K W Chapman

List of Publications by Year
in descending order

167 papers	13,473 citations	17440 63 h-index	23533 111 g-index
172 all docs	172 docs citations	172 times ranked	14863 citing authors

#	Article	IF	Citations
1	A mixing-flow reactor for time-resolved reaction measurements distributed in space. Journal of Applied Crystallography, 2022, 55, 258-264.	4.5	5
2	Reaction Selectivity in Cometathesis: Yttrium Manganese Oxides. Chemistry of Materials, 2022, 34, 4694-4702.	6.7	4
3	Relative Kinetics of Solid-State Reactions: The Role of Architecture in Controlling Reactivity. Journal of the American Chemical Society, 2022, 144, 11975-11979.	13.7	10
4	Revisiting metal fluorides as lithium-ion battery cathodes. Nature Materials, 2021, 20, 841-850.	27.5	109
5	A multimodal analytical toolkit to resolve correlated reaction pathways: the case of nanoparticle formation in zeolites. Chemical Science, 2021, 12, 13836-13847.	7.4	5
6	Experimental considerations to study Li-excess disordered rock salt cathode materials. Journal of Materials Chemistry A, 2021, 9, 1720-1732.	10.3	19
7	A stable cathode-solid electrolyte composite for high-voltage, long-cycle-life solid-state sodium-ion batteries. Nature Communications, 2021, 12, 1256.	12.8	110
8	Whither Mn Oxidation in Mn-Rich Alkali-Excess Cathodes?. ACS Energy Letters, 2021, 6, 1055-1064.	17.4	20
9	Nanostructure Transformation as a Signature of Oxygen Redox in Li-Rich 3d and 4d Cathodes. Journal of the American Chemical Society, 2021, 143, 5763-5770.	13.7	29
10	Validation of non-negative matrix factorization for rapid assessment of large sets of atomic pair distribution function data. Journal of Applied Crystallography, 2021, 54, 768-775.	4.5	20
11	Resolving Single-layer Nanosheets as Short-lived Intermediates in the Solution Synthesis of FeS. , 2021, 3, 698-703.		14
12	Lowering Ternary Oxide Synthesis Temperatures by Solid-State Cometathesis Reactions. Chemistry of Materials, 2021, 33, 3692-3701.	6.7	14
13	Mechanistic Insights into Nanoparticle Formation from Bimetallic Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 8976-8980.	13.7	22
14	Engineering Dendrimer-Templated, Metalâ€“Organic Framework-Confined Zero-Valent, Transition-Metal Catalysts. ACS Applied Materials & Interfaces, 2021, 13, 36232-36239.	8.0	10
15	Influence of Al location on formation of silver clusters in mordenite. Microporous and Mesoporous Materials, 2021, 327, 111401.	4.4	0
16	<i>In situ</i> flow pair distribution function analysis to probe the assemblyâ€“disassemblyâ€“organisationâ€“reassembly (ADOR) mechanism of zeolite IPC-2 synthesis. Materials Advances, 2021, 2, 7949-7955.	5.4	7
17	Revealing Local Disorder in a Silver-Bismuth Halide Perovskite upon Compression. Journal of Physical Chemistry Letters, 2021, 12, 532-536.	4.6	11
18	Homologous Structural, Chemical, and Biological Behavior of Sc and Lu Complexes of the Picaga Bifunctional Chelator: Toward Development of Matched Theranostic Pairs for Radiopharmaceutical Applications. Bioconjugate Chemistry, 2021, 32, 1232-1241.	3.6	19

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19	The Molecular Path Approaching the Active Site in Catalytic Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2021, 143, 20090-20094.	13.7	21
20	Best practices for <i>operando</i> depth-resolving battery experiments. Journal of Applied Crystallography, 2020, 53, 133-139.	4.5	8
21	The Synthesis Science of Targeted Vapor-Phase Metalâ€“Organic Framework Postmodification. Journal of the American Chemical Society, 2020, 142, 242-250.	13.7	32
22	Isomerization and Selective Hydrogenation of Propyne: Screening of Metalâ€“Organic Frameworks Modified by Atomic Layer Deposition. Journal of the American Chemical Society, 2020, 142, 20380-20389.	13.7	15
