Antonio Monzon

List of Publications by Year
in descending order

110 papers	4,165 citations	109321 35 h-index	118850 62 g-index
110 all docs	110 docs citations	110 times ranked	4185 citing authors

#	Article	IF	Citations
1	Synthesis of carbon nanofibers: effects of Ni crystal size during methane decomposition. Journal of Catalysis, 2005, 229, 82-96.	6.2	429
2	Methane reforming with CO2 over Ni/ZrO2â€“CeO2 catalysts prepared by solâ€“gel. Catalysis Today, 2000, 63, 71-85.	4.4	285
3	Catalytic decomposition of methane over Ni-Al2O3 coprecipitated catalysts. Applied Catalysis A: General, 2003, 252, 363-383.	4.3	220
4	Steam-methane reforming at low temperature on nickel-based catalysts. Chemical Engineering Journal, 2014, 235, 158-166.	12.7	182
5	Improved explicit equations for estimation of the friction factor in rough and smooth pipes. Chemical Engineering Journal, 2002, 86, 369-374.	12.7	165
6	An in depth investigation of deactivation through carbon formation during the biogas dry reforming reaction for Ni supported on modified with CeO2 and La2O3 zirconia catalysts. International Journal of Hydrogen Energy, 2018, 43, 18955-18976.	7.1	165
7	Dehydrogenation of isopropylic alcohol on a Cu/SiO2 catalyst: a study of the activity evolution and reactivation of the catalyst. Applied Catalysis A: General, 1996, 142, 375-386.	4.3	129
8	Growing mechanism of CNTs: a kinetic approach. Journal of Catalysis, 2004, 224, 197-205.	6.2	99
9	Development of Niâ€“Cuâ€“Mgâ€“Al catalysts for the synthesis of carbon nanofibers by catalytic decomposition of methane. Journal of Catalysis, 2007, 251, 223-232.	6.2	89
10	Hydrogenation of Acetylene over Ni/NiAl2O4Catalyst: Characterization, Coking, and Reaction Studies. Journal of Catalysis, 1996, 159, 313-322.	6.2	84
11	Elucidation of Catalyst Support Effect for NH₃ Decomposition Using Ru Nanoparticles on Nitrogen-Functionalized Carbon Nanofiber Monoliths. Journal of Physical Chemistry C, 2012, 116, 26385-26395.	3.1	73
12	Aluminium foams as structured supports for volatile organic compounds (VOCs) oxidation. Applied Catalysis A: General, 2008, 340, 125-132.	4.3	70
13	Effect of Zn Content on Catalytic Activity and Physicochemical Properties of Ni-Based Catalysts for Selective Hydrogenation of Acetylene. Journal of Catalysis, 1997, 171, 268-278.	6.2	69
14	Improvement of activity and stability of Niâ€“Mgâ€“Al catalysts by Cu addition during hydrogen production by catalytic decomposition of methane. Catalysis Today, 2006, 116, 264-270.	4.4	68
15	Acetylene hydrogenation over Niâ€“Siâ€“Al mixed oxides prepared by solâ€“gel technique. Applied Catalysis A: General, 2003, 251, 199-214.	4.3	65
16	Deactivation and regeneration of Cu/SiO2 catalyst in the hydrogenation of maleic anhydride. Kinetic modeling. Applied Catalysis A: General, 2009, 367, 122-129.	4.3	65
17	Production of carbon nanotubes from methaneUse of Co-Zn-Al catalysts prepared by microwave-assisted synthesis. Chemical Engineering Journal, 2009, 149, 455-462.	12.7	62
18	Hydrodeoxygenation of vanillin over noble metal catalyst supported on biochars: Part II: Catalytic behaviour. Applied Catalysis B: Environmental, 2020, 268, 118425.	20.2	61

