Evangelos P Favvas

List of Publications by Year
in descending order

74 papers	2,884 citations	218677 26 h-index	175258 52 g-index
75 all docs	75 docs citations	75 times ranked	3653 citing authors

#	Article	IF	Citations
1	Metalâ€“carboxylate interactions in metalâ€“alginate complexes studied with FTIR spectroscopy. Carbohydrate Research, 2010, 345, 469-473.	2.3	626
2	Nanobubbles effect on heavy metal ions adsorption by activated carbon. Chemical Engineering Journal, 2019, 356, 91-97.	12.7	153
3	Porous alginate aerogel beads for effective and rapid heavy metal sorption from aqueous solutions: Effect of porosity in Cu2+ and Cd2+ ion sorption. Chemical Engineering Journal, 2012, 209, 537-546.	12.7	147
4	Alginate fibers as photocatalyst immobilizing agents applied in hybrid photocatalytic/ultrafiltration water treatment processes. Water Research, 2012, 46, 1858-1872.	11.3	119
5	A review of the latest development of polyimide based membranes for CO 2 separations. Reactive and Functional Polymers, 2017, 120, 104-130.	4.1	116
6	Bulk nanobubbles: Production and investigation of their formation/stability mechanism. Journal of Colloid and Interface Science, 2020, 564, 371-380.	9.4	103
7	Preparation and investigation of distinct and shape stable paraffin/SiO2 composite PCM nanospheres. Energy Conversion and Management, 2018, 168, 382-394.	9.2	85
8	Characterization of highly selective microporous carbon hollow fiber membranes prepared from a commercial co-polyimide precursor. Journal of Porous Materials, 2008, 15, 625-633.	2.6	84
9	Preparation, characterization and gas permeation properties of carbon hollow fiber membranes based on MatrimidÂ® 5218 precursor. Journal of Materials Processing Technology, 2007, 186, 102-110.	6.3	83
10	Pore structure, interface properties and photocatalytic efficiency of hydration/dehydration derived TiO2/CNT composites. Applied Catalysis B: Environmental, 2014, 147, 65-81.	20.2	80
11	Clinoptilolite, a natural zeolite material: Structural characterization and performance evaluation on its dehydration properties of hydrocarbon-based fuels. Microporous and Mesoporous Materials, 2016, 225, 385-391.	4.4	80
12	Helium and hydrogen selective carbon hollow fiber membranes: The effect of pyrolysis isothermal time. Separation and Purification Technology, 2015, 142, 176-181.	7.9	71
13	New polyimideâ€“polyaniline hollow fibers: Synthesis, characterization and behavior in gas separation. European Polymer Journal, 2007, 43, 5010-5016.	5.4	65
14	Study of Cu(II) removal by Cystoseira crinitophylla biomass in batch and continuous flow biosorption. Chemical Engineering Journal, 2015, 277, 334-340.	12.7	59
15	Effect of copper and copper alginate treatment on wool fabric. Study of textile and antibacterial properties. Surface and Coatings Technology, 2013, 235, 24-31.	4.8	54
16	Metal Organic Framework â€” Based Mixed Matrix Membranes for Carbon Dioxide Separation: Recent Advances and Future Directions. Frontiers in Chemistry, 2020, 8, 534.	3.6	54
17	Bulk nanobubbles,Âgeneration methods and potential applications. Current Opinion in Colloid and Interface Science, 2021, 54, 101455.	7.4	53
18	High purity multi-walled carbon nanotubes: Preparation, characterization and performance as filler materials in co-polyimide hollow fiber membranes. Separation and Purification Technology, 2014, 122, 262-269.	7.9	48

