3	92
56	Reciprocal-space instrumental effects on the real-space neutron atomic pair distribution function. <i>Journal of Applied Crystallography</i> , 2004, 37, 110-116.	4.5	90
57	Understanding the Formation and Evolution of Ceria Nanoparticles Under Hydrothermal Conditions. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9030-9033.	13.8	88
58	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.	0.6	81
59	Structure of Sulfate Adsorption Complexes on Ferrihydrite. <i>Environmental Science and Technology Letters</i> , 2014, 1, 97-101.	8.7	79
60	Characterisation of amorphous and nanocrystalline molecular materials by total scattering. <i>CrystEngComm</i> , 2010, 12, 1366-1368.	2.6	78
61	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.	6.7	77
62	Mechanisms for Iron Oxide Formation under Hydrothermal Conditions: An <i>in Situ</i> Total Scattering Study. <i>ACS Nano</i> , 2014, 8, 10704-10714.	14.6	75
63	Superconducting order from disorder in 2H-TaSe $2\hat{a}^* \times S \times$. <i>Npj Quantum Materials</i> , 2017, 2, .	5.2	73
64	Data Requirements for the Reliable Use of Atomic Pair Distribution Functions in Amorphous Pharmaceutical Fingerprinting. <i>Pharmaceutical Research</i> , 2011, 28, 1041-1048.	3.5	72
65	Local off-centering symmetry breaking in the high-temperature regime of SnTe. <i>Physical Review B</i> , 2014, 89, .	3.2	72
66	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.	2.8	71
67	Study of Local Structure in Selected Organic-Inorganic Perovskites in the <i>Pm-3̄1...m</i> Phase. <i>Chemistry of Materials</i> , 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. <i>Physical Review Letters</i> , 2002, 89, 075502.	7.8	67
69	The atomic pair distribution function: past and present. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2004, 219, .	0.8	67
70	Cation Exchange Induced Transformation of InP Magic-Sized Clusters. <i>Chemistry of Materials</i> , 2017, 29, 7984-7992.	6.7	67
71	Scalable Synthesis of Ultrathin Mn_3N_2 Exhibiting Room-Temperature Antiferromagnetism. <i>Advanced Functional Materials</i> , 2019, 29, 1809001.	14.9	67
72	Tuning the Surface Structure and Optical Properties of CdSe Clusters Using Coordination Chemistry. <i>Journal of Physical Chemistry Letters</i> , 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. <i>Physical Review B</i> , 2011, 84, .	3.2	62
74	Search for a structural response to the intermediate phase in Ge ₂ Se ₁₁ glasses. <i>Physical Review B</i> , 2008, 77, .	3.2	61
75	Synthesis, crystal structure, and magnetism of Fe^2O_3 . <i>Physical Review B</i> , 2010, 81, .	3.2	61
76	Network-Forming Liquids from Metal-Bis(acetamide) Frameworks with Low Melting Temperatures. <i>Journal of the American Chemical Society</i> , 2021, 143, 2801-2811.	13.7	60
77	Probing Local and Long-Range Structure Simultaneously: An In Situ Study of the High-Temperature Phase Transition of LiAlF_4 . <i>Journal of the American Chemical Society</i> , 2004, 126, 4756-4757.	13.7	59
78	Nanoscale disorder and local electronic properties of CaCu_2O_7 . An integrated study of electron, neutron, and x-ray diffraction, x-ray absorption fine structure. <i>Physical Review B</i> , 2010, 81, .	3.2	58
79	Early stage structural development of prototypical zeolitic imidazolate framework (ZIF) in solution. <i>Nanoscale</i> , 2018, 10, 4291-4300.	5.6	56
80	Lattice dynamics reveals a local symmetry breaking in the emergent dipole phase of PbTe. <i>Physical Review B</i> , 2012, 86, .	3.2	55
81	Magnetic pair distribution function analysis of local magnetic correlations. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014, 70, 3-11.	0.1	52
82	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, 481-489.	2.2	50