23	Vanadyl Phosphates A<i>_x</i>VOPO₄ (A = Li, Na, K) as Multielectron Cathodes for Alkaliâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2002638.	19.5	26
24	Active Reaction Control of Cu Redox State Based on Real-Time Feedback from In Situ Synchrotron Measurements. Journal of the American Chemical Society, 2020, 142, 18758-18762.	13.7	9
25	Defect-Accommodating Intermediates Yield Selective Low-Temperature Synthesis of YMnO₃ Polymorphs. Inorganic Chemistry, 2020, 59, 13639-13650.	4.0	22
26	Intrinsic Kinetic Limitations in Substituted Lithium-Layered Transition-Metal Oxide Electrodes. Journal of the American Chemical Society, 2020, 142, 7001-7011.	13.7	69
27	Mechanistic Insights into Câ€“H Borylation of Arenes with Organoiridium Catalysts Embedded in a Microporous Metalâ€“Organic Framework. Organometallics, 2020, 39, 1123-1133.	2.3	20
28	Synchrotron Operando Depth Profiling Studies of State-of-Charge Gradients in Thick Li(Ni_{0.8}Mn_{0.1}Co_{0.1})O₂ Cathode Films. Chemistry of Materials, 2020, 32, 6358-6364.	6.7	17
29	Energetics and Structure of Agâ€“Water Clusters Formed in Mordenite. Journal of Physical Chemistry C, 2020, 124, 4517-4524.	3.1	9
30	Salt Effects on Li-Ion Exchange Kinetics of Na2Mg2P3O9N: Systematic In Situ Synchrotron Diffraction Studies. Journal of Physical Chemistry C, 2020, 124, 6522-6527.	3.1	10
31	Regioselective Functionalization of the Mesoporous Metalâ€“Organic Framework, NU-1000, with Photo-Active Tris-(2,2â€²-bipyridine)ruthenium(II). ACS Omega, 2020, 5, 30299-30305.	3.5	17
32	A thermal-gradient approach to variable-temperature measurements resolved in space. Journal of Applied Crystallography, 2020, 53, 662-670.	4.5	19
33	Comprehensive study of a versatile polyol synthesis approach for cathode materials for Li-ion batteries. Nano Research, 2019, 12, 2238-2249.	10.4	13
34	Reversible MOF-Based Sensors for the Electrical Detection of Iodine Gas. ACS Applied Materials & Interfaces, 2019, 11, 27982-27988.	8.0	52
35	Revisiting the charge compensation mechanisms in LiNi_{0.8}Co_{0.2âˆ’y}Al_yO₂ systems. Materials Horizons, 2019, 6, 2112-2123.	12.2	62
36	A high-performance solid-state synthesized LiVOPO4 for lithium-ion batteries. Electrochemistry Communications, 2019, 105, 106491.	4.7	26

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37	Structure, Dynamics, and Reactivity for Light Alkane Oxidation of Fe(II) Sites Situated in the Nodes of a Metalâ€“Organic Framework. Journal of the American Chemical Society, 2019, 141, 18142-18151.	13.7	80
38	Effective Electrochemical Charge Storage in the High-Lithium Compound Li₈ZrO₆. ACS Applied Energy Materials, 2019, 2, 1274-1287.	5.1	4
39	Local atomic order and hierarchical polar nanoregions in a classical relaxor ferroelectric. Nature Communications, 2019, 10, 2728.	12.8	89
40	Nonstoichiometry and Defects in Hydrothermally Synthesized Îµ-LiVOPO₄. ACS Applied Energy Materials, 2019, 2, 4792-4800.	5.1	12
41	Quantifying Reaction and Rate Heterogeneity in Battery Electrodes in 3D through Operando X-ray Diffraction Computed Tomography. ACS Applied Materials & Interfaces, 2019, 11, 18386-18394.	8.0	44
42	Rational synthesis and electrochemical performance of LiVOPO₄ polymorphs. Journal of Materials Chemistry A, 2019, 7, 8423-8432.	10.3	20
43	Nanocrystals in Molten Salts and Ionic Liquids: Experimental Observation of Ionic Correlations Extending beyond the Debye Length. ACS Nano, 2019, 13, 5760-5770.	14.6	48
44	Structural evolution in a melt-quenched zeolitic imidazolate framework glass during heat-treatment. Chemical Communications, 2019, 55, 2521-2524.	4.1	21
45	Pore-Templated Growth of Catalytically Active Gold Nanoparticles within a Metalâ€“Organic Framework. Chemistry of Materials, 2019, 31, 1485-1490.	6.7	47
