Angelo Freni

List of Publications by Year
in descending order

52	2,151	201385	223531
papers	citations	27 h-index	46 g-index

52	52	52	914
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	SAPO-34 coated adsorbent heat exchanger for adsorption chillers. Applied Thermal Engineering, 2015, 82, 1-7.	3.0	185
2	Kinetics of water adsorption on silica Fuji Davison RD. Microporous and Mesoporous Materials, 2006, 96, 65-71.	2.2	140
3	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
4	Water sorption on composite â€œsilica modified by calcium nitrateâ€• Microporous and Mesoporous Materials, 2009, 122, 223-228.	2.2	108
5	Influence of the management strategy and operating conditions on the performance of an adsorption chiller. Energy, 2011, 36, 5532-5538.	4.5	94
6	Zeolite coated copper foams for heat pumping applications. Microporous and Mesoporous Materials, 2006, 91, 7-14.	2.2	91
7	Adsorption chilling driven by low temperature heat: New adsorbent and cycle optimization. Applied Thermal Engineering, 2012, 32, 141-146.	3.0	85
8	Adsorbent working pairs for solar thermal energy storage in buildings. Renewable Energy, 2017, 110, 87-94.	4.3	79
9	Water adsorption dynamics on representative pieces of real adsorbers for adsorptive chillers. Applied Energy, 2014, 134, 11-19.	5.1	78
10	An innovative adsorptive chiller prototype based on 3 hybrid coated/granular adsorbers. Applied Energy, 2016, 179, 929-938.	5.1	78
11	Development and lab-test of a mobile adsorption air-conditioner. International Journal of Refrigeration, 2012, 35, 701-708.	1.8	73
12	Adsorbent coatings for heat pumping applications: Verification of hydrothermal and mechanical stabilities. Applied Thermal Engineering, 2013, 50, 1658-1663.	3.0	72
13	Zeolites direct synthesis on heat exchangers for adsorption heat pumps. Applied Thermal Engineering, 2013, 50, 1590-1595.	3.0	70
14	Dynamic study of adsorbers by a new gravimetric version of the Large Temperature Jump method. Applied Energy, 2014, 113, 1244-1251.	5.1	64
15	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
16	Composites â€œlithium halides in silica gel poresâ€• Methanol sorption equilibrium. Microporous and Mesoporous Materials, 2008, 112, 254-261.	2.2	55
17	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
18	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

#	Article	IF	Citations
19	A stand-alone solar adsorption refrigerator for humanitarian aid. Solar Energy, 2014, 100, 172-178.	2.9	49
20	Hydrothermal and microwave synthesis of SAPO (CHA) zeolites on aluminium foams for heat pumping applications. Microporous and Mesoporous Materials, 2013, 167, 30-37.	2.2	44
21	Synthesis of SAPO-34 on graphite foams for adsorber heat exchangers. Applied Thermal Engineering, 2013, 61, 848-852.	3.0	43
22	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
23	Experimental testing of AQSOA FAM Z02/water adsorption system for heat and cold storage. Applied Thermal Engineering, 2017, 124, 967-974.	3.0	36
24	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
25	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
26	Silica-Supported Ionic Liquids for Heat-Powered Sorption Desalination. ACS Applied Materials & Interfaces, 2019, 11, 36497-36505.	4.0	31
27	In situ Growth of Zeolites on Metal Foamed Supports for Adsorption Heat Pumps. Journal of Chemical Engineering of Japan, 2007, 40, 1307-1312.	0.3	29
28	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
29	Sorption equilibrium of methanol on new composite sorbents â€œCaCl2/silica gelâ€• Adsorption, 2007, 13, 121-127.	1.4	26
30	A dynamic multi-level model for adsorptive solar cooling. Renewable Energy, 2012, 43, 301-312.	4.3	25
31	Characterization of Zeolite-Based Coatings for Adsorption Heat Pumps. SpringerBriefs in Applied Sciences and Technology, 2015, , .	0.2	25
32	Dynamics study of ethanol adsorption on microporous activated carbon for adsorptive cooling applications. Applied Thermal Engineering, 2016, 105, 28-38.	3.0	22
33	New SAPO-34-SPEEK composite coatings for adsorption heat pumps: Adsorption performance and thermodynamic analysis. Energy, 2020, 203, 117814.	4.5	19
34	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
35	Zeolite filled siloxane composite foams: Compression property. Journal of Applied Polymer Science, 2018, 135, 46145.	1.3	18
36	Design of an Innovative Graphite Exchanger for Adsorption Heat Pumps and Chillers. Energy Procedia, 2015, 81, 1030-1040.	1.8	16

#	Article	IF	Citations
37	Innovative zeolite coatings on graphite plates for advanced adsorbers. Applied Thermal Engineering, 2014, 72, 153-159.	3.0	15
38	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
39	Feasibility study of a desiccant packed bed system for air humidification. Energy, 2021, 214, 119002.	4.5	11
40	Innovative Adsorption Chiller for Marine Applications: Design and Building. Energy Procedia, 2015, 82, 432-438.	1.8	6
41	Modified Silicone-SAPO34 Composite Materials for Adsorption Thermal Energy Storage Systems. Applied Sciences (Switzerland), 2020, 10, 8715.	1.3	6
42	An Industrial Approach for the Optimization of a New Performing Coated Adsorber for Adsorption Heat Pumps. Energies, 2022, 15, 5118.	1.6	4
43	Adsorption Heat Exchangers. SpringerBriefs in Applied Sciences and Technology, 2015, , 35-53.	0.2	3
44	Hydrothermal Stability of Adsorbent Coatings. SpringerBriefs in Applied Sciences and Technology, 2015, , 55-79.	0.2	1
45	Adsorptive Heat Transformation and Storage: Thermodynamic and Kinetic Aspects. SpringerBriefs in Applied Sciences and Technology, 2018, , 1-18.	0.2	1
46	Mechanical Stability of Adsorbent Coatings. SpringerBriefs in Applied Sciences and Technology, 2015, , 81-96.	0.2	1
47	Measurement of Adsorption Dynamics: An Overview. SpringerBriefs in Applied Sciences and Technology, 2018, , 19-29.	0.2	1
48	A novel desiccant compound for air humidification and dehumidification. Applied Thermal Engineering, 2022, 214, 118857.	3.0	1
49	Basics of Adsorption Heat Pump Processes. SpringerBriefs in Applied Sciences and Technology, 2015, , 1-33.	0.2	0
50	New Functional Composite Silane-Zeolite Coatings for Adsorption Heat Pump Applications. , 2016, , 659-679.		0
51	Experimental Findings: Main Factors Affecting the Adsorptive Temperature-Driven Cycle Dynamics. SpringerBriefs in Applied Sciences and Technology, 2018, , 31-68.	0.2	0
52	Optimization of an â€œAdsorbent/Heat Exchangerâ€•Unit. SpringerBriefs in Applied Sciences and Technology, 2018, , 69-87.	0.2	0