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19	A Langmuirâ€“Hinshelwood approach to the kinetic modelling of catalytic ammonia decomposition in an integral reactor. Physical Chemistry Chemical Physics, 2013, 15, 12104.	2.8	58
20	Ni on alumina-coated cordierite monoliths for in situ generation of CO-free H2 from ammonia. Journal of Catalysis, 2010, 275, 228-235.	6.2	55
21	Dehydration of glucose to 5-Hydroxymethlyfurfural on bifunctional carbon catalysts. Applied Catalysis B: Environmental, 2021, 286, 119938.	20.2	55
22	Acetylene hydrogenation on Niâ€“Alâ€“Cr oxide catalysts: the role of added Zn. Applied Clay Science, 1998, 13, 363-379.	5.2	54
23	Carbon Nanotube Growth by Catalytic Chemical Vapor Deposition: A Phenomenological Kinetic Model. Journal of Physical Chemistry C, 2010, 114, 4773-4782.	3.1	54
24	Use of hydrotalcites as catalytic precursors of multimetallic mixed oxides. Application in the hydrogenation of acetylene. Applied Catalysis A: General, 1999, 185, 53-63.	4.3	53
25	Oxidation of Methane to Synthesis Gas in a Fluidized Bed Reactor Using MgO-Based Catalysts. Journal of Catalysis, 1996, 158, 83-91.	6.2	50
26	Enhanced selectivity and stability of Pt-Ge/Al2O3 catalysts by Ca promotion in propane dehydrogenation. Chemical Engineering Journal, 2021, 405, 126656.	12.7	49
27	Relationship between the kinetic parameters of different catalyst deactivation models. Chemical Engineering Journal, 2003, 94, 19-28.	12.7	48
28	Sintering and redispersion of Pt/Î³-Al2O3 catalysts: a kinetic model. Applied Catalysis A: General, 2003, 248, 279-289.	4.3	48
29	Texturising and structurising mechanisms of carbon nanofilaments during growth. Journal of Materials Chemistry, 2007, 17, 4611.	6.7	44
30	Development of aligned carbon nanotubes layers over stainless steel mesh monoliths. Catalysis Today, 2009, 147, S71-S75.	4.4	44
31	Metal catalysts supported on biochars: Part I synthesis and characterization. Applied Catalysis B: Environmental, 2020, 268, 118423.	20.2	43
32	Some intrinsic kinetic equations and deactivation mechanisms leading to deactivation curves with a residual activity. Industrial & Engineering Chemistry Research, 1988, 27, 375-381.	3.7	41
33	Deactivation model with residual activity to study thioresistance and thiotolerance of naphtha reforming catalysts. Journal of Catalysis, 1994, 146, 69-81.	6.2	40
34	Modeling of the deactivation kinetics of solid catalysts by two or more simultaneous and different causes. Industrial & Engineering Chemistry Research, 1988, 27, 369-374.	3.7	39
35	Deactivation by coking and poisoning of spinel-type Ni catalysts. Catalysis Today, 1997, 37, 255-265.	4.4	35
36	Ni-Co-Mg-Al catalysts for hydrogen and carbonaceous nanomaterials production by CCVD of methane. Catalysis Today, 2011, 172, 143-151.	4.4	35