83	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. <i>Journal of the Electrochemical Society</i> , 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. <i>Journal of Applied Crystallography</i> , 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. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 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: New Materials for Chemical Reductions and Hydrogen Production. <i>Journal of the American Chemical Society</i> , 2007, 129, 1386-1392.	13.7	46
88	Tiopronin Gold Nanoparticle Precursor Forms Auophilic Ring Tetramer. <i>Inorganic Chemistry</i> , 2010, 49, 10858-10866.	4.0	46
89	Evolution of atomic structure during nanoparticle formation. <i>IUCrJ</i> , 2014, 1, 165-171.	2.2	46
90	Assigned and unassigned distance geometry: applications to biological molecules and nanostructures. <i>4or</i> , 2016, 14, 337-376.	1.6	45

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91	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.	13.7	44
92	Local and average structures of the spin-glass pyrochlore $Y_2M_2O_7$ (M = Nb, Ta) studied by neutron diffraction and neutron pair distribution function analysis. <i>Physical Review B</i> , 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 [Ge ₄ Q ₁₀] ⁴⁻ Clusters. <i>Advanced Materials</i> , 2000, 12, 85-91.	21.0	43
94	Correlated local dipoles in PbTe. <i>Physical Review Materials</i> , 2018, 2, .	2.4	43
95	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, 325-334.	0.1	42
96	Local orbital degeneracy lifting as a precursor to an orbital-selective Peierls transition. <i>Nature Communications</i> , 2019, 10, 3638.	12.8	42
97	Quantitative nanostructure characterization using atomic pair distribution functions obtained from laboratory electron microscopes. <i>Zeitschrift für Kristallographie</i> , 2012, 227, 248-256.	1.1	41
98	Towards atomistic understanding of polymorphism in the solvothermal synthesis of ZrO ₂ nanoparticles. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, 645-650.	0.1	41
99	Improved Models for Metallic Nanoparticle Cores from Atomic Pair Distribution Function (PDF) Analysis. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29498-29506.	3.1	41
100	Stabilization of reactive Co ₄ O ₄ 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.	7.1	41
101	Neutron Scattering Studies of Compositional Heterogeneity in Sol-Gel Processed Lead Zirconate Titanates. <i>Chemistry of Materials</i> , 1998, 10, 3611-3619.	6.7	39
102	The nanostructure problem. <i>Physics Magazine</i> , 0, 3, .	0.1	39
103	Proton-Electron Conductivity in Thin Films of a Cobalt-Oxygen Evolving Catalyst. <i>ACS Applied Energy Materials</i> , 2019, 2, 3-12.	5.1	39
104	Volume-wise destruction of the antiferromagnetic Mott insulating state through quantum tuning. <i>Nature Communications</i> , 2016, 7, 12519.	12.8	36
105	Structures of Hard Phases in Thermoplastic Polyurethanes. <i>Macromolecules</i> , 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. <i>Nanoscale</i> , 2015, 7, 5480-5487.	5.6	35
107	Hollandites as a new class of multiferroics. <i>Scientific Reports</i> , 2014, 4, 6203.	3.3	35
108	A high throughput optical method for studying compositional effects in electrocatalysts for CO ₂ reduction. <i>Nature Communications</i> , 2021, 12, 1114.	12.8	35

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109	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.	7.8	34
110	Hollow organic capsules assemble into cellular semiconductors. <i>Nature Communications</i> , 2018, 9, 1957.	12.8	34
111	<i>Cluster-mining</i> : 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.	0.1	34
112	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.	6.7	32
113	Nanoscale structural domains in the phonon-glass thermoelectric material Zn_4Sb_3 . <i>Physical Review B</i> , 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. <i>Crystal Growth and Design</i> , 2013, 13, 4239-4244.	3.0	30
115	Evidence for Short-Range-Ordered Charge Stripes Far above the Charge-Ordering Transition in $\text{La}_{1.67}\text{Sr}$. <i>Physical Review Letters</i> , 2013, 111, 096404.	7.8	30
