

# Christos Kalamaras

## List of Publications by Year in descending order

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55  
papers

2,022  
citations

257450

24  
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243625

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docs citations

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times ranked

1989  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ignition–extinction analysis of catalytic reactor models. <i>Reviews in Chemical Engineering</i> , 2022, 38, 737-768.	4.4	3
2	Modular reactors with electrical resistance heating for hydrocarbon cracking and other endothermic reactions. <i>AIChE Journal</i> , 2022, 68, .	3.6	25
3	Gas–liquid flows through porous media in microgravity: Packed Bed Reactor Experiment–2. <i>AIChE Journal</i> , 2022, 68, .	3.6	5
4	Oxidative dehydrogenation of ethane over mixed metal oxide catalysts: Autothermal or cooled tubular reactor design?. <i>AIChE Journal</i> , 2021, 67, e17168.	3.6	9
5	Scaling Relations for Autothermal Operation of Catalytic Reactors. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 6565-6582.	3.7	7
6	Low-dimensional models for real time simulations of monolith reactors with dual washcoat layers. <i>Chemical Engineering Journal</i> , 2021, 429, 132153.	12.7	1
7	Scale–up analysis of autothermal operation of methane oxidative coupling with $\text{La}_2\text{O}_3/\text{CaO}$ catalyst. <i>AIChE Journal</i> , 2020, 66, e16949.	3.6	14
8	The effect of preparation route of commercial $\text{Co}/\text{Al}_2\text{O}_3$ catalyst on important Fischer-Tropsch kinetic parameters studied by SSITKA and CO-DRIFTS transient hydrogenation techniques. <i>Journal of Catalysis</i> , 2019, 379, 60-77.	6.2	21
9	Gas hold–up and bubble behavior in an upflow packed bed column in the limit of low flow rate. <i>AIChE Journal</i> , 2019, 65, e16624.	3.6	10
10	Effect of Pt:Pd ratio on CO and hydrocarbon oxidation. <i>Applied Catalysis B: Environmental</i> , 2018, 223, 67-75.	20.2	50
11	Comparison of light-off performance of Pt-Pd/ $\text{Al}_2\text{O}_3$ dual layer and dual brick diesel oxidation catalysts. <i>Chemical Engineering Journal</i> , 2018, 335, 1004-1017.	12.7	11
12	Fast Cycling NO <sub>x</sub> Storage and Reduction: Identification of an Adsorbed Intermediate Pathway. <i>Catalysis Letters</i> , 2018, 148, 1951-1964.	2.6	1
13	Multi-scale reduced order models for transient simulation of multi-layered monolith reactors. <i>Chemical Engineering Journal</i> , 2018, 352, 293-305.	12.7	17
14	Experimentally–based constitutive relations for co–current gas–liquid flow in randomly packed beds. <i>AIChE Journal</i> , 2017, 63, 812-822.	3.6	2
15	Selective catalytic reduction of NO by H <sub>2</sub> /C <sub>3</sub> H <sub>6</sub> over Pt/Ce <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> – $\gamma$ : The synergy effect studied by transient techniques. <i>Applied Catalysis B: Environmental</i> , 2017, 206, 308-318.	20.2	32
16	SuperButol– $\phi$ – A novel high-octane gasoline blending component. <i>Fuel</i> , 2017, 195, 165-173.	6.4	9
17	Experimental and modeling study of CO and hydrocarbons light-off on various Pt-Pd/ $\text{Al}_2\text{O}_3$ diesel oxidation catalysts. <i>Chemical Engineering Journal</i> , 2017, 323, 347-360.	12.7	35
18	Hydrocarbon Trapping over Ag-Beta Zeolite for Cold-Start Emission Control. <i>Catalysis Letters</i> , 2017, 147, 1355-1362.	2.6	30

