

Andrey Av Shkolin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/691959/publications.pdf>

Version: 2024-02-01

89
papers

936
citations

516215

16
h-index

642321

23
g-index

90
all docs

90
docs citations

90
times ranked

320
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal-organic framework structures: adsorbents for natural gas storage. Russian Chemical Reviews, 2019, 88, 925-978.	2.5	57
2	Porous carbon-based adsorption systems for natural gas (methane) storage. Russian Chemical Reviews, 2018, 87, 950-983.	2.5	48
3	Deformation of AUK microporous carbon adsorbent induced by methane adsorption. Colloid Journal, 2009, 71, 119-124.	0.5	36
4	Experimental study and numerical modeling: Methane adsorption in microporous carbon adsorbent over the subcritical and supercritical temperature regions. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 955-963.	0.3	30
5	Adsorption accumulation of natural gas based on microporous carbon adsorbents of different origin. Adsorption, 2017, 23, 327-339.	1.4	30
6	Methane adsorption on AUK microporous carbon adsorbent. Colloid Journal, 2008, 70, 796-801.	0.5	25
7	Measurement of Carbon-Nanotube Adsorption of Energy-Carrier Gases for Alternative Energy Systems. Measurement Techniques, 2018, 61, 395-401.	0.2	23
8	Preparation of novel hybrid catalyst with an hierarchical micro-/mesoporous structure by direct growth of the HKUST-1 nanoparticles inside mesoporous silica matrix (MMS). Microporous and Mesoporous Materials, 2020, 300, 110136.	2.2	22
9	Adsorption-Based Hydrogen Storage in Activated Carbons and Model Carbon Structures. Reactions, 2021, 2, 209-226.	0.9	22
10	Methane adsorption on microporous carbon adsorbents in the region of supercritical temperatures. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 493-498.	0.3	21
11	Optimization of structural and energy characteristics of adsorbents for methane storage. Russian Chemical Bulletin, 2018, 67, 1814-1822.	0.4	21
12	Thermodynamics of Adsorbed Methane Storage Systems Based on Peat-Derived Activated Carbons. Nanomaterials, 2020, 10, 1379.	1.9	21
13	Thermodynamic Behaviors of Adsorbed Methane Storage Systems Based on Nanoporous Carbon Adsorbents Prepared from Coconut Shells. Nanomaterials, 2020, 10, 2243.	1.9	19
14	Thermodynamics of methane adsorption on the microporous carbon adsorbent ACC. Russian Chemical Bulletin, 2008, 57, 1799-1805.	0.4	18
15	Low-temperature adsorption of methane on microporous AU-1 carbon adsorbent. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 15-21.	0.3	17
16	Carbon adsorbents for methane storage: genesis, synthesis, porosity, adsorption. Korean Journal of Chemical Engineering, 2021, 38, 276-291.	1.2	17
17	Description of methane adsorption on microporous carbon adsorbents on the range of supercritical temperatures on the basis of the Dubinin-Astakhov equation. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 575-580.	0.3	16
18	Measurement of Adsorption of Methane at High Pressures for Alternative Energy Systems. Measurement Techniques, 2016, 58, 1387-1391.	0.2	15

#	ARTICLE	IF	CITATIONS
19	Synthesis and Structural-Energy Characteristics of Fe-BDC Metal-Organic Frameworks. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 1004-1009.	0.3	15
20	Analysis of adsorption isosteres of gas and vapor on microporous adsorbents. Russian Chemical Bulletin, 2007, 56, 393-396.	0.4	14
21	Adsorption of methane on an MOF-199 organometallic framework structure at high pressures in the range of supercritical temperatures. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 24-29.	0.3	14
22	Heat and Mass Transfer in an Adsorbed Natural Gas Storage System Filled with Monolithic Carbon Adsorbent during Circulating Gas Charging. Nanomaterials, 2021, 11, 3274.	1.9	14
23	Deformation of AUK microporous carbon adsorbent induced by krypton adsorption. Colloid Journal, 2014, 76, 351-357.	0.5	13
24	Theory of volume filling of micropores applied to the description of methane adsorption on the microporous carbon adsorbent AUK. Russian Chemical Bulletin, 2009, 58, 717-721.	0.4	12
25	Adsorption-induced deformation of AUK microporous carbon adsorbent in adsorption of n-pentane. Protection of Metals and Physical Chemistry of Surfaces, 2011, 47, 555-561.	0.3	12
26	Methane adsorption on microporous carbon adsorbent with wide pore size distribution. Colloid Journal, 2017, 79, 144-151.	0.5	12
27	The energy of adsorption of methane on microporous carbon adsorbents. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 780-785.	0.3	12
28	A technique for measuring an adsorption-induced deformation. Instruments and Experimental Techniques, 2008, 51, 150-155.	0.1	11
29	Adsorption of methane on AU-5 microporous carbon adsorbent. Protection of Metals and Physical Chemistry of Surfaces, 2013, 49, 521-527.	0.3	11
30	Adsorption of methane on model adsorbents formed from single-wall carbon nanotubes. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 279-286.	0.3	11
31	Monolithic microporous carbon adsorbent for low-temperature natural gas storage. Adsorption, 2019, 25, 1559-1573.	1.4	11
32	Adsorption of Natural Gas Methane on Metal-Organic Framework Structures in the Range of Supercritical Temperatures. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 347-353.	0.3	11
33	Deformation of AUK microporous carbon adsorbent induced by xenon adsorption. Colloid Journal, 2015, 77, 812-820.	0.5	10
34	A study of methane adsorption and accumulation on microporous carbon adsorbent in a wide temperature range. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 762-770.	0.3	10
35	Synthesis and Structure—Energy Characteristics of an MOF Al-BTC Organometallic Framework Structure. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 961-966.	0.3	10
36	Adsorption of Hydrogen in Microporous Carbon Adsorbents of Different Origin. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 413-419.	0.3	10

