Chariklia Sotiriou-Leventis

List of Publications by Year
in descending order

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55 papers	2,914 citations	186265 28 h-index	161849 54 g-index
55 all docs	55 docs citations	55 times ranked	2264 citing authors

#	Article	IF	Citations
1	Nanoengineering Strong Silica Aerogels. Nano Letters, 2002, 2, 957-960.	9.1	478
2	Isocyanate-crosslinked silica aerogel monoliths: preparation and characterization. Journal of Non-Crystalline Solids, 2004, 350, 152-164.	3.1	221
3	Click Synthesis of Monolithic Silicon Carbide Aerogels from Polyacrylonitrile-Coated 3D Silica Networks. Chemistry of Materials, 2010, 22, 2790-2803.	6.7	167
4	Time-Efficient Acid-Catalyzed Synthesis of Resorcinolâ"Formaldehyde Aerogels. Chemistry of Materials, 2007, 19, 6138-6144.	6.7	164
5	Multifunctional Polyurea Aerogels from Isocyanates and Water. A Structureâ"Property Case Study. Chemistry of Materials, 2010, 22, 6692-6710.	6.7	163
6	One-step room-temperature synthesis of fibrous polyimide aerogels from anhydrides and isocyanates and conversion to isomorphic carbons. Journal of Materials Chemistry, 2010, 20, 9666.	6.7	134
7	Cross-Linking 3D Assemblies of Nanoparticles into Mechanically Strong Aerogels by Surface-Initiated Free-Radical Polymerization. Chemistry of Materials, 2008, 20, 5035-5046.	6.7	112
8	The effect of compactness on the carbothermal conversion of interpenetrating metal oxide/resorcinol-formaldehyde nanoparticle networks to porous metals and carbides. Journal of Materials Chemistry, 2010, 20, 7456.	6.7	100
9	Smelting in the age of nano: iron aerogels. Journal of Materials Chemistry, 2009, 19, 63-65.	6.7	91
10	Polybenzoxazine Aerogels. 1. High-Yield Room-Temperature Acid-Catalyzed Synthesis of Robust Monoliths, Oxidative Aromatization, and Conversion to Microporous Carbons. Chemistry of Materials, 2014, 26, 1303-1317.	6.7	89
11	Multifunctional porous aramids (aerogels) by efficient reaction of carboxylic acids and isocyanates. Journal of Materials Chemistry, 2011, 21, 11981.	6.7	84
12	Nanoengineered Silica-Polymer Composite Aerogels with No Need for Supercritical Fluid Drying. Journal of Sol-Gel Science and Technology, 2005, 35, 99-105.	2.4	80
13	Polybenzoxazine Aerogels. 2. Interpenetrating Networks with Iron Oxide and the Carbothermal Synthesis of Highly Porous Monolithic Pure Iron(0) Aerogels as Energetic Materials. Chemistry of Materials, 2014, 26, 1318-1331.	6.7	68
14	Sturdy, Monolithic SiC and Si₃N₄ Aerogels from Compressed Polymer-Cross-Linked Silica Xerogel Powders. Chemistry of Materials, 2018, 30, 1635-1647.	6.7	59
15	Shape Memory Superelastic Poly(isocyanurate-urethane) Aerogels (PIR-PUR) for Deployable Panels and Biomimetic Applications. Chemistry of Materials, 2017, 29, 4461-4477.	6.7	56
16	From â€˜Greenâ€™ Aerogels to Porous Graphite by Emulsion Gelation of Acrylonitrile. Chemistry of Materials, 2012, 24, 26-47.	6.7	49
17	Selective CO₂ Sequestration with Monolithic Bimodal Micro/Macroporous Carbon Aerogels Derived from Stepwise Pyrolytic Decomposition of Polyamide-Polyimide-Polyurea Random Copolymers. ACS Applied Materials & Interfaces, 2017, 9, 13520-13536.	8.0	48
18	Polydicyclopentadiene aerogels grafted with PMMA: I. Molecular and interparticle crosslinking. Soft Matter, 2013, 9, 1516-1530.	2.7	43

