

Fernando V Diez

List of Publications by Year in descending order

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105
papers

3,143
citations

145106

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all docs

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docs citations

105
times ranked

2853
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of an integrated adsorption-regenerative catalytic oxidation process for the harnessing of lean methane emissions. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107013.	3.3	4
2	Control of regenerative catalytic oxidizers used in coal mine ventilation air methane exploitation. <i>Chemical Engineering Research and Design</i> , 2020, 134, 333-342.	2.7	12
3	Reverse flow reactors as sustainable devices for performing exothermic reactions: Applications and engineering aspects. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 135, 175-189.	1.8	27
4	Direct synthesis of dimethyl ether in multi-tubular fixed-bed reactors: 2D multi-scale modelling and optimum design. <i>Fuel Processing Technology</i> , 2018, 174, 149-157.	3.7	24
5	Open-cell foams as beds in multiphase reactors: Residence time distribution and mass transfer. <i>Chemical Engineering Journal</i> , 2017, 316, 323-331.	6.6	25
6	Performance of a cell-foam trickle-bed reactor for phenol wet oxidation: Influence of operation parameters and modelling. <i>Chemical Engineering Research and Design</i> , 2017, 107, 35-43.	2.7	3
7	Assessment of phenol wet oxidation on CuO/ γ -Al ₂ O ₃ catalysts: Competition between heterogeneous and leached-copper homogeneous reaction paths. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 2570-2578.	3.3	18
8	Transition metal oxide catalysts as an alternative for the oxidation of nitrogen monoxide to nitrogen dioxide: kinetic modelling at high space velocity. <i>Journal of Chemical Technology and Biotechnology</i> , 2016, 91, 359-366.	1.6	0
9	Combustion of coal mine ventilation air methane in a regenerative combustor with integrated adsorption: Reactor design and optimization. <i>Applied Thermal Engineering</i> , 2016, 102, 167-175.	3.0	26
10	Liquid hold-up and gas-liquid mass transfer in an alumina open-cell foam. <i>Chemical Engineering Science</i> , 2016, 143, 297-304.	1.9	27
11	Performance of ceramic foams as gas-liquid contactors for phenol wet oxidation in the trickle regime. <i>Catalysis Today</i> , 2016, 273, 172-177.	2.2	12
12	Catalytic combustion of sulphur-containing methane lean emissions in a reverse-flow reactor with integrated adsorption. <i>Chemical Engineering Journal</i> , 2016, 285, 39-48.	6.6	7
13	Coal mine ventilation air methane combustion in a catalytic reverse flow reactor: Influence of emission humidity. <i>Fuel Processing Technology</i> , 2015, 133, 202-209.	3.7	22
14	Experimental demonstration and modeling of an adsorption-enhanced reverse flow reactor for the catalytic combustion of coal mine ventilation air methane. <i>Chemical Engineering Journal</i> , 2015, 279, 198-206.	6.6	8
15	Influence of operation conditions on the copper-catalysed homogeneous wet oxidation of phenol: Development of a kinetic model. <i>Chemical Engineering Journal</i> , 2015, 270, 122-132.	6.6	21
16	Selective catalytic reduction of NO in a reverse-flow reactor: Modelling and experimental validation. <i>Applied Energy</i> , 2015, 138, 183-192.	5.1	12
17	The role of reaction kinetics and mass transfer in the selective catalytic reduction of NO with NH ₃ in monolithic reactors. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 1299-1307.	1.6	9
18	A new method for controlling the ignition state of a regenerative combustor using a heat storage device. <i>Applied Energy</i> , 2014, 116, 322-332.	5.1	18

