

Gianpiero Groppi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1485019/publications.pdf>

Version: 2024-02-01

155
papers

7,428
citations

38742

50
h-index

64796

79
g-index

161
all docs

161
docs citations

161
times ranked

4056
citing authors

#	ARTICLE	IF	CITATIONS
1	Mass-Transfer Characterization of Metallic Foams as Supports for Structured Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 4993-5002.	3.7	324
2	The deposition of γ -Al ₂ O ₃ layers on ceramic and metallic supports for the preparation of structured catalysts. <i>Catalysis Today</i> , 2001, 69, 307-314.	4.4	253
3	Steam and dry reforming of methane on Rh: Microkinetic analysis and hierarchy of kinetic models. <i>Journal of Catalysis</i> , 2008, 259, 211-222.	6.2	223
4	In situ Raman and in situ XRD analysis of PdO reduction and Pd ⁰ oxidation supported on γ -Al ₂ O ₃ catalyst under different atmospheres. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4607.	2.8	190
5	Catalytic combustion for the production of energy. <i>Catalysis Today</i> , 1999, 54, 165-180.	4.4	168
6	Preparation and characterization of hexaaluminate-based materials for catalytic combustion. <i>Applied Catalysis A: General</i> , 1993, 104, 101-108.	4.3	165
7	A comparison of lumped and distributed models of monolith catalytic combustors. <i>Chemical Engineering Science</i> , 1995, 50, 2705-2715.	3.8	156
8	Heat Transfer Characterization of Metallic Foams. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 9078-9085.	3.7	145
9	An appraisal of the heat transfer properties of metallic open-cell foams for strongly exo-/endo-thermic catalytic processes in tubular reactors. <i>Chemical Engineering Journal</i> , 2012, 198-199, 512-528.	12.7	142
10	Washcoating method for Pd/ γ -Al ₂ O ₃ deposition on metallic foams. <i>Applied Catalysis B: Environmental</i> , 2006, 62, 121-131.	20.2	137
11	Design of novel monolith catalyst supports for gas/solid reactions with heat exchange. <i>Chemical Engineering Science</i> , 2000, 55, 2161-2171.	3.8	136
12	Catalytic partial oxidation of methane over a 4% Rh/ γ -Al ₂ O ₃ catalyst Part I: Kinetic study in annular reactor. <i>Journal of Catalysis</i> , 2008, 255, 241-258.	6.2	132
13	Ni based mixed oxide materials for CH ₄ oxidation under redox cycle conditions. <i>Journal of Molecular Catalysis A</i> , 2003, 204-205, 637-646.	4.8	125
14	Structured catalysts for non-adiabatic applications. <i>Current Opinion in Chemical Engineering</i> , 2014, 5, 55-67.	7.8	123
15	Methods for the catalytic activation of metallic structured substrates. <i>Catalysis Science and Technology</i> , 2014, 4, 2846-2870.	4.1	118
16	Structure and morphology of Pd/Al ₂ O ₃ and Pd/CeO ₂ /Al ₂ O ₃ combustion catalysts in Pd ⁰ →PdO transformation hysteresis. <i>Applied Catalysis A: General</i> , 2010, 390, 1-10.	4.3	110
17	Honeycomb supports with high thermal conductivity for gas/solid chemical processes. <i>Catalysis Today</i> , 2005, 105, 297-304.	4.4	96
18	Catalytic partial oxidation of methane over a 4% Rh/ γ -Al ₂ O ₃ catalyst Part II: Role of CO ₂ reforming. <i>Journal of Catalysis</i> , 2008, 255, 259-268.	6.2	95

