Christos Kalamaras

List of Publications by Year
in descending order

55 papers	2,022 citations	257450 24 h-index	243625 44 g-index
55 all docs	55 docs citations	55 times ranked	1989 citing authors

#	Article	IF	Citations
1	â€œRedoxâ€•vs â€œassociative formate with â€“OH group regenerationâ€•WGS reaction mechanism on Pt/CeO2: Effect of platinum particle size. Journal of Catalysis, 2011, 279, 287-300.	6.2	226
2	Kinetic and mechanistic studies of the waterâ€“gas shift reaction on Pt/TiO2 catalyst. Journal of Catalysis, 2009, 264, 117-129.	6.2	168
3	Mechanistic Studies of the Waterâ€“Gas Shift Reaction over Pt/Ce_xZr_{1â€“x}O₂ Catalysts: The Effect of Pt Particle Size and Zr Dopant. ACS Catalysis, 2012, 2, 2729-2742.	11.2	133
4	Selective catalytic reduction of NOx on combined Fe- and Cu-zeolite monolithic catalysts: Sequential and dual layer configurations. Applied Catalysis B: Environmental, 2012, 111-112, 67-80.	20.2	127
5	Light-off criterion and transient analysis of catalytic monoliths. Chemical Engineering Science, 2003, 58, 1381-1405.	3.8	126
6	Mechanistic aspects of the waterâ€“gas shift reaction on alumina-supported noble metal catalysts: In situ DRIFTS and SSITKA-mass spectrometry studies. Catalysis Today, 2007, 127, 304-318.	4.4	93
7	Effects of Reaction Temperature and Support Composition on the Mechanism of Waterâ€“Gas Shift Reaction over Supported-Pt Catalysts. Journal of Physical Chemistry C, 2011, 115, 11595-11610.	3.1	90
8	The effect of La3+-doping of CeO2 support on the water-gas shift reaction mechanism and kinetics over Pt/Ce1â^'xLaxO2â^'Î´. Applied Catalysis B: Environmental, 2013, 136-137, 225-238.	20.2	70
9	The water-gas shift reaction on Pt/Î³-Al2O3 catalyst: Operando SSITKA-DRIFTS-mass spectroscopy studies. Catalysis Today, 2008, 138, 228-234.	4.4	66
10	Selective Oxidation of Methane to Methanol Over Cu- and Fe-Exchanged Zeolites: The Effect of Si/Al Molar Ratio. Catalysis Letters, 2016, 146, 483-492.	2.6	66
11	Lowâ€dimensional models for real time simulations of catalytic monoliths. AICHE Journal, 2009, 55, 1771-1783.	3.6	53
12	Effect of Pt:Pd ratio on CO and hydrocarbon oxidation. Applied Catalysis B: Environmental, 2018, 223, 67-75.	20.2	50
13	Selective catalytic reduction of NO by hydrogen (H2-SCR) on WO -promoted Ce Zr1-O2 solids. Applied Catalysis B: Environmental, 2014, 156-157, 72-83.	20.2	49
14	Optimal design of catalytic converters for minimizing cold-start emissions. Catalysis Today, 2004, 98, 357-373.	4.4	47
15	Flow structure underneath the large amplitude waves of a vertically falling film. AICHE Journal, 2008, 54, 1725-1740.	3.6	47
16	Steady-state and dynamic hysteresis effects during lean co-oxidation of CO and C3H6 over Pt/Al2O3 monolithic catalyst. Chemical Engineering Journal, 2015, 281, 322-333.	12.7	46
17	Performance features of Pt/BaO lean NOx trap with hydrogen as reductant. AICHE Journal, 2009, 55, 687-700.	3.6	44
18	The effect of La3+, Ti4+ and Zr4+ dopants on the mechanism of WGS on ceria-doped supported Pt catalysts. Catalysis Today, 2014, 228, 183-193.	4.4	35

