Yuri I Aristov

List of Publications by Year
in descending order

230	9,154	28190 55	54797 84
papers	citations	h-index	g-index

231	231	231	2578
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Adsorption heat conversion and storage in closed systems: What have we learned over the past decade of this century?. Energy, 2022, 239, 122142.	4.5	13
2	Adsorptive transformation of ultralow-temperature heat using a â€œHeat from Coldâ€•cycle. Energy, 2022, 238, 122083.	4.5	2
3	Effect of residual air on dynamics of temperature- and pressure-initiated adsorption cycles for heat transformation. Applied Thermal Engineering, 2022, 200, 117629.	3.0	0
4	Closed Sorption Systems. , 2022, , 542-558.		0
5	Adsorptive Systems for Heat Transformation and Heat Storage Applications. Energies, 2022, 15, 617.	1.6	0
6	Pressure- and temperature-initiated adsorption of water vapour in a finned flat-tube adsorber. Energy Conversion and Management, 2022, 258, 115487.	4.4	3
7	Thermochemical storage of medium-temperature heat using MgO promoted with eutectic ternary mixture LiNO3-NaNO3-KNO3. Journal of Energy Storage, 2022, 51, 104409.	3.9	6
8	Water Vapor Adsorption on CAU-10-X: Effect of Functional Groups on Adsorption Equilibrium and Mechanisms. Langmuir, 2021, 37, 693-702.	1.6	25
9	Ultrahigh-Energy-Density Sorption Thermal Battery Enabled by Graphene Aerogel-Based Composite Sorbents for Thermal Energy Harvesting from Air. ACS Energy Letters, 2021, 6, 1795-1802.	8.8	82
10	Plastic heat exchangers for adsorption cooling: Thermodynamic and dynamic performance. Applied Thermal Engineering, 2021, 188, 116622.	3.0	12
11	MIL-160 as an Adsorbent for Atmospheric Water Harvesting. Energies, 2021, 14, 3586.	1.6	18
12	Metal-organic frameworks for energy conversion and water harvesting: A bridge between thermal engineering and material science. Nano Energy, 2021, 84, 105946.	8.2	110
13	Ammoniated salt based solid sorption thermal batteries: A comparative study. Applied Thermal Engineering, 2021, 191, 116875.	3.0	7
14	Studies on a metal hydride based year-round comfort heating and cooling system for extreme climates. Energy and Buildings, 2021, 244, 111042.	3.1	5
15	Adsorptive conversion of ultralow-temperature heat: Thermodynamic issues. Energy, 2021, 236, 121892.	4.5	11
16	Combining the psychrometric chart of humid air with water adsorption isosters: Analysis of the Ventireg process. Energy, 2021, 239, 122278.	4.5	2
17	Dynamics of pressure- and temperature-initiated adsorption cycles for transformation of low temperature heat: Flat bed of loose grains. Applied Thermal Engineering, 2020, 165, 114654.	3.0	14
18	Potable water extraction from the atmosphere: Potential of MOFs. Renewable Energy, 2020, 148, 72-80.	4.3	50

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19	Rational design of a robust aluminum metal-organic framework for multi-purpose water-sorption-driven heat allocations. Nature Communications, 2020, 11, 5112.	5.8	68
20	Novel adsorption method for moisture and heat recuperation in ventilation: Composites â€œLiCl/matrixâ€• tailored for cold climate. Energy, 2020, 201, 117595.	4.5	17
21	Water as an adsorptive for adsorption cycles operating at a temperature below 0ÂÂ°C. Energy, 2020, 211, 119037.	4.5	7
22	Review of adsorptive heat conversion/storage in cold climate countries. Applied Thermal Engineering, 2020, 180, 115848.	3.0	5
23	Activated Carbons as Methanol Adsorbents for a New Cycle â€œHeat from Coldâ€• Fibers, 2020, 8, 51.	1.8	2
24	Thermodynamic Analysis of Working Fluids for a New â€œHeat from Coldâ€•Cycle. Entropy, 2020, 22, 808.	1.1	7
25	New Adsorption Method for Moisture and Heat Exchange in Ventilation Systems in Cold Countries: Concept and Mathematical Simulation. Energies, 2020, 13, 1386.	1.6	7
26	Performance Results of a Solar Adsorption Cooling and Heating Unit. Energies, 2020, 13, 1630.	1.6	13
27	Dynamics of adsorptive heat conversion systems: Review of basics and recent advances. Energy, 2020, 205, 117998.	4.5	14