#	ARTICLE	IF	CITATIONS
19	A C_{12} microkinetic model for methane conversion to syngas on Rh/Al_2O_3 . <i>AIChE Journal</i> , 2009, 55, 993-1008.	3.6	95
20	An experimental investigation of Fischer-Tropsch synthesis over washcoated metallic structured supports. <i>Applied Catalysis A: General</i> , 2009, 370, 93-101.	4.3	93
21	Monolithic catalysts with high thermal conductivity for the Fischer-Tropsch synthesis in tubular reactors. <i>Chemical Engineering Journal</i> , 2011, 171, 1294-1307.	12.7	92
22	Comparison among structured and packed-bed reactors for the catalytic partial oxidation of CH_4 at short contact times. <i>Catalysis Today</i> , 2005, 105, 709-717.	4.4	88
23	Heat transfer properties of metal foam supports for structured catalysts: Wall heat transfer coefficient. <i>Catalysis Today</i> , 2013, 216, 121-134.	4.4	87
24	Preparation, characterisation and catalytic activity of pure and substituted La-hexaaluminate systems for high temperature catalytic combustion. <i>Applied Catalysis B: Environmental</i> , 2001, 35, 137-148.	20.2	84
25	The effect of CeO_2 on the dynamics of $Pd \rightarrow PdO$ transformation over Pd/Al_2O_3 combustion catalysts. <i>Catalysis Communications</i> , 2007, 8, 1263-1266.	3.3	81
26	Monolithic catalysts with "high conductivity" honeycomb supports for gas/solid exothermic reactions: characterization of the heat-transfer properties. <i>Chemical Engineering Science</i> , 2004, 59, 4941-4949.	3.8	79
27	Microkinetic modeling of spatially resolved autothermal CH_4 catalytic partial oxidation experiments over Rh-coated foams. <i>Journal of Catalysis</i> , 2010, 275, 270-279.	6.2	79
28	Development of a molecular kinetic scheme for methane partial oxidation over a $Rh/\gamma-Al_2O_3$ catalyst. <i>Journal of Catalysis</i> , 2006, 241, 1-13.	6.2	78
29	Intensifying heat transfer in Fischer-Tropsch tubular reactors through the adoption of conductive packed foams. <i>Chemical Engineering Journal</i> , 2018, 349, 829-837.	12.7	78
30	Effect of Pt/Pd ratio on catalytic activity and redox behavior of bimetallic $Pt \rightarrow Pd/Al_2O_3$ catalysts for CH_4 combustion. <i>Applied Catalysis B: Environmental</i> , 2010, 95, 303-311.	20.2	75
31	Continuous vs. discrete models of nonadiabatic monolith catalysts. <i>AIChE Journal</i> , 1996, 42, 2382-2387.	3.6	72
32	On the Crystal Structure and Cation Valence of Mn in Mn-Substituted $Ba\text{-}\gamma-Al_2O_3$. <i>Journal of Catalysis</i> , 1998, 179, 597-605.	6.2	70
33	A fundamental analysis of the influence of the geometrical properties on the effective thermal conductivity of open-cell foams. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 129, 181-189.	3.6	70
34	Mathematical Models of Catalytic Combustors. <i>Catalysis Reviews - Science and Engineering</i> , 1999, 41, 227-254.	12.9	69
35	Investigation of pressure drop in 3D replicated open-cell foams: Coupling CFD with experimental data on additively manufactured foams. <i>Chemical Engineering Journal</i> , 2019, 377, 120123.	12.7	67
36	A study of methane partial oxidation in annular reactor: activity of $Rh/\gamma-Al_2O_3$ and Rh/ZrO_2 catalysts. <i>Catalysis Today</i> , 2005, 99, 89-98.	4.4	66

