Lynne B Mccusker

List of Publications by Year
in descending order

116 papers	4,803 citations	81900 39 h-index	106344 65 g-index
125 all docs	125 docs citations	125 times ranked	3987 citing authors

#	Article	IF	Citations
1	Paired Copper Monomers in Zeolite Omega: The Active Site for Methaneâ€toâ€Methanol Conversion. Angewandte Chemie, 2021, 133, 5918-5922.	2.0	8
2	Paired Copper Monomers in Zeolite Omega: The Active Site for Methaneâ€toâ€Methanol Conversion. Angewandte Chemie - International Edition, 2021, 60, 5854-5858.	13.8	27
3	Further Investigations of Racemic and Chiral Molecular Sieves of the STW Topology. Chemistry of Materials, 2021, 33, 1752-1759.	6.7	11
4	Pinpointing and Quantifying the Aluminum Distribution in Zeolite Catalysts Using Anomalous Scattering at the Al Absorption Edge. Journal of the American Chemical Society, 2021, 143, 17926-17930.	13.7	16
5	SSZâ€27: A Smallâ€Pore Zeolite with Large Heartâ€Shaped Cavities Determined by Using Multiâ€crystal Electron Diffraction. Angewandte Chemie, 2019, 131, 13214-13220.	2.0	2
6	SSZâ€27: A Smallâ€Pore Zeolite with Large Heartâ€Shaped Cavities Determined by Using Multiâ€crystal Electron Diffraction. Angewandte Chemie - International Edition, 2019, 58, 13080-13086.	13.8	15
7	InnenrÃ¼cktitelbild: Preferential Siting of Aluminum Heteroatoms in the Zeolite Catalyst Alâ€SSZâ€70 (Angew. Chem. 19/2019). Angewandte Chemie, 2019, 131, 6523-6523.	2.0	0
8	Preferential Siting of Aluminum Heteroatoms in the Zeolite Catalyst Alâ€SSZâ€70. Angewandte Chemie - International Edition, 2019, 58, 6255-6259.	13.8	31
9	Preferential Siting of Aluminum Heteroatoms in the Zeolite Catalyst Alâ€SSZâ€70. Angewandte Chemie, 2019, 131, 6321-6325.	2.0	10
10	Crystallization of Mordenite Platelets using Cooperative Organic Structure-Directing Agents. Journal of the American Chemical Society, 2019, 141, 20155-20165.	13.7	42
11	Multidimensional Disorder in Zeolite IM-18 Revealed by Combining Transmission Electron Microscopy and X-ray Powder Diffraction Analyses. Crystal Growth and Design, 2018, 18, 2441-2451.	3.0	30
12	Electron diffraction and the hydrogen atom. Science, 2017, 355, 136-136.	12.6	5
13	Well-Defined Silanols in the Structure of the Calcined High-Silica Zeolite SSZ-70: New Understanding of a Successful Catalytic Material. Journal of the American Chemical Society, 2017, 139, 16803-16812.	13.7	61
14	Location of Organic Structure-Directing Agents in Zeolites Using Diffraction Techniques. Structure and Bonding, 2017, , 43-73.	1.0	2
15	Locating Organic Guests in Inorganic Host Materials from X-ray Powder Diffraction Data. Journal of the American Chemical Society, 2016, 138, 7099-7106.	13.7	55
16	Synthesis and Characterization of CIT-13, a Germanosilicate Molecular Sieve with Extra-Large Pore Openings. Chemistry of Materials, 2016, 28, 6250-6259.	6.7	56
17	Highly selective uptake of carbon dioxide on the zeolite |Na_{10.2}KCs_{0.8}|-LTA â€“ a possible sorbent for biogas upgrading. Physical Chemistry Chemical Physics, 2016, 18, 16080-16083.	2.8	22
18	Synthesis and structural characterization of Zn-containing DAF-1. New Journal of Chemistry, 2016, 40, 4160-4166.	2.8	5

