David Alfredo Pacheco Tanaka

List of Publications by Year
in descending order

106 papers	3,563 citations	101384 36 h-index	155451 55 g-index
108 all docs	108 docs citations	108 times ranked	3097 citing authors

#	Article	IF	Citations
1	Advances in membranes and membrane reactors for the Fischer-Tropsch synthesis process for biofuel production. Reviews in Chemical Engineering, 2022, 38, 55-76.	2.3	15
2	Vapor/gas separation through carbon molecular sieve membranes: Experimental and theoretical investigation. International Journal of Hydrogen Energy, 2022, 47, 11385-11401.	3.8	7
3	New hydrophilic carbon molecular sieve membranes for bioethanol dehydration via pervaporation. Chemical Engineering Journal, 2022, 435, 134891.	6.6	18
4	Effect of aluminium acetyl acetonate on the hydrogen and nitrogen permeation of carbon molecular sieves membranes. International Journal of Hydrogen Energy, 2022, 47, 14570-14579.	3.8	6
5	Alternative methods for cleaning membranes in water and wastewater treatment. Water Environment Research, 2022, 94, e10708.	1.3	6
6	Continuous Cultivation of Microalgae in Cattle Slaughterhouse Wastewater Treated with Hydrodynamic Cavitation. Water (Switzerland), 2022, 14, 1288.	1.2	3
7	Hydrogen permeation studies of composite supported alumina-carbon molecular sieves membranes: Separation of diluted hydrogen from mixtures with methane. International Journal of Hydrogen Energy, 2021, 46, 19758-19767.	3.8	17
8	Systematic experimental assessment of concentration polarization and inhibition in Pd-based membranes for hydrogen purification. Fuel Processing Technology, 2021, 213, 106661.	3.7	10
9	On the use of double-skinned membranes to prevent chemical interaction between membranes and catalysts. International Journal of Hydrogen Energy, 2021, 46, 20240-20244.	3.8	4
10	Acid precipitation followed by microalgae (Chlorella vulgaris) cultivation as a new approach for poultry slaughterhouse wastewater treatment. Bioresource Technology, 2021, 335, 125284.	4.8	23
11	Emerging contaminants, SARS-COV-2 and wastewater treatment plants, new challenges to confront: A short review. Bioresource Technology Reports, 2021, 15, 100731.	1.5	17
12	Tailoring pore structure and surface chemistry of microporous Alumina-Carbon Molecular Sieve Membranes (Al-CMSMs) by altering carbonization temperature for optimal gas separation performance: An investigation using low-field NMR relaxation measurements. Chemical Engineering Journal, 2021, 424, 129313.	6.6	21
13	Hydrogen permeation and stability in ultra-thin Pd Ru supported membranes. International Journal of Hydrogen Energy, 2020, 45, 7455-7467.	3.8	20
14	Influence of H2S on the hydrogen flux of thin-film PdAgAu membranes. International Journal of Hydrogen Energy, 2020, 45, 7303-7312.	3.8	18
15	Water Adsorption Effect on Carbon Molecular Sieve Membranes in H2-CH4 Mixture at High Pressure. Energies, 2020, 13, 3577.	1.6	7
16	Comparison between carbon molecular sieve and Pd-Ag membranes in H2-CH4 separation at high pressure. International Journal of Hydrogen Energy, 2020, 45, 28876-28892.	3.8	14
17	The influence of the support composition on the physicochemical and catalytic properties of Cu catalysts supported on Zirconia-Alumina for methanol steam reforming. Applied Catalysis B: Environmental, 2020, 277, 119243.	10.8	53
18	Techno-economic evaluation on a hybrid technology for low hydrogen concentration separation and purification from natural gas grid. International Journal of Hydrogen Energy, 2020, 46, 23417-23417.	3.8	76

#	Article	IF	Citations
19	Membrane reactors using metallic membranes. , 2020, , 235-260.		3
20	An overview of some recent european projects on metallic membranes. , 2020, , 313-379.		2