#	ARTICLE	IF	CITATIONS
37	Experimental and Modeling Analysis of Methane Partial Oxidation: Transient and Steady-State Behavior of Rh-Coated Honeycomb Monoliths. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 3825-3836.	3.7	64
38	Role of Pd loading and dispersion on redox behaviour and CH ₄ combustion activity of Al ₂ O ₃ supported catalysts. <i>Catalysis Today</i> , 2010, 155, 18-26.	4.4	64
39	BaFexAl(12x)O19 System for High-Temperature Catalytic Combustion: Physico-Chemical Characterization and Catalytic Activity. <i>Journal of Catalysis</i> , 1997, 168, 95-103.	6.2	62
40	Effect of periodic lean/rich switch on methane conversion over a Ce-Zr promoted Pd-Rh/Al ₂ O ₃ catalyst in the exhausts of natural gas vehicles. <i>Applied Catalysis B: Environmental</i> , 2012, 119-120, 91-99.	20.2	62
41	A fundamental investigation of gas/solid mass transfer in open-cell foams using a combined experimental and CFD approach. <i>Chemical Engineering Journal</i> , 2018, 352, 558-571.	12.7	61
42	Generalized Correlation for Gas/Solid Mass-Transfer Coefficients in Metallic and Ceramic Foams. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 3955-3958.	3.7	60
43	FeCrAl as a Catalyst Support. <i>Chemical Reviews</i> , 2020, 120, 7516-7550.	47.7	59
44	A study on the thermal behavior of structured plate-type catalysts with metallic supports for gas/solid exothermic reactions. <i>Chemical Engineering Science</i> , 2000, 55, 6021-6036.	3.8	58
45	Preparation, characterization and reactivity of Me-hexaaluminate (Me=Mn, Co, Fe, Ni, Cr) catalysts in the catalytic combustion of NH ₃ -containing gasified biomasses. <i>Catalysis Today</i> , 2000, 59, 191-204.	4.4	56
46	The Crystal Structure of Ba- γ -Alumina Materials for High-Temperature Catalytic Combustion. <i>Journal of Solid State Chemistry</i> , 1995, 114, 326-336.	2.9	55
47	Theoretical analysis of mass and heat transfer in monolith catalysts with triangular channels. <i>Chemical Engineering Science</i> , 1997, 52, 3521-3526.	3.8	55
48	The influence of ceria and other rare earth promoters on palladium-based methane combustion catalysts. <i>Catalysis Today</i> , 2012, 180, 124-130.	4.4	55
49	Simulation of structured catalytic reactors with enhanced thermal conductivity for selective oxidation reactions. <i>Catalysis Today</i> , 2001, 69, 63-73.	4.4	54
50	Structured reactors for kinetic measurements in catalytic combustion. <i>Chemical Engineering Journal</i> , 2001, 82, 57-71.	12.7	54
51	Regeneration of S-poisoned Pd/Al ₂ O ₃ catalysts for the combustion of methane. <i>Catalysis Today</i> , 2006, 117, 569-576.	4.4	52
52	Dominant Reaction Pathways in the Catalytic Partial Oxidation of CH ₄ on Rh. <i>Topics in Catalysis</i> , 2009, 52, 1983-1988.	2.8	52
53	Enabling small-scale methanol synthesis reactors through the adoption of highly conductive structured catalysts. <i>Catalysis Today</i> , 2013, 215, 176-185.	4.4	52
54	Numerical simulation of heat transfer in the near-wall region of tubular reactors packed with metal open-cell foams. <i>Chemical Engineering Journal</i> , 2015, 264, 268-279.	12.7	49

