John L Fulton

List of Publications by Year
in descending order

61 papers	3,648 citations	101543 36 h-index	133252 59 g-index
61 all docs	61 docs citations	61 times ranked	4723 citing authors

#	Article	IF	Citations
1	Methane Oxidation to Methanol Catalyzed by Cu-Oxo Clusters Stabilized in NU-1000 Metalâ€“Organic Framework. Journal of the American Chemical Society, 2017, 139, 10294-10301.	13.7	282
2	Sintering-Resistant Single-Site Nickel Catalyst Supported by Metalâ€“Organic Framework. Journal of the American Chemical Society, 2016, 138, 1977-1982.	13.7	273
3	Understanding the Effects of Concentration on the Solvation Structure of Ca2+ in Aqueous Solution. I:â€‰ The Perspective on Local Structure from EXAFS and XANES. Journal of Physical Chemistry A, 2003, 107, 4688-4696.	2.5	201
4	Quantitatively Probing the Al Distribution in Zeolites. Journal of the American Chemical Society, 2014, 136, 8296-8306.	13.7	199
5	Is It Homogeneous or Heterogeneous Catalysis Derived from [RhCp*Cl₂]₂?In OperandoXAFS, Kinetic, and Crucial Kinetic Poisoning Evidence for Subnanometer Rh₄Cluster-Based Benzene Hydrogenation Catalysis. Journal of the American Chemical Society, 2011, 133, 18889-18902.	13.7	147
6	Selective Methane Oxidation to Methanol on Cu-Oxo Dimers Stabilized by Zirconia Nodes of an NU-1000 Metalâ€“Organic Framework. Journal of the American Chemical Society, 2019, 141, 9292-9304.	13.7	131
7	Direct Modeling of EXAFS Spectra from Molecular Dynamics Simulations. The Journal of Physical Chemistry, 1996, 100, 13393-13398.	2.9	129
8	Copper(I) and Copper(II) Coordination Structure under Hydrothermal Conditions at 325 Â°C:â€‰ An X-ray Absorption Fine Structure and Molecular Dynamics Study. Journal of Physical Chemistry A, 2000, 104, 11651-11663.	2.5	117
9	Supersaturated calcium carbonate solutions are classical. Science Advances, 2018, 4, eaao6283.	10.3	116
10	Molecular Simulation Analysis and X-ray Absorption Measurement of Ca2+, K+and Cl-Ions in Solution. Journal of Physical Chemistry B, 2006, 110, 23644-23654.	2.6	115
11	An X-ray absorption fine structure study of copper(I) chloride coordination structure in water up to 325Â°C. Chemical Physics Letters, 2000, 330, 300-308.	2.6	95
12	Rh(CAAC)-Catalyzed Arene Hydrogenation: Evidence for Nanocatalysis and Sterically Controlled Site-Selective Hydrogenation. ACS Catalysis, 2018, 8, 8441-8449.	11.2	94
13	A Transition in the Ni2+ Complex Structure from Six- to Four-Coordinate upon Formation of Ion Pair Species in Supercritical Water:â€‰ An X-ray Absorption Fine Structure, Near-Infrared, and Molecular Dynamics Study. Journal of Physical Chemistry A, 1999, 103, 8471-8482.	2.5	91
14	Sinterâ€Resistant Platinum Catalyst Supported by Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2018, 57, 909-913.	13.8	88
15	Well-Defined Rhodiumâ€“Gallium Catalytic Sites in a Metalâ€“Organic Framework: Promoter-Controlled Selectivity in Alkyne Semihydrogenation to E-Alkenes. Journal of the American Chemical Society, 2018, 140, 15309-15318.	13.7	88
16	Copper-zirconia interfaces in UiO-66 enable selective catalytic hydrogenation of CO2 to methanol. Nature Communications, 2020, 11, 5849.	12.8	86
17	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
18	Tracking the Chemical Transformations at the BrÃ¸nsted Acid Site upon Water-Induced Deprotonation in a Zeolite Pore. Chemistry of Materials, 2017, 29, 9030-9042.	6.7	71

