

# Sarah C Larsen

## List of Publications by Year in descending order

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97  
papers

4,252  
citations

94433

37  
h-index

118850

62  
g-index

100  
all docs

100  
docs citations

100  
times ranked

5459  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron Paramagnetic Resonance Studies of Copper Ion-Exchanged ZSM-5. <i>The Journal of Physical Chemistry</i> , 1994, 98, 11533-11540.	2.9	302
2	Nanocrystalline Zeolites and Zeolite Structures: Synthesis, Characterization, and Applications. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18464-18474.	3.1	280
3	Synthesis, Characterization, and Adsorption Properties of Nanocrystalline ZSM-5. <i>Langmuir</i> , 2004, 20, 8301-8306.	3.5	213
4	An Infrared Study of NO Decomposition over Cu-ZSM-5. <i>Journal of Catalysis</i> , 1995, 157, 592-602.	6.2	209
5	Silica nanoparticle-generated ROS as a predictor of cellular toxicity: mechanistic insights and safety by design. <i>Environmental Science: Nano</i> , 2016, 3, 56-66.	4.3	128
6	Synthesis of hierarchical nanocrystalline ZSM-5 with controlled particle size and mesoporosity. <i>Microporous and Mesoporous Materials</i> , 2011, 137, 92-100.	4.4	125
7	Zeolite and mesoporous silica nanomaterials: greener syntheses, environmental applications and biological toxicity. <i>Environmental Science: Nano</i> , 2014, 1, 200-213.	4.3	114
8	Size-Dependent Properties of Nanocrystalline Silicalite Synthesized with Systematically Varied Crystal Sizes. <i>Langmuir</i> , 2004, 20, 4696-4702.	3.5	109
9	Aspirin Loading and Release from MCM-41 Functionalized with Aminopropyl Groups via Co-condensation or Postsynthesis Modification Methods. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18358-18366.	3.1	97
10	EPR Study of Copper-Exchanged Zeolites: Effects of Correlated g- and A-Strain, Si/Al Ratio, and Parent Zeolite. <i>Journal of Physical Chemistry B</i> , 2000, 104, 6568-6575.	2.6	96
11	Chemical Insight into the Adsorption of Chromium(III) on Iron Oxide/Mesoporous Silica Nanocomposites. <i>Langmuir</i> , 2015, 31, 7553-7562.	3.5	93
12	Development of Improved Materials for Environmental Applications: Nanocrystalline NaY Zeolites. <i>Environmental Science &amp; Technology</i> , 2005, 39, 1214-1220.	10.0	88
13	Chromate adsorption on bifunctional, magnetic zeolite composites. <i>Microporous and Mesoporous Materials</i> , 2010, 130, 197-202.	4.4	84
14	Insight into seed-assisted template free synthesis of ZSM-5 zeolites. <i>Microporous and Mesoporous Materials</i> , 2017, 239, 444-452.	4.4	82
15	Carbon dioxide (C16O2 and C18O2) adsorption in zeolite Y materials: effect of cation, adsorbed water and particle size. <i>Energy and Environmental Science</i> , 2009, 2, 401.	30.8	76
16	Surface Adsorption of Suwannee River Humic Acid on TiO <sub>2</sub> Nanoparticles: A Study of pH and Particle Size. <i>Langmuir</i> , 2018, 34, 3136-3145.	3.5	76
17	Effect of Crystal Size and Surface Functionalization on the Cytotoxicity of Silicalite-1 Nanoparticles. <i>Chemical Research in Toxicology</i> , 2009, 22, 1359-1368.	3.3	70
18	Loading and release of 5-fluorouracil from HY zeolites with varying SiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> ratios. <i>Microporous and Mesoporous Materials</i> , 2013, 167, 182-187.	4.4	68