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19	Evaluation of the use of ceramic foams as catalyst supports for reverse-flow combustors. <i>Chemical Engineering Journal</i> , 2013, 221, 44-54.	6.6	29
20	Modelling of hydrogen perm-selective membrane reactors for catalytic methane steam reforming. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 18433-18445.	3.8	33
21	Fixed bed membrane reactors for WGSR-based hydrogen production: Optimisation of modelling approaches and reactor performance. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 4997-5010.	3.8	30
22	Performance of silicon-carbide foams as supports for Pd-based methane combustion catalysts. <i>Journal of Chemical Technology and Biotechnology</i> , 2012, 87, 360-367.	1.6	17
23	Modelling of a Monolithic Reverse Flow Reactor for Selective Catalytic Reduction of NO by Ammonia. , 2012, , 26-51.		0
24	Rational design of heating elements using CFD: Application to a bench-scale adiabatic reactor. <i>Computers and Chemical Engineering</i> , 2011, 35, 2326-2333.	2.0	6
25	Analysis of a fluidized bed membrane reactor for butane partial oxidation to maleic anhydride: 2D modelling. <i>Chemical Engineering Science</i> , 2010, 65, 3538-3548.	1.9	28
26	Monoliths as suitable catalysts for reverse-flow combustors: Modeling and experimental validation. <i>AIChE Journal</i> , 2010, 56, 3162-3173.	1.8	17
27	Partial oxidation of n-butane to maleic anhydride over VPO in a simulated circulating fluidized bed reactor. <i>Applied Catalysis A: General</i> , 2010, 376, 76-82.	2.2	13
28	Minimization of the deactivation of palladium catalysts in the hydrodechlorination of trichloroethylene in wastewaters. <i>Applied Catalysis B: Environmental</i> , 2010, 95, 288-296.	10.8	55
29	Performance of carbon nanofibres, high surface area graphites, and activated carbons as supports of Pd-based hydrodechlorination catalysts. <i>Catalysis Today</i> , 2010, 150, 16-21.	2.2	20
30	Demonstration of a control system for combustion of lean hydrocarbon emissions in a reverse flow reactor. <i>Chemical Engineering Science</i> , 2010, 65, 54-59.	1.9	16
31	Systematic study of the performance of a reverse flow reactor for the treatment of lean hydrocarbon emissions. <i>Journal of Chemical Technology and Biotechnology</i> , 2009, 84, 1292-1302.	1.6	9
32	Simplified design methods of reverse flow catalytic combustors for the treatment of lean hydrocarbon-air mixtures. <i>Chemical Engineering and Processing: Process Intensification</i> , 2009, 48, 229-238.	1.8	20
33	Performance of reverse flow monolithic reactor for water-gas shift reaction. <i>Catalysis Today</i> , 2009, 147, S185-S190.	2.2	9
34	Procedures for heat recovery in the catalytic combustion of lean methane-air mixtures in a reverse flow reactor. <i>Chemical Engineering Journal</i> , 2009, 147, 356-365.	6.6	43
35	Combustion of Methane in Lean Mixtures over Bulk Transition-Metal Oxides: Evaluation of the Activity and Self-Deactivation. <i>Energy & Fuels</i> , 2009, 23, 86-93.	2.5	69
36	Sulphur poisoning of palladium catalysts used for methane combustion: Effect of the support. <i>Journal of Hazardous Materials</i> , 2008, 153, 742-750.	6.5	47