#	ARTICLE	IF	CITATIONS
37	Adsorption deformation of AIK microporous carbon adsorbent at adsorption of n-heptane. Protection of Metals and Physical Chemistry of Surfaces, 2013, 49, 373-378.	0.3	9
38	Adsorption-Induced Deformation of Adsorbents. Colloid Journal, 2018, 80, 578-586.	0.5	9
39	Methane Adsorption on the Metal-Organic Framework Structure Al-BTC. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 9-14.	0.3	9
40	The Influence of the Structural and Energetic Characteristics of the Microporous Structure of Carbon Adsorbents on Hydrogen Adsorption. Colloid Journal, 2019, 81, 607-612.	0.5	9
41	Thermodynamics of methane adsorption on carbon adsorbent prepared from mineral coal. Adsorption, 2021, 27, 1095-1107.	1.4	9
42	Deformation of Microporous Carbon Adsorbent Sorbonorit-4 during Methane Adsorption. Journal of Chemical & Engineering Data, 2022, 67, 1699-1714.	1.0	9
43	Wave sorbostriction in adsorption of gases and vapors. Doklady Physical Chemistry, 2008, 423, 292-296.	0.2	8
44	Krypton adsorption on microporous adsorbents at higher pressures. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 639-643.	0.3	8
45	Adsorption Accumulation of Liquefied Natural Gas Vapors. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 897-903.	0.3	8
46	Nitrogen adsorption by microporous adsorbents in the range of high pressures and supercritical temperatures. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 519-523.	0.3	7
47	Wave sorbostriction: Waves of adsorption deformation of microporous adsorbent. Protection of Metals and Physical Chemistry of Surfaces, 2012, 48, 158-164.	0.3	7
48	Supramolecular microporous structures based on carbon nanotubes and coordinating cumene (C ₉ H ₁₂) molecules. Colloid Journal, 2017, 79, 701-706.	0.5	7
49	Model Nanoporous Supramolecular Structures Based on Carbon Nanotubes and Hydrocarbons for Methane and Hydrogen Adsorption. Colloid Journal, 2018, 80, 739-750.	0.5	7
50	Functional Composite Adsorbents of High Packing Density Based on Metal-Organic Framework Structures for Methane Accumulation. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 826-832.	0.3	7
51	High-Density Carbon Adsorbents for Natural Gas Storage. Colloid Journal, 2020, 82, 719-726.	0.5	7
52	Zr-Based Metal-Organic Nanoporous Adsorbents of High Density for Methane Storage. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 1114-1121.	0.3	7
53	Xenon adsorption on microporous adsorbents at higher pressures. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 644-647.	0.3	6
54	Self-organization of supramolecular microporous structures based on carbon nanotubes and benzene. Colloid Journal, 2016, 78, 800-807.	0.5	6