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19	Robust monolithic multiscale nanoporous polyimides and conversion to isomorphic carbons. RSC Advances, 2013, 3, 26459.	3.6	43
20	Low-Cost, Ambient-Dried, Superhydrophobic, High Strength, Thermally Insulating, and Thermally Resilient Polybenzoxazine Aerogels. ACS Applied Polymer Materials, 2019, 1, 2322-2333.	4.4	37
21	Polydicyclopentadiene aerogels grafted with PMMA: II. Nanoscopic characterization and origin of macroscopic deformation. Soft Matter, 2013, 9, 1531-1539.	2.7	36
22	A Three-Dimensional Energy Surface for the Conformational Inversion of Cyclohexane. Journal of Chemical Education, 1997, 74, 813.	2.3	34
23	Synthesis and mechanical characterization of mechanically strong, polyurea-crosslinked, ordered mesoporous silica aerogels. Journal of Sol-Gel Science and Technology, 2015, 75, 98-123.	2.4	34
24	Nanoporous Polyurea from a Triisocyanate and Boric Acid: A Paradigm of a General Reaction Pathway for Isocyanates and Mineral Acids. Chemistry of Materials, 2016, 28, 67-78.	6.7	34
25	Transparent, mechanically strong, thermally insulating cross-linked silica aerogels for energy-efficient windows. Journal of Sol-Gel Science and Technology, 2019, 92, 84-100.	2.4	34
26	Reuseable Monolithic Nanoporous Graphite-Supported Nanocatalysts (Fe, Au, Pt, Pd, Ni, and Rh) from Pyrolysis and Galvanic Transmetalation of Ferrocene-Based Polyamide Aerogels. Chemistry of Materials, 2016, 28, 4867-4877.	6.7	33
27	Nanostructure-Dependent Marcus-Type Correlation of the Shape Recovery Rate and the Youngâ€™s Modulus in Shape Memory Polymer Aerogels. ACS Applied Materials & Interfaces, 2018, 10, 23321-23334.	8.0	33
28	A facile synthesis of 2,7â€diazapyrene. Journal of Heterocyclic Chemistry, 2000, 37, 1665-1667.	2.6	29
29	K-Index: A Descriptor, Predictor, and Correlator of Complex Nanomorphology to Other Material Properties. ACS Nano, 2019, 13, 3677-3690.	14.6	29
30	Scalable, hydrophobic and highly-stretchable poly(isocyanurateâ€“urethane) aerogels. RSC Advances, 2018, 8, 21214-21223.	3.6	26
31	Air-oxidation of phenolic resin aerogels: backbone reorganization, formation of ring-fused pyrylium cations, and the effect on microporous carbons with enhanced surface areas. RSC Advances, 2017, 7, 51104-51120.	3.6	25
32	Exceptionally High CO₂ Adsorption at 273 K by Microporous Carbons from Phenolic Aerogels: The Role of Heteroatoms in Comparison with Carbons from Polybenzoxazine and Other Organic Aerogels. Macromolecular Chemistry and Physics, 2019, 220, 1800333.	2.2	25
33	Robust PEDOT films by covalent bonding to substrates using in tandem solâ€“gel, surface initiated free-radical and redox polymerization. Journal of Materials Chemistry, 2012, 22, 100-108.	6.7	23
34	Polydicyclopentadiene aerogels from first- versus second-generation Grubbsâ€™ catalysts: a molecular versus a nanoscopic perspective. Journal of Sol-Gel Science and Technology, 2015, 75, 460-474.	2.4	22
35	Light scattering and haze in TMOS-co-APTES silica aerogels. Journal of Sol-Gel Science and Technology, 2019, 90, 127-139.	2.4	21
36	Photolithographic Patterning and Doping of Silica Xerogel Films. Journal of Sol-Gel Science and Technology, 2002, 23, 235-245.	2.4	19