#	ARTICLE	IF	CITATIONS
55	Adoption of 3D printed highly conductive periodic open cellular structures as an effective solution to enhance the heat transfer performances of compact Fischer-Tropsch fixed-bed reactors. Chemical Engineering Journal, 2020, 386, 123988.	12.7	49
56	Effect of alternate CH ₄ -reducing/lean combustion treatments on the reactivity of fresh and S-poisoned Pd/CeO ₂ /Al ₂ O ₃ catalysts. Applied Catalysis B: Environmental, 2008, 80, 335-342.	20.2	48
57	Synergy of Homogeneous and Heterogeneous Chemistry Probed by In-situ Spatially Resolved Measurements of Temperature and Composition. Angewandte Chemie - International Edition, 2011, 50, 3943-3946.	13.8	47
58	Highly conductive "packed foams": A new concept for the intensification of strongly endo- and exo-thermic catalytic processes in compact tubular reactors. Catalysis Today, 2016, 273, 178-186.	4.4	47
59	A systematic procedure for the virtual reconstruction of open-cell foams. Chemical Engineering Journal, 2017, 315, 608-620.	12.7	47
60	Steady-state and transient analysis of a CH ₄ -catalytic partial oxidation reformer. AIChE Journal, 2006, 52, 3234-3245.	3.6	45
61	Study of sulfur poisoning on Pd/Al ₂ O ₃ and Pd/CeO ₂ /Al ₂ O ₃ methane combustion catalysts. Catalysis Today, 2010, 155, 59-65.	4.4	45
62	FT-IR Skeletal Powder Spectra of Ba- γ -Aluminas with Compositions BaAl ₉ O _{14.5} , BaAl ₁₂ O ₁₉ , and BaAl ₁₄ O ₂₂ and of Ba-Ferrite, BaFe ₂ O ₉ . Journal of Solid State Chemistry, 1995, 117, 8-15.	2.9	44
63	Activation process of Pd/Al ₂ O ₃ catalysts for CH ₄ combustion by reduction/oxidation cycles in CH ₄ -containing atmosphere. Journal of Catalysis, 2010, 275, 218-227.	6.2	43
64	Optimal design of a CH ₄ CPO-reformer with honeycomb catalyst: Combined effect of catalyst load and channel size on the surface temperature profile. Catalysis Today, 2011, 171, 79-83.	4.4	43
65	Two-dimensional detailed modeling of full-scale industrial combustion over $\frac{3}{8}$ Rh catalysts	3.8	42
66	Washcoating and chemical testing of a commercial Cu/ZnO/Al ₂ O ₃ catalyst for the methanol synthesis over copper open-cell foams. Applied Catalysis A: General, 2014, 481, 96-103.	4.3	42
67	Testing in annular micro-reactor and characterization of supported Rh nanoparticles for the catalytic partial oxidation of methane: Effect of the preparation procedure. Applied Catalysis B: Environmental, 2008, 83, 96-109.	20.2	41
68	Investigation of packed conductive foams as a novel reactor configuration for methane steam reforming. Chemical Engineering Journal, 2020, 391, 123494.	12.7	41
69	Activation of metallic open-cell foams via washcoat deposition of Ni/MgAl ₂ O ₄ catalysts for steam reforming reaction. Catalysis Today, 2012, 197, 256-264.	4.4	39
70	High-temperature combustion of CH ₄ over PdO/Al ₂ O ₃ : kinetic measurements in a structured annular reactor. Chemical Engineering Science, 2001, 56, 831-839.	3.8	38
71	State of Supported Rhodium Nanoparticles for Methane Catalytic Partial Oxidation (CPO): FT-IR Studies. Langmuir, 2007, 23, 10419-10428.	3.5	38
72	Optimization of compact multitubular fixed-bed reactors for the methanol synthesis loaded with highly conductive structured catalysts. Chemical Engineering Journal, 2014, 255, 257-265.	12.7	38