28	An Aqueous CaCl2 Solution in the Condenser/Evaporator Instead of Pure Water: Application for the New Adsorptive Cycle â€œHeat from Coldâ€• Energies, 2020, 13, 2904.	1.6	4
29	Composite â€œLiCl/MWCNT/PVAâ€•for adsorption thermal battery: Dynamics of methanol sorption. Renewable and Sustainable Energy Reviews, 2020, 123, 109748.	8.2	12
30	â€œLiCl/vermiculite - Methanolâ€•as working pair for adsorption heat storage: Adsorption equilibrium and dynamics. Energy, 2019, 186, 115775.	4.5	13
31	Adapting the MgO-CO2 Working Pair for Thermochemical Energy Storage by Doping with Salts: Effect of the (LiK)NO3 Content. Energies, 2019, 12, 2262.	1.6	9
32	â€œMIL-101(Cr)â€“methanolâ€•as working pair for adsorption heat transformation cycles: Adsorbent shaping, adsorption equilibrium and dynamics. Energy Conversion and Management, 2019, 182, 299-306.	4.4	27
33	Adsorption Transformation of Heat: The Applicability in Various Climatic Zones of the Russian Federation. Applied Sciences (Switzerland), 2019, 9, 139.	1.3	9
34	Water adsorption equilibrium and dynamics of LICL/MWCNT/PVA composite for adsorptive heat storage. Solar Energy Materials and Solar Cells, 2019, 193, 133-140.	3.0	30
35	A new version of the large pressure jump (T-LPJ) method for dynamic study of pressure-initiated adsorptive cycles for heat storage and transformation. Energy, 2019, 179, 542-548.	4.5	7
36	Dynamics and useful heat of the discharge stage of adsorptive cycles for long term thermal storage. Applied Energy, 2019, 248, 299-309.	5.1	25

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37	Thermochemical energy storage by LiNO3-doped Mg(OH)2: Rehydration study. Journal of Energy Storage, 2019, 22, 302-310.	3.9	17
38	Adapting the MgO-CO2 working pair for thermochemical energy storage by doping with salts. Energy Conversion and Management, 2019, 185, 473-481.	4.4	38
39	A dynamic model of a solar driven trigeneration system based on micro-ORC and adsorption chiller prototypes. AIP Conference Proceedings, 2019, , .	0.3	3
40	Experimental characterization of the LiCl/vermiculite composite for sorption heat storage applications. International Journal of Refrigeration, 2019, 105, 92-100.	1.8	34
41	A new adsorptive cycle "HeCol" for upgrading the ambient heat: The current state of the art. International Journal of Refrigeration, 2019, 105, 19-32.	1.8	13
42	Adsorptive heat storage and amplification: New cycles and adsorbents. Energy, 2019, 167, 440-453.	4.5	47
43	A HeCol cycle for upgrading the ambient heat: The dynamic verification of desorption stage. Applied Thermal Engineering, 2019, 146, 608-612.	3.0	11
44	Thermochemical Energy Storage using LiNO₃â€Doped Mg(OH)₂: A Dehydration Study. Energy Technology, 2018, 6, 1844-1851.	1.8	22
45	Testing the lab-scale â€œHeat from Coldâ€•prototype with the â€œLiCl/silica â€“ methanolâ€•working pair. Energy Conversion and Management, 2018, 159, 213-220.	4.4	23
46	Composite â€œLiCl/MWCNTâ€•as advanced water sorbent for thermal energy storage: Sorption dynamics. Solar Energy Materials and Solar Cells, 2018, 176, 273-279.	3.0	37
47	Adsorption cycle â€œheat from coldâ€•for upgrading the ambient heat: The testing a lab-scale prototype with the composite sorbent CaClBr/silica. Applied Energy, 2018, 211, 136-145.	5.1	33
48	Adsorption Heat Storage: State-of-the-Art and Future Perspectives. Nanomaterials, 2018, 8, 522.	1.9	50
49	MOF-801 as a promising material for adsorption cooling: Equilibrium and dynamics of water adsorption. Energy Conversion and Management, 2018, 174, 356-363.	4.4	121
50	Thermodynamic Analysis of the New Adsorption Cycle â€œHeColâ€•for Ambient Heat Upgrading: Ideal Heat Transfer. Journal of Engineering Thermophysics, 2018, 27, 327-338.	0.6	9
51	Adsorptive transformation and storage of renewable heat: Review of current trends in adsorption dynamics. Renewable Energy, 2017, 110, 105-114.	4.3	51
52	NH 2 -MIL-125 as promising adsorbent for adsorptive cooling: Water adsorption dynamics. Applied Thermal Engineering, 2017, 116, 541-548.	3.0	29