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37	Sulphur poisoning of transition metal oxides used as catalysts for methane combustion. <i>Applied Catalysis A: General</i> , 2008, 341, 174-180.	2.2	71
38	Combustion of toluene-hexane binary mixtures in a reverse flow catalytic reactor. <i>Chemical Engineering Science</i> , 2008, 63, 5003-5009.	1.9	14
39	Effect of organosulphur, organonitrogen and organooxygen compounds on the hydrodechlorination of tetrachloroethylene over Pd/Al ₂ O ₃ . <i>Applied Catalysis B: Environmental</i> , 2008, 82, 264-272.	10.8	8
40	Preparation of carbon nanofibres supported palladium catalysts for hydrodechlorination reactions. <i>Catalysis Communications</i> , 2008, 9, 2080-2084.	1.6	16
41	Effect of hydrothermal ageing on the performance of Ce-promoted PdO/ZrO ₂ for methane combustion. <i>Catalysis Communications</i> , 2008, 9, 2291-2296.	1.6	34
42	Oxidation of trichloroethene over metal oxide catalysts: Kinetic studies and correlation with adsorption properties. <i>Chemosphere</i> , 2007, 66, 1706-1715.	4.2	55
43	Bioremediation for Shoreline Cleanup: In Situ vs. On-Site Treatments. <i>Environmental Engineering Science</i> , 2007, 24, 493-504.	0.8	28
44	Combustion of medium concentration CH ₄ -air mixtures in non-stationary reactors. <i>Chemical Engineering Journal</i> , 2007, 131, 343-349.	6.6	10
45	Regeneration of Pd/Al ₂ O ₃ catalysts used for tetrachloroethylene hydrodechlorination. <i>Reaction Kinetics and Catalysis Letters</i> , 2007, 90, 101-106.	0.6	13
46	Effect of the catalyst properties on the performance of a reverse flow reactor for methane combustion in lean mixtures. <i>Chemical Engineering Journal</i> , 2007, 129, 1-10.	6.6	17
47	Catalytic combustion of trichloroethene over Ru/Al ₂ O ₃ : Reaction mechanism and kinetic study. <i>Catalysis Communications</i> , 2006, 7, 945-949.	1.6	41
48	VPO transient lattice oxygen contribution. <i>Catalysis Today</i> , 2006, 112, 45-48.	2.2	21
49	Heat transfer studies in an inorganic membrane reactor at pilot plant scale. <i>Catalysis Today</i> , 2006, 118, 32-38.	2.2	4
50	Fluid bed gas RTD: Effect of fines and internals. <i>Powder Technology</i> , 2006, 168, 1-9.	2.1	25
51	Deactivation of a Pd/Al ₂ O ₃ catalyst used in hydrodechlorination reactions: Influence of the nature of organochlorinated compound and hydrogen chloride. <i>Applied Catalysis B: Environmental</i> , 2006, 62, 57-65.	10.8	84
52	Performance of alumina-supported noble metal catalysts for the combustion of trichloroethene at dry and wet conditions. <i>Applied Catalysis B: Environmental</i> , 2006, 64, 262-271.	10.8	45
53	Effect of wall properties on the behavior of bench-scale reverse flow reactors. <i>AIChE Journal</i> , 2006, 52, 3203-3209.	1.8	14
54	Membrane pilot reactor applied to selective oxidation reactions. <i>Catalysis Today</i> , 2005, 104, 177-184.	2.2	17

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55	Design and testing of small-scale unsteady-state afterburners and reactors. <i>AIChE Journal</i> , 2005, 51, 1654-1664.	1.8	37
56	Design and testing of a control system for reverse-flow catalytic afterburners. <i>AIChE Journal</i> , 2005, 51, 3020-3027.	1.8	22
57	Combustion of methane lean mixtures in reverse flow reactors: Comparison between packed and structured catalyst beds. <i>Catalysis Today</i> , 2005, 105, 701-708.	2.2	61
58	Methane catalytic combustion over Pd/Al ₂ O ₃ in presence of sulphur dioxide: development of a regeneration procedure. <i>Catalysis Letters</i> , 2005, 100, 27-34.	1.4	33
59	Oxidation of methane over palladium catalysts: effect of the support. <i>Chemosphere</i> , 2005, 58, 9-17.	4.2	62
60	Catalytic combustion of methane over red mud-based catalysts. <i>Applied Catalysis B: Environmental</i> , 2004, 47, 37-45.	10.8	95
61	Combustion of methane over palladium catalyst in the presence of inorganic compounds: inhibition and deactivation phenomena. <i>Applied Catalysis B: Environmental</i> , 2004, 47, 85-93.	10.8	65
62	Development of a kinetic model for the oxidation of methane over Pd/Al ₂ O ₃ at dry and wet conditions. <i>Applied Catalysis B: Environmental</i> , 2004, 51, 229-238.	10.8	93
63	Methane catalytic combustion over Pd/Al ₂ O ₃ in presence of sulphur dioxide: development of a deactivation model. <i>Applied Catalysis A: General</i> , 2004, 259, 41-48.	2.2	47
64	Transient n-butane partial oxidation kinetics over VPO. <i>Applied Catalysis A: General</i> , 2004, 263, 193-202.	2.2	43
65	Catalytic combustion of methane over commercial catalysts in presence of ammonia and hydrogen sulphide. <i>Chemosphere</i> , 2004, 55, 681-689.	4.2	32
66	Hydrodechlorination of tetrachloroethene over Pd/Al ₂ O ₃ : influence of process conditions on catalyst performance and stability. <i>Applied Catalysis B: Environmental</i> , 2003, 40, 119-130.	10.8	48
67	Fines effects on collapsing fluidized beds. <i>Powder Technology</i> , 2003, 131, 234-240.	2.1	26
68	Degradation kinetics of meta- and para-aromatic polyamides. <i>Advances in Polymer Technology</i> , 2003, 22, 15-21.	0.8	4
69	Kinetic study of the gas-phase hydrogenation of aromatic and aliphatic organochlorinated compounds using a Pd/Al ₂ O ₃ catalyst. <i>Journal of Hazardous Materials</i> , 2003, 97, 281-294.	6.5	42
70	Methane oxidation over vanadium-modified Pd/Al ₂ O ₃ catalysts. <i>Catalysis Today</i> , 2003, 78, 191-196.	2.2	21
71	Inhibition effects of organosulphur compounds on the hydrodechlorination of tetrachloroethylene over Pd/Al ₂ O ₃ catalysts. <i>Catalysis Today</i> , 2003, 84, 121-127.	2.2	6
72	Butane Oxidation to Maleic Anhydride: Kinetic Modeling and Byproducts. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 6730-6742.	1.8	38