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19	Bifurcation analysis of index infinity DAE parabolic models describing reactors and reacting flows. <i>AIChE Journal</i> , 2017, 63, 295-305.	3.6	14
20	Analysis of light-off during oxidation of reactant mixtures on Pt/Al <sub>2</sub> O <sub>3</sub> using micro-kinetic models. <i>Chemical Engineering Science</i> , 2017, 166, 320-333.	3.8	18
21	Zoning and Trapping Effects on CO and Hydrocarbon Light-Off in Diesel Oxidation Catalysts. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 13628-13633.	3.7	6
22	Simulation of NO <sub>x</sub> and soot abatement with Cu-CHA and Fe-ZSM5 catalysts. <i>AIChE Journal</i> , 2017, 63, 238-248.	3.6	7
23	Bifurcation features of mixtures containing CO and hydrocarbons in diesel oxidation catalyst. <i>Chemical Engineering Journal</i> , 2016, 304, 941-952.	12.7	9
24	Dynamic hysteresis in monolith reactors and hysteresis effects during co-oxidation of CO and C <sub>3</sub> H <sub>6</sub> over Pt/Al <sub>2</sub> O <sub>3</sub> monolithic catalyst. <i>Chemical Engineering Journal</i> , 2016, 297, 325-340.	12.7	29
25	Selective Oxidation of Methane to Methanol Over Cu- and Fe-Exchanged Zeolites: The Effect of Si/Al Molar Ratio. <i>Catalysis Letters</i> , 2016, 146, 483-492.	2.6	66
26	pH-Induced Re-entrant Microstructural Transitions in Cationic Surfactant-Hydrotrope Mixtures. <i>Langmuir</i> , 2016, 32, 655-663.	3.5	31
27	Re-evaluating selectivity as a determining factor in peroxidative methane oxidation by multimetallic copper complexes. <i>Catalysis Science and Technology</i> , 2015, 5, 4108-4115.	4.1	13
28	Steady-state and dynamic hysteresis effects during lean co-oxidation of CO and C <sub>3</sub> H <sub>6</sub> over Pt/Al <sub>2</sub> O <sub>3</sub> monolithic catalyst. <i>Chemical Engineering Journal</i> , 2015, 281, 322-333.	12.7	46
29	Impact of gravity on the bubble-pulse transition in packed beds. <i>AIChE Journal</i> , 2014, 60, 778-793.	3.6	6
30	The effect of La <sup>3+</sup> , Ti <sup>4+</sup> and Zr <sup>4+</sup> dopants on the mechanism of WGS on ceria-doped supported Pt catalysts. <i>Catalysis Today</i> , 2014, 228, 183-193.	4.4	35
31	Modeling and analysis of dual-layer NO <sub>x</sub> storage and reduction and selective catalytic reduction monolithic catalyst. <i>Chemical Engineering Journal</i> , 2014, 237, 109-122.	12.7	29
32	Selective catalytic reduction of NO by hydrogen (H <sub>2</sub> -SCR) on WO <sub>3</sub> -promoted Ce-Zr-O <sub>2</sub> solids. <i>Applied Catalysis B: Environmental</i> , 2014, 156-157, 72-83.	20.2	49
33	Modeling studies of low-temperature aerobic NO <sub>x</sub> reduction by a sequence of LNT-SCR catalysts. <i>AIChE Journal</i> , 2013, 59, 3421-3431.	3.6	9
34	Spectral properties and low-dimensional description of loop and recycle reactors. <i>AIChE Journal</i> , 2013, 59, 3365-3377.	3.6	1
35	The effect of La <sup>3+</sup> -doping of CeO <sub>2</sub> support on the water-gas shift reaction mechanism and kinetics over Pt/Ce <sub>1-x</sub> La <sub>x</sub> O <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , 2013, 136-137, 225-238.	20.2	70
36	NO Inhibition Effects During Oxidation of Propylene on Cu-Chabazite Catalyst: A Kinetic and Mechanistic Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 15455-15465.	3.7	20

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37	Mechanistic Studies of the Water-Gas Shift Reaction over Pt/Ce <sub>2</sub> ZrO <sub>2</sub> Catalysts: The Effect of Pt Particle Size and Zr Dopant. ACS Catalysis, 2012, 2, 2729-2742.	11.2	133
38	Modeling Studies on Lean NO <sub>x</sub> Reduction by a Sequence of LNT-SCR Bricks. Industrial & Engineering Chemistry Research, 2012, 51, 6686-6696.	3.7	12
39	Experimental and Theoretical Investigation of Controlling Regimes during Lean Oxidation of Methane and Propylene on Pt/Al <sub>2</sub> O <sub>3</sub> Monolithic Reactors. Industrial & Engineering Chemistry Research, 2012, 51, 7482-7492.	3.7	10
40	Selective catalytic reduction of NO <sub>x</sub> 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
41	Effects of Reaction Temperature and Support Composition on the Mechanism of Water-Gas Shift Reaction over Supported-Pt Catalysts. Journal of Physical Chemistry C, 2011, 115, 11595-11610.	3.1	90
42	Celerity-Amplitude Relations for Solitary Waves on Vertically Falling Films. Industrial & Engineering Chemistry Research, 2011, 50, 13258-13272.	3.7	4
43	Redox vs associative formate with OH group regeneration-WGS reaction mechanism on Pt/CeO <sub>2</sub> : Effect of platinum particle size. Journal of Catalysis, 2011, 279, 287-300.	6.2	226
44	Fundamentals-based low-dimensional combustion modeling of spark-ignited internal combustion engines. AIChE Journal, 2011, 57, 2472-2492.	3.6	6
45	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
46	Estimation of Effective Diffusivity of Stored NO <sub>x</sub> in the Barium Phase of Pt/BaO/Al <sub>2</sub> O <sub>3</sub> Catalysts using TAP. Industrial & Engineering Chemistry Research, 2010, 49, 10334-10340.	3.7	7
47	Kinetic and mechanistic studies of the water-gas shift reaction on Pt/TiO <sub>2</sub> catalyst. Journal of Catalysis, 2009, 264, 117-129.	6.2	168
48	Performance features of Pt/BaO lean NO <sub>x</sub> trap with hydrogen as reductant. AIChE Journal, 2009, 55, 687-700.	3.6	44
49	Low-dimensional models for real time simulations of catalytic monoliths. AIChE Journal, 2009, 55, 1771-1783.	3.6	53
50	Flow structure underneath the large amplitude waves of a vertically falling film. AIChE Journal, 2008, 54, 1725-1740.	3.6	47
51	The water-gas shift reaction on Pt/Al <sub>2</sub> O <sub>3</sub> catalyst: Operando SSITKA-DRIFTS-mass spectroscopy studies. Catalysis Today, 2008, 138, 228-234.	4.4	66
52	Mechanistic aspects of the water-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
53	Optimal design of catalytic converters for minimizing cold-start emissions. Catalysis Today, 2004, 98, 357-373.	4.4	47
54	Shape normalization for catalytic monoliths. Chemical Engineering Science, 2004, 59, 3737-3766.	3.8	24

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55	Light-off criterion and transient analysis of catalytic monoliths. Chemical Engineering Science, 2003, 58, 1381-1405.	3.8	126