Sergey Lermontov

List of Publications by Year
in descending order

65 papers	464 citations	840119 11 h-index	839053 18 g-index
65 all docs	65 docs citations	65 times ranked	434 citing authors

#	Article	IF	Citations
1	Diethyl and methyl-tert-buthyl ethers as new solvents for aerogels preparation. Materials Letters, 2014, 116, 116-119.	1.3	35
2	Hexafluoroisopropyl alcohol as a new solvent for aerogels preparation. Journal of Supercritical Fluids, 2014, 89, 28-32.	1.6	31
3	A sol-gel method for applying nanosized antibacterial particles to the surface of textile materials in an ultrasonic field. Ultrasonics Sonochemistry, 2020, 60, 104788.	3.8	29
4	pH control of the structure, composition, and catalytic activity of sulfated zirconia. Journal of Solid State Chemistry, 2013, 198, 496-505.	1.4	24
5	How to Tune the Alumina Aerogels Structure by the Variation of a Supercritical Solvent. Evolution of the Structure During Heat Treatment. Journal of Physical Chemistry C, 2016, 120, 3319-3325.	1.5	22
6	Functionalization of aerogels by the use of pre-constructed monomers: the case of trifluoroacetylated (3-aminopropyl) triethoxysilane. RSC Advances, 2014, 4, 52423-52429.	1.7	17
7	Methyltrimethoxysilane-based elastic aerogels: Effects of the supercritical medium on structure-sensitive properties. Russian Journal of Inorganic Chemistry, 2015, 60, 488-492.	0.3	17
8	Properties of highly porous aerogels prepared from ultra-high molecular weight polyethylene. Polymer, 2019, 182, 121824.	1.8	17
9	Facile synthesis of fluorinated resorcinol-formaldehyde aerogels. Journal of Fluorine Chemistry, 2017, 193, 1-7.	0.9	15
10	Luminescent alumina-based aerogels modified with tris(8-hydroxyquinolinato)aluminum. Journal of Sol-Gel Science and Technology, 2018, 86, 400-409.	1.1	13
11	Synthesis of Î²-carbonylphosphine oxides and phenyl-substituted ethylenediphosphine oxides. study of their complexing with alkali metals cations. Russian Journal of General Chemistry, 2009, 79, 2113-2115.	0.3	12
12	Electrochemical Properties of Carbon Aerogel Electrodes: Dependence on Synthesis Temperature. Molecules, 2019, 24, 3847.	1.7	12
13	Methyl tert-butyl ether as a new solvent for the preparation of SiO2â€“TiO2 binary aerogels. Inorganic Materials, 2016, 52, 163-169.	0.2	11
14	Hydrophobicity/hydrophilicity control for SiO2-based aerogels: The role of a supercritical solvent. Russian Journal of Inorganic Chemistry, 2015, 60, 1169-1172.	0.3	10
15	A novel synthesis of 1,5-disubstituted fluorinated tetrazoles from 1,1-difluoroazides. Tetrahedron Letters, 2010, 51, 4205-4207.	0.7	9
16	Synthesis and comparative studies of xerogels, aerogels, and powders based on the ZrO2â€“Y2O3â€“Ð¡eO2 system. Glass Physics and Chemistry, 2017, 43, 368-375.	0.2	9
17	Comparative analysis of the physicochemical characteristics of SiO2 aerogels prepared by drying under subcritical and supercritical conditions. Inorganic Materials, 2017, 53, 1270-1278.	0.2	9
18	Green synthesis of methyl trifluoropyruvate catalyzed by solid acids. Journal of Fluorine Chemistry, 2008, 129, 332-334.	0.9	8