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19	Aluminum Redistribution during the Preparation of Hierarchical Zeolites by Desilication. Chemistry - A European Journal, 2015, 21, 14156-14164.	3.3	44
20	On the relationship between unit cells and channel systems in high silica zeolites with the â€œbutterflyâ€• projection. Zeitschrift Fur Kristallographie - Crystalline Materials, 2015, 230, 301-309.	0.8	4
21	SSZ-87: A Borosilicate Zeolite with Unusually Flexible 10-Ring Pore Openings. Journal of the American Chemical Society, 2015, 137, 2015-2020.	13.7	48
22	Ionothermal Synthesis and Structure of a New Layered Zirconium Phosphate. Inorganic Chemistry, 2015, 54, 7953-7958.	4.0	10
23	Serial snapshot crystallography for materials science with SwissFEL. IUCrJ, 2015, 2, 361-370.	2.2	19
24	Solving the Structures of Polycrystalline Materials: from the Debye-Scherrer Camera to SwissFEL. Chimia, 2014, 68, 19-25.	0.6	3
25	Crystal Structure of an Indigo@Silicalite Hybrid Related to the Ancient Maya Blue Pigment. Journal of Physical Chemistry C, 2014, 118, 28032-28042.	3.1	26
26	Highâ€Silica Zeolite SSZâ€61 with Dumbbellâ€Shaped Extraâ€Largeâ€Pore Channels. Angewandte Chemie - International Edition, 2014, 53, 10398-10402.	13.8	47
27	Zeolites with Continuously Tuneable Porosity. Angewandte Chemie - International Edition, 2014, 53, 13210-13214.	13.8	104
28	Synthesis, Structural Elucidation, and Catalytic Properties in Olefin Epoxidation of the Polymeric Hybrid Material [Mo3O9(2-[3(5)-Pyrazolyl]pyridine)]n. Inorganic Chemistry, 2014, 53, 2652-2665.	4.0	38
29	SSZ-45: A High-Silica Zeolite with Small Pore Openings, Large Cavities, and Unusual Adsorption Properties. Chemistry of Materials, 2014, 26, 3909-3913.	6.7	42
30	Solving the structures of light-atom compounds with powder charge flipping. Journal of Applied Crystallography, 2014, 47, 1569-1576.	4.5	4
31	Controlling the Aluminum Distribution in the Zeolite Ferrierite via the Organic Structure Directing Agent. Chemistry of Materials, 2013, 25, 3654-3661.	6.7	105
32	Advances in exploiting preferred orientation in the structure analysis of polycrystalline materials. Journal of Applied Crystallography, 2013, 46, 173-180.	4.5	16
33	Electron crystallography as a complement to X-ray powder diffraction techniques. Zeitschrift Fur Kristallographie - Crystalline Materials, 2013, 228, 1-10.	0.8	28
34	SSZ-52, a Zeolite with an 18-Layer Aluminosilicate Framework Structure Related to That of the DeNOx Catalyst Cu-SSZ-13. Journal of the American Chemical Society, 2013, 135, 10519-10524.	13.7	79
35	Using<i>FOCUS</i>to solve zeolite structures from three-dimensional electron diffraction data. Journal of Applied Crystallography, 2013, 46, 1017-1023.	4.5	24
36	Using a non-monochromatic microbeam for serial snapshot crystallography. Journal of Applied Crystallography, 2013, 46, 791-794.	4.5	27