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19	Preparation of carbon molecular sieve membranes with remarkable CO2/CH4 selectivity for high-pressure natural gas sweetening. Journal of Membrane Science, 2020, 614, 118529.	8.2	46
20	Screening Cellulose Spinning Parameters for Fabrication of Novel Carbon Hollow Fiber Membranes for Gas Separation. Industrial & Engineering Chemistry Research, 2019, 58, 13330-13339.	3.7	45
21	Nanomaterials in Cementitious Composites: An Update. Molecules, 2021, 26, 1430.	3.8	38
22	A methodology for the morphological and physicochemical characterisation of asymmetric carbon hollow fiber membranes. Journal of Membrane Science, 2011, 375, 113-123.	8.2	33
23	Mixed Matrix Hollow Fiber Membranes with enhanced gas permeation properties. Separation and Purification Technology, 2014, 132, 336-345.	7.9	33
24	Cellulose-based carbon hollow fiber membranes for high-pressure mixed gas separations of CO2/CH4 and CO2/N2. Separation and Purification Technology, 2020, 253, 117473.	7.9	32
25	A facile approach for the development of fine-tuned self-standing graphene oxide membranes and their gas and vapor separation performance. Journal of Membrane Science, 2015, 493, 734-747.	8.2	30
26	Comparison of self-standing and supported graphene oxide membranes prepared by simple filtration: Gas and vapor separation, pore structure and stability. Journal of Membrane Science, 2017, 522, 303-315.	8.2	27
27	Dispersion of Multi-Walled Carbon Nanotubes into White Cement Mortars: The Effect of Concentration and Surfactants. Nanomaterials, 2022, 12, 1031.	4.1	27
28	Development and characterization of silica-based membranes for hydrogen separation. Journal of Porous Materials, 2008, 15, 551-557.	2.6	26
29	Mixed matrix polymeric and carbon hollow fiber membranes with magnetic iron-based nanoparticles and their application in gas mixture separation. Materials Chemistry and Physics, 2019, 223, 220-229.	4.0	26
30	Characterization of carbonate rocks by combination of scattering, porosimetry and permeability techniques. Microporous and Mesoporous Materials, 2009, 120, 109-114.	4.4	25
31	Enhancement of Flux Performance in PTFE Membranes for Direct Contact Membrane Distillation. Polymers, 2020, 12, 345.	4.5	25
32	Natural resins and their application in antifouling fuel technology. Fuel Processing Technology, 2013, 114, 135-143.	7.2	24
33	Methods of evaluating pore morphology in hybrid organicâ€“inorganic porous materials. Microporous and Mesoporous Materials, 2009, 120, 53-61.	4.4	22
34	Fundamentals and applications of nanobubbles. Interface Science and Technology, 2019, , 69-99.	3.3	20
35	Facile synthesis of carbon supported copper nanoparticles from alginate precursor with controlled metal content and catalytic NO reduction properties. Journal of Hazardous Materials, 2011, 189, 384-390.	12.4	19
36	A novel method for improving the physicochemical properties of diesel and jet fuel using polyaspartate polymer additives. Fuel, 2013, 104, 155-162.	6.4	18

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37	Gas permeance properties of asymmetric carbon hollow fiber membranes at high feed pressures. Journal of Natural Gas Science and Engineering, 2016, 31, 842-851.	4.4	17
38	Long-term performance of highly selective carbon hollow fiber membranes for biogas upgrading in the presence of H2S and water vapor. Chemical Engineering Journal, 2022, 448, 137615.	12.7	17
39	Characterization of natural resin materials using water adsorption and various advanced techniques. Applied Physics A: Materials Science and Processing, 2015, 119, 735-743.	2.3	16
40	Graphene nanoplatelets based polyimide/Pebax dual-layer mixed matrix hollow fiber membranes for CO2/CH4 and He/N2 separations. International Journal of Greenhouse Gas Control, 2022, 114, 103588.	4.6	16
41	On the Formation of Nanobubbles in Vycor Porous Glass during the Desorption of Halogenated Hydrocarbons. Scientific Reports, 2015, 5, 10943.	3.3	15
42	Carbon dioxide permeation study through carbon hollow fiber membranes at pressures up to 55 bar. Separation and Purification Technology, 2014, 134, 158-162.	7.9	13
43	In situ small angle X-ray scattering and benzene adsorption on polymer-based carbon hollow fiber membranes. Adsorption, 2013, 19, 225-233.	3.0	12
44	Effect of agitation on batch adsorption process facilitated by using nanobubbles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 607, 125440.	4.7	12
45	Investigating the evolution of N2 transport mechanism during the cyclic CVD post-treatment of silica membranes. Microporous and Mesoporous Materials, 2008, 110, 11-24.	4.4	11
46	Water removal from biodiesel/diesel blends and jet fuel using natural resin as dehydration agent. Canadian Journal of Chemical Engineering, 2015, 93, 1812-1818.	1.7	11
47	Mechanical behavior of MWCNTs based mixed-matrix polymeric and carbon hollow fiber membranes. Separation and Purification Technology, 2017, 183, 21-31.	7.9	11
48	Pure Curcumin Spherulites from Impure Solutions via Nonclassical Crystallization. ACS Omega, 2021, 6, 23884-23900.	3.5	10
49	A simple equation for accurate mesopore size calculations. Microporous and Mesoporous Materials, 2011, 145, 9-13.	4.4	9
50	An in situ antimicrobial susceptibility testing method based on in vivo measurements of chlorophyll Î± fluorescence. Journal of Microbiological Methods, 2015, 112, 49-54.	1.6	9
51	Preparation and characterization of graphene oxide as a candidate filler material for the preparation of mixed matrix polyimide membranes. Surface and Coatings Technology, 2018, 349, 1058-1068.	4.8	9
52	Effect of air gap on gas permeance/selectivity performance of BTDAâ€TDI/MDI copolyimide hollow fiber membranes. Journal of Applied Polymer Science, 2013, 130, 4490-4499.	2.6	8
53	Structural Characterization of Calcium Sulfate Bone Graft Substitute Cements. Materials Research, 2016, 19, 1108-1113.	1.3	8
54	Modified in situ antimicrobial susceptibility testing method based on cyanobacteria chlorophyll a fluorescence. Journal of Microbiological Methods, 2016, 121, 1-4.	1.6	8

