Orhan Talu

List of Publications by Year in descending order

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42	2,572	236925	265206
papers	citations	25	42
		h-index	g-index

44	44	44	1876
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multicomponent adsorption equilibria of nonideal mixtures. AICHE Journal, 1986, 32, 1263-1276.	3.6	251
2	Molecular simulation of adsorption: Gibbs dividing surface and comparison with experiment. AICHE Journal, 2001, 47, 1160-1168.	3.6	211
3	Adsorption Equilibria of C1to C4Alkanes, CO2, and SF6on Silicalite. Journal of Physical Chemistry B, 1998, 102, 1466-1473.	2.6	205
4	Correlation of Multicomponent Gas Adsorption by the Dual-Site Langmuir Model. Application to Nitrogen/Oxygen Adsorption on 5A-Zeolite. Industrial & Engineering Chemistry Research, 1996, 35, 2477-2483.	3.7	145
5	Needs, status, techniques and problems with binary gas adsorption experiments. Advances in Colloid and Interface Science, 1998, 76-77, 227-269.	14.7	136
6	Adsorption Equilibria of C5â^'C10Normal Alkanes in Silicalite Crystals. The Journal of Physical Chemistry, 1996, 100, 17276-17280.	2.9	125
7	High-pressure adsorption of methane in zeolites NaX, MgX, CaX, SrX and BaX. The Journal of Physical Chemistry, 1991, 95, 1722-1726.	2.9	123
8	Rigorous thermodynamic treatment of gas adsorption. AICHE Journal, 1988, 34, 1887-1893.	3.6	122
9	Behavior and performance of adsorptive natural gas storage cylinders during discharge. Applied Thermal Engineering, 1996, 16, 359-374.	6.0	110
10	Diffusivities ofn-alkanes in silicalite by steady-state single-crystal membrane technique. AICHE Journal, 1998, 44, 681-694.	3.6	110
11	Reference potentials for adsorption of helium, argon, methane, and krypton in high-silica zeolites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 187-188, 83-93.	4.7	103
12	Heterogeneous adsorption equilibria with comparable molecule and pore sizes. The Journal of Physical Chemistry, 1989, 93, 7294-7298.	2.9	102
13	Net Adsorption: A Thermodynamic Framework for Supercritical Gas Adsorption and Storage in Porous Solids. Langmuir, 2010, 26, 17013-17023.	3.5	80
14	Gibbs Dividing Surface and Helium Adsorption. Adsorption, 2003, 9, 17-28.	3.0	75
15	Effect of cations on methane adsorption by NaY, MgY, CaY, SrY, and BaY zeolites. The Journal of Physical Chemistry, 1993, 97, 12894-12898.	2.9	74
16	Phase transition and structural heterogeneity; Benzene adsorption on silicalite. AICHE Journal, 1989, 35, 573-578.	3.6	71
17	Measurement and analysis of oxygen/nitrogen/ 5A-zeolite adsorption equilibria for air separation. Separation and Purification Technology, 1996, 10, 149-159.	0.3	53
18	Activity coefficients of adsorbed mixtures. Adsorption, 1995, 1, 103-112.	3.0	45

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19	The Diffusion Process of Methane through a Silicalite Single Crystal Membrane. Journal of Physical Chemistry B, 2002, 106, 5163-5168.	2.6	44
20	Diffusion measurements through embedded zeolite crystals. AICHE Journal, 1996, 42, 3001-3007.	3.6	41
21	Surface Resistance to Permeation through the Silicalite Single Crystal Membrane:Â Variation with Permeant. Journal of Physical Chemistry B, 2004, 108, 7801-7808.	2.6	35
22	Isosteric heat of adsorption and the vacancy solution model. AICHE Journal, 1987, 33, 510-514.	3.6	32
23	Structural effect on molecular simulations of tight-pore systems. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 1683.	1.7	29
24	Measurement and Analysis of Mixture Adsorption Equilibrium in Porous Solids. Chemie-Ingenieur-Technik, 2011, 83, 67-82.	0.8	28
25	Net Adsorption of Gas/Vapor Mixtures in Microporous Solids. Journal of Physical Chemistry C, 2013, 117, 13059-13071.	3.1	27
26	Electrodeposition of nickel nanowires and nanotubes using various templates. Journal of Experimental Nanoscience, 2008, 3, 287-295.	2.4	24
27	Role of Pressure Drop on Rapid Pressure Swing Adsorption Performance. Industrial & Engineering Chemistry Research, 2017, 56, 5715-5723.	3.7	24
28	Behavior of Aromatic Molecules in Silicalite by the Direct Integration of the Configurational Integral. Molecular Simulation, 1991, 8, 119-132.	2.0	21
29	Effect of Surface Resistances on the Diffusion of Binary Mixtures in the Silicalite Single Crystal Membrane. Journal of Physical Chemistry B, 2005, 109, 923-929.	2.6	19
30	Limitations of Portable Pressure Swing Adsorption Processes for Air Separation. Industrial & Engineering Chemistry Research, 2018, 57, 11981-11987.	3.7	17
31	An Overview of Adsorptive Storage of Natural Gas. Studies in Surface Science and Catalysis, 1993, 80, 655-662.	1.5	16
32	Axial dispersion effects with small diameter adsorbent particles. Adsorption, 2018, 24, 333-344.	3.0	13
33	Integral Mass Balance (IMB) Method for Measuring Multicomponent Gas Adsorption Equilibria in Nanoporous Materials. Industrial & Engineering Chemistry Research, 2020, 59, 20478-20491.	3.7	13
34	Determination of Effective Diffusivities in Commercial Single Pellets:Â Effect of Water Loading. Industrial & Engineering Chemistry Research, 2007, 46, 600-607.	3.7	8
35	Spreading pressure dependent equation for adsorbate phase activity coefficients. Reactive Polymers, Ion Exchangers, Sorbents, 1987, 5, 81-91.	0.0	6
36	Prediction of Adsorption of Polar and Non-Polar Gases on Silicalite by Molecular Simulation. Kluwer International Series in Engineering and Computer Science, 1996, , 945-952.	0.2	5

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37	Effect of Structural Heterogeneity on Multicomponent Adsorption: Benzene and p-Xylene Mixture on Silicalite. Studies in Surface Science and Catalysis, 1993, , 373-380.	1.5	3
38	Gas Permeation Through Zeolite Single Crystal Membranes. Adsorption, 2005, 11, 313-318.	3.0	3
39	Effect of synthesis time and treatment on porosity of mesoporous silica materials. Adsorption, 2009, 15, 81-86.	3.0	2
40	Physical Chemistry and Engineering for Adsorptive Gas Storage in Nanoporous Solids. Green Energy and Technology, 2019, , 65-90.	0.6	2
41	EFFECT OF WATER LOADING ON EFFECTIVE DIFFUSIVITY IN INDUSTRIAL ADSORBENTS. , 2000, , .		1
42	INFINITE DILUTION SELECTIVITY MEASUREMENTS BY GAS CHROMATOGRAPHY. , 2003, , .		1