21	Metallic membranes for hydrogen separation. , 2020, , 1-29.		5
22	Upgrading biogas with novel composite carbon molecular sieve (CCMS) membranes: Experimental and techno-economic assessment. Chemical Engineering Journal, 2020, 394, 124957.	6.6	24
23	Effect of sweep gas on hydrogen permeation of supported Pd membranes: Experimental and modeling. International Journal of Hydrogen Energy, 2019, 44, 4228-4239.	3.8	34
24	Fusion Exhaust Gas Separation with a Carbon Molecular Sieve (CMS) Membrane. InterCeram: International Ceramic Review, 2019, 68, 14-17.	0.2	2
25	Membranes utilization for biogas upgrading to synthetic natural gas. , 2019, , 245-274.		5
26	Mixed Ionic-Electronic Conducting Membranes (MIEC) for Their Application in Membrane Reactors: A Review. Processes, 2019, 7, 128.	1.3	68
27	Long-Term Stability of Thin-Film Pd-Based Supported Membranes. Processes, 2019, 7, 106.	1.3	30
28	Ethanol Reforming in Thermally Coupled, Fluidized-Bed, Bubble Column, and Membrane Reactors. , 2019, , 355-382.		1
29	The membrane-assisted chemical looping reforming concept for efficient H2 production with inherent CO2 capture: Experimental demonstration and model validation. Applied Energy, 2018, 215, 75-86.	5.1	49
30	Unravelling the transport mechanism of pore-filled membranes for hydrogen separation. Separation and Purification Technology, 2018, 203, 41-47.	3.9	13
31	Catalytic nickel and nickelâ€“copper alloy hollow-fiber membranes for the remediation of organic pollutants by electrocatalysis. Journal of Materials Chemistry A, 2018, 6, 6904-6915.	5.2	18
32	Hydrogen production with integrated CO2 capture in a membrane assisted gas switching reforming reactor: Proof-of-Concept. International Journal of Hydrogen Energy, 2018, 43, 6177-6190.	3.8	39
33	Development of Pd-based double-skinned membranes for hydrogen production in fluidized bed membrane reactors. Journal of Membrane Science, 2018, 550, 536-544.	4.1	50
34	Direct route from ethanol to pure hydrogen through autothermal reforming in a membrane reactor: Experimental demonstration, reactor modelling and design. Energy, 2018, 143, 666-681.	4.5	51
35	Membrane Optimization and Process Condition Investigation for Enhancing the CO2 Separation From Natural Gas. , 2018, , 469-509.		3
36	On concentration polarisation in a fluidized bed membrane reactor for biogas steam reforming: Modelling and experimental validation. Chemical Engineering Journal, 2018, 348, 232-243.	6.6	44

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37	Attrition-resistant membranes for fluidized-bed membrane reactors: Double-skin membranes. Journal of Membrane Science, 2018, 563, 419-426.	4.1	40
38	Preparation and characterization of ceramic supported ultra-thin (~1 Âµm) Pd-Ag membranes. Journal of Membrane Science, 2017, 528, 12-23.	4.1	57
39	Advanced m-CHP fuel cell system based on a novel bio-ethanol fluidized bed membrane reformer. International Journal of Hydrogen Energy, 2017, 42, 13970-13987.	3.8	24
40	Palladium based membranes and membrane reactors for hydrogen production and purification: An overview of research activities at Tecnalia and TU/e. International Journal of Hydrogen Energy, 2017, 42, 13763-13776.	3.8	70
41	Effect of Au addition on hydrogen permeation and the resistance to H2S on Pd-Ag alloy membranes. Journal of Membrane Science, 2017, 542, 329-341.	4.1	31
42	Preparation of Porous Stainless Steel Hollow-Fibers through Multi-Modal Particle Size Sintering towards Pore Engineering. Membranes, 2017, 7, 40.	1.4	8
43	Recent Advances in Pd-Based Membranes for Membrane Reactors. Molecules, 2017, 22, 51.	1.7	82
44	Morphology and N2 Permeance of Sputtered Pd-Ag Ultra-Thin Film Membranes. Molecules, 2016, 21, 210.	1.7	8