53	Adsorptive transformation of ambient heat: A new cycle. Applied Thermal Engineering, 2017, 124, 521-524.	3.0	51
54	A new management strategy based on the reallocation of ads-/desorption times: Experimental operation of a full-scale 3 beds adsorption chiller. Applied Energy, 2017, 205, 1081-1090.	5.1	39

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55	Calcium hydroxide doped by KNO₃as a promising candidate for thermochemical storage of solar heat. RSC Advances, 2017, 7, 42929-42939.	1.7	24
56	A new version of the Large Temperature Jump method: The thermal response (Tâ€“LTJ). Energy, 2017, 140, 481-487.	4.5	18
57	Dynamic optimization of adsorptive chillers: Compact layer vs. bed of loose grains. Applied Thermal Engineering, 2017, 125, 823-829.	3.0	26
58	â€œHeat from Coldâ€•â€“ A new cycle for upgrading the ambient heat: Adsorbent optimal from the dynamic point of view. Applied Thermal Engineering, 2017, 124, 1189-1193.	3.0	9
59	Composite â€œLiCl/vermiculiteâ€•as advanced water sorbent for thermal energy storage. Applied Thermal Engineering, 2017, 124, 1401-1408.	3.0	65
60	Identification and characterization of promising phase change materials for solar cooling applications. Solar Energy Materials and Solar Cells, 2017, 160, 225-232.	3.0	52
61	â€œWater - Silica Siogelâ€•working pair for adsorption chillers: Adsorption equilibrium and dynamics. Renewable Energy, 2017, 110, 40-46.	4.3	48
62	New materials for adsorption heat transformation and storage. Renewable Energy, 2017, 110, 59-68.	4.3	124
63	VENTIREGâ€”A New Approach to Regenerating Heat and Moisture in Dwellings in Cold Countries. , 2017, , 87-107.		1
64	Dynamics study of ethanol adsorption on microporous activated carbon for adsorptive cooling applications. Applied Thermal Engineering, 2016, 105, 28-38.	3.0	22
65	Comparative analysis of promising adsorbent/adsorbate pairs for adsorptive heat pumping, air conditioning and refrigeration. Applied Thermal Engineering, 2016, 104, 85-95.	3.0	111
66	Dynamic optimization of adsorptive chillers: The â€œAQSOAâ„¢-FAM-Z02 â€“ Waterâ€•working pair. Energy, 2016, 106, 13-22.	4.5	52
67	New composite sorbents of water and methanol â€œsalt in anodic aluminaâ€• Evaluation for adsorption heat transformation. Energy, 2016, 106, 231-239.	4.5	15
68	Experimental testing of a hybrid sensible-latent heat storage system for domestic hot water applications. Applied Energy, 2016, 183, 1157-1167.	5.1	53
69	An innovative adsorptive chiller prototype based on 3 hybrid coated/granular adsorbers. Applied Energy, 2016, 179, 929-938.	5.1	78
70	Dynamics of water vapour adsorption by a monolayer of loose AQSOAâ„¢-FAM-Z02 grains: Indication of inseparably coupled heat and mass transfer. Energy, 2016, 114, 767-773.	4.5	24
71	Composite sorbents â€œLi/Ca halogenides inside Multi-wall Carbon Nano-tubesâ€•for Thermal Energy Storage. Solar Energy Materials and Solar Cells, 2016, 155, 176-183.	3.0	52
72	Making adsorptive chillers more fast and efficient: The effect of bi-dispersed adsorbent bed. Applied Thermal Engineering, 2016, 106, 254-256.	3.0	17

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73	Prediction of SCP and COP for adsorption heat pumps and chillers by combining the large-temperature-jump method and dynamic modeling. Applied Thermal Engineering, 2016, 98, 900-909.	3.0	53
74	NH 2 -MIL-125 as a promising material for adsorptive heat transformation and storage. Energy, 2016, 100, 18-24.	4.5	84
75	Dramatic effect of residual gas on dynamics of isobaric adsorption stage of an adsorptive chiller. Applied Thermal Engineering, 2016, 96, 385-390.	3.0	18
76	Innovative Adsorption Chiller for Marine Applications: Design and Building. Energy Procedia, 2015, 82, 432-438.	1.8	6
77	Modification of magnesium and calcium hydroxides with salts: An efficient way to advanced materials for storage of middle-temperature heat. Energy, 2015, 85, 667-676.	4.5	69