#	ARTICLE	IF	CITATIONS
73	Accurate prediction of the effective radial conductivity of highly conductive honeycomb monoliths with square channels. Chemical Engineering Journal, 2013, 223, 224-230.	12.7	37
74	Conductive Monolithic Catalysts: Development and Industrial Pilot Tests for the Oxidation of <i>m</i> -Xylene to Phthalic Anhydride. Industrial & Engineering Chemistry Research, 2012, 51, 7590-7596.	3.7	35
75	Development of a heat transport model for open-cell metal foams with high cell densities. Chemical Engineering Journal, 2017, 321, 432-446.	12.7	35
76	Packed foams for the intensification of catalytic processes: assessment of packing efficiency and pressure drop using a combined experimental and numerical approach. Chemical Engineering Journal, 2020, 382, 122801.	12.7	35
77	Kinetic measurements of CH ₄ combustion over a 10% PdO/ZrO ₂ catalyst using an annular flow microreactor. Catalysis Today, 2003, 83, 115-129.	4.4	33
78	Enhanced Methane Conversion Under Periodic Operation Over a Pd/Rh Based TWC in the Exhausts from NGVs. Topics in Catalysis, 2013, 56, 372-377.	2.8	33
79	Analytical Geometrical Model of Open Cell Foams with Detailed Description of Strut-Node Intersection. Chemie-Ingenieur-Technik, 2017, 89, 915-925.	0.8	33
80	Characteristics of metallic structured catalysts with high thermal conductivity. Catalysis Today, 2000, 60, 57-62.	4.4	31
81	A kinetic analysis of the partial oxidation of C ₃ H ₈ over a 2% Rh/Al ₂ O ₃ catalyst in annular microreactor. Catalysis Today, 2012, 197, 265-280.	4.4	30
82	Hierarchical Refinement of Microkinetic Models: Assessment of the Role of the WGS and r-WGS Pathways in CH ₄ Partial Oxidation on Rh. Industrial & Engineering Chemistry Research, 2014, 53, 10914-10928.	3.7	30
83	Surface temperature profiles in CH ₄ CPO over honeycomb supported Rh catalyst probed with in situ optical pyrometer. Applied Catalysis A: General, 2011, 402, 41-49.	4.3	29
84	Conditioning of Rh/Al ₂ O ₃ catalysts for H ₂ production via CH ₄ partial oxidation at high space velocity. Applied Catalysis B: Environmental, 2007, 70, 515-524.	20.2	28
85	A comparison between washcoated and packed copper foams for the intensification of methane steam reforming. Reaction Chemistry and Engineering, 2019, 4, 1387-1392.	3.7	28
86	A Fundamental Investigation of Gas/Solid Heat and Mass Transfer in Structured Catalysts Based on Periodic Open Cellular Structures (POCS). Industrial & Engineering Chemistry Research, 2021, 60, 10522-10538.	3.7	27
87	Experimental and modeling analysis of the effect of catalyst aging on the performance of a short contact time adiabatic CH ₄ -CPO reactor. Catalysis Today, 2007, 129, 372-379.	4.4	26
88	Combustion of CH ₄ over a PdO/ZrO ₂ catalyst: an example of kinetic study under severe conditions. Catalysis Today, 2003, 77, 335-346.	4.4	25
89	Reactor modelling and design for sorption enhanced dimethyl ether synthesis. Chemical Engineering Journal, 2021, 404, 126573.	12.7	25
90	Modelling of catalytic combustors for gas turbine applications. Catalysis Today, 1993, 17, 237-249.	4.4	24

