

# Angelo Freni

## List of Publications by Year in descending order

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52  
papers

2,151  
citations

201385

27  
h-index

223531

46  
g-index

52  
all docs

52  
docs citations

52  
times ranked

914  
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel desiccant compound for air humidification and dehumidification. Applied Thermal Engineering, 2022, 214, 118857.	3.0	1
2	An Industrial Approach for the Optimization of a New Performing Coated Adsorber for Adsorption Heat Pumps. Energies, 2022, 15, 5118.	1.6	4
3	Feasibility study of a desiccant packed bed system for air humidification. Energy, 2021, 214, 119002.	4.5	11
4	Modified Silicone-SAPO34 Composite Materials for Adsorption Thermal Energy Storage Systems. Applied Sciences (Switzerland), 2020, 10, 8715.	1.3	6
5	New SAPO-34-SPEEK composite coatings for adsorption heat pumps: Adsorption performance and thermodynamic analysis. Energy, 2020, 203, 117814.	4.5	19
6	Silica-Supported Ionic Liquids for Heat-Powered Sorption Desalination. ACS Applied Materials & Interfaces, 2019, 11, 36497-36505.	4.0	31
7	Zeolite filled siloxane composite foams: Compression property. Journal of Applied Polymer Science, 2018, 135, 46145.	1.3	18
8	Adsorptive Heat Transformation and Storage: Thermodynamic and Kinetic Aspects. SpringerBriefs in Applied Sciences and Technology, 2018, , 1-18.	0.2	1
9	Measurement of Adsorption Dynamics: An Overview. SpringerBriefs in Applied Sciences and Technology, 2018, , 19-29.	0.2	1
10	Experimental Findings: Main Factors Affecting the Adsorptive Temperature-Driven Cycle Dynamics. SpringerBriefs in Applied Sciences and Technology, 2018, , 31-68.	0.2	0
11	Optimization of an "Adsorbent/Heat Exchanger" Unit. SpringerBriefs in Applied Sciences and Technology, 2018, , 69-87.	0.2	0
12	Experimental testing of AQSOA FAM Z02/water adsorption system for heat and cold storage. Applied Thermal Engineering, 2017, 124, 967-974.	3.0	36
13	Adsorbent working pairs for solar thermal energy storage in buildings. Renewable Energy, 2017, 110, 87-94.	4.3	79
14	Dynamics study of ethanol adsorption on microporous activated carbon for adsorptive cooling applications. Applied Thermal Engineering, 2016, 105, 28-38.	3.0	22
15	New Functional Composite Silane-Zeolite Coatings for Adsorption Heat Pump Applications. , 2016, , 659-679.		0
16	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
17	An innovative adsorptive chiller prototype based on 3 hybrid coated/granular adsorbers. Applied Energy, 2016, 179, 929-938.	5.1	78
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

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19	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
20	Innovative Adsorption Chiller for Marine Applications: Design and Building. Energy Procedia, 2015, 82, 432-438.	1.8	6
21	Basics of Adsorption Heat Pump Processes. SpringerBriefs in Applied Sciences and Technology, 2015, , 1-33.	0.2	0
22	Hydrothermal Stability of Adsorbent Coatings. SpringerBriefs in Applied Sciences and Technology, 2015, , 55-79.	0.2	1
23	Design of an Innovative Graphite Exchanger for Adsorption Heat Pumps and Chillers. Energy Procedia, 2015, 81, 1030-1040.	1.8	16
24	SAPO-34 coated adsorbent heat exchanger for adsorption chillers. Applied Thermal Engineering, 2015, 82, 1-7.	3.0	185
25	Characterization of Zeolite-Based Coatings for Adsorption Heat Pumps. SpringerBriefs in Applied Sciences and Technology, 2015, , .	0.2	25
26	Adsorption Heat Exchangers. SpringerBriefs in Applied Sciences and Technology, 2015, , 35-53.	0.2	3
27	Mechanical Stability of Adsorbent Coatings. SpringerBriefs in Applied Sciences and Technology, 2015, , 81-96.	0.2	1
28	A stand-alone solar adsorption refrigerator for humanitarian aid. Solar Energy, 2014, 100, 172-178.	2.9	49
29	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
30	Adsorption cooling utilizing the "LiBr/silica" ethanol working pair: Dynamic optimization of the adsorber/heat exchanger unit. Energy, 2014, 75, 390-399.	4.5	33
31	Water adsorption dynamics on representative pieces of real adsorbents for adsorptive chillers. Applied Energy, 2014, 134, 11-19.	5.1	78
32	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
33	Innovative zeolite coatings on graphite plates for advanced adsorbents. Applied Thermal Engineering, 2014, 72, 153-159.	3.0	15
34	Dynamic study of adsorbents by a new gravimetric version of the Large Temperature Jump method. Applied Energy, 2014, 113, 1244-1251.	5.1	64
35	Synthesis of SAPO-34 on graphite foams for adsorber heat exchangers. Applied Thermal Engineering, 2013, 61, 848-852.	3.0	43
36	Adsorbent coatings for heat pumping applications: Verification of hydrothermal and mechanical stabilities. Applied Thermal Engineering, 2013, 50, 1658-1663.	3.0	72

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37	Zeolites direct synthesis on heat exchangers for adsorption heat pumps. Applied Thermal Engineering, 2013, 50, 1590-1595.	3.0	70
38	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
39	Adsorption chilling driven by low temperature heat: New adsorbent and cycle optimization. Applied Thermal Engineering, 2012, 32, 141-146.	3.0	85
40	Experimental testing of a lab-scale adsorption chiller using a novel selective water sorbent –silica modified by calcium nitrate–. International Journal of Refrigeration, 2012, 35, 518-524.	1.8	63
41	Development and lab-test of a mobile adsorption air-conditioner. International Journal of Refrigeration, 2012, 35, 701-708.	1.8	73
42	A dynamic multi-level model for adsorptive solar cooling. Renewable Energy, 2012, 43, 301-312.	4.3	25
43	Influence of the management strategy and operating conditions on the performance of an adsorption chiller. Energy, 2011, 36, 5532-5538.	4.5	94
44	Water sorption on composite –silica modified by calcium nitrate–. Microporous and Mesoporous Materials, 2009, 122, 223-228.	2.2	108
45	Composite Sorbent of Methanol –Lithium Chloride in Mesoporous Silica Gel–for Adsorption Cooling Machines: Performance and Stability Evaluation. Industrial & Engineering Chemistry Research, 2009, 48, 6197-6202.	1.8	28
46	Composites –lithium halides in silica gel pores–. Methanol sorption equilibrium. Microporous and Mesoporous Materials, 2008, 112, 254-261.	2.2	55
47	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
48	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
49	Influence of Characteristics of Methanol Sorbents –Salts in Mesoporous Silica–on the Performance of Adsorptive Air Conditioning Cycle. Industrial & Engineering Chemistry Research, 2007, 46, 2747-2752.	1.8	40
50	Sorption equilibrium of methanol on new composite sorbents –CaCl <sub>2</sub> /silica gel–. Adsorption, 2007, 13, 121-127.	1.4	26
51	Zeolite coated copper foams for heat pumping applications. Microporous and Mesoporous Materials, 2006, 91, 7-14.	2.2	91
52	Kinetics of water adsorption on silica Fuji Davison RD. Microporous and Mesoporous Materials, 2006, 96, 65-71.	2.2	140