78	SAPO-34 coated adsorbent heat exchanger for adsorption chillers. Applied Thermal Engineering, 2015, 82, 1-7.	3.0	185
79	Adsorption and catalysis for sustainable energy applications. Kinetics and Catalysis, 2015, 56, 442-449.	0.3	2
80	Adsorption Dynamics in Adsorptive Heat Transformers: Review of New Trends. Heat Transfer Engineering, 2014, 35, 1014-1027.	1.2	18
81	Dynamic behaviors of adsorption chiller: Effects of the silica gel grain size and layers. Energy, 2014, 78, 304-312.	4.5	44
82	Doping Magnesium Hydroxide with Sodium Nitrate: A New Approach to Tune the Dehydration Reactivity of Heat-Storage Materials. ACS Applied Materials & Interfaces, 2014, 6, 19966-19977.	4.0	42
83	A stand-alone solar adsorption refrigerator for humanitarian aid. Solar Energy, 2014, 100, 172-178.	2.9	49
84	Dynamic study of methanol adsorption on activated carbon ACM-35.4 for enhancing the specific cooling power of adsorptive chillers. Applied Energy, 2014, 117, 127-133.	5.1	70
85	Novel experimental methodology for the characterization of thermodynamic performance of advanced working pairs for adsorptive heat transformers. Applied Thermal Engineering, 2014, 72, 229-236.	3.0	34
86	Adsorption cooling utilizing the â€œLiBr/silica â€“ ethanolâ€•working pair: Dynamic optimization of the adsorber/heat exchanger unit. Energy, 2014, 75, 390-399.	4.5	33
87	Concept of adsorbent optimal for adsorptive cooling/heating. Applied Thermal Engineering, 2014, 72, 166-175.	3.0	101
88	Water adsorption dynamics on representative pieces of real adsorbers for adsorptive chillers. Applied Energy, 2014, 134, 11-19.	5.1	78
89	Experimental and theoretical analysis of the kinetic performance of an adsorbent coating composition for use in adsorption chillers and heat pumps. Applied Thermal Engineering, 2014, 73, 1022-1031.	3.0	54
90	Making adsorptive chillers faster by a proper choice of adsorption isobar shape: Comparison of optimal and real adsorbents. Energy, 2014, 76, 400-405.	4.5	9

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91	Dynamic study of adsorbers by a new gravimetric version of the Large Temperature Jump method. Applied Energy, 2014, 113, 1244-1251.	5.1	64
92	Extraction of Water from the Atmosphere in Arid Areas by Employing Composites â€œA Salt Inside a Porous Matrixâ€• NATO Science for Peace and Security Series C: Environmental Security, 2014, , 257-268.	0.1	0
93	Thermal conductivity of composite sorbents â€œsalt in porous matrixâ€•for heat storage and transformation. Applied Thermal Engineering, 2013, 61, 401-407.	3.0	59
94	Experimental and numerical study of adsorptive chiller dynamics: Loose grains configuration. Applied Thermal Engineering, 2013, 61, 841-847.	3.0	43
95	Modeling of isobaric stages of adsorption cooling cycle: Transient and quasi-stationary regimes. Applied Thermal Engineering, 2013, 51, 231-238.	3.0	5
96	Composites â€œbinary salts in porous matrixâ€•for adsorption heat transformation. Applied Thermal Engineering, 2013, 50, 1633-1638.	3.0	51
97	Modelling of isobaric stages of adsorption cooling cycle: An optimal shape of adsorption isobar. Applied Thermal Engineering, 2013, 53, 89-95.	3.0	17
98	Challenging offers of material science for adsorption heat transformation: A review. Applied Thermal Engineering, 2013, 50, 1610-1618.	3.0	265
99	Optimisation of Adsorption Dynamics in Adsorptive Heat Transformers. , 2013, , 63-108.		0
100	Composite material â€œMg(OH)2/vermiculiteâ€• A promising new candidate for storage of middle temperature heat. Energy, 2012, 44, 1028-1034.	4.5	78
101	Physicochemical bases of autonomous maintenance of humidity and temperature in closed spaces. Journal of Engineering Physics and Thermophysics, 2012, 85, 977-986.	0.2	0
102	Nonstationary mass transfer in a drying chamberâ€“adsorber system under conditions of nonequilibrium adsorption of steam. Journal of Engineering Physics and Thermophysics, 2012, 85, 1327-1330.	0.2	1