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55	A comparative evaluation of bottom-up and break-down methodologies for the synthesis of calcium hydroxide nanoparticles for the consolidation of architectural monuments. Materials Today: Proceedings, 2018, 5, 27425-27433.	1.8	8
56	Comparative Evaluation of the Morphological Characteristics of Nanolime Dispersions for the Consolidation of Architectural Monuments. International Journal of Architectural Heritage, 2020, 14, 994-1007.	3.1	8
57	CO2/CH4 and He/N2 Separation Properties and Water Permeability Valuation of Mixed Matrix MWCNTs-Based Cellulose Acetate Flat Sheet Membranes: A Study of the Optimization of the Filler Material Dispersion Method. Nanomaterials, 2021, 11, 280.	4.1	8
58	In situ SAXS investigation of dibromomethane adsorption in ordered mesoporous silica. Adsorption, 2013, 19, 331-338.	3.0	7
59	A Study of the Reinforcement Effect of MWCNTs onto Polyimide Flat Sheet Membranes. Polymers, 2020, 12, 1381.	4.5	7
60	Phenol functionalized MWCNTs: A dispersion study into polar solvents by small angle neutron scattering. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 496, 94-99.	4.7	6
61	Polymeric Membrane Materials for CO2 Separations. , 2018, , 3-50.		6
62	The Optimization of Dispersion and Application Techniques for Nanocarbon-Doped Mixed Matrix Gas Separation Membranes. Membranes, 2022, 12, 87.	3.0	6
63	A new fuel (Dâ€“BDâ€“J) from the blending of conventional diesel, biodiesel and JP8. Fuel Processing Technology, 2014, 127, 66-71.	7.2	5
64	Hydrogen adsorption simulations in isomorphous borohydride and imidazolate frameworks: Evaluations using interpolation. International Journal of Hydrogen Energy, 2021, 46, 19778-19787.	7.1	4
65	A rotating sample cell for in situ measurements of adsorption with x-rays. Review of Scientific Instruments, 2018, 89, 123113.	1.3	3
66	Scanning of Adsorption Hysteresis In Situ with Small Angle X-Ray Scattering. PLoS ONE, 2016, 11, e0164636.	2.5	3
67	In situ SAXS study of dibromomethane adsorption on MCM-41. Microporous and Mesoporous Materials, 2015, 209, 122-125.	4.4	2
68	Monitoring the CO₂ enhanced oil recovery process at the nanoscale: an in situ neutron scattering study. Energy Advances, 2022, 1, 67-75.	3.3	2
69	One-step preparation of bilayered films from kraft lignin and cellulose acetate to mimic tree bark. European Journal of Wood and Wood Products, 2020, 78, 831-834.	2.9	1
70	Strain Sensing of Glass Fiber Reinforced Coupons by Using Carbon Nanotube Doped Resin. , 2013, , .		0
71	Mesoporous silica based copper catalytic materials for potential deNOx application: Synthesis and characterization. Materials Today: Proceedings, 2021, , .	1.8	0
72	Special issue â€œMaterials and membranes for hydrogen separation/purification processesâ€• International Journal of Hydrogen Energy, 2021, 46, 19704.	7.1	0

#	Article	IF	Citations
73	Nanohybrid Graphene-Based Materials for Advanced Wastewater Treatment. , 2020, , 91-123.		0
74	Carbon Membranes for Natural Gas Sweetening. , 2020, , 79-113.		0