#	Article	IF	Citations
19	Aqueous phase catalytic and electrocatalytic hydrogenation of phenol and benzaldehyde over platinum group metals. Journal of Catalysis, 2020, 382, 372-384.	6.2	68
20	Defining Active Catalyst Structure and Reaction Pathways from ab Initio Molecular Dynamics and Operando XAFS: Dehydrogenation of Dimethylaminoborane by Rhodium Clusters. Journal of the American Chemical Society, 2009, 131, 10516-10524.	13.7	67
21	Impact of Zeolite Aging in Hot Liquid Water on Activity for Acid-Catalyzed Dehydration of Alcohols. Journal of the American Chemical Society, 2015, 137, 10374-10382.	13.7	63
22	Formation of Active Cu-oxo Clusters for Methane Oxidation in Cu-Exchanged Mordenite. Journal of Physical Chemistry C, 2019, 123, 8759-8769.	3.1	60
23	Environment of Metalâ€“Oâ€“Fe Bonds Enabling High Activity in CO₂ Reduction on Single Metal Atoms and on Supported Nanoparticles. Journal of the American Chemical Society, 2021, 143, 5540-5549.	13.7	54
24	Hydrated Structure of Ag(I) Ion from Symmetry-Dependent, K- and L-Edge XAFS Multiple Scattering and Molecular Dynamics Simulations. Journal of Physical Chemistry A, 2009, 113, 13976-13984.	2.5	51
25	Carbon-supported Pt during aqueous phenol hydrogenation with and without applied electrical potential: X-ray absorption and theoretical studies of structure and adsorbates. Journal of Catalysis, 2018, 368, 8-19.	6.2	49
26	Structure of Hydronium (H₃O⁺)/Chloride (Cl^{â^'}) Contact Ion Pairs in Aqueous Hydrochloric Acid Solution: A Zundel-like Local Configuration. Journal of the American Chemical Society, 2010, 132, 12597-12604.	13.7	47
27	Operando XAFS Studies on Rh(CAAC)-Catalyzed Arene Hydrogenation. ACS Catalysis, 2019, 9, 4106-4114.	11.2	46
28	The Aqueous Ca²⁺ System, in Comparison with Zn²⁺, Fe^{3 +}, and Al^{3 +}: An Abâ€...Initio Molecular Dynamics Study. Chemistry - A European Journal, 2013, 19, 3047-3060.	3.3	45
29	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
30	Many-Body Effects Determine the Local Hydration Structure of Cs⁺ in Solution. Journal of Physical Chemistry Letters, 2019, 10, 406-412.	4.6	45
31	State of Supported Pd during Catalysis in Water. Journal of Physical Chemistry C, 2013, 117, 17603-17612.	3.1	43
32	Hydration and contact ion pairing of Ca2+ with Clâ^' in supercritical aqueous solution. Journal of Chemical Physics, 2006, 125, 094507.	3.0	41
33	Near-Quantitative Agreement of Model-Free DFT-MD Predictions with XAFS Observations of the Hydration Structure of Highly Charged Transition-Metal Ions. Journal of Physical Chemistry Letters, 2012, 3, 2588-2593.	4.6	40
34	Quantifying Adsorption of Organic Molecules on Platinum in Aqueous Phase by Hydrogen Site Blocking and in Situ X-ray Absorption Spectroscopy. ACS Catalysis, 2019, 9, 6869-6881.	11.2	40
35	Ion-pairing in aqueous CaCl2 and RbBr solutions: Simultaneous structural refinement of XAFS and XRD data. Journal of Chemical Physics, 2013, 138, 044201.	3.0	39
36	Quantifying the hydration structure of sodium and potassium ions: taking additional steps on Jacob's Ladder. Physical Chemistry Chemical Physics, 2020, 22, 10641-10652.	2.8	38