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19	DFT calculations of EPR parameters of transition metal complexes: Implications for catalysis. <i>Catalysis Today</i> , 2005, 105, 122-133.	4.4	66
20	Selective catalytic reduction of NO <sub>2</sub> with urea in nanocrystalline NaY zeolite. <i>Journal of Catalysis</i> , 2005, 234, 401-413.	6.2	65
21	Functionalized magnetic mesoporous silica nanoparticles for U removal from low and high pH groundwater. <i>Journal of Hazardous Materials</i> , 2016, 317, 494-502.	12.4	63
22	Density Functional Theory Calculations of the Electron Paramagnetic Resonance Parameters for VO <sub>2</sub> <sup>+</sup> Complexes. <i>Journal of Physical Chemistry A</i> , 2003, 107, 1872-1878.	2.5	61
23	An Experimental and Computational Study of the Loading and Release of Aspirin from Zeolite HY. <i>Journal of Physical Chemistry C</i> , 2012, 116, 21382-21390.	3.1	56
24	Photooxidation of 1-Alkenes in Zeolites: A Study of the Factors that Influence Product Selectivity and Formation. <i>Journal of the American Chemical Society</i> , 1999, 121, 5063-5072.	13.7	55
25	NanoEHS “defining fundamental science needs: no easy feat when the simple itself is complex. <i>Environmental Science: Nano</i> , 2016, 3, 15-27.	4.3	53
26	CO Adsorption as a Probe of Acid Sites and the Electric Field in Alkaline Earth Exchanged Zeolite Beta Using FT-IR and ab Initio Quantum Calculations. <i>Journal of Physical Chemistry B</i> , 1999, 103, 5058-5062.	2.6	48
27	Combining Theory and Experiment to Interpret the EPR Spectra of VO <sub>2</sub> <sup>+</sup> -Exchanged Zeolites. <i>Journal of Physical Chemistry A</i> , 2001, 105, 4563-4573.	2.5	47
28	Toxicity of Silica Nanomaterials: Zeolites, Mesoporous Silica, and Amorphous Silica Nanoparticles. <i>Advances in Molecular Toxicology</i> , 2010, 4, 223-266.	0.4	47
29	From nanoparticles to hierarchical structures: Controlling the morphology of zeolite beta. <i>Microporous and Mesoporous Materials</i> , 2011, 143, 97-103.	4.4	46
30	DFT Calculations of Proton Hyperfine Coupling Constants for [VO(H <sub>2</sub> O) <sub>5</sub> ] <sup>2+</sup> : Comparison with Proton ENDOR Data. <i>Journal of Physical Chemistry A</i> , 2001, 105, 8333-8338.	2.5	45
31	Nano-Bio Interactions of Porous and Nonporous Silica Nanoparticles of Varied Surface Chemistry: A Structural, Kinetic, and Thermodynamic Study of Protein Adsorption from RPMI Culture Medium. <i>Langmuir</i> , 2016, 32, 731-742.	3.5	45
32	Variable-Temperature Electron Paramagnetic Resonance Studies of Copper-Exchanged Zeolites. <i>Journal of Catalysis</i> , 1999, 182, 208-218.	6.2	43
33	Microscopic and Macroscopic Characterization of Organosilane-Functionalized Nanocrystalline NaZSM-5. <i>Langmuir</i> , 2005, 21, 7009-7014.	3.5	43
34	FTIR study of the selective catalytic reduction of NO <sub>2</sub> with ammonia on nanocrystalline NaY and CuY. <i>Journal of Molecular Catalysis A</i> , 2008, 285, 48-57.	4.8	43
35	Amine modification of nonporous silica nanoparticles reduces inflammatory response following intratracheal instillation in murine lungs. <i>Toxicology Letters</i> , 2016, 241, 207-215.	0.8	43
36	Solvent effects in the development of a drug delivery system for 5-fluorouracil using magnetic mesoporous silica nanoparticles. <i>Microporous and Mesoporous Materials</i> , 2017, 237, 108-116.	4.4	42