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37	A Cobalt Sunrise: Thermites Based on LiClO₄-Filled Co(0) Aerogels Prepared from Polymer-Cross-Linked Cobaltia Xerogel Powders. ACS Applied Materials & Interfaces, 2019, 11, 22668-22676.	8.0	19
38	One-step synthesis and redox properties of dodecahydro-3a,9a-diazaperyleneâ€"the most easily oxidized p-phenylenediamine. Chemical Communications, 2001, , 1742-1743.	4.1	18
39	Explosive versus Thermite Behavior in Iron(0) Aerogels Infiltrated with Perchlorates. Chemistry of Materials, 2015, 27, 8126-8137.	6.7	16
40	Experimental deconvolution of depressurization from capillary shrinkage during drying of silica wet-gels with SCF CO2 why aerogels shrink?. Journal of Sol-Gel Science and Technology, 2019, 92, 662-680.	2.4	16
41	Economical synthesis of vanadia aerogels via epoxide-assisted gelation of VOCl3. Journal of Sol-Gel Science and Technology, 2016, 77, 244-256.	2.4	15
42	Meta-Aerogels: Auxetic Shape-Memory Polyurethane Aerogels. ACS Applied Polymer Materials, 2021, 3, 5727-5738.	4.4	15
43	Immobilization of Pd Catalysts on Mesoporous Silica for Amine- and Copper-Free Sonogashira Coupling Reactions. Synthetic Communications, 2008, 38, 2285-2298.	2.1	14
44	Isocyanate-Derived Organic Aerogels: Polyureas, Polyimides, Polyamides. Materials Research Society Symposia Proceedings, 2011, 1306, 1.	0.1	10
45	Polyurethane Aerogels Based on Cyclodextrins: High-Capacity Desiccants Regenerated at Room Temperature by Reducing the Relative Humidity of the Environment. ACS Applied Materials & Interfaces, 2019, 11, 34292-34304.	8.0	8
46	Preparation of Carbon Aerogels from Polymer-Cross-Linked Xerogel Powders without Supercritical Fluid Drying and Their Application in Highly Selective CO₂ Adsorption. Chemistry of Materials, 2022, 34, 4828-4847.	6.7	8
47	Synthesis and Spectroscopic Properties of the Elusive 3a,9a-Diazaperylenium Dication. Organic Letters, 2002, 4, 4113-4116.	4.6	6
48	Metamaterial-like aerogels for broadband vibration mitigation. Soft Matter, 2021, 17, 4496-4503.	2.7	6
49	Low-temperature catalytic synthesis of graphite aerogels from polyacrylonitrile-crosslinked iron oxide and cobalt oxide xerogel powders. Carbon, 2022, 193, 107-127.	10.3	6
50	Multiple Substitution Effects and Three-Dimensional Nonlinear Free-Energy Relationships in the Electrochemical Reduction of theN,Nâ€˜-Dibenzyl Viologen and the 4-Benzoyl-N-benzylpyridinium Cation. Journal of Physical Chemistry B, 2004, 108, 11228-11235.	2.6	4
51	SYNTHESIS AND HYDROLYTIC STABILITY OFTERT-BUTOXYDIMETHYLSILYL ENOL ETHERS. Synthetic Communications, 2001, 31, 2379-2389.	2.1	3
52	Coupling of 3,8-Dibromo-1,10-phenanthroline with 3,5-Diethynylheptyloxybenzene: A Suzuki/Miyaura Versus a Sonogashira Perspective. Synthetic Communications, 2003, 33, 3317-3325.	2.1	3
53	One Pot Synthesis of Multifunctional Aramid Aerogels. Materials Research Society Symposia Proceedings, 2012, 1403, 126.	0.1	2
54	From Flexible to Hard Polyurethane Aerogels: The Effect of Molecular Functionality vs. Molecular Rigidity. Materials Research Society Symposia Proceedings, 2012, 1403, 114.	0.1	2

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55	Synthesis of Aerogel-Metal Cluster Composites by Gamma Radiolysis. Materials Research Society Symposia Proceedings, 2002, 740, 1.	0.1	0