116	Local atomic and magnetic structure of dilute magnetic semiconductor $\text{Ba}_{1-x}\text{Mn}_x\text{S}$. <i>Physical Review B</i> , 2016, 94, .	3.2	30
117	Local Environment of Terbium(III) Ions in Layered Nanocrystalline Zirconium(IV) Phosphonate-Phosphate Ion Exchange Materials. <i>Inorganic Chemistry</i> , 2017, 56, 8837-8846.	4.0	30
118	Cu_xUTe_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, 4755-4762.	13.7	29
119	<i>PDFgetN3</i> : atomic pair distribution functions from neutron powder diffraction data using <i>ad hoc</i> corrections. <i>Journal of Applied Crystallography</i> , 2018, 51, 1492-1497.	4.5	29
120	In-Situ Monitoring of Particle Growth at PEMFC Cathode under Accelerated Cycling Conditions. <i>Electrochemical and Solid-State Letters</i> , 2012, 15, B72.	2.2	28
121	Reconciliation of local and long-range tilt correlations in underdoped $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$ (0.155). <i>Physical Review B</i> , 2015, 91, .	3.2	28
122	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.	3.0	28
123	Bulk Metallic Glass-like Scattering Signal in Small Metallic Nanoparticles. <i>ACS Nano</i> , 2014, 8, 6163-6170.	14.6	26
124	Anthracene as a Launchpad for a Phosphinidene Sulfide and for Generation of a Phosphorus-Sulfur Material Having the Composition P_2S , a Vulcanized Red Phosphorus That Is Yellow. <i>Journal of the American Chemical Society</i> , 2019, 141, 431-440.	13.7	26
125	Understanding electronic peculiarities in tetragonal FeSe as local structural symmetry breaking. <i>Physical Review B</i> , 2020, 102, .	3.2	26
126	Crystal structure solution from experimentally determined atomic pair distribution functions. <i>Journal of Applied Crystallography</i> , 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 _x Fe _{1-x})O ₃ 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 Order through the Metal-Insulator Transitions of $Sr_{1-x}Ca_xFe_2As_2$ through the Metal-Insulator Transitions of $Sr_{1-x}Ca_xFe_2As_2$	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 Mo ₆ S ₇ 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 Boron-Doped Silicon Nanoparticles. Advanced Functional Materials, 2019, 29, 1807788.	14.9	23
139	A cloud platform for atomic pair distribution function analysis: PDFfitc. Acta Crystallographica Section A: Foundations and Advances, 2021, 77, 2-6.	0.1	23
140	Magnetic phase transition in V_2O_5 Physical Review B, 2010, 82, .	12.2	22
141	Structure-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 YMnO ₃ 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. <i>Journal of Applied Crystallography</i> , 2014, 47, 561-565.	4.5	21
146	Perovskites at the nanoscale: from fundamentals to applications. <i>Nanoscale</i> , 2016, 8, 6206-6208.	5.6	21
147	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.	4.1	21
148	Ultrafast x-ray diffraction study of melt-front dynamics in polycrystalline thin films. <i>Science Advances</i> , 2020, 6, eaax2445.	10.3	21
149	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.	0.1	21
150	Liquid and Glass Phases of an Alkylguanidinium Sulfonate Hydrogen-Bonded Organic Framework. <i>Journal of the American Chemical Society</i> , 2022, 144, 11064-11068.	13.7	21
151	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.	4.5	20
152	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.	10.3	20
153	Pair Distribution Function Analysis of ZrO ₂ Nanocrystals and Insights in the Formation of ZrO ₂ -YBa ₂ Cu ₃ O ₇ Nanocomposites. <i>Materials</i> , 2018, 11, 1066.	2.9	20
154	Zirconium Phosphate: The Pathway from Turbostratic Disorder to Crystallinity. <i>Inorganic Chemistry</i> , 2019, 58, 14260-14274.	4.0	20
155	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.	4.5	20
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