45	Fluidized Bed Membrane Reactors for Ultra Pure H2 Productionâ€”A Step forward towards Commercialization. Molecules, 2016, 21, 376.	1.7	45
46	Recent Advances on Carbon Molecular Sieve Membranes (CMSMs) and Reactors. Processes, 2016, 4, 29.	1.3	35
47	Pd-based metallic supported membranes: High-temperature stability and fluidized bed reactor testing. International Journal of Hydrogen Energy, 2016, 41, 8706-8718.	3.8	60
48	Preparation and characterization of metallic supported thin Pdâ€“Ag membranes for hydrogen separation. Chemical Engineering Journal, 2016, 305, 182-190.	6.6	83
49	Catalytic membrane reactor for the production of biofuels. Catalysis Today, 2016, 268, 37-45.	2.2	16
50	N2, He and CO2 diffusion mechanism through nanoporous YSZ/Î³-Al2O3 layers and their use in a pore-filled membrane for hydrogen membrane reactors. International Journal of Hydrogen Energy, 2016, 41, 8732-8744.	3.8	19
51	Development of highly permeable ultra-thin Pd-based supported membranes. Chemical Engineering Journal, 2016, 305, 149-155.	6.6	34
52	Fabrication of supported palladium alloy membranes using electroless plating techniques. , 2015, , 83-99.		6
53	Growth of nano-textured graphene coatings across highly porous stainless steel supports towards corrosion resistant coatings. Carbon, 2015, 87, 395-408.	5.4	65
54	CuO/ZnO catalysts for methanol steam reforming: The role of the support polarity ratio and surface area. Applied Catalysis B: Environmental, 2015, 174-175, 67-76.	10.8	107

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55	Syngas upgrading in a membrane reactor with thin Pd-alloy supported membrane. International Journal of Hydrogen Energy, 2015, 40, 10883-10893.	3.8	49
56	Membrane reactors for autothermal reforming of methane, methanol, and ethanol. , 2015, , 61-98.		1
57	Composite-alumina-carbon molecular sieve membranes prepared from novolac resin and boehmite. Part I: Preparation, characterization and gas permeation studies. International Journal of Hydrogen Energy, 2015, 40, 5653-5663.	3.8	48
58	Preparation and characterization of thin-film Pdâ€“Ag supported membranes for high-temperature applications. International Journal of Hydrogen Energy, 2015, 40, 13463-13478.	3.8	58
59	Composite-alumina-carbon molecular sieve membranes prepared from novolac resin and boehmite. Part II: Effect of the carbonization temperature on the gas permeation properties. International Journal of Hydrogen Energy, 2015, 40, 3485-3496.	3.8	52
60	Development of thin Pdâ€“Ag supported membranes for fluidized bed membrane reactors including WGS related gases. International Journal of Hydrogen Energy, 2015, 40, 3506-3519.	3.8	98
61	Metallic porous supports and ceramic interface layer development for H₂separation membranes. Powder Metallurgy, 2014, 57, 232-235.	0.9	2
62	Preparation and characterization of crosslinked PVAL membranes loaded with boehmite nanoparticles for fuel cell applications. Journal of Applied Polymer Science, 2014, 131, .	1.3	14
63	Boehmite-phenolic resin carbon molecular sieve membranesâ€”Permeation and adsorption studies. Chemical Engineering Research and Design, 2014, 92, 2668-2680.	2.7	43
64	Controlled Heating of Palladium Dispersed Porous Alumina Tube and Continuous Oxidation of Ethylene Using Frequency-Variable Single-Mode Microwave Reactor. Industrial & Engineering Chemistry Research, 2014, 53, 1073-1078.	1.8	13
65	Simple hydrothermal synthesis method for tailoring the physicochemical properties of ZnO: morphology, surface area and polarity. RSC Advances, 2014, 4, 31166.	1.7	14
66	Effect of incorporation of graphene oxide and graphene nanoplatelets on mechanical and gas permeability properties of poly(lactic acid) films. Polymer International, 2013, 62, 33-40.	1.6	261