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37	Catalytic reduction of NO <sub>2</sub> in nanocrystalline NaY zeolite. <i>Journal of Molecular Catalysis A</i> , 2005, 227, 25-35.	4.8	39
38	Adsorption and Thermal Reaction of DMMP in Nanocrystalline NaY. <i>Langmuir</i> , 2006, 22, 11077-11084.	3.5	37
39	Photooxidation of Toluene and p-Xylene in Cation-Exchanged Zeolites X, Y, ZSM-5, and Beta: The Role of Zeolite Physicochemical Properties in Product Yield and Selectivity. <i>Journal of Physical Chemistry B</i> , 2000, 104, 5706-5714.	2.6	36
40	Adsorption, desorption and thermal oxidation of 2-CEES on nanocrystalline zeolites. <i>Microporous and Mesoporous Materials</i> , 2007, 100, 77-86.	4.4	35
41	A Kinetic Study of the Thermal and Photochemical Partial Oxidation of Cyclohexane with Molecular Oxygen in Zeolite Y. <i>Journal of Catalysis</i> , 2001, 204, 440-449.	6.2	33
42	Density Functional Theory Investigation of EPR Parameters for Tetragonal Cu(II) Model Complexes with Oxygen Ligands. <i>Journal of Physical Chemistry A</i> , 2009, 113, 4305-4312.	2.5	31
43	Sequestration of U(VI) from Acidic, Alkaline, and High Ionic-Strength Aqueous Media by Functionalized Magnetic Mesoporous Silica Nanoparticles: Capacity and Binding Mechanisms. <i>Environmental Science &amp; Technology</i> , 2017, 51, 14330-14341.	10.0	31
44	Adsorption and Photochemical Properties of a Molecular CO <sub>2</sub> Reduction Catalyst in Hierarchical Mesoporous ZSM-5: An In Situ FTIR Study. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 486-492.	4.6	30
45	Mechanochemical reaction pathways in solvent-free synthesis of ZSM-5. <i>Microporous and Mesoporous Materials</i> , 2019, 276, 23-28.	4.4	30
46	An FT-IR Study of NO <sub>2</sub> Reduction in Nanocrystalline NaY Zeolite: Effect of Zeolite Crystal Size and Adsorbed Water. <i>Catalysis Letters</i> , 2005, 103, 23-32.	2.6	29
47	Ligand Characterization of Covalently Functionalized Mesoporous Silica Nanoparticles: An NMR Toolbox Approach. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29943-29951.	3.1	29
48	Chromate adsorption on amine-functionalized nanocrystalline silicalite-1. <i>Microporous and Mesoporous Materials</i> , 2008, 116, 365-369.	4.4	28
49	Mechanochemically-assisted solvent-free and template-free synthesis of zeolites ZSM-5 and mordenite. <i>Nanoscale Advances</i> , 2019, 1, 3918-3928.	4.6	28
50	Characterization of Ruthenium-Exchanged Zeolites (Beta, Y, and ZSM-5) by EPR Spectroscopy. <i>Journal of Catalysis</i> , 2000, 196, 352-361.	6.2	26
51	Silicalite nanoparticles that promote transgene expression. <i>Nanotechnology</i> , 2008, 19, 175103.	2.6	26
52	Preparation of a Versatile Bifunctional Zeolite for Targeted Imaging Applications. <i>Langmuir</i> , 2011, 27, 2904-2909.	3.5	26
53	DFT calculations of the EPR parameters for Cu(II) DETA imidazole complexes. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8266.	2.8	23
54	Computational Study of the Effect of the Imidazole Ring Orientation on the EPR Parameters for Vanadyl-Imidazole Complexes. <i>Journal of Physical Chemistry A</i> , 2002, 106, 10444-10451.	2.5	22