#	ARTICLE	IF	CITATIONS
55	Description of Adsorption-Stimulated Deformation of Microporous Adsorbents Based on Generalized Potential of Intermolecular Interactions (6, n). Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 193-198.	0.3	6
56	Thermodynamics of krypton adsorption on microporous carbon adsorbent at high pressures. Russian Chemical Bulletin, 2017, 66, 607-613.	0.4	6
57	Measurements of Adsorption and Thermal Deformations of Microporous Carbon Adsorbents. Measurement Techniques, 2018, 60, 1051-1057.	0.2	6
58	Hydrogen (H ₂) Adsorption in Model Carbon Adsorbents with Slitlike Micropores. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 754-762.	0.3	6
59	Methane Adsorption on Microporous Carbon Adsorbent Prepared from Thermochemically Activated Wood. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 17-21.	0.3	6
60	Peculiarities of Thermodynamic Behaviors of Xenon Adsorption on the Activated Carbon Prepared from Silicon Carbide. Nanomaterials, 2021, 11, 971.	1.9	6
61	Carbon Nanoporous Adsorbents Prepared from Walnut Shell for Liquefied Natural Gas Vapor Recovery in Cryogenic Storage Systems. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 1122-1133.	0.3	6
62	Adsorption of n-pentane on a microporous carbon adsorbent with a narrow pore size distribution. Protection of Metals and Physical Chemistry of Surfaces, 2010, 46, 184-190.	0.3	5
63	Carbon adsorbents used for gold recovery technology with cyanide. Protection of Metals and Physical Chemistry of Surfaces, 2014, 50, 689-693.	0.3	5
64	Adsorption of Neon in Model Carbon Microporous Adsorbents with Slit-Like Micropores. Russian Journal of Physical Chemistry A, 2018, 92, 552-558.	0.1	5
65	Methane Adsorption in Microporous Carbon Adsorbent LCN Obtained by Thermochemical Synthesis from Lignocellulose. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 211-216.	0.3	5
66	Methane Adsorption on Cu-BTC110 Metal-Organic Framework. Russian Journal of Inorganic Chemistry, 2019, 64, 1507-1512.	0.3	5
67	Estimation of adsorption of ethane on the superactive microporous carbon adsorbent using the theory of volume filling of micropores. Russian Chemical Bulletin, 2020, 69, 2091-2096.	0.4	5
68	Ethane adsorption on microporous carbon adsorbent with a wide pore size distribution. Russian Chemical Bulletin, 2019, 68, 1838-1842.	0.4	4
69	Deformation of AUK Adsorbent and Adsorbate Structure upon n-Octane Adsorption. Colloid Journal, 2019, 81, 613-620.	0.5	4
70	Functional Composite Adsorbents Based on Metal-Organic Frameworks in a Carbon Matrix Applied for Methane Storage. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 1080-1084.	0.3	4
71	Methane Adsorption in Microporous Carbon Adsorbent with a Bimodal Pore Size Distribution. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 1-5.	0.3	4
72	Methane Adsorption on BDC Metal-Organic Porous Structures at High Pressures. Protection of Metals and Physical Chemistry of Surfaces, 2020, 56, 682-687.	0.3	4

#	ARTICLE	IF	CITATIONS
73	Experimental study of heat transfer in adsorbed natural gas storage system filled with microporous monolithic active carbon. Journal of Physics: Conference Series, 2021, 2116, 012085.	0.3	4
74	Adsorption of Carbon Dioxide onto Model Carbon Structures with Slitlike Micropores. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 1105-1114.	0.3	4
75	The influence of mechanical activation on the adsorption properties of powdered tungsten. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 81-84.	0.3	3
76	Synthesis and studies of thermal stability of NaK-, K-, Na-, and Li forms of LSX zeolite. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 767-772.	0.3	3
77	Adsorption-Induced and Thermal Deformation of Microporous Carbon Adsorbent upon n-Octane Adsorption. Colloid Journal, 2019, 81, 797-803.	0.5	3
78	The MIL-125 Metal-Organic Framework Structure for Adsorption-Based Accumulation of Methane and Hydrogen. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 672-679.	0.3	3
79	Thermodynamics of Methane Adsorption in a Microporous Carbon Adsorbent Prepared From Polymer Composition. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 883-889.	0.3	3
80	Experimental study of the thermal management process at low-temperature circulating charging of an adsorbed natural gas storage system. Journal of Physics: Conference Series, 2021, 2116, 012084.	0.3	3
81	Wave sorbostriction of AP-B recuperated carbon adsorbent during adsorption of vapors of organic substances. Protection of Metals and Physical Chemistry of Surfaces, 2015, 51, 49-56.	0.3	2
82	ZrBDC-Based Functional Adsorbents for Small-Scale Methane Storage Systems. Adsorption Science and Technology, 2022, 2022, .	1.5	2
83	Adsorption Properties of a Functional Porous Material Based on a Zn-Organic Framework Structure. Protection of Metals and Physical Chemistry of Surfaces, 2022, 58, 6-12.	0.3	2
84	Sorbostriction of FAS-3 microporous carbon adsorbent upon vapor adsorption from a flow of nitrogen carrier gas. Colloid Journal, 2017, 79, 773-778.	0.5	1
85	Supramolecular nanoporous carbon materials based on the arrays of carbon nanotubes, ordered by cyclic hydrocarbons for methane and hydrogen storage. Materials Today: Proceedings, 2018, 5, 25911-25915.	0.9	1
86	SORBOSTRUCTION OF MICROPOROUS CARBON ADSORBENT FAS-3 AT ADSORPTION OF ORGANIC SUBSTANCES VAPORS FROM NITROGEN FLOW. ChemChemTech, 2017, 60, 54.	0.1	0
87	ADSORPTION DEFORMATION OF MICROPOROUS CARBON ADSORBENT FAS AT ADSORPTION OF WATER AND ACETONE VAPORS. ChemChemTech, 2019, 62, 43-47.	0.1	0
88	ADSORPTION OF BENZENE, ACETONE AND CARBON TETRACHLORIDE VAPORS ON MICROPOROUS CARBON ADSORBENT FAS-3. ChemChemTech, 2019, 62, 52-57.	0.1	0
89	Development of an approach to estimating the adsorption-induced deformation limit values of microporous carbons. , 2021, , 50-55.		0