46	Porosity Dependence of Compression and Lattice Rigidity in Metalâ€“Organic Framework Series. Journal of the American Chemical Society, 2019, 141, 4365-4371.	13.7	51
47	Vapor-Phase Fabrication and Condensed-Phase Application of a MOF-Node-Supported Iron Thiolate Photocatalyst for Nitrate Conversion to Ammonium. ACS Applied Energy Materials, 2019, 2, 8695-8700.	5.1	29
48	Single-atom gold oxo-clusters prepared in alkaline solutions catalyse the heterogeneous methanol self-coupling reactions. Nature Chemistry, 2019, 11, 1098-1105.	13.6	82
49	Impact of Anion Vacancies on the Local and Electronic Structures of Iron-Based Oxyfluoride Electrodes. Journal of Physical Chemistry Letters, 2019, 10, 107-112.	4.6	16
50	Operando Observations and Firstâ€Principles Calculations of Reduced Lithium Insertion in Auâ€Coated LiMn 2 O 4. Advanced Materials Interfaces, 2019, 6, 1801923.	3.7	11
51	Application and Limitations of Nanocasting in Metalâ€“Organic Frameworks. Inorganic Chemistry, 2018, 57, 2782-2790.	4.0	21
52	Multivalent Electrochemistry of Spinel Mg_{<i>x</i>}Mn_{3â€“<i>x</i>}O₄ Nanocrystals. Chemistry of Materials, 2018, 30, 1496-1504.	6.7	23
53	A molecular cross-linking approach for hybrid metal oxides. Nature Materials, 2018, 17, 341-348.	27.5	90
54	Site-Directed Synthesis of Cobalt Oxide Clusters in a Metalâ€“Organic Framework. ACS Applied Materials & Interfaces, 2018, 10, 15073-15078.	8.0	44

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55	Thermally induced migration of a polyoxometalate within a metalâ€“organic framework and its catalytic effects. Journal of Materials Chemistry A, 2018, 6, 7389-7394.	10.3	71
56	Extending the Compositional Range of Nanocasting in the Oxozirconium Cluster-Based Metalâ€“Organic Framework NU-1000â€”A Comparative Structural Analysis. Chemistry of Materials, 2018, 30, 1301-1315.	6.7	10
57	Identifying the chemical and structural irreversibility in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ â€“ a model compound for classical layered intercalation. Journal of Materials Chemistry A, 2018, 6, 4189-4198.	10.3	48
58	A₂TiO₅ (A = Dy, Gd, Er, Yb) at High Pressure. Inorganic Chemistry, 2018, 57, 2269-2277.	4.0	6
59	Evolution of Active Sites in Pt-Based Nanoalloy Catalysts for the Oxidation of Carbonaceous Species by Combined in Situ Infrared Spectroscopy and Total X-ray Scattering. ACS Applied Materials & Interfaces, 2018, 10, 10870-10881.	8.0	12
60	Strain-Driven Stacking Faults in CdSe/CdS Core/Shell Nanorods. Journal of Physical Chemistry Letters, 2018, 9, 1900-1906.	4.6	30
61	Sinterâ€Resistant Platinum Catalyst Supported by Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2018, 57, 909-913.	13.8	88
62	Atomic Structure of 2 nm Size Metallic Cobalt Prepared by Electrochemical Conversion: An in Situ Pair Distribution Function Study. Journal of Physical Chemistry C, 2018, 122, 23861-23866.	3.1	14
63	Well-Defined Rhodiumâ€“Gallium Catalytic Sites in a Metalâ€“Organic Framework: Promoter-Controlled Selectivity in Alkyne Semihydrogenation to <i>E</i>-Alkenes. Journal of the American Chemical Society, 2018, 140, 15309-15318.	13.7	88
64	Operando Studies Reveal Structural Evolution with Electrochemical Cycling in Liâ€“CoS₂. Journal of Physical Chemistry C, 2018, 122, 24559-24569.	3.1	8
65	Role of disorder in limiting the true multi-electron redox in Îµ-LiVOPO₄. Journal of Materials Chemistry A, 2018, 6, 20669-20677.	10.3	21
66	Adsorptive removal of Sb(V) from water using a mesoporous Zr-based metalâ€“organic framework. Polyhedron, 2018, 151, 338-343.	2.2	43
67	Inorganic â€œConductive Glassâ€•Approach to Rendering Mesoporous Metalâ€“Organic Frameworks Electronically Conductive and Chemically Responsive. ACS Applied Materials & Interfaces, 2018, 10, 30532-30540.	8.0	54