67	Carbonâ€“Al2O3â€“Ag composite molecular sieve membranes for gas separation. Chemical Engineering Research and Design, 2012, 90, 2338-2345.	2.7	40
68	Aging Studies of Composite Alumina Carbon Molecular Sieve Membranes. Procedia Engineering, 2012, 44, 639-641.	1.2	1
69	Preparation and Characterization of Pd-Ag Alloy Membranes via Simultaneous Plating by Continuous Addition of Ag to the Electroless Plating Solution. Procedia Engineering, 2012, 44, 1002-1004.	1.2	0
70	Reduced graphene oxide films as transparent counter-electrodes for dye-sensitized solar cells. Solar Energy, 2012, 86, 716-724.	2.9	111
71	An investigation of thermal stability of thin palladiumâ€“silver alloy membranes for high temperature hydrogen separation. Journal of Membrane Science, 2011, 366, 212-219.	4.1	72
72	Composite phenolic resin-based carbon molecular sieve membranes for gas separation. Carbon, 2011, 49, 4348-4358.	5.4	74

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73	Direct production of hydrogen peroxide from oxygen and hydrogen applying membrane-permeation mechanism. Chemical Engineering Science, 2010, 65, 436-440.	1.9	26
74	In situ high-temperature X-ray diffraction study of thin palladium/Î±-alumina composite membranes and their hydrogen permeation properties. Journal of Membrane Science, 2009, 335, 126-132.	4.1	33
75	Importance of the support material in thin palladium composite membranes for steady hydrogen permeation at elevated temperatures. Physical Chemistry Chemical Physics, 2009, 11, 8632.	1.3	43
76	Silica Capillary with Thin Metal (Pd and Pt) Inner Wall: Application to Continuous Decomposition of Hydrogen Peroxide. Chemistry Letters, 2009, 38, 146-147.	0.7	22
77	Preparation of â€œpore-fillâ€•type Pdâ€“YSZâ€“Î³-Al2O3 composite membrane supported on Î±-Al2O3 tube for hydrogen separation. Journal of Membrane Science, 2008, 320, 436-441.	4.1	56
78	Strong Interaction at the Palladium/Alumina Interface of Membrane during Hydrogen Permeation at Elevated Temperature. Chemistry Letters, 2008, 37, 1004-1005.	0.7	24
79	Preparation and Hydrogen Permeation Properties of Thin Pd-Au Alloy Membranes Supported on Porous α-Alumina Tube. Materials Transactions, 2008, 49, 449-452.	0.4	22
80	Preparation of Porous Carbon Spheres Dispersed with Pdâ€“Ag Alloy Nanoparticles. Chemistry Letters, 2007, 36, 152-153.	0.7	2
81	Hydrogen Gas Diffusion Electrode Prepared from Porous Carbon Spheres Dispersed with Pdâ€“Ag Alloy Nanoparticles. Bulletin of the Chemical Society of Japan, 2007, 80, 2243-2245.	2.0	0
82	Lower Temperature Dehydrogenation of Methylcyclohexane by Membrane-assisted Equilibrium Shift. Chemistry Letters, 2006, 35, 1372-1373.	0.7	21
83	Hydrogen permeability study of the thin Pdâ€“Ag alloy membranes in the temperature range across the Î±â€“Î² phase transition. Journal of Membrane Science, 2006, 282, 370-374.	4.1	128
84	Fabrication of Hydrogen-Permeable Composite Membranes Packed with Palladium Nanoparticles. Advanced Materials, 2006, 18, 630-632.	11.1	83
85	Switching of PET Fluorescence Signals Induced by Ligand Exchange Reactions of N-(9-Anthrylmethyl)amine on Cu(II) Complexes and Its Application to Postcolumn Detection of Glyphosate. Analytical Sciences, 2005, 21, 417-420.	0.8	3
86	Preparation of palladium and silver alloy membrane on a porous Î±-alumina tube via simultaneous electroless plating. Journal of Membrane Science, 2005, 247, 21-27.	4.1	134
87	Simple detection of trace Pb2+ by enrichment on cerium phosphate membrane filter coupled with color signaling. Analyst, The, 2005, 130, 1537.	1.7	12
88	Separation and concentration of trace Pb(II) by the porous resin loaded with Î±-zirconium phosphate crystals. Reactive and Functional Polymers, 2004, 58, 131-138.	2.0	27