#	ARTICLE	IF	CITATIONS
91	Partial oxidation of methane to synthesis gas over Rh-hexaaluminate-based catalysts. <i>Catalysis Letters</i> , 2000, 65, 49-56.	2.6	24
92	Analysis of the effective thermal conductivity of isotropic and anisotropic Periodic Open Cellular Structures for the intensification of catalytic processes. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 158, 108169.	3.6	24
93	Preparation and characterisation of SrTi _{1-x} Zr _x MnyO ₃ solid solution powders in relation to their use in combustion catalysis. <i>Applied Catalysis B: Environmental</i> , 1997, 12, 325-337.	20.2	23
94	Oxidation of NH ₃ and NO _x formation During the catalytic combustion of gasified biomasses fuels over Mn-hexaaluminate and alumina-supported Pd catalysts. <i>Applied Catalysis B: Environmental</i> , 1999, 21, 89-101.	20.2	23
95	Flooding of the diffusion layer in a polymer electrolyte fuel cell: Experimental and modelling analysis. <i>Journal of Power Sources</i> , 2011, 196, 10632-10639.	7.8	23
96	Potentialities and draw-backs of the experimental approach to the study of high T and high GHSV kinetics. <i>Applied Catalysis A: General</i> , 1999, 187, 49-60.	4.3	22
97	Experimental and Modeling Analysis of the Thermal Behavior of an Autothermal C ₃ H ₈ Catalytic Partial Oxidation Reformer. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 7573-7583.	3.7	22
98	On the performance of a Co-based catalyst supported on modified γ -Al ₂ O ₃ during Fischer-Tropsch synthesis in the presence of co-fed water. <i>Catalysis Science and Technology</i> , 2016, 6, 6431-6440.	4.1	22
99	Simulation of a structured catalytic reactor for exothermic methanation reactions producing synthetic natural gas. <i>Computer Aided Chemical Engineering</i> , 2010, , 691-696.	0.5	21
100	Effect of pressure in the autothermal catalytic partial oxidation of CH ₄ and C ₃ H ₈ : Spatially resolved temperature and composition profiles. <i>Applied Catalysis A: General</i> , 2014, 469, 52-64.	4.3	21
101	Optimal Design of A CPO-Reformer of Light Hydrocarbons with Honeycomb Catalyst: Effect of Frontal Heat Dispersions on the Temperature Profiles. <i>Topics in Catalysis</i> , 2011, 54, 866-872.	2.8	20
102	H ₂ production by methane steam reforming over Rh/Al ₂ O ₃ catalyst packed in Cu foams: A strategy for the kinetic investigation in concentrated conditions. <i>Catalysis Today</i> , 2022, 387, 107-118.	4.4	20
103	Investigations on catalytic combustors for gas turbine applications through mathematical model analysis. <i>Applied Catalysis A: General</i> , 1996, 138, 177-197.	4.3	19
104	Packed Periodic Open Cellular Structures – an Option for the Intensification of Non-Adiabatic Catalytic Processes. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 155, 108057.	3.6	19
105	Packed-POCS with skin: A novel concept for the intensification of non-adiabatic catalytic processes demonstrated in the case of the Fischer-Tropsch synthesis. <i>Catalysis Today</i> , 2022, 383, 15-20.	4.4	19
106	Surface characterization of Ba- γ -alumina. <i>Catalysis Letters</i> , 1995, 31, 65-74.	2.6	18
107	The Influence of the Washcoat Deposition Process on High Pore Density Open Cell Foams Activation for CO Catalytic Combustion. <i>Catalysts</i> , 2018, 8, 510.	3.5	18
108	A Numerical Investigation of Electrically-Heated Methane Steam Reforming Over Structured Catalysts. <i>Frontiers in Chemical Engineering</i> , 0, 3, .	2.7	18

