Alexander Nikolaev

List of Publications by Year
in descending order

35 papers	400 citations	758635 12 h-index	839053 18 g-index
36 all docs	36 docs citations	36 times ranked	466 citing authors

#	Article	IF	Citations
1	Effect of Supercritical CO2 Treatment on Mechanical and Gas Transport Characteristics of Polyimides Based on Diethyl Toluene Diamine Isomers. Membranes and Membrane Technologies, 2022, 4, 162-169.	0.6	3
2	Platinum crossâ€linked chitosan hydrogels synthesized in water saturated with CO 2 under high pressure. Journal of Applied Polymer Science, 2021, 138, 50006.	1.3	4
3	New Conjugated Polymers Based on Dithieno[2,3â€e:3â€²,2â€²â€g]Isoindoleâ€7,9(8H)â€Dione Derivatives for Applications in Nonfullerene Polymer Solar Cells. Solar Rrl, 2020, 4, 1900475.	3.1	7
4	The Effect of Conformation Order on Gas Separation Properties of Polyetherimide Ultem Films. Polymers, 2020, 12, 1578.	2.0	4
5	Supercritical fluids in chemistry. Russian Chemical Reviews, 2020, 89, 1337-1427.	2.5	62
6	Electrochemically active dispersed tungsten oxides obtained from tungsten hexacarbonyl in supercritical carbon dioxide. Journal of Materials Science, 2019, 54, 9426-9441.	1.7	4
7	Random D1â€“A1â€“D1â€“A2 terpolymers based on diketopyrrolopyrrole and benzothiadiazolequinoxaline (BTQx) derivatives for high-performance polymer solar cells. New Journal of Chemistry, 2019, 43, 5325-5334.	1.4	9
8	Formation of Dispersed Particles of Tungsten Oxide and Deposition of Platinum Nanoparticles on Them Using Organometallic Precursors from Solutions in Supercritical Carbon Dioxide. Russian Journal of Physical Chemistry B, 2019, 13, 1315-1321.	0.2	2
9	Phosphonium salts derived from Î±-ferrocenylvinyl cation in situ generated in sc -CO 2 from ethynylferrocene by Nafion film. Journal of Supercritical Fluids, 2018, 131, 117-123.	1.6	2
10	Influence of swelling in supercritical carbon dioxide of Ultem and polyhexafluoropropylene thin films on their gas separation properties: comparative analysis. Structural Chemistry, 2018, 29, 457-466.	1.0	8
11	Dithienosiloleâ€“phenylquinoxalineâ€based copolymers with Aâ€Dâ€Aâ€D and Aâ€D structures for polymer solar cells. Journal of Polymer Science Part A, 2018, 56, 376-386.	2.5	6
12	Modification of Nafion with silica nanoparticles in supercritical carbon dioxide for electrochemical applications. Journal of Membrane Science, 2018, 564, 106-114.	4.1	19
13	Synthesis, characterization and photovoltaic properties of new iridium-containing conjugated polymers. AIP Conference Proceedings, 2018, , .	0.3	0
14	Polystyrene Foamed with Supercritical CO2 as Possible Model System of the Membrane Materials for Flow Batteries. Polymer Science - Series A, 2018, 60, 507-514.	0.4	3
15	Microstructure relaxation process of polyhexafluoropropylene after swelling in supercritical carbon dioxide. Journal of Applied Polymer Science, 2016, 133, .	1.3	15
16	Synthesis of alternating Dâ€“A1â€“Dâ€“A2 terpolymers comprising two electron-deficient moieties, quinoxaline and benzothiadiazole units for photovoltaic applications. Polymer Chemistry, 2016, 7, 4025-4035.	1.9	11
17	Effect of supercritical carbon dioxide on nanoporous polyhexafluoropropylene. High Energy Chemistry, 2016, 50, 287-291.	0.2	16
18	Synthesis and photophysical properties of regioregular low bandgap copolymers with controlled 5-fluorobenzotriazole orientation for photovoltaic application. Polymer Chemistry, 2016, 7, 5849-5861.	1.9	11

#	Article	IF	Citations
19	Synthesis of new D-A1â€“D-A2 type low bandgap terpolymers based on different thiadiazoloquinoxaline acceptor units for efficient polymer solar cells. RSC Advances, 2016, 6, 71232-71244.	1.7	11
20	Synthesis and photophysical properties of semiconductor molecules D1-A-D2-A-D1-type structure based on derivatives of quinoxaline and dithienosilole for organics solar cells. Organic Electronics, 2016, 39, 361-370.	1.4	3
21	Design and synthesis of new ultra-low band gap thiadiazoloquinoxaline-based polymers for near-infrared organic photovoltaic application. RSC Advances, 2016, 6, 14893-14908.	1.7	26
22	New low bandgap near-IR conjugated Dâ€“A copolymers for BHJ polymer solar cell applications. Physical Chemistry Chemical Physics, 2016, 18, 8389-8400.	1.3	18
23	Redispersible polymers are prepared in supercritical carbon dioxide. Russian Journal of Inorganic Chemistry, 2015, 60, 724-728.	0.3	1
24	Fractionation of ultradisperse polytetrafluoroethylene in supercritical carbon dioxide and the chemical structures of the fractions. Polymer Science - Series A, 2015, 57, 271-278.	0.4	4
25	Change of microstructure of polyimide thin films under the action of supercritical carbon dioxide and its influence on dielectric constant. Structural Chemistry, 2014, 25, 1687-1694.	1.0	7
26	Change of microstructure of polyimide thin films under the action of supercritical carbon dioxide and its influence on the transport properties. Structural Chemistry, 2014, 25, 301-310.	1.0	15
27	Lowering the dielectric constant of polyimide thin films by swelling with supercritical carbon dioxide. Polymers for Advanced Technologies, 2013, 24, 615-622.	1.6	13
28	Study of porous structure of polyimide films resulting by using various methods. Journal of Supercritical Fluids, 2012, 70, 146-155.	1.6	15
29	Structure of mono- and bimetallic heterogeneous catalysts based on noble metals obtained by means of fluid technology and metal-vapor synthesis. Russian Journal of Physical Chemistry A, 2012, 86, 1602-1608.	0.1	7
30	Electrocatalysts for fuel cells synthesized in supercritical carbon dioxide. Nanotechnologies in Russia, 2011, 6, 311-322.	0.7	10
31	Structural and electrocatalytic features of Pt/C catalysts fabricated in supercritical carbon dioxide. Journal of Solid State Electrochemistry, 2011, 15, 623-633.	1.2	21
32	Categorization system of nanofillers to polymer composites. Journal of Friction and Wear, 2010, 31, 68-80.	0.1	18
33	Carbon dioxide in the surface layers of ultrahigh molecular weight polyethylene. Doklady Physical Chemistry, 2008, 419, 68-72.	0.2	8
34	Formation of superhydrophobic surfaces by the deposition of coatings from supercritical carbon dioxide. Colloid Journal, 2007, 69, 411-424.	0.5	25
35	Structure of composites prepared via polypyrrole synthesis in supercritical CO2 on microporous polyethylene. Polymer Science - Series A, 2006, 48, 827-840.	0.4	6