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55	Integration of a Communicating Science Module into an Advanced Chemistry Laboratory Course. <i>Journal of Chemical Education</i> , 2006, 83, 1029.	2.3	22
56	Interpretation of the EPR Spectra of Nitrogen-Containing Compounds Adsorbed on Copper-Exchanged Zeolites. <i>Journal of Physical Chemistry B</i> , 2000, 104, 8848-8854.	2.6	21
57	Surface adsorption of Nordic aquatic fulvic acid on amine-functionalized and non-functionalized mesoporous silica nanoparticles. <i>Environmental Science: Nano</i> , 2018, 5, 2162-2171.	4.3	21
58	Radical Anion Complexes of Tris(1,3-diphenyltriazenido)aluminum. <i>Journal of the American Chemical Society</i> , 1995, 117, 1736-1745.	13.7	20
59	Solid-State Nuclear Magnetic Resonance Study of Acetone Oxime Adsorbed on CuZSM-5 and on HZSM-5. <i>Journal of Catalysis</i> , 1999, 182, 244-256.	6.2	20
60	Photooxidation of cyclohexane and cyclohexene in BaY. <i>Journal of Molecular Catalysis A</i> , 2003, 194, 169-180.	4.8	20
61	Two-Dimensional Pulsed EPR Studies of Vanadium-Exchanged ZSM-5. <i>Journal of Physical Chemistry B</i> , 2004, 108, 16128-16134.	2.6	20
62	Framework Stability of Nanocrystalline NaY in Aqueous Solution at Varying pH. <i>Langmuir</i> , 2010, 26, 6695-6701.	3.5	20
63	Visible light photoreduction of Cr(VI) in aqueous solution using iron-containing zeolite tubes. <i>Microporous and Mesoporous Materials</i> , 2007, 100, 340-349.	4.4	19
64	Solid-State MAS NMR Studies of Sulfonic Acid-Functionalized SBA-15. <i>Applied Magnetic Resonance</i> , 2007, 32, 513-526.	1.2	19
65	Selective photooxidation reactions in zeolites X, Y and ZSM-5. <i>Catalysis Letters</i> , 1997, 48, 199-202.	2.6	18
66	Magnetic resonance studies of reactions of urea and nitric oxide on FeZSM-5, HZSM-5 and silicalite. <i>Journal of Molecular Catalysis A</i> , 2004, 212, 329-336.	4.8	18
67	Electrospun hematite nanofiber/mesoporous silica core/shell nanomaterials as an efficient adsorbent for heavy metals. <i>RSC Advances</i> , 2016, 6, 90516-90525.	3.6	17
68	Surface-Selective Solution NMR Studies of Functionalized Zeolite Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 425-429.	4.6	16
69	Quantification of gabapentin polymorphs in gabapentin/excipient mixtures using solid state <sup>13</sup> C NMR spectroscopy and X-ray powder diffraction. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017, 146, 29-36.	2.8	16
70	Solvent-free synthesis of crystalline ZSM-5 zeolite: Investigation of mechanochemical pre-reaction impact on growth of thermally stable zeolite structures. <i>Solid State Sciences</i> , 2019, 94, 15-22.	3.2	16
71	DFT Calculations of EPR Parameters for Copper(II)-Exchanged Zeolites Using Cluster Models. <i>Journal of Physical Chemistry A</i> , 2010, 114, 589-594.	2.5	15
72	Relativistic DFT Calculations of Copper Hyperfine Coupling Constants: Effect of Spin-Orbit Coupling. <i>Journal of Physical Chemistry A</i> , 2003, 107, 5583-5587.	2.5	14