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73	Catalytic Hydrodechlorination of Chlorinated Olefins over a Pd/Al ₂ O ₃ Catalyst: Kinetics and Inhibition Phenomena. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 505-511.	1.8	43
74	Kinetics of the deep oxidation of benzene, toluene, n-hexane and their binary mixtures over a platinum on γ -alumina catalyst. <i>Applied Catalysis B: Environmental</i> , 2002, 38, 139-149.	10.8	223
75	Hydrodechlorination of tetrachloroethylene over sulfided catalysts: kinetic study. <i>Catalysis Today</i> , 2002, 73, 325-331.	2.2	13
76	Characterization of polyarylamide fibers by inverse gas chromatography. <i>Journal of Chromatography A</i> , 2002, 962, 153-160.	1.8	20
77	Ammonia Oxidation over Conventional Combustion Catalysts. <i>Reaction Kinetics and Catalysis Letters</i> , 2002, 76, 61-68.	0.6	13
78	Activity Coefficients for Cyclohexane, Cyclohexene, and Benzene in Extractive Distillation Solvents Using Non-Steady-State Gas Chromatography. <i>Journal of Chemical & Engineering Data</i> , 2001, 46, 98-101.	1.0	6
79	Catalytic hydrodechlorination of tetrachloroethylene over red mud. <i>Journal of Hazardous Materials</i> , 2001, 81, 103-114.	6.5	64
80	Thermogravimetric determination of coke deposits on alumina-supported noble metal catalysts used as hydrodechlorination catalysts. <i>Thermochimica Acta</i> , 2001, 379, 25-34.	1.2	45
81	Hydrodechlorination of tetrachloroethylene over vanadium-modified Pt/Al ₂ O ₃ catalysts. <i>Catalysis Letters</i> , 2001, 72, 177-182.	1.4	8
82	Characterisation of the deactivation of platinum and palladium supported on activated carbon used as hydrodechlorination catalysts. <i>Applied Catalysis B: Environmental</i> , 2001, 31, 113-122.	10.8	87
83	Characterisation and deactivation studies of sulfided red mud used as catalyst for the hydrodechlorination of tetrachloroethylene. <i>Applied Catalysis B: Environmental</i> , 2001, 29, 263-273.	10.8	66
84	Hydrodechlorination of tetrachloroethylene over modified red mud: deactivation studies and kinetics. <i>Applied Catalysis B: Environmental</i> , 2001, 34, 213-226.	10.8	22
85	Degradation mechanism and kinetics of a high thermally stable aromatic polyamide. <i>Advances in Polymer Technology</i> , 2000, 19, 120-131.	0.8	8
86	Hydrodechlorination of aliphatic organochlorinated compounds over commercial hydrogenation catalysts. <i>Applied Catalysis B: Environmental</i> , 2000, 25, 49-58.	10.8	97
87	Hydrodechlorination of Organochlorinated Aliphatic Compounds Over Nickel Catalysts. <i>Reaction Kinetics and Catalysis Letters</i> , 2000, 70, 61-66.	0.6	12
88	Hydrodechlorination of dichloromethane, trichloroethane, trichloroethylene and tetrachloroethylene over a sulfided Ni/Mo γ -alumina catalyst. <i>Applied Catalysis B: Environmental</i> , 1999, 20, 301-307.	10.8	49
89	Solvent extraction of molybdenum and tungsten by Alamine 336 and DEHPA in a rotating disc contactor. <i>Separation and Purification Technology</i> , 1999, 17, 173-179.	3.9	54
90	Catalytic hydrogenation of aromatic hydrocarbons in a trickle bed reactor. <i>Journal of Chemical Technology and Biotechnology</i> , 1998, 72, 74-84.	1.6	2

