

Mary K Carroll

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4415207/publications.pdf>

Version: 2024-02-01

29
papers

542
citations

759233

12
h-index

642732

23
g-index

30
all docs

30
docs citations

30
times ranked

422
citing authors

#	ARTICLE	IF	CITATIONS
1	A fast supercritical extraction technique for aerogel fabrication. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 238-243.	3.1	86
2	Optical and visual experimental characterization of a glazing system with monolithic silica aerogel. <i>Solar Energy</i> , 2019, 183, 30-39.	6.1	50
3	Hydrophobic silica aerogels prepared via rapid supercritical extraction. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 53, 199-207.	2.4	43
4	Preparation of Monolithic Silica Aerogel for Fenestration Applications: Scaling up, Reducing Cycle Time, and Improving Performance. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 6971-6981.	3.7	41
5	Epoxide-assisted alumina aerogels by rapid supercritical extraction. <i>Journal of Non-Crystalline Solids</i> , 2015, 426, 141-149.	3.1	38
6	Alumina aerogels prepared via rapid supercritical extraction. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 53, 216-226.	2.4	31
7	Acoustic measurements on monolithic aerogel samples and application of the selected solutions to standard window systems. <i>Applied Acoustics</i> , 2018, 142, 123-131.	3.3	31
8	Analysis of a rapid supercritical extraction aerogel fabrication process: Prediction of thermodynamic conditions during processing. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 3685-3693.	3.1	30
9	Fabrication of titania and titania-silica aerogels using rapid supercritical extraction. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 62, 404-413.	2.4	22
10	Preparing Silica Aerogel Monoliths via a Rapid Supercritical Extraction Method. <i>Journal of Visualized Experiments</i> , 2014, , e51421.	0.3	15
11	Life Cycle Assessment of Aerogel Manufacture on Small and Large Scales: Weighing the Use of Advanced Materials in Oil Spill Remediation. <i>Journal of Industrial Ecology</i> , 2018, 22, 1365-1377.	5.5	15
12	Inclusion of Ceria in Alumina- and Silica-Based Aerogels for Catalytic Applications. <i>Journal of Supercritical Fluids</i> , 2019, 152, 104536.	3.2	15
13	Fabrication and characterization of TEOS-based silica aerogels prepared using rapid supercritical extraction. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 70, 371-377.	2.4	13
14	Cobalt-alumina sol gels: Effects of heat treatment on structure and catalytic ability. <i>Journal of Non-Crystalline Solids</i> , 2016, 453, 94-102.	3.1	13
15	Hydrophobicity and drag reduction properties of surfaces coated with silica aerogels and xerogels. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 71, 490-500.	2.4	12
16	Preparation of vanadia-containing aerogels by rapid supercritical extraction for applications in catalysis. <i>Journal of Sol-Gel Science and Technology</i> , 2016, 77, 160-171.	2.4	12
17	Preparation and characterization of copper-containing alumina and silica aerogels for catalytic applications. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 84, 432-445.	2.4	12
18	Aesthetic Aerogel Window Design for Sustainable Buildings. <i>Sustainability</i> , 2022, 14, 2887.	3.2	12

#	ARTICLE	IF	CITATIONS
19	Intermolecular Forces in Introductory Chemistry Studied by Gas Chromatography, Computer Models, and Viscometry. <i>Journal of Chemical Education</i> , 1998, 75, 885.	2.3	10
20	Moving from Recommendations to Innovations: Increasing the Relevancy and Effectiveness of Chemistry Education. <i>Journal of Chemical Education</i> , 2013, 90, 816-819.	2.3	8
21	Facile method for surface etching of silica aerogel monoliths. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 87, 22-26.	2.4	8
22	Density Determination by Water Displacement and Flotation: An Introductory Experiment in Forensic Chemistry. <i>Journal of Chemical Education</i> , 2006, 83, 1187.	2.3	7
23	Synthesis and Characterization of Copper-Nanoparticle-Containing Silica Aerogel Prepared via Rapid Supercritical Extraction for Applications in Three-Way Catalysis. <i>MRS Advances</i> , 2017, 2, 3485-3490.	0.9	7
24	Fabrication and Testing of Catalytic Aerogels Prepared Via Rapid Supercritical Extraction. <i>Journal of Visualized Experiments</i> , 2018, , .	0.3	3
25	Analysis and characterization of etched silica aerogels. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 94, 406-415.	2.4	3
26	Effect of Copper Loading in Copper-Alumina Aerogels on Three-Way Catalytic Performance. <i>Emission Control Science and Technology</i> , 2020, 6, 324-335.	1.5	2
27	Effect of slurry processing on the properties of catalytically active copper-alumina aerogel material for applications in three-way catalysis. <i>Journal of Sol-Gel Science and Technology</i> , 2022, 102, 422-436.	2.4	2
28	Aesthetically Enhanced Silica Aerogel Via Incorporation of Laser Etching and Dyes. <i>Journal of Visualized Experiments</i> , 2021, , .	0.3	1
29	The Evolution of a Laboratory Syllabus for Quantitative Analysis. <i>The Chemical Educator</i> , 1997, 2, 1-13.	0.0	0