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37	Fourier transform infrared spectroscopic study of coke deposits on a Cr2O3î—¸Al2O3 catalyst. Vibrational Spectroscopy, 1995, 9, 191-196.	2.2	34
38	Kinetic Modeling of the SWNT Growth by CO Disproportionation on CoMo Catalysts. Journal of Nanoscience and Nanotechnology, 2008, 8, 6141-6152.	0.9	34
39	Deactivation by Coke of a Cr2O3/Al2O3 Catalyst During Butene Dehydrogenation. Journal of Catalysis, 1993, 142, 59-69.	6.2	32
40	In situ generation of COx-free H2 by catalytic ammonia decomposition over Ru-Al-monoliths. Fuel, 2018, 233, 851-859.	6.4	32
41	Stacked wire-mesh monoliths for VOCs combustion: Effect of the mesh-opening in the catalytic performance. Catalysis Today, 2017, 296, 76-83.	4.4	31
42	Kinetics of carbon nanotubes growth on a Niâ€"Mgâ€"Al catalyst by CCVD of methane: Influence of catalyst deactivation. Catalysis Today, 2010, 154, 217-223.	4.4	29
43	Selective synthesis of carbon nanotubes by catalytic decomposition of methane using Co-Cu/cellulose derived carbon catalysts: A comprehensive kinetic study. Chemical Engineering Journal, 2021, 404, 126103.	12.7	29
44	Modelling of experimental vanillin hydrodeoxygenation reactions in water/oil emulsions. Effects of mass transport. Catalysis Today, 2013, 210, 89-97.	4.4	27
45	Deactivation and regeneration of Pt/Al2O3 catalysts during the hydrodechlorination of carbon tetrachloride. Applied Catalysis B: Environmental, 2009, 87, 211-219.	20.2	25
46	Syntheses of CNTs over several iron-supported catalysts: influence of the metallic precursors. Catalysis Today, 2004, 93-95, 681-687.	4.4	24
47	Regeneration strategies for coked fixed bed reactors. Chemical Engineering Science, 1991, 46, 11-21.	3.8	23
48	Coking kinetics of fresh and thermally aged commercial Cr2O3/Al2O3 catalyst. Applied Catalysis A: General, 1993, 101, 185-198.	4.3	21
49	Promotion of Ni/MgAl2O4 Catalysts with Rare Earths for the Ethanol Steam Reforming Reaction. Catalysis Letters, 2012, 142, 1461-1469.	2.6	21
50	Catalyst sintering in fixed-bed reactors: Deactivation rate and thermal history. AIChE Journal, 1992, 38, 237-243.	3.6	20
51	Hydrogenation of 1,3-butadiene on Pd/SiO2 in the presence of H2S deactivation and reactivation of the catalyst. Applied Catalysis A: General, 1997, 165, 147-157.	4.3	19
52	Thermal Stability of Pt/Al2O3 Catalysts Prepared by Solâ€"Gel. Journal of Solid State Chemistry, 2002, 168, 343-353.	2.9	19
53	New Niâ€"Cuâ€"Mgâ€"Al-based catalysts preparation procedures for the synthesis of carbon nanofibers and nanotubes. Journal of Physics and Chemistry of Solids, 2006, 67, 1162-1167.	4.0	19
54	Synthesis of graphenic nanomaterials by decomposition of methane on a Ni-Cu/biomorphic carbon catalyst. Kinetic and characterization results. Catalysis Today, 2018, 299, 67-79.	4.4	19

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55	Regeneration of Coked Catalysts: The Effect of Aging upon the Characteristics of the Coke Deposits. Industrial & Engineering Chemistry Research, 1994, 33, 2563-2570.	3.7	18
56	Modelling of sulfur deactivation of naphtha-reforming catalysts Structure sensitivity in cyclopentane hydrogenolysis. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2445-2450.	1.7	18
57	Promotion by a second metal or SO2 over vanadium supported on mesoporous carbon-coated monoliths for the SCR of NO at low temperature. Catalysis Today, 2005, 102-103, 177-182.	4.4	17
58	Highly Active Ce- and Mg-Promoted Ni Catalysts Supported on Cellulose-Derived Carbon for Low-Temperature CO₂ Methanation. Energy & Fuels, 2021, 35, 17212-17224.	5.1	17
59	Carbon nanofiber growth onto a cordierite monolith coated with Co-mordenite. Catalysis Today, 2008, 133-135, 7-12.	4.4	16
60	Desulfurization and Catalytic Gas Cleaning in Fluidized-Bed Co-gasification of Sewage Sludgeâ€“Coal Blends. Energy & Fuels, 2013, 27, 2846-2856.	5.1	16
61	A kinetic model for activation-deactivation processes in solid catalysts. Industrial & Engineering Chemistry Research, 1991, 30, 111-122.	3.7	15
62	Synthesis of Pd-Al/biomorphic carbon catalysts using cellulose as carbon precursor. Catalysis Today, 2018, 301, 226-238.	4.4	15
63	Characterization of the active sites of Ni-Si-Al sol-gel hydrogenation catalysts. Studies in Surface Science and Catalysis, 2000, , 3345-3350.	1.5	14
64	Gas Phase Selective Hydrogenation of Acetylene. Importance of the Formation of Ni-Co and Ni-Cu Bimetallic Clusters on the Selectivity and Coke Deposition. Studies in Surface Science and Catalysis, 2001, 139, 37-44.	1.5	14
65	Kinetic study of trichloroethylene combustion on exchanged zeolites catalysts. Journal of Hazardous Materials, 2011, 190, 903-908.	12.4	14
66	Dry powder formulation for pulmonary infections: Ciprofloxacin loaded in chitosan sub-micron particles generated by electrospray. Carbohydrate Polymers, 2021, 273, 118543.	10.2	14
67	Preparation of stainless steel microreactors coated with carbon nanofiber layer: Impact of hydrocarbon and temperature. Catalysis Today, 2009, 147, S87-S93.	4.4	13
68	Unraveling the growth of vertically aligned multi-walled carbon nanotubes by chemical vapor deposition. Materials Research Express, 2014, 1, 045604.	1.6	13
69	Fructose dehydration reaction over functionalized nanographitic catalysts in MIBK/H2O biphasic system. Catalysis Today, 2021, 366, 68-76.	4.4	13
70	Coking kinetics of a Cr₂O₃/Al₂O₃ catalyst during 1â€butene dehydrogenation: Effect of H₂ partial pressure. Canadian Journal of Chemical Engineering, 1996, 74, 1034-1038.	1.7	12
71	Development of Niâ€“Al Catalysts for Hydrogen and Carbon Nanofibre Production by Catalytic Decomposition of Methane. Effect of MgO Addition. Topics in Catalysis, 2008, 51, 158-168.	2.8	12
72	AN EXPERIMENTAL STUDY OF METHANE OXIDATIVE COUPLING IN FIXED BED REACTORS WITH A DISTRIBUTED OXYGEN FEED. Chemical Engineering Communications, 1995, 135, 175-184.	2.6	11