#	Article	IF	Citations
37	Coordination Sphere of Lanthanide Aqua Ions Resolved with Ab Initio Molecular Dynamics and X-ray Absorption Spectroscopy. Inorganic Chemistry, 2021, 60, 3117-3130.	4.0	33
38	Inverse iron oxide/metal catalysts from galvanic replacement. Nature Communications, 2020, 11, 3269.	12.8	31
39	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cuâ€Exchanged Mordenite. Chemistry - A European Journal, 2020, 26, 7563-7567.	3.3	31
40	Elementary Steps of Faujasite Formation Followed by in Situ Spectroscopy. Chemistry of Materials, 2018, 30, 888-897.	6.7	29
41	Determination of the Dominant Catalyst Derived from the Classic [RhCp*Cl₂]₂ Precatalyst System: Is it Single-Metal Rh₁Cp*-Based, Subnanometer Rh₄ Cluster-Based, or Rh(0)_n Nanoparticle-Based Cyclohexene Hydrogenation Catalysis at Room Temperature and Mild Pressures?. ACS Catalysis, 2015, 5, 3876-3886.	11.2	28
42	Activity of Cuâ€“Alâ€“Oxo Extra-Framework Clusters for Selective Methane Oxidation on Cu-Exchanged Zeolites. Jacs Au, 2021, 1, 1412-1421.	7.9	21
43	Electronic and Chemical State of Aluminum from the Single- (K) and Double-Electron Excitation (KL_{II&III}, KL_I) X-ray Absorption Near-Edge Spectra of Î±-Alumina, Sodium Aluminate, Aqueous Al³⁺Â·(H₂O)₆, and Aqueous Al(OH)₄^{â€“}. Journal of Physical Chemistry B, 2015, 119, 8380-8388.	2.6	20
44	Structural Characteristics of Amorphous Calcium Sulfate: Evidence to the Role of Water Molecules. Journal of Physical Chemistry C, 2021, 125, 3415-3420.	3.1	19
45	High-pressure, high-temperature x-ray absorption fine structure transmission cell for the study of aqueous ions with low absorption-edge energies. Review of Scientific Instruments, 2004, 75, 5228-5231.	1.3	18
46	Understanding the Role of Surface Heterogeneities in Electrosynthesis Reactions. IScience, 2020, 23, 101814.	4.1	16
47	Glucoseâ€•and Celluloseâ€Derived Ni/Câ€SO₃H Catalysts for Liquid Phase Phenol Hydrodeoxygenation. Chemistry - A European Journal, 2015, 21, 1567-1577.	3.3	14
48	State of Supported Nickel Nanoparticles during Catalysis in Aqueous Media. Chemistry - A European Journal, 2015, 21, 16541-16546.	3.3	14
49	Materials Engineering of Violin Soundboards by Stradivari and Guarneri. Angewandte Chemie - International Edition, 2021, 60, 19144-19154.	13.8	11
50	Speciation of Cu-Oxo Clusters in Ferrierite for Selective Oxidation of Methane to Methanol. Chemistry of Materials, 2022, 34, 4355-4363.	6.7	11
51	Nanometer-Scale Correlations in Aqueous Salt Solutions. Journal of Physical Chemistry Letters, 2020, 11, 2598-2604.	4.6	10
52	Ionic Contraction across the Lanthanide Series Decreases the Temperature-Induced Disorder of the Water Coordination Sphere. Inorganic Chemistry, 2022, 61, 287-294.	4.0	10
53	High-resolution Measurement of Contact Ion-pair Structures in Aqueous RbCl Solutions from the Simultaneous Corefinement of their Rb and Cl K-edge XAFS and XRD Spectra. Journal of Solution Chemistry, 2016, 45, 1061-1070.	1.2	9
54	Anticorrelated Contributions to Pre-edge Features of Aluminate Near-Edge X-ray Absorption Spectroscopy in Concentrated Electrolytes. Journal of Physical Chemistry Letters, 2018, 9, 2444-2449.	4.6	9

#	Article	IF	Citations
55	Metal-organic framework supported single-site nickel catalysts for butene dimerization. Journal of Catalysis, 2022, 413, 176-183.	6.2	9
56	A variable ultra-short-pathlength solution cell forÂXAFS transmission spectroscopy of light elements. Journal of Synchrotron Radiation, 2012, 19, 949-953.	2.4	8
57	Contact ion-pair structure in concentrated cesium chloride aqueous solutions: An extended X-ray absorption fine structure study. Journal of Electron Spectroscopy and Related Phenomena, 2018, 229, 20-25.	1.7	7
58	Materials Engineering of Violin Soundboards by Stradivari and Guarneri. Angewandte Chemie, 2021, 133, 19293-19303.	2.0	6
59	Near-Quantitative Predictions of the First-Shell Coordination Structure of Hydrated First-Row Transition Metal Ions Using K-Edge X-ray Absorption Near-Edge Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 6323-6330.	4.6	6
60	Frontispiece: Materials Engineering of Violin Soundboards by Stradivari and Guarneri. Angewandte Chemie - International Edition, 2021, 60, .	13.8	0
61	Frontispiz: Materials Engineering of Violin Soundboards by Stradivari and Guarneri. Angewandte Chemie, 2021, 133, .	2.0	0