103	Composites â€˜salt inside porous matrixâ€™ for adsorption heat transformation: a current state-of-the-art and new trends. International Journal of Low-Carbon Technologies, 2012, 7, 288-302.	1.2	164
104	Optimization of adsorption dynamics in adsorptive chillers: Loose grains configuration. Energy, 2012, 46, 484-492.	4.5	131
105	Adsorptive transformation of heat: Principles of construction of adsorbents database. Applied Thermal Engineering, 2012, 42, 18-24.	3.0	73
106	Adsorption chilling driven by low temperature heat: New adsorbent and cycle optimization. Applied Thermal Engineering, 2012, 32, 141-146.	3.0	85
107	Simulation of water sorption dynamics in adsorption chillers: One, two and four layers of loose silica grains. Applied Thermal Engineering, 2012, 44, 69-77.	3.0	50
108	Experimental testing of a lab-scale adsorption chiller using a novel selective water sorbent â€œsilica modified by calcium nitrateâ€• International Journal of Refrigeration, 2012, 35, 518-524.	1.8	63

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109	Reallocation of adsorption and desorption times for optimisation of cooling cycles. International Journal of Refrigeration, 2012, 35, 525-531.	1.8	121
110	Development and lab-test of a mobile adsorption air-conditioner. International Journal of Refrigeration, 2012, 35, 701-708.	1.8	73
111	Water sorption by the calcium chloride/silica gel composite: The accelerating effect of the salt solution present in the pores. Kinetics and Catalysis, 2011, 52, 620-628.	0.3	19
112	Influence of the management strategy and operating conditions on the performance of an adsorption chiller. Energy, 2011, 36, 5532-5538.	4.5	94
113	Low temperature heat capacity of the system â€œsilica gelâ€“calcium chlorideâ€“waterâ€• Journal of Thermal Analysis and Calorimetry, 2011, 103, 773-778.	2.0	8
114	Composite sorbent of methanol â€œLiCl in mesoporous silica gelâ€•for adsorption cooling: Dynamic optimization. Energy, 2011, 36, 1273-1279.	4.5	63
115	Composites CaCl2/SBA-15 for adsorptive transformation of low temperature heat: Pore size effect. International Journal of Refrigeration, 2011, 34, 1244-1250.	1.8	53
116	Novel sorbents of ethanol â€œsalt confined to porous matrixâ€•for adsorptive cooling. Energy, 2010, 35, 2703-2708.	4.5	23
117	A compact layer of alumina modified by CaCl2: The influence of composition and porous structure on water transport. Microporous and Mesoporous Materials, 2010, 131, 358-365.	2.2	11
118	Novel ammonia sorbents â€œporous matrix modified by active saltâ€•for adsorptive heat transformation. Applied Thermal Engineering, 2010, 30, 584-589.	3.0	36
119	Novel ammonia sorbents â€œporous matrix modified by active saltâ€•for adsorptive heat transformation: 2. Calcium chloride in ACF felt. Applied Thermal Engineering, 2010, 30, 845-849.	3.0	31
120	Novel ammonia sorbents â€œporous matrix modified by active saltâ€•for adsorptive heat transformation: 3. Testing of â€œBaCl2/vermiculiteâ€•composite in a lab-scale adsorption chiller. Applied Thermal Engineering, 2010, 30, 1188-1192.	3.0	64
121	Synthesis and water sorption properties of a new composite â€œCaCl2 confined into SBA-15 poresâ€• Microporous and Mesoporous Materials, 2010, 129, 243-250.	2.2	97
122	Effect of residual gas on the dynamics of water adsorption under isobaric stages of adsorption heat pumps: Mathematical modelling. International Journal of Heat and Mass Transfer, 2010, 53, 1283-1289.	2.5	12
123	The effect of cycle boundary conditions and adsorbent grain size on the water sorption dynamics in adsorption chillers. International Journal of Heat and Mass Transfer, 2010, 53, 1893-1898.	2.5	78
124	Effect of Residual Gas on Water Adsorption Dynamics Under Typical Conditions of an Adsorption Chiller. Heat Transfer Engineering, 2010, 31, 924-930.	1.2	21
125	Simulation of a solid sorption ice-maker based on the novel composite sorbent â€œlithium chloride in silica gel poresâ€• Applied Thermal Engineering, 2009, 29, 1714-1720.	3.0	52