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37	Solving complex open-framework structures from X-ray powder diffraction by direct-space methods using composite building units. Journal of Applied Crystallography, 2013, 46, 1094-1104.	4.5	10
38	Can Laue microdiffraction be used to solve and refine complex inorganic structures?. Journal of Applied Crystallography, 2013, 46, 1805-1816.	4.5	17
39	Optimizing the input parameters for powder charge flipping. Journal of Applied Crystallography, 2012, 45, 1125-1135.	4.5	10
40	Synthesis, structure and characterization of ZrPOF-DEA, a microporous zirconium phosphate framework material. Microporous and Mesoporous Materials, 2012, 164, 82-87.	4.4	6
41	Combination of X-ray Powder Diffraction, Electron Diffraction and HRTEM Data. NATO Science for Peace and Security Series B: Physics and Biophysics, 2012, , 303-314.	0.3	0
42	Synthesis of Zn-containing microporous aluminophosphate with the STA-1 structure. Dalton Transactions, 2011, 40, 8125.	3.3	10
43	Unraveling the Perplexing Structure of the Zeolite SSZ-57. Science, 2011, 333, 1134-1137.	12.6	73
44	Structure of the Borosilicate Zeolite Catalyst SSZ-82 Solved Using 2D-XPD Charge Flipping. Journal of the American Chemical Society, 2011, 133, 20604-20610.	13.7	42
45	A re-examination of the structure of the germanosilicate zeolite SSZ-77. Solid State Sciences, 2011, 13, 800-805.	3.2	6
46	Using phases retrieved from two-dimensional projections to facilitate structure solution from X-ray powder diffraction data. Journal of Applied Crystallography, 2011, 44, 1023-1032.	4.5	9
47	Ionothermal Synthesis and Structure Analysis of an Openâ€Framework Zirconium Phosphate with a High CO₂/CH₄ Adsorption Ratio. Angewandte Chemie - International Edition, 2011, 50, 8139-8142.	13.8	67
48	Stereochemical Models for Discussing Additions to <i>Î±</i>,<i>Î²</i>â€Unsaturated Aldehydes Organocatalyzed by Diarylprolinol or Imidazolidinone Derivatives â€" Is There an <i>â€˜(</i>E<i>)/(</i>Z<i>)â€Dilemmaâ€™</i>?. Helvetica Chimica Acta, 2010, 93, 603-634.	1.6	93
49	The Search for Tricyanomethane (Cyanoform). Chemistry - A European Journal, 2010, 16, 7224-7230.	3.3	15
50	The Crystal Structure of <scp>D</scp>â€Riboseâ€"At Last!. Angewandte Chemie - International Edition, 2010, 49, 4503-4505.	13.8	63
51	Structure determination of the zeolite IM-5 using electron crystallography. Zeitschrift FÃ¼r Kristallographie, 2010, 225, 77-85.	1.1	38
52	Optimized Synthesis and Structural Characterization of the Borosilicate MCM-70. Journal of Physical Chemistry C, 2009, 113, 9845-9850.	3.1	26
53	Structural Aspects of 1,3,5-Benzenetrisamidesâ˘'A New Family of Nucleating Agents. Crystal Growth and Design, 2009, 9, 2556-2558.	3.0	47
54	Synthesis and Structural Characterization of the Aluminosilicate LZ-135, a Zeolite Related to ZSM-10. Journal of Physical Chemistry C, 2009, 113, 9838-9844.	3.1	16

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55	Exceptional Ion-Exchange Selectivity in a Flexible Open Framework Lanthanum(III)tetrakisphosphonate. Journal of the American Chemical Society, 2009, 131, 18112-18118.	13.7	209
56	Synthesis, Structure, and Characterization of Two Photoluminescent Zirconium PhosphateâQuinoline Compounds. Inorganic Chemistry, 2009, 48, 8947-8954.	4.0	14
57	Using electron microscopy to complement X-ray powder diffraction data to solve complex crystal structures. Chemical Communications, 2009, , 1439.	4.1	39
58	Combining precession electron diffraction data with X-ray powder diffraction data to facilitate structure solution. Journal of Applied Crystallography, 2008, 41, 1115-1121.	4.5	30
59	Combining Structure Modeling and Electron Microscopy to Determine Complex Zeolite Framework Structures. Angewandte Chemie - International Edition, 2008, 47, 4401-4405.	13.8	24
60	Metalâ^'Peptide Frameworks (MPFs):â€‰ â€œBioinspiredâ€•Metal Organic Frameworks. Journal of the American Chemical Society, 2008, 130, 2517-2526.	13.7	163
61	Ordered silicon vacancies in the framework structure of the zeolite catalyst SSZ-74. Nature Materials, 2008, 7, 631-635.	27.5	156
62	Zeolite structure determination using electron crystallography. Studies in Surface Science and Catalysis, 2008, 174, 799-804.	1.5	3
63	Solving complex zeolite structures â€” how far can we go?. Studies in Surface Science and Catalysis, 2008, , 3-12.	1.5	1
64	Zeolite Structures. Studies in Surface Science and Catalysis, 2007, 168, 13-37.	1.5	50
65	Pmmn. , 2007, , 34-35.		0
66	Charge flipping combined with histogram matching to solve complex crystal structures from powder diffraction data. Zeitschrift FÃ¼r Kristallographie, 2007, 222, .	1.1	123
67	New advances in zeolite structure analysis. Studies in Surface Science and Catalysis, 2007, , 657-665.	1.5	3
68	Synthesis, characterization and crystal structure analysis of an open-framework zirconium phosphate. Microporous and Mesoporous Materials, 2007, 104, 185-191.	4.4	19
69	Synthesis and structure analysis of the layer silicate DLM-2. Microporous and Mesoporous Materials, 2007, 105, 75-81.	4.4	11
70	Structure of the Polycrystalline Zeolite Catalyst IM-5 Solved by Enhanced Charge Flipping. Science, 2007, 315, 1113-1116.	12.6	239
71	P63/mmc. , 2007, , 122-123.		1
72	Cmcm. , 2007, , 116-117.		0