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73	Transition metal and organic functionalization of hollow zeolite structures. <i>Microporous and Mesoporous Materials</i> , 2008, 113, 554-561.	4.4	14
74	Insight into the copper coordination environment in the prion protein through density functional theory calculations of EPR parameters. <i>Journal of Biological Inorganic Chemistry</i> , 2009, 14, 547-557.	2.6	14
75	Density Functional Theory Calculations of Nitrogen Hyperfine and Quadrupole Coupling Constants in Oxovanadium(IV) Complexes. <i>Journal of Physical Chemistry A</i> , 2003, 107, 4735-4740.	2.5	12
76	Magnetic Resonance Investigation of Vanadia and Vanadium-Molybdenum Gels Synthesized with Peroxovanadate Precursors. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1756-1762.	2.6	12
77	One-pot synthesis of iron oxide mesoporous silica core/shell nanocomposites. <i>Microporous and Mesoporous Materials</i> , 2015, 204, 173-179.	4.4	12
78	ATR-FTIR Spectroscopy in the Undergraduate Chemistry Laboratory. Part II: A Physical Chemistry Laboratory Experiment on Surface Adsorption. <i>Journal of Chemical Education</i> , 2008, 85, 282.	2.3	11
79	Development of Porous Nanomaterials for Applications in Drug Delivery and Imaging. <i>ACS Symposium Series</i> , 2012, , 239-258.	0.5	11
80	Hyperfine and Quadrupolar Interactions in Vanadyl Proteins and Model Complexes: Theory and Experiment. <i>Biological Magnetic Resonance</i> , 2010, , 371-409.	0.4	10
81	Fiber and film formation by self-assembly of colloidal silicalite-1 and copper coated silicalite-1 nanocrystals. <i>Microporous and Mesoporous Materials</i> , 2006, 88, 77-83.	4.4	9
82	A <sup>13</sup> C and <sup>15</sup> N Solid State NMR Study of the Reactions of Acetone Oxime Adsorbed on FeZSM-5. <i>Catalysis Letters</i> , 2002, 78, 243-249.	2.6	8
83	Title is missing!. <i>Catalysis Letters</i> , 2000, 70, 43-50.	2.6	7
84	Effects of pore topology and iron oxide core on doxorubicin loading and release from mesoporous silica nanoparticles. <i>Journal of Nanoparticle Research</i> , 2017, 19, 1.	1.9	6
85	Electronic Structure of the Tris(1,3-diphenyltriazenido)aluminum Radical Anion: A Theoretical and Experimental ESEEM and EPR Study. <i>Journal of the American Chemical Society</i> , 1995, 117, 1746-1753.	13.7	5
86	Incorporation of germanium into the framework of nanocrystalline faujasite. <i>Microporous and Mesoporous Materials</i> , 2013, 180, 229-234.	4.4	4
87	Development of Hands-on Nanotechnology Content Materials: Undergraduate Chemistry and Beyond. <i>ACS Symposium Series</i> , 2010, , 87-99.	0.5	3
88	NMR Developments and Applications. <i>Analytical Chemistry</i> , 2017, 89, 1391-1391.	6.5	3
89	Applications of Zeolites in Environmental Catalysis. , 2005, , 269-286.		3
90	Zeolites and Mesoporous Silica: From Greener Synthesis to Surface Chemistry of Environmental and Biological Interactions. , 2019, , 375-397.		2

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91	Recent Advances in Connecting Structure, Dynamics, and Function of Biomolecules by NMR. Journal of Physical Chemistry B, 2018, 122, 4195-4195.	2.6	1
92	Building Bridges between Sustainability and Chemistry in Education and Outreach. ACS Symposium Series, 2020, , 45-53.	0.5	1
93	Nanocatalysts for Environmental Technology. ACS Symposium Series, 2004, , 268-271.	0.5	0
94	DFT Calculations of EPR Parameters of Transition Metal Complexes: Implications for Catalysis. ChemInform, 2005, 36, no.	0.0	0
95	New Physical Insights: Magnetic Resonance Methods and Applications. Journal of Physical Chemistry A, 2017, 121, 6199-6199.	2.5	0
96	New Physical Insights: Magnetic Resonance Methods and Applications. Journal of Physical Chemistry C, 2017, 121, 17560-17560.	3.1	0
97	New Physical Insights: Magnetic Resonance Methods and Applications. Journal of Physical Chemistry B, 2017, 121, 7749-7749.	2.6	0