89	A Density Functional Study To Choose the Best Fluorophore for Photon-Induced Electron-Transfer (PET) Sensors. Chemistry - A European Journal, 2003, 9, 3920-3929.	1.7	25
90	Loading of Crystalline .ALPHA.-zirconium Phosphate onto Porous Materials:-Preparation and Application to the Concentration of Trace Ions-. Journal of Ion Exchange, 2003, 14, 93-96.	0.1	1

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91	Switching of Terbium(III)-sensitized Luminescence by Ligand Exchange Reaction: Determination of Catecholamines. Chemistry Letters, 2002, 31, 722-723.	0.7	2
92	Adsorption of fluoride ion on the zirconium(IV) complexes of the chelating resins functionalized with amine-N-acetate ligands. Separation Science and Technology, 2002, 37, 877-894.	1.3	24
93	Fluorometric detection of fluoride ion by ligand exchange reaction with 3-hydroxyflavone coordinated to a zirconium(iv)â€“EDTA complex. Perkin Transactions II RSC, 2002, , 759-762.	1.1	30
94	Preparation of porous chelating resin containing linear polymer ligand and the adsorption characteristics for harmful metal ions. Reactive and Functional Polymers, 2002, 53, 91-101.	2.0	41
95	ADSORPTION CHARACTERISTICS AND REMOVAL OF OXO-ANIONS OF ARSENIC AND SELENIUM ON THE POROUS POLYMERS LOADED WITH MONOCLINIC HYDROUS ZIRCONIUM OXIDE. Separation Science and Technology, 2001, 36, 103-111.	1.3	55
96	Adsorption and removal of oxo-anions of arsenic and selenium on the zirconium(iv) loaded polymer resin functionalized with diethylenetriamine-N,N,Nâ€²,Nâ€²-polyacetic acid. Journal of Environmental Monitoring, 2000, 2, 550-555.	2.1	46
97	Equilibrium and kinetic studies on the complexation of boric acid with chromotropic acid. Dalton Transactions RSC, 2000, , 3136-3142.	2.3	22
98	Complexation and removal of trace boron from aqueous solution by an anion exchange resin loaded with chromotropic acid (disodium 2,7-dihydroxynaphthalene-4,5-disulfonate). Journal of the Chemical Society Dalton Transactions, 1999, , 1639-1644.	1.1	20
99	Thermodynamics of protonation and complexation of EDTA derivatives and metal cations in water. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3105-3110.	1.7	19
100	Thermodynamics of Calix(4)arene Esters. 1. Complexation of Alkyl p-tert-Butylcalix(4)arenetetraethanoates and Alkali-Metal Cations in Acetonitrile and in Benzonitrile. The Journal of Physical Chemistry, 1995, 99, 16776-16780.	2.9	34
101	Thermodynamic and electrochemical aspects of the interactions of functionalised calix(4)arenes and metal cations in 'allosteric media'. Pure and Applied Chemistry, 1994, 66, 435-440.	0.9	15
102	Thermodynamic and electrochemical aspects ofp-tert-butylcalix[n]arenes (n=4, 6, 8) and their interactions with amines. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 1994, 19, 371-387.	1.6	11
103	From neutral to ionic species: amineâ€“p-tert-butylcalix(n)arene (n= 6, 8) interaction. Electrochemical, thermodynamic and structural studies in benzonitrile. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 2727-2736.	1.7	32
104	From molecules to electrolytes. Electrochemical and thermodynamic aspects of the interaction of phenol and resorcinol based calixarenes with amines. Pure and Applied Chemistry, 1993, 65, 415-422.	0.9	14
105	Effect of Î²-cyclodextrin on the transfer of N1-substituted sulfonamides from water to chloroform. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1665-1668.	1.7	11
106	First report on electrochemical, thermodynamic and structural aspects of the interaction of p-tert-butylcalix[8]arene and cryptands in benzonitrile. Journal of the Chemical Society Chemical Communications, 1992, , 855-856.	2.0	8