126	â€œSalt in a porous matrixâ€•adsorbents: Design of the phase composition and sorption properties. Kinetics and Catalysis, 2009, 50, 65-72.	0.3	20

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127	Optimal adsorbent for adsorptive heat transformers: Dynamic considerations. International Journal of Refrigeration, 2009, 32, 675-686.	1.8	106
128	Water sorption on composite â€œsilica modified by calcium nitrateâ€• Microporous and Mesoporous Materials, 2009, 122, 223-228.	2.2	108
129	A new generation cooling device employing CaCl2-in-silica gelâ€“water system. International Journal of Heat and Mass Transfer, 2009, 52, 516-524.	2.5	178
130	Kinetics of water adsorption/desorption under isobaric stages of adsorption heat transformers: The effect of isobar shape. International Journal of Heat and Mass Transfer, 2009, 52, 1774-1777.	2.5	37
131	Water dynamics in bulk and dispersed in silica CaCl2 hydrates studied by neutron scattering methods. Microporous and Mesoporous Materials, 2009, 125, 46-50.	2.2	4
132	Adsorption properties of composite materials (LiCl+LiBr)/silica. Microporous and Mesoporous Materials, 2009, 126, 262-267.	2.2	66
133	Composite Sorbent of Methanol â€œLithium Chloride in Mesoporous Silica Gelâ€•for Adsorption Cooling Machines: Performance and Stability Evaluation. Industrial & Engineering Chemistry Research, 2009, 48, 6197-6202.	1.8	28
134	Chemical and adsorption heat pumps: Comments on the second law efficiency. Chemical Engineering Journal, 2008, 136, 419-424.	6.6	37
135	Universal relation between the boundary temperatures of a basic cycle of sorption heat machines. Chemical Engineering Science, 2008, 63, 2907-2912.	1.9	43
136	A new methodology of studying the dynamics of water sorption/desorption under real operating conditions of adsorption heat pumps: Modelling of coupled heat and mass transfer in a single adsorbent grain. International Journal of Heat and Mass Transfer, 2008, 51, 246-252.	2.5	44
137	Chemical and sorption heat engines: State of the art and development prospects in the Russian Federation and the Republic of Belarus. Journal of Engineering Physics and Thermophysics, 2008, 81, 17-47.	0.2	6
138	A new approach to regenerating heat and moisture in ventilation systems. Energy and Buildings, 2008, 40, 204-208.	3.1	32
139	A new methodology of studying the dynamics of water sorption/desorption under real operating conditions of adsorption heat pumps: Experiment. International Journal of Heat and Mass Transfer, 2008, 51, 4966-4972.	2.5	148
140	Dynamics of water sorption on a single adsorbent grain caused by a large pressure jump: Modeling of coupled heat and mass transfer. International Journal of Heat and Mass Transfer, 2008, 51, 5872-5876.	2.5	24
141	Kinetics of water adsorption on loose grains of SWS-1L under isobaric stages of adsorption heat pumps: The effect of residual air. International Journal of Heat and Mass Transfer, 2008, 51, 5823-5827.	2.5	38
142	Composites â€œlithium halides in silica gel poresâ€• Methanol sorption equilibrium. Microporous and Mesoporous Materials, 2008, 112, 254-261.	2.2	55
143	Status quo and prospects of development of chemical and sorption heat engines in the Russian federation and the Republic of Belarus. Journal of Engineering Thermophysics, 2008, 17, 166.	0.6	1
144	Chemical and adsorption heat pumps: Cycle efficiency and boundary temperatures. Theoretical Foundations of Chemical Engineering, 2008, 42, 873-881.	0.2	11

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145	Water Dynamics in Bulk and Dispersed in Silica CaCl₂ Hydrates Studied by ²H NMR. Journal of Physical Chemistry C, 2008, 112, 12853-12860.	1.5	21
146	Adsorptive Air Conditioning Systems Driven by Low Temperature Energy Sources: Choice of the Working Pairs. Journal of Chemical Engineering of Japan, 2007, 40, 1287-1291.	0.3	12
147	Influence of Characteristics of Methanol Sorbents â€œSalts in Mesoporous Silicaâ€•on the Performance of Adsorptive Air Conditioning Cycle. Industrial & Engineering Chemistry Research, 2007, 46, 2747-2752.	1.8	40