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73	Pca21. , 2007, , 264-265.		0
74	Cmcm. , 2007, , 162-163.		0
75	C2/m. , 2007, , 338-339.		0
76	Complex zeolite structure solved by combining powder diffraction and electron microscopy. Nature, 2006, 444, 79-81.	27.8	200
77	Synthesis and structure of Mu-33, a new layered aluminophosphate. Microporous and Mesoporous Materials, 2006, 90, 5-15.	4.4	18
78	Experimental methods for estimating the relative intensities of overlapping reflections. , 2006, , 162-178.		0
79	Chemical information and intuition in solving crystal structures. , 2006, , 307-324.		0
80	Synthesis and structure analysis of the potassium calcium silicate CAS-1. Application of a texture approach to structure solution using data collected in transmission mode. Comptes Rendus Chimie, 2005, 8, 331-339.	0.5	15
81	Zeolite structures. Studies in Surface Science and Catalysis, 2005, 157, 41-64.	1.5	29
82	IUPAC Nomenclature for Ordered Microporous and Mesoporous Materials and its Application to Non-zeolite Microporous Mineral Phases. Reviews in Mineralogy and Geochemistry, 2005, 57, 1-16.	4.8	27
83	Editorial: Structure Determination from Powder Diffraction Data. Zeitschrift Fur Kristallographie - Crystalline Materials, 2004, 219, .	0.8	17
84	Exploiting texture to estimate the relative intensities of overlapping reflections. Zeitschrift Fur Kristallographie - Crystalline Materials, 2004, 219, .	0.8	18
85	Structure analysis of the novel microporous aluminophosphate IST-1 using synchrotron powder diffraction data and HETCOR MAS NMR. Microporous and Mesoporous Materials, 2003, 65, 43-57.	4.4	29
86	The application of structure envelopes in structure determination from powder diffraction data. Journal of Applied Crystallography, 2002, 35, 243-252.	4.5	37
87	Chapter 3 Zeolite structures. Studies in Surface Science and Catalysis, 2001, , 37-67.	1.5	45
88	Product characterization by x-ray powder diffraction. , 2001, , 47-49.		1
89	Rietveld refinement of a chabazite-like aluminophosphate containing a [Ni(1,2-diaminoethane)2O2]2â˘ complex bridge. Microporous and Mesoporous Materials, 2001, 47, 269-274.	4.4	7
90	Characterization and structural analysis of differently prepared samples of dehydrated VPI-5. Microporous and Mesoporous Materials, 2000, 34, 99-113.	4.4	26