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91	Determination of Wetting Efficiency in Trickle-Bed Reactors by a Reaction Method. Industrial & Engineering Chemistry Research, 1997, 36, 2616-2625.	1.8	34
92	Solvent Selection for Cyclohexane~Cyclohexene~Benzene Separation by Extractive Distillation Using Non-Steady-State Gas Chromatography. Industrial & Engineering Chemistry Research, 1997, 36, 803-807.	1.8	48
93	Extractive Distillation of Hydrocarbons with Dimethylformamide:~ Experimental and Simulation Data. Industrial & Engineering Chemistry Research, 1997, 36, 4934-4939.	1.8	17
94	Hydrodynamics of a rotating disc contactor. Separation and Purification Technology, 1997, 11, 79-92.	3.9	38
95	Comparison of oils and asphaltenes from extraction of bituminous coal and lignite with hydrogenated anthracene oil. Fuel, 1995, 74, 1013-1017.	3.4	1
96	Characterization and deactivation of sulfided red mud used as hydrogenation catalyst. Applied Catalysis A: General, 1995, 128, 259-273.	2.2	24
97	Catalytic hydrogenation of multiring aromatic hydrocarbons in a coal tar fraction. Industrial & Engineering Chemistry Research, 1992, 31, 1007-1012.	1.8	28
98	Hydrogen-transferring liquefaction of two different rank coals employing hydrogenated anthracene oil as a donor solvent. Industrial & Engineering Chemistry Research, 1992, 31, 2407-2412.	1.8	3
99	Hydrogen incorporation during the hydrogenation reaction of an anthracene oil. The Chemical Engineering Journal, 1992, 48, 191-195.	0.4	0
100	Estimation of the concentration of hydroaromatic compounds in a hydrogenated anthracene oil. Fuel, 1992, 71, 761-765.	3.4	6
101	Decoloration of indene~coumarone resins by catalytic hydrogenation. Journal of Chemical Technology and Biotechnology, 1992, 53, 365-371.	1.6	9
102	Solvent extraction of molybdenum and tungsten by Alamine 336 and DEHPA. Hydrometallurgy, 1990, 25, 125-135.	1.8	64
103	Effect of the operating conditions on the preparation of stannous octanoate from stannous oxide. Industrial & Engineering Chemistry Research, 1988, 27, 845-847.	1.8	11
104	EFFECTS OF SURFACTANTS ON THE TERMINAL VELOCITY OF PHENOL SOLUTION DROPS FALLING IN n-BUTYL ACETATE. Journal of Dispersion Science and Technology, 1987, 8, 341-358.	1.3	0
105	On Site Bioremediation and Washing Techniques in a Cobble Beach Affected by Prestige Oil Spill. , 0, , 556-560.		0