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73	Steam reforming of clean biogas over Rh and Ru open-cell metallic foam structured catalysts. Catalysis Today, 2022, 383, 74-83.	4.4	11
74	Regeneration of Fixed-Bed Catalytic Reactors Deactivated by Coke:Â Influence of Operating Conditions and of Different Pretreatments of the Coke Deposits. Industrial & Engineering Chemistry Research, 1996, 35, 1813-1823.	3.7	10
75	Modelling of sintering kinetics of naphtha-reforming Pt/Al2O3-Cl catalysts. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2637-2640.	1.7	10
76	Pt-MgZnCuAl hydrotalcite-derived catalysts in the reduction of nitrates using continuous and batch reactors. Catalysis Today, 2011, 175, 328-337.	4.4	10
77	Process Optimisation of In Situ H2 Generation From Ammonia Using Ni on Alumina Coated Cordierite Monoliths. Topics in Catalysis, 2011, 54, 914-921.	2.8	10
78	Carbon nanotube formation during propane decomposition on boron-modified Co/Al 2 O 3 catalysts: A kinetic study. International Journal of Hydrogen Energy, 2014, 39, 18016-18026.	7.1	10
79	Use of Ni Catalysts Supported on Biomorphic Carbon Derived From Lignocellulosic Biomass Residues in the Decomposition of Methane. Frontiers in Energy Research, 2019, 7, .	2.3	10
80	Insights into catalyst structure, kinetics and reaction mechanism during propane dehydrogenation on Pt-Ge bimetallic catalysts. Applied Catalysis A: General, 2022, 643, 118751.	4.3	10
81	Kinetics of liquid phase cyclohexene hydrogenation on Pdâ€"Al/biomorphic carbon catalysts. Catalysis Today, 2015, 249, 127-136.	4.4	9
82	Growth of carbonaceous nanomaterials over stainless steel foams. Effect of activation temperature. Catalysis Today, 2016, 273, 41-49.	4.4	9
83	Activity, selectivity and coking of bimetallic Ni-Co-spinel catalysts in selective hydrogenation reactions. Studies in Surface Science and Catalysis, 1997, 111, 183-190.	1.5	8
84	Methane reforming with CO2 over Ni/ZrO2-CeO2 and Ni/ZrO2-MgO catalysts synthesized by sol-gel method. Studies in Surface Science and Catalysis, 2000, 130, 3669-3674.	1.5	8
85	Performance of AISI 316L-stainless steel foams towards the formation of graphene related nanomaterials by catalytic decomposition of methane at high temperature. Catalysis Today, 2022, 383, 236-246.	4.4	8
86	Development of one-pot Cu/cellulose derived carbon catalysts for RWGS reaction. Fuel, 2022, 319, 123707.	6.4	8
87	Functionalization of carbon nanofibers coated on cordierite monoliths by oxidative treatment. Studies in Surface Science and Catalysis, 2010, 175, 483-486.	1.5	7
88	Catalytic oxidation of carbon tetrachloride on metal exchanged Y-zeolite. Chemical Engineering Journal, 2012, 198-199, 18-26.	12.7	7
89	In-situ preparation of a highly accessible Pt/CNF catalytic layer on metallic microchannel reactors. Application to the SELOX reaction. Applied Catalysis A: General, 2015, 505, 193-199.	4.3	7
90	Flow model for the solid in a continuous fluidized bed with increase of the cross section in its upper zone. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 188-197.	0.6	6