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91	NMR Characterization and Rietveld Refinement of the Structure of Rehydrated AlPO4-34. Journal of Physical Chemistry B, 2000, 104, 5697-5705.	2.6	99
92	Single-Crystal-Like Diffraction Data from Polycrystalline Materials. Science, 1999, 284, 477-479.	12.6	62
93	An Ordered Form of the Extra-Large-Pore Zeolite UTD-1:Â Synthesis and Structure Analysis from Powder Diffraction Data. Journal of the American Chemical Society, 1999, 121, 6242-6247.	13.7	78
94	Rietveld refinement of the calcined form of SAPO-40. Microporous Materials, 1997, 11, 247-251.	1.6	5
95	Cyclo-?-peptides: Structure and tubular stacking of cyclic tetramers of 3-aminobutanoic acid as determined from powder diffraction data. Helvetica Chimica Acta, 1997, 80, 173-182.	1.6	209
96	A re-examination of the structure of SAPO-40. Microporous Materials, 1996, 6, 51-54.	1.6	19
97	Synthesis optimization and structure analysis of the zincosilicate molecular sieve VPI-9. Microporous Materials, 1996, 6, 295-309.	1.6	83
98	Is the VFI topology compatible with tetrahedral Al?. Studies in Surface Science and Catalysis, 1995, 98, 254-255.	1.5	0
99	Advances in Powder Diffraction Methods for Zeolite Structure Analysis. Studies in Surface Science and Catalysis, 1994, , 341-356.	1.5	25
100	Location of the 18-crown-6 template in EMC-2 (EMT) Rietveld refinement of the calcined and as-synthesized forms. Microporous Materials, 1994, 2, 269-280.	1.6	85
101	Practical Aspects of Powder Diffraction Data Analysis. Studies in Surface Science and Catalysis, 1994, , 391-428.	1.5	30
102	Characterization and Rietveld refinement of the large pore molecular sieve SAPO-40. Microporous Materials, 1993, 1, 149-160.	1.6	42
103	Ab initio structure determination from severely overlapping powder diffraction data. Journal of Applied Crystallography, 1992, 25, 539-543.	4.5	80
104	The triple helix inside the large-pore aluminophosphate molecular sieve VPI-5. Zeolites, 1991, 11, 308-313.	0.5	235
105	AlPO4-based molecular sieves synthesized in the presence of di-n-propylamine: Are the structures related?. Zeolites, 1991, 11, 460-465.	0.5	47
106	The structure determination and rietveld refinement of the aluminophosphate AlPO4-18. Zeolites, 1991, 11, 654-661.	0.5	129
107	The framework topology of zeolite EU-1. Zeolites, 1988, 8, 74-76.	0.5	98
108	AB-5 and ABC-6 networks. Materials Research Bulletin, 1987, 22, 1203-1207.	5.2	13

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109	The crystal structure of a sodium gallosilicate sodalite. Zeolites, 1986, 6, 388-391.	0.5	40
110	Rietveld refinement of the crystal structure of the new zeolite mineral gobbinsite. Zeitschrift Fur Kristallographie - Crystalline Materials, 1985, 171, 281-289.	0.8	23
111	Crystal structures of the ammonium and hydrogen forms of zeolite rho. Zeolites, 1984, 4, 51-55.	0.5	56
112	Ruthenium(II) complexes of benzylphosphines. Inorganic Chemistry, 1982, 21, 1376-1382.	4.0	35
113	Crystal structure of vacuum-dehydrated fully ammonium-exchanged zeolite A. Journal of the American Chemical Society, 1981, 103, 3441-3446.	13.7	21
114	Cadmium(I) and dicadmium(I). Crystal structures of cadmium(II)-exchanged zeolite A evacuated at 500.degree.C and of its cadmium sorption complex. Journal of the American Chemical Society, 1979, 101, 5235-5239.	13.7	35
115	Zero-coordinate cadmium(II). Over ion exchange. Crystal structures of hydrated and dehydrated zeolite A exchanged with cadmium chloride to give cadmium chloride hydroxide (Cd9.5Cl4(OH)3-A). Journal of the American Chemical Society, 1978, 100, 5052-5057.	13.7	23
116	Structure determination of zeolites by electron crystallography. , 0, , 757-758.		1