#	ARTICLE	IF	CITATIONS
109	Flexible Power & Biomass-to-Methanol plants: Design optimization and economic viability of the electrolysis integration. <i>Fuel</i> , 2022, 310, 122113.	6.4	18
110	Mechanistic kinetic treatment of the chain growth process in higher alcohol synthesis over a Cs-promoted Zn-Cr-O catalyst. <i>Journal of Catalysis</i> , 1992, 135, 99-114.	6.2	17
111	Chemical pathways in the partial oxidation and steam reforming of acetic acid over a Rh-Al ₂ O ₃ catalyst. <i>Catalysis Today</i> , 2017, 289, 162-172.	4.4	17
112	Electrodeposition of CeO ₂ and Pd-CeO ₂ on small pore size metallic foams: Selection of deposition parameters. <i>Catalysis Today</i> , 2019, 334, 37-47.	4.4	17
113	Experimental and theoretical study of gas/solid mass transfer in metallic filters as supports for micro-structured catalysts. <i>Chemical Engineering Science</i> , 2010, 65, 392-397.	3.8	16
114	Cost-efficient Aluminum Open Cell Foams: Manufacture, Characterization, and Heat Transfer Measurements. <i>Advanced Engineering Materials</i> , 2018, 20, 1701032.	3.5	16
115	Electrified methane steam reforming on a washcoated SiSiC foam for low-carbon hydrogen production. <i>AIChE Journal</i> , 2023, 69, .	3.6	16
116	Title is missing!. <i>Catalysis Letters</i> , 1998, 53, 91-95.	2.6	15
117	An investigation of methane partial oxidation kinetics over Rh-supported catalysts. <i>Studies in Surface Science and Catalysis</i> , 2004, , 163-168.	1.5	15
118	Role of gas-phase chemistry in the rich combustion of H ₂ and CO over a Rh/Al ₂ O ₃ catalyst in annular reactor. <i>Chemical Engineering Science</i> , 2007, 62, 4992-4997.	3.8	15
119	Model Analysis of the Role of Kinetics, Adsorption Capacity, and Heat and Mass Transfer Effects in Sorption Enhanced Dimethyl Ether Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 6767-6783.	3.7	15
120	Rich H ₂ catalytic oxidation as a novel methodology for the evaluation of mass transport properties of 3D printed catalyst supports. <i>Catalysis Today</i> , 2022, 383, 123-132.	4.4	15
121	Periodic open cellular structures (POCS) as enhanced catalyst supports: Optimization of the coating procedure and analysis of mass transport. <i>Applied Catalysis B: Environmental</i> , 2021, 283, 119651.	20.2	14
122	Microkinetic analysis of CH ₄ CPO tests with CO ₂ -diluted feed streams. <i>Applied Catalysis A: General</i> , 2011, 391, 350-359.	4.3	13
123	Catalytic partial oxidation of n-octane and iso-octane: Experimental and modeling results. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 24675-24688.	7.1	13
124	Model Analysis of the Effects of Active Phase Distribution at the Pellet Scale in Catalytic Reactors for the Direct Dimethyl Ether Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14252-14266.	3.7	13
125	Catalytic combustion of methane on BaZr(1-x)MxO ₃ perovskites synthesised by a modified citrate method. <i>Catalysis Today</i> , 2012, 197, 236-242.	4.4	12
126	Annular reactor testing and Raman surface characterization in the CPO of methane and propylene. <i>Applied Catalysis A: General</i> , 2014, 474, 149-158.	4.3	12