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91	The modeling of the kinetics of deactivation of a commercial hydrocracking catalyst in the reaction of cumene disproportionation. Journal of Catalysis, 1986, 100, 149-157.	6.2	6
92	Kinetic modelling of the deactivation of a commercial silicaâ€"alumina catalyst during isopropylbenzene cracking. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1995, 58, 7-13.	0.1	6
93	Epoxidation of electron-deficient alkenes using heterogeneous basic catalysts. Studies in Surface Science and Catalysis, 2000, 130, 1673-1678.	1.5	6
94	Ultra-Fast Biomass Pyrolysis in a High-Temperature (2200Â° C), Fluid-Wall Reactor. Journal of Solar Energy Engineering, Transactions of the ASME, 1988, 110, 10-13.	1.8	5
95	Simultaneous Activation and Deactivation Phenomena in Isopropyl Alcohol Dehydrogenation on A Cu/Sio2 Catalyst. Studies in Surface Science and Catalysis, 1991, , 391-398.	1.5	5
96	Preparation and characterisation of Ni-Mg-Al hydrotalcites as hydrogenation catalysts. Studies in Surface Science and Catalysis, 2000, , 2099-2104.	1.5	5
97	Hydrogen and CNT Production by Methane Cracking Using Niâ€"Cu and Coâ€"Cu Catalysts Supported on Argan-Derived Carbon. ChemEngineering, 2022, 6, 47.	2.4	5
98	Hydrogen Production by Catalytic Cracking of Methane Using Ni-Al2O3 Catalysts. Influence of the Operating Conditions. Studies in Surface Science and Catalysis, 2001, , 391-398.	1.5	4
99	Influence of the catalyst pretreatment on the relative rates of the main and coking reactions during acetylene hydrogenation on a NiO/NiAl2O4 catalyst. Studies in Surface Science and Catalysis, 1994, 88, 555-560.	1.5	3
100	Acetylene hydrogenation with a modified Ni-Zn-Al catalyst. Influence of the operating conditions on the coking rate. Studies in Surface Science and Catalysis, 1999, 126, 113-120.	1.5	3
101	Synthesis of Nickel Nanoparticles Supported on Carbon Using a Filter Paper as Biomorphic Pattern for Application in Catalysis. Materials Research, 2015, 18, 1278-1283.	1.3	3
102	Effect of thermal aging upon the regeneration kinetics of a coked Cr2O3î—¸Al2O3 catalyst. Thermochimica Acta, 1996, 274, 249-259.	2.7	2
103	Deactivation by sintering and coking of Sol-Gel NiO-Al2O3-TiO2 hydrogenation catalysts. Studies in Surface Science and Catalysis, 1997, 111, 609-616.	1.5	2
104	Deactivation of bulk iron oxide catalysts during methane combustion. Studies in Surface Science and Catalysis, 2001, 139, 487-494.	1.5	2
105	Effect of the Operating Conditions on the Growth of Carbonaceous Nanomaterials over Stainless Steel Foams. Kinetic and Characterization Studies. International Journal of Chemical Reactor Engineering, 2017, 15, .	1.1	2
106	Thioresistance of Reforming Catalysts in the Presence of Coking. Studies in Surface Science and Catalysis, 1991, , 581-584.	1.5	1
107	Effect of preparation method and support on the deactivation of nickel catalysts by carbon deposition. Studies in Surface Science and Catalysis, 1994, , 531-536.	1.5	1
108	Deactivation by sintering of Ni/TiO2 and Ni/TiO2-Al2O3 sol-gel hydrogenation catalysts. Studies in Surface Science and Catalysis, 1999, 126, 477-480.	1.5	1

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109	Kinetics of catalyst regeneration by coke combustion. II. Influence of temperature rise in the catalyst particles. Reaction Kinetics and Catalysis Letters, 1991, 44, 279-285.	0.6	0
110	Deactivation of Ni supported on alumina-titania: Modelling of coke deposition in the phenylacetylene hydrogenation. Studies in Surface Science and Catalysis, 1999, 126, 439-442.	1.5	0