#	Article	IF	Citations
19	Experimental and modeling study of CO and hydrocarbons light-off on various Pt-Pd/Î³-Al 2 O 3 diesel oxidation catalysts. Chemical Engineering Journal, 2017, 323, 347-360.	12.7	35
20	Selective catalytic reduction of NO by H2/C3H6 over Pt/Ce1-xZrxO2-Î´: The synergy effect studied by transient techniques. Applied Catalysis B: Environmental, 2017, 206, 308-318.	20.2	32
21	pH-Induced Re-entrant Microstructural Transitions in Cationic Surfactantâ€“Hydrotrope Mixtures. Langmuir, 2016, 32, 655-663.	3.5	31
22	Hydrocarbon Trapping over Ag-Beta Zeolite for Cold-Start Emission Control. Catalysis Letters, 2017, 147, 1355-1362.	2.6	30
23	Modeling and analysis of dual-layer NOx storage and reduction and selective catalytic reduction monolithic catalyst. Chemical Engineering Journal, 2014, 237, 109-122.	12.7	29
24	Modular reactors with electrical resistance heating for hydrocarbon cracking and other endothermic reactions. AIChE Journal, 2022, 68, .	3.6	25
25	Shape normalization for catalytic monoliths. Chemical Engineering Science, 2004, 59, 3737-3766.	3.8	24
26	The effect of preparation route of commercial Co/Î³-Al2O3 catalyst on important Fischer-Tropsch kinetic parameters studied by SSITKA and CO-DRIFTS transient hydrogenation techniques. Journal of Catalysis, 2019, 379, 60-77.	6.2	21
27	NO Inhibition Effects During Oxidation of Propylene on Cu-Chabazite Catalyst: A Kinetic and Mechanistic Study. Industrial & Engineering Chemistry Research, 2013, 52, 15455-15465.	3.7	20
28	Dynamic hysteresis in monolith reactors and hysteresis effects during co-oxidation of CO and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si14.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mtext>C</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mml:m Chemical Engineering Journal, 2016, 297, 325-340.	12.7	20
29	Analysis of light-off during oxidation of reactant mixtures on Pt/Al2O3 using micro-kinetic models. Chemical Engineering Science, 2017, 166, 320-333.	3.8	18
30	Multi-scale reduced order models for transient simulation of multi-layered monolith reactors. Chemical Engineering Journal, 2018, 352, 293-305.	12.7	17
31	Bifurcation analysis of index infinity DAE parabolic models describing reactors and reacting flows. AIChE Journal, 2017, 63, 295-305.	3.6	14
32	Scaleâ€up analysis of autothermal operation of methane oxidative coupling with La₂O₃/CaO catalyst. AIChE Journal, 2020, 66, e16949.	3.6	14
33	Re-evaluating selectivity as a determining factor in peroxidative methane oxidation by multimetallic copper complexes. Catalysis Science and Technology, 2015, 5, 4108-4115.	4.1	13
34	Modeling Studies on Lean NO_x Reduction by a Sequence of LNTâ€“SCR Bricks. Industrial & Engineering Chemistry Research, 2012, 51, 6686-6696.	3.7	12
35	Comparison of light-off performance of Pt-Pd/Î³-Al2O3 dual layer and dual brick diesel oxidation catalysts. Chemical Engineering Journal, 2018, 335, 1004-1017.	12.7	11
36	Experimental and Theoretical Investigation of Controlling Regimes during Lean Oxidation of Methane and Propylene on Pt/Al₂O₃ Monolithic Reactors. Industrial & Engineering Chemistry Research, 2012, 51, 7482-7492.	3.7	10

#	Article	IF	Citations
37	Gas holdâ€up and bubble behavior in an upflow packed bed column in the limit of low flow rate. AIChE Journal, 2019, 65, e16624.	3.6	10
38	Modeling studies of lowâ€temperature aerobic NO_x reduction by a sequence of LNTâ€SCR catalysts. AIChE Journal, 2013, 59, 3421-3431.	3.6	9
39	Bifurcation features of mixtures containing CO and hydrocarbons in diesel oxidation catalyst. Chemical Engineering Journal, 2016, 304, 941-952.	12.7	9
40	SuperButolâ„¢ â€“ A novel high-octane gasoline blending component. Fuel, 2017, 195, 165-173.	6.4	9
41	Oxidative dehydrogenation of ethane over mixed metal oxide catalysts: Autothermal or cooled tubular reactor design?. AIChE Journal, 2021, 67, e17168.	3.6	9
42	Ceria-Based Materials for Hydrogen Production Via Hydrocarbon Steam Reforming and Water-Gas Shift Reactions. Recent Patents on Materials Science, 2011, 4, 122-145.	0.5	8
43	Estimation of Effective Diffusivity of Stored NO_x in the Barium Phase of Pt/BaO/Al₂O₃ Catalysts using TAP. Industrial & Engineering Chemistry Research, 2010, 49, 10334-10340.	3.7	7
44	Simulation of NO_x and soot abatement with Cuâ€Cha and Feâ€ZSM5 catalysts. AIChE Journal, 2017, 63, 238-248.	3.6	7
45	Scaling Relations for Autothermal Operation of Catalytic Reactors. Industrial & Engineering Chemistry Research, 2021, 60, 6565-6582.	3.7	7
46	Fundamentalsâ€based lowâ€dimensional combustion modeling of sparkâ€ignited internal combustion engines. AIChE Journal, 2011, 57, 2472-2492.	3.6	6
47	Impact of gravity on the bubbleâ€toâ€pulse transition in packed beds. AIChE Journal, 2014, 60, 778-793.	3.6	6
48	Zoning and Trapping Effects on CO and Hydrocarbon Light-Off in Diesel Oxidation Catalysts. Industrial & Engineering Chemistry Research, 2017, 56, 13628-13633.	3.7	6
49	Gasâ€“liquid flows through porous media in microgravity: Packed Bed Reactor Experimentâ€2. AIChE Journal, 2022, 68, .	3.6	5
50	Celerity-Amplitude Relations for Solitary Waves on Vertically Falling Films. Industrial & Engineering Chemistry Research, 2011, 50, 13258-13272.	3.7	4
51	Ignitionâ€“extinction analysis of catalytic reactor models. Reviews in Chemical Engineering, 2022, 38, 737-768.	4.4	3
52	Experimentallyâ€based constitutive relations for coâ€current gasâ€liquid flow in randomly packed beds. AIChE Journal, 2017, 63, 812-822.	3.6	2
53	Spectral properties and lowâ€dimensional description of loop and recycle reactors. AIChE Journal, 2013, 59, 3365-3377.	3.6	1
54	Fast Cycling NOx Storage and Reduction: Identification of an Adsorbed Intermediate Pathway. Catalysis Letters, 2018, 148, 1951-1964.	2.6	1

#	Article	IF	Citations
55	Low-dimensional models for real time simulations of monolith reactors with dual washcoat layers. Chemical Engineering Journal, 2021, 429, 132153.	12.7	1