68	Diverse Physical States of Amorphous Precursors in Zeolite Synthesis. Industrial & Engineering Chemistry Research, 2018, 57, 8460-8471.	3.7	45
69	Sinterâ€Resistant Platinum Catalyst Supported by Metalâ€“Organic Framework. Angewandte Chemie, 2018, 130, 921-925.	2.0	3
70	Atomic Layer Deposition in a Metalâ€“Organic Framework: Synthesis, Characterization, and Performance of a Solid Acid. Chemistry of Materials, 2017, 29, 1058-1068.	6.7	45
71	Iodine Gas Adsorption in Nanoporous Materials: A Combined Experimentâ€“Modeling Study. Industrial & Engineering Chemistry Research, 2017, 56, 2331-2338.	3.7	72
72	Catalytically Active Silicon Oxide Nanoclusters Stabilized in a Metalâ€“Organic Framework. Chemistry - A European Journal, 2017, 23, 8532-8536.	3.3	14

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73	Investigating Sodium Storage Mechanisms in Tin Anodes: A Combined Pair Distribution Function Analysis, Density Functional Theory, and Solid-State NMR Approach. Journal of the American Chemical Society, 2017, 139, 7273-7286.	13.7	121
74	Addressing the characterisation challenge to understand catalysis in MOFs: the case of nanoscale Cu supported in NU-1000. Faraday Discussions, 2017, 201, 337-350.	3.2	66
75	Metalâ€“Organic Framework Supported Cobalt Catalysts for the Oxidative Dehydrogenation of Propane at Low Temperature. ACS Central Science, 2017, 3, 31-38.	11.3	222
76	Sensitivity and Limitations of Structures from X-ray and Neutron-Based Diffraction Analyses of Transition Metal Oxide Lithium-Battery Electrodes. Journal of the Electrochemical Society, 2017, 164, A1802-A1811.	2.9	40
77	Adsorption of a Catalytically Accessible Polyoxometalate in a Mesoporous Channel-type Metalâ€“Organic Framework. Chemistry of Materials, 2017, 29, 5174-5181.	6.7	143
78	Intergranular Cracking as a Major Cause of Long-Term Capacity Fading of Layered Cathodes. Nano Letters, 2017, 17, 3452-3457.	9.1	361
79	Multifunctional, Tunable Metalâ€“Organic Framework Materials Platform for Bioimaging Applications. ACS Applied Materials & Interfaces, 2017, 9, 22268-22277.	8.0	122
80	Local Structure Evolution and Modes of Charge Storage in Secondary Liâ€“FeS₂ Cells. Chemistry of Materials, 2017, 29, 3070-3082.	6.7	42
81	Fine-Tuning the Activity of Metalâ€“Organic Framework-Supported Cobalt Catalysts for the Oxidative Dehydrogenation of Propane. Journal of the American Chemical Society, 2017, 139, 15251-15258.	13.7	112
82	Liquid metalâ€“organic frameworks. Nature Materials, 2017, 16, 1149-1154.	27.5	326
83	Reversible magnesium and aluminium ions insertion in cation-deficient anatase TiO2. Nature Materials, 2017, 16, 1142-1148.	27.5	366
84	Layered Lepidocrocite Type Structure Isolated by Revisiting the Solâ€“Gel Chemistry of Anatase TiO₂: A New Anode Material for Batteries. Chemistry of Materials, 2017, 29, 8313-8324.	6.7	33
85	Lithiation Thermodynamics and Kinetics of the TiO₂ (B) Nanoparticles. Journal of the American Chemical Society, 2017, 139, 13330-13341.	13.7	45
86	Reaction Heterogeneity in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Induced by Surface Layer. Chemistry of Materials, 2017, 29, 7345-7352.	6.7	142
87	Coupling of emergent octahedral rotations to polarization in (K,Na)NbO3 ferroelectrics. Scientific Reports, 2017, 7, 15620.	3.3	19
88	Bridging Zirconia Nodes within a Metalâ€“Organic Framework via Catalytic Ni-Hydroxo Clusters to Form Heterobimetallic Nanowires. Journal of the American Chemical Society, 2017, 139, 10410-10418.	13.7	74
89	Uniform second Li ion intercalation in solid state <i>Ïµ</i>-LiVOPO4. Applied Physics Letters, 2016, 109, .	3.3	20
90	Emerging <i>operando</i> and x-ray pair distribution function methods for energy materials development. MRS Bulletin, 2016, 41, 231-240.	3.5	42