148	An advanced solid sorption chiller using SWS-1L. Applied Thermal Engineering, 2007, 27, 2200-2204.	3.0	110
149	Simulation and design of a solar driven thermochemical refrigerator using new chemisorbents. Chemical Engineering Journal, 2007, 134, 58-65.	6.6	12
150	Modeling of the limiting step of water sorption by composite sorbents of the â€œcalcium chloride in porous matrixâ€•type. Theoretical Foundations of Chemical Engineering, 2007, 41, 83-90.	0.2	8
151	Effect of capillary condensation on water sorption by composite calcium chloride in a porous matrix sorbents. Theoretical Foundations of Chemical Engineering, 2007, 41, 200-204.	0.2	1
152	New family of solid sorbents for adsorptive cooling: Material scientist approach. Journal of Engineering Thermophysics, 2007, 16, 63-72.	0.6	110
153	Sorption equilibrium of methanol on new composite sorbents â€œCaCl2/silica gelâ€• Adsorption, 2007, 13, 121-127.	1.4	26
154	Isothermal sorption characteristics of the BaCl2â€“NH3 pair in a vermiculite host matrix. Applied Thermal Engineering, 2007, 27, 2455-2462.	3.0	72
155	Kinetics of water sorption on a CaCl2-in-silica-gel-pores sorbent: The effects of the pellet size and temperature. Kinetics and Catalysis, 2006, 47, 770-775.	0.3	13
156	Dynamics of water vapor sorption in a CaCl2/Silica Gel/Binder bed: The effect of the bed pore structure. Kinetics and Catalysis, 2006, 47, 776-781.	0.3	5
157	Dynamics of hydration water in CaCl2 complexes. Chemical Physics Letters, 2006, 419, 111-114.	1.2	10
158	Impact of phase composition on water adsorption on inorganic hybrids â€œsalt/silicaâ€• Journal of Colloid and Interface Science, 2006, 301, 685-691.	5.0	66
159	Kinetics of water adsorption on silica Fuji Davison RD. Microporous and Mesoporous Materials, 2006, 96, 65-71.	2.2	140
160	Assessment of the operation of a low-temperature adsorption refrigerator. Thermal Engineering (English Translation of Teploenergetika), 2006, 53, 240-244.	0.4	7
161	Experimental study and mathematical modelling of heat transfer processes in heat accumulating media. Thermophysics and Aeromechanics, 2006, 13, 403-410.	0.1	8
162	New composite sorbents of water and ammonia for chemical and adsorption heat pumps. Journal of Engineering Physics and Thermophysics, 2006, 79, 1214-1229.	0.2	11

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163	Kinetics of water sorption on SWS-1L (calcium chloride confined to mesoporous silica gel): Influence of grain size and temperature. Chemical Engineering Science, 2006, 61, 1453-1458.	1.9	120
164	Investigation of the Moisture Exchange in a Stationary Adsorbent Layer Through which Air is Passed. Journal of Engineering Physics and Thermophysics, 2005, 78, 248-255.	0.2	10
165	Composite Water Sorbents of the Salt in Silica Gel Pores Type: The Effect of the Interaction between the Salt and the Silica Gel Surface on the Chemical and Phase Compositions and Sorption Properties. Kinetics and Catalysis, 2005, 46, 736-742.	0.3	13
166	Ammonia adsorption by MgCl2, CaCl2 and BaCl2 confined to porous alumina: the fixed bed adsorber. Reaction Kinetics and Catalysis Letters, 2005, 85, 183-188.	0.6	43
167	Kinetics of carbon dioxide sorption by the composite material K2CO3in Al2O3. Reaction Kinetics and Catalysis Letters, 2004, 82, 363-369.	0.6	28
168	Selective water sorbent for solid sorption chiller: experimental results and modelling. International Journal of Refrigeration, 2004, 27, 284-293.	1.8	121
169	Sorption of carbon dioxide by the composite sorbent â€œpotassium carbonate in porous matrixâ€• Russian Chemical Bulletin, 2003, 52, 359-363.	0.4	38
170	Experimental study on the kinetics of water vapor sorption on selective water sorbents, silica gel and alumina under typical operating conditions of sorption heat pumps. International Journal of Heat and Mass Transfer, 2003, 46, 273-281.	2.5	145
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