#	ARTICLE	IF	CITATIONS
127	Annular reactor testing and Raman surface characterization of the CPO of i-octane and n-octane on Rh based catalyst. Chemical Engineering Journal, 2016, 294, 9-21.	12.7	12
128	Catalytic Partial Oxidation of Iso-octane over Rh/Al ₂ O ₃ in an Adiabatic Reactor: An Experimental and Modeling Study. Industrial & Engineering Chemistry Research, 2017, 56, 4911-4919.	3.7	12
129	Thermal Deactivation of Rh/Al ₂ O ₃ in the Catalytic Partial Oxidation of Iso-Octane: Effect of Flow Rate. Catalysts, 2019, 9, 532.	3.5	12
130	Structured Catalysts-Based on Open-Cell Metallic Foams for Energy and Environmental Applications. Studies in Surface Science and Catalysis, 2019, , 303-327.	1.5	12
131	Metal Micro-Monoliths for the Kinetic Study and the Intensification of the Water Gas Shift Reaction. Catalysts, 2018, 8, 594.	3.5	11
132	A Kinetic Investigation of the Catalytic Partial Oxidation of Propylene over a Rh/Al ₂ O ₃ Catalyst. Industrial & Engineering Chemistry Research, 2014, 53, 1804-1815.	3.7	10
133	Coating method for Ni/MgAl ₂ O ₄ deposition on metallic foams. Studies in Surface Science and Catalysis, 2010, , 653-656.	1.5	8
134	On the passivation of platinum promoted cobalt-based Fischer-Tropsch catalyst. Catalysis Today, 2020, 342, 79-87.	4.4	8
135	Numerical and Experimental Investigation of Pressure Drop in Periodic Open Cellular Structures for Intensification of Catalytic Processes. ACS Engineering Au, 2022, 2, 118-133.	5.1	8
136	Development of novel structured catalytic reactors for highly exothermic reactions. Studies in Surface Science and Catalysis, 2000, 130, 2747-2752.	1.5	7
137	Development and Application of Mathematical Models of Pilot-Scale Catalytic Combustors Fueled by Gasified Biomasses. Industrial & Engineering Chemistry Research, 2000, 39, 4106-4113.	3.7	7
138	Production and characterization of copper periodic open cellular structures made by 3D printingâ€ˆreplica technique. Journal of Advanced Manufacturing and Processing, 2020, 2, e10068.	2.4	7
139	Heat transfer intensification with packed open-cell foams in TSA processes for CO capture. Chemical Engineering Journal, 2022, 430, 131000.	12.7	7
140	The pivotal role of an interconnected cellular conductive structure to manage heat removal in compact Fischerâ€ˆTropsch fixed-bed reactors. Reaction Chemistry and Engineering, 2019, 4, 1917-1921.	3.7	6
141	Catalytic partial oxidation of ethanol over Rh-coated monoliths investigated by the axially resolved sampling technique: Effect of H ₂ O co-feed. Catalysis Today, 2021, 367, 71-82.	4.4	6
142	Catalytic partial oxidation of CH ₄ and C ₃ H ₈ : experimental and modeling study of the dynamic and steady state behavior of a pilot-scale reformer. Studies in Surface Science and Catalysis, 2007, 167, 319-324.	1.5	5
143	Recent Advances in the Development of Highly Conductive Structured Supports for the Intensification of Non-adiabatic Gas-Solid Catalytic Processes: The Methane Steam Reforming Case Study. Frontiers in Chemical Engineering, 2022, 3, .	2.7	5
144	H ₂ from biofuels and carriers: A kinetic investigation of formic acid decomposition on Rh/Al ₂ O ₃ in the annular reactor. Chemical Engineering Research and Design, 2022, 181, 458-472.	5.6	5

#	ARTICLE	IF	CITATIONS
145	H ₂ from biofuels and carriers: gas-phase and surface ethanol conversion pathways on Rh/Al ₂ O ₃ investigated by annular microreactor coupled with Raman and FTIR spectroscopy. <i>Journal of Catalysis</i> , 2022, 413, 184-200.	6.2	5
146	4th International conference on structured catalysts and reactors, ICOSCAR-4, Beijing, China, September 25â€“27, 2013. <i>Catalysis Today</i> , 2013, 216, 1.	4.4	3
147	Highly Conductive Structured Catalysts for the Intensification of Methanol Synthesis in Multitubular Reactors. , 2018, , 519-538.		3
148	Structured Catalytic Reactors for Selective Oxidations. , 2014, , 943-997.		2
149	Honeycomb Supports with High Thermal Conductivity for Gas/Solid Chemical Processes. <i>ChemInform</i> , 2005, 36, no.	0.0	1
150	Development of a Catalytic Fuel Processor for a 10 kW Combined Heat and Power System: Experimental and Modeling Analysis of the Steam Reforming Unit. <i>ChemEngineering</i> , 2018, 2, 5.	2.4	1
151	Addition of propene to carbon monoxide-hydrogen in higher alcohol synthesis over unpromoted and caesium-promoted ZnCrO catalysts. <i>Applied Catalysis A: General</i> , 1991, 79, 181-190.	4.3	0
152	Catalytic Combustion for the Production of Energy. , 0, , 363-392.		0
153	Analysis of the Impact of Gas-Phase Chemistry in Adiabatic CPO Reactors by Axially Resolved Measurements. <i>Advances in Chemical Engineering</i> , 2017, 50, 161-201.	0.9	0
154	Preface to the Enrico Tronconi Festschrift. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 6355-6356.	3.7	0
155	The effect of catalyst formulation and Rh dispersion on the performance of a CPO fuel processor investigated by operando sampling technique and predictive modelling analysis. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 7150-7167.	7.1	0