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91	Structural Transitions of the Metal-Oxide Nodes within Metalâ€“Organic Frameworks: On the Local Structures of NU-1000 and UiO-66. Journal of the American Chemical Society, 2016, 138, 4178-4185.	13.7	108
92	Selective O₂ Sorption at Ambient Temperatures via Node Distortions in Sc-MIL-100. Chemistry of Materials, 2016, 28, 3327-3336.	6.7	39
93	Unraveling the Complex Delithiation Mechanisms of Olivine-Type Cathode Materials, LiFe_{<i>x</i>}Co_{1â€“<i>x</i>}PO₄. Chemistry of Materials, 2016, 28, 3676-3690.	6.7	38
94	A Precise and Scalable Post-Modification of Mesoporous Metal-Organic Framework NU-1000 Via Atomic Layer Deposition. ECS Transactions, 2016, 75, 93-99.	0.5	5
95	Regioselective Atomic Layer Deposition in Metalâ€“Organic Frameworks Directed by Dispersion Interactions. Journal of the American Chemical Society, 2016, 138, 13513-13516.	13.7	78
96	Exploiting Pressure To Induce a â€œGuest-Blockedâ€•Spin Transition in a Framework Material. Inorganic Chemistry, 2016, 55, 10490-10498.	4.0	41
97	Identifying the Distribution of Al³⁺ in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂. Chemistry of Materials, 2016, 28, 8170-8180.	6.7	77
98	Installing Heterobimetallic Cobaltâ€“Aluminum Single Sites on a Metal Organic Framework Support. Chemistry of Materials, 2016, 28, 6753-6762.	6.7	56
99	A radially accessible tubular <i>in situ</i> X-ray cell for spatially resolved <i>operando</i> scattering and spectroscopic studies of electrochemical energy storage devices. Journal of Applied Crystallography, 2016, 49, 1665-1673.	4.5	44
100	Stable Metalâ€“Organic Framework-Supported Niobium Catalysts. Inorganic Chemistry, 2016, 55, 11954-11961.	4.0	85
101	The Interplay of Al and Mg Speciation in Advanced Mg Battery Electrolyte Solutions. Journal of the American Chemical Society, 2016, 138, 328-337.	13.7	186
102	Tracking Sodium-Antimonide Phase Transformations in Sodium-Ion Anodes: Insights from Operando Pair Distribution Function Analysis and Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2016, 138, 2352-2365.	13.7	175
103	Thermal Stabilization of Metalâ€“Organic Framework-Derived Single-Site Catalytic Clusters through Nanocasting. Journal of the American Chemical Society, 2016, 138, 2739-2748.	13.7	83
104	Thermodynamics, Kinetics and Structural Evolution of Îµ-LiVOPO4 over Multiple Lithium Intercalation. Chemistry of Materials, 2016, 28, 1794-1805.	6.7	64
105	Lithium Insertion Mechanism in Ironâ€Based Oxyfluorides with Anionic Vacancies Probed by PDF Analysis. ChemistryOpen, 2015, 4, 443-447.	1.9	17
106	Best Practices for Operando Battery Experiments: Influences of X-ray Experiment Design on Observed Electrochemical Reactivity. Journal of Physical Chemistry Letters, 2015, 6, 2081-2085.	4.6	74
107	Multiple Redox Modes in the Reversible Lithiation of High-Capacity, Peierls-Distorted Vanadium Sulfide. Journal of the American Chemical Society, 2015, 137, 8499-8508.	13.7	127
108	Pressure-induced structural phase transformation in cobalt(II) dicyanamide. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2015, 71, 252-257.	1.1	14

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109	Applications of principal component analysis to pair distribution function data. Journal of Applied Crystallography, 2015, 48, 1619-1626.	4.5	47
110	Microwave-assisted synthesis and electrochemical evaluation of VO₂ (B) nanostructures. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2015, 71, 722-726.	1.1	12
111	High Substitution Rate in TiO₂ Anatase Nanoparticles with Cationic Vacancies for Fast Lithium Storage. Chemistry of Materials, 2015, 27, 5014-5019.	6.7	77
112	Targeted Single-Site MOF Node Modification: Trivalent Metal Loading via Atomic Layer Deposition. Chemistry of Materials, 2015, 27, 4772-4778.	6.7	116