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19	Effect of synthetic conditions on the properties of methyltrimethoxysilane-based aerogels. Russian Journal of Inorganic Chemistry, 2014, 59, 1392-1395.	0.3	8
20	SiO2â€"TiO2 binary aerogels: Synthesis in new supercritical fluids and study of thermal stability. Russian Journal of Inorganic Chemistry, 2016, 61, 1339-1346.	0.3	8
21	Propylene oxide as a new reagent for mixed SiO 2 -based aerogels preparation. Journal of Sol-Gel Science and Technology, 2017, 84, 377-381.	1.1	8
22	Chiral lactate-modified silica aerogels. Microporous and Mesoporous Materials, 2017, 237, 127-131.	2.2	8
23	Hydrophobization of organic resorcinol-formaldehyde aerogels by fluoroacylation. Journal of Fluorine Chemistry, 2021, 244, 109742.	0.9	8
24	Aluminum 8-Hydroxyquinolate, A New Catalyst for CO2 Reactions with Epoxides. Russian Journal of General Chemistry, 2002, 72, 1492-1493.	0.3	7
25	Hexafluoroacetone: A new solvent for manufacturing SiO2-based aerogels. Russian Journal of Inorganic Chemistry, 2015, 60, 541-545.	0.3	7
26	SiO2 aerogels modified by perfluoro acid amides: a precisely controlled hydrophobicity. RSC Advances, 2016, 6, 80766-80772.	1.7	7
27	SiO2â€"TiO2 Binary Aerogels: A Small-Angle Scattering Study. Russian Journal of Inorganic Chemistry, 2021, 66, 874-882.	0.3	7
28	1-Fluorosilatrane synthesis from SiF4 complexes and its properties. Journal of Organometallic Chemistry, 2009, 694, 2476-2479.	0.8	6
29	Interaction of Î±,Î±-difluoroazides with trivalent phosphorus compounds and triphenylantimony. Russian Journal of General Chemistry, 2010, 80, 1646-1651.	0.3	6
30	Sulfated SnO2 As a high-performance catalyst for alkene oligomerization. Inorganic Materials, 2012, 48, 1012-1019.	0.2	6
31	Tin Dioxide-Based Superacid Aerogels Produced Using Propylene Oxide. Russian Journal of Inorganic Chemistry, 2018, 63, 303-307.	0.3	6
32	Sulfated Halloysite Nanoscrolls as Superacid Catalysts for Oligomerization of Hexene-1. Russian Journal of Applied Chemistry, 2019, 92, 1251-1257.	0.1	6
33	Is Supercritical So Critical? The Choice of Temperature to Synthesize SiO2 Aerogels. Russian Journal of Inorganic Chemistry, 2020, 65, 255-262.	0.3	6
34	Unusual Fluorination of Diphenylacetylene with Methyl 3-Azidotetrafluoropropionate. Russian Journal of General Chemistry, 2002, 72, 1289-1290.	0.3	5
35	A new method for dissolution of silica gel in a pentafluoropropionyl fluorideâ€"tertiary amine system. Russian Chemical Bulletin, 2007, 56, 435-437.	0.4	5
36	Hierarchical highly porous composite ceramic material modified by hydrophobic methyltrimetoxysilane-based aerogel. Journal of Porous Materials, 2021, 28, 1237-1244.	1.3	5