113	Large Negative Thermal Expansion and Anomalous Behavior on Compression in Cubic ReO₃-Type A^{II}B^{IV}F₆: CaZrF₆ and CaHfF₆. Chemistry of Materials, 2015, 27, 3912-3918.	6.7	86
114	Dramatic softening of the negative thermal expansion material HfW2O8 upon heating through its WO4 orientational order-disorder phase transition. Journal of Applied Physics, 2014, 115, 053512.	2.5	21
115	Silver-mordenite for radiologic gas capture from complex streams: Dual catalytic CH3I decomposition and I confinement. Microporous and Mesoporous Materials, 2014, 200, 297-303.	4.4	150
116	Identifying the Structure of the Intermediate, Li_{2/3}CoPO₄, Formed during Electrochemical Cycling of LiCoPO₄. Chemistry of Materials, 2014, 26, 6193-6205.	6.7	54
117	Capturing metastable structures during high-rate cycling of LiFePO ₄ nanoparticle electrodes. Science, 2014, 344, 1252817.	12.6	493
118	Understanding improved electrochemical properties of NiO-doped NiF2â€“C composite conversion materials by X-ray absorption spectroscopy and pair distribution function analysis. Physical Chemistry Chemical Physics, 2014, 16, 3095.	2.8	15
119	Solvation structure and energetics of electrolytes for multivalent energy storage. Physical Chemistry Chemical Physics, 2014, 16, 21941-21945.	2.8	124
120	Comprehensive Study of the CuF₂ Conversion Reaction Mechanism in a Lithium Ion Battery. Journal of Physical Chemistry C, 2014, 118, 15169-15184.	3.1	168
121	Mesoscale Effects in Electrochemical Conversion: Coupling of Chemistry to Atomic- and Nanoscale Structure in Iron-Based Electrodes. Journal of the American Chemical Society, 2014, 136, 6211-6214.	13.7	32
122	Simultaneous diffuse reflection infrared spectroscopy and X-ray pair distribution function measurements. Journal of Applied Crystallography, 2014, 47, 95-101.	4.5	21
123	Tailoring the Composition of a Mixed Anion Iron-Based Fluoride Compound: Evidence for Anionic Vacancy and Electrochemical Performance in Lithium Cells. Chemistry of Materials, 2014, 26, 4190-4199.	6.7	42
124	Origin of additional capacities in metal oxide lithium-ion battery electrodes. Nature Materials, 2013, 12, 1130-1136.	27.5	635
125	Correlating structure and chemistry through simultaneous in situ pair distribution function and infrared spectroscopy measurements. CrystEngComm, 2013, 15, 9377.	2.6	10
126	Orientational order-dependent thermal expansion and compressibility of ZrW2O8 and ZrMo2O8. Physical Chemistry Chemical Physics, 2013, 15, 19665.	2.8	22

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127	Mapping spatially inhomogeneous electrochemical reactions in battery electrodes using high energy X-rays. Physical Chemistry Chemical Physics, 2013, 15, 8466.	2.8	15
128	Exploiting High Pressures to Generate Porosity, Polymorphism, And Lattice Expansion in the Nonporous Molecular Framework Zn(CN)₂. Journal of the American Chemical Society, 2013, 135, 7621-7628.	13.7	74
129	Competitive I₂ Sorption by Cu-BTC from Humid Gas Streams. Chemistry of Materials, 2013, 25, 2591-2596.	6.7	294
130	Negative thermal expansion and compressibility of Sc1â€“<i>x</i>Y<i>x</i>F3â€ˆ(xâ‰¤0.25). Journal of Applied Physics, 2013, 114, .	2.5	68
131	Comprehensive Insights into the Structural and Chemical Changes in Mixed-Anion FeOF Electrodes by Using Operando PDF and NMR Spectroscopy. Journal of the American Chemical Society, 2013, 135, 4070-4078.	13.7	124
132	Multinuclear NMR Study of Zinc Dicyanide. Zeitschrift Fur Physikalische Chemie, 2012, 226, 1205-1218.	2.8	8
133	Reactive Gas Environment Induced Structural Modification of Noble-Transition Metal Alloy Nanoparticles. Physical Review Letters, 2012, 109, 125504.	7.8	13
134	Elucidating the Domain Structure of the Cobalt Oxide Water Splitting Catalyst by X-ray Pair Distribution Function Analysis. Journal of the American Chemical Society, 2012, 134, 11096-11099.	13.7	139
135	The AMPIX electrochemical cell: a versatile apparatus for<i>in situ</i>X-ray scattering and spectroscopic measurements. Journal of Applied Crystallography, 2012, 45, 1261-1269.	4.5	179
136	Chasing Changing Nanoparticles with Time-Resolved Pair Distribution Function Methods. Journal of the American Chemical Society, 2012, 134, 5036-5039.	13.7	73
137	Structural and Mechanistic Revelations on an Iron Conversion Reaction from Pair Distribution Function Analysis. Angewandte Chemie - International Edition, 2012, 51, 4852-4855.	13.8	36
138	Determining Quantitative Kinetics and the Structural Mechanism for Particle Growth in Porous Templates. Journal of Physical Chemistry Letters, 2011, 2, 2742-2746.	4.6	52
139	Dual Lithium Insertion and Conversion Mechanisms in a Titanium-Based Mixed-Anion Nanocomposite. Journal of the American Chemical Society, 2011, 133, 13240-13243.	13.7	34
140	Trapping Guests within a Nanoporous Metalâ€“Organic Framework through Pressure-Induced Amorphization. Journal of the American Chemical Society, 2011, 133, 18583-18585.	13.7	247
141	Capture of Volatile Iodine, a Gaseous Fission Product, by Zeolitic Imidazolate Framework-8. Journal of the American Chemical Society, 2011, 133, 12398-12401.	13.7	579
142	Pressureâ€Induced Sequential Orbital Reorientation in a Magnetic Framework Material. Angewandte Chemie - International Edition, 2011, 50, 419-421.	13.8	49
143	Optimizing high-pressure pair distribution function measurements in diamond anvil cells. Journal of Applied Crystallography, 2010, 43, 297-307.	4.5	32
144	Study of Supported PtCu and PdAu Bimetallic Nanoparticles Using In-Situ X-ray Tools. Journal of Physical Chemistry C, 2010, 114, 17085-17091.	3.1	72

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145	Investigation of Surface Structures by Powder Diffraction: A Differential Pair Distribution Function Study on Arsenate Sorption on Ferrihydrite. Inorganic Chemistry, 2010, 49, 325-330.	4.0	53
146	Radioactive Iodine Capture in Silver-Containing Mordenites through Nanoscale Silver Iodide Formation. Journal of the American Chemical Society, 2010, 132, 8897-8899.	13.7	517
147	Application of high-energy X-rays and Pair-Distribution-Function analysis to nano-scale structural studies in catalysis. Catalysis Today, 2009, 145, 213-219.	4.4	61
148	Pressure-Induced Amorphization and Porosity Modification in a Metalâˆ'Organic Framework. Journal of the American Chemical Society, 2009, 131, 17546-17547.	13.7	376
149	Pair distribution function analysis of pressure treated zeolite Na-A. Chemical Communications, 2009, , 3383.	4.1	31
150	A versatile sample-environment cell for non-ambient X-ray scattering experiments. Journal of Applied Crystallography, 2008, 41, 822-824.	4.5	258
151	Negative Thermal Expansion in the Metalâ€"Organic Framework Material Cu₃(1,3,5â€benzenetricarboxylate)₂. Angewandte Chemie - International Edition, 2008, 47, 8929-8932.	13.8	251
152	Elucidating the Mechanism of a Two-Step Spin Transition in a Nanoporous Metalâˆ'Organic Framework. Journal of the American Chemical Society, 2008, 130, 17552-17562.	13.7	172
153	Guest-Dependent High Pressure Phenomena in a Nanoporous Metalâˆ'Organic Framework Material. Journal of the American Chemical Society, 2008, 130, 10524-10526.	13.7	162
154	Synthesis, Symmetry, and Physical Properties of Cerium Pyrophosphate. Chemistry of Materials, 2008, 20, 3728-3734.	6.7	32
155	Pressure Enhancement of Negative Thermal Expansion Behavior and Induced Framework Softening in Zinc Cyanide. Journal of the American Chemical Society, 2007, 129, 10090-10091.	13.7	89
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