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37	Crystal Structure of Tetrafluoro(1,10-phenanthroline-N,N)silicon Acetonitrile Semisolvate. Journal of Structural Chemistry, 2003, 44, 1080-1083.	0.3	4
38	Transesterification and esterification with subcritical methanol. Synthesis of biodiesel. Russian Chemical Bulletin, 2008, 57, 105-107.	0.4	4
39	Hydrothermal synthesis and catalytic properties of superacid sulfated titania. Russian Journal of Inorganic Chemistry, 2010, 55, 661-664.	0.3	4
40	New aerogels chemically modified with amino complexes of bivalent copper. Russian Journal of Inorganic Chemistry, 2015, 60, 1459-1463.	0.3	4
41	Sulfated alumina aerogel-based superacid catalysts for 1-hexene oligomerization. Russian Journal of Inorganic Chemistry, 2016, 61, 7-10.	0.3	4
42	Aerogels with hybrid organo-inorganic 3D network structure based on polyfluorinated diacids. Journal of Fluorine Chemistry, 2018, 207, 67-71.	0.9	4
43	Methyl trifluoropyruvate â€“ a new solvent for the production of fluorinated organic resorcinolâ€“formaldehyde aerogels. Mendeleev Communications, 2018, 28, 102-104.	0.6	4
44	Hexafluoropropylene Oxideâ€“Alcohol: A Convenient System for Silica Dissolution. Phosphorus, Sulfur and Silicon and the Related Elements, 2010, 186, 178-188.	0.8	3
45	Fluorinated Metal Oxide-assisted Oligomerization of Olefins. Mendeleev Communications, 2013, 23, 110-112.	0.6	3
46	Solid superacids as catalysts for the synthesis of acylals from aldehydes and acetic anhydride. Russian Chemical Bulletin, 2008, 57, 2561-2563.	0.4	2
47	Perfluoropropylene oxide as a reagent for the synthesis of germanium, titanium, tin, and zirconium fluorides. Russian Journal of General Chemistry, 2010, 80, 1825-1830.	0.3	2
48	Reactions of Î±-difluoro azides with olefins. Russian Chemical Bulletin, 2010, 59, 2114-2121.	0.4	2
49	Oxidative fluorination of trialkyl phosphites using 2-hydroperfluoropropyl azide. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1989, 38, 204-204.	0.0	1
50	Reaction of 2-hdyroperfluoropropyl azide with some phosphorous acid derivatives. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1990, 39, 602-604.	0.0	1
51	The fluorination of hydrophosphoryl compounds using 2-hydroperfluoropropyl azide. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1990, 39, 839-841.	0.0	1
52	1-hexene oligomerization by fluorinated tin dioxide. Inorganic Materials, 2014, 50, 479-481.	0.2	1
53	The Effect of Sulfating Agent Nature on the Catalytic Activity Tin Dioxide Aerogel. Russian Journal of Inorganic Chemistry, 2021, 66, 288-293.	0.3	1
54	A convenient method for the preparation of [1-2H]- and [1-3H]-terminal acetylenes. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1985, 34, 1773-1774.	0.0	0

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55	Reaction of silyl amidophosphites with chloral and ?-halonitroso compounds. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1988, 37, 1251-1253.	0.0	0
56	Fluorination of some phosphoric acid derivatives. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1988, 37, 1033-1035.	0.0	0
57	Oxidation of bis(Trimethylsilyl)amidodifluorophosphite. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1989, 38, 1306-1307.	0.0	0
58	The fluorination of silylated phosphites by perfluoropropylene oxide. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1989, 38, 1978-1978.	0.0	0
59	Reaction of perfluoroisobutylene and perfluoropropylene with N-trimethylsilylphosphazenes. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1990, 39, 2582-2584.	0.0	0
60	Fluorination of derivatives of tri- and pentavalent phosphorus acids by perfluoropropylene oxide. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1990, 39, 2584-2587.	0.0	0
61	Reaction of perfluoroisobutylene and perfluoropropylene with N-silylamidophosphites. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1991, 40, 1081-1084.	0.0	0
62	Halogenophilic reaction of silylated phosphites with trichloroacetic acid derivatives. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1991, 40, 404-408.	0.0	0
63	A new reaction of silica with pentafluoropropyonyl fluoride and perfluoropropylene oxide. Russian Journal of General Chemistry, 2009, 79, 2280-2281.	0.3	0
64	Synthesis of fluoro-substituted atranes using MO2 oxides (M = Si, Ge, or Ti). Russian Journal of Inorganic Chemistry, 2013, 58, 432-434.	0.3	0
65	Formation of phosphorus-carbon bond in the course of amidoalkylation of hydrophosphorylic compounds. Russian Journal of General Chemistry, 2015, 85, 497-499.	0.3	0