

Nicolas Abatzoglou

List of Publications by Year in descending order

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89
papers

2,979
citations

257450

24
h-index

168389

53
g-index

110
all docs

110
docs citations

110
times ranked

3222
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of biogas purification processes. <i>Biofuels, Bioproducts and Biorefining</i> , 2009, 3, 42-71.	3.7	550
2	Phenomenological kinetics of complex systems: the development of a generalized severity parameter and its application to lignocellulosics fractionation. <i>Chemical Engineering Science</i> , 1992, 47, 1109-1122.	3.8	247
3	Co, Ru and K loadings effects on the activity and selectivity of carbon nanotubes supported cobalt catalyst in Fischer-Tropsch synthesis. <i>Applied Catalysis A: General</i> , 2009, 353, 193-202.	4.3	181
4	Synthesis of CNT-supported cobalt nanoparticle catalysts using a microemulsion technique: Role of nanoparticle size on reducibility, activity and selectivity in Fischer-Tropsch reactions. <i>Applied Catalysis A: General</i> , 2010, 374, 79-86.	4.3	138
5	Fischer-Tropsch synthesis over carbon nanotubes supported cobalt catalysts in a fixed bed reactor: Influence of acid treatment. <i>Fuel Processing Technology</i> , 2009, 90, 367-374.	7.2	135
6	Steam reforming of naphthalene on Ni-Cr/Al ₂ O ₃ catalysts doped with MgO, TiO ₂ , and La ₂ O ₃ . <i>AIChE Journal</i> , 1998, 44, 927-936.	3.6	122
7	Effects of Confinement in Carbon Nanotubes on the Activity, Selectivity, and Lifetime of Fischer-Tropsch Co/Carbon Nanotube Catalysts. <i>Journal of Chemical & Engineering Data</i> , 2010, 55, 2757-2763.	1.9	99
8	Hydrogen production by glycerol steam reforming catalyzed by Ni-promoted Fe/Mg-bearing metallurgical wastes. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 183-193.	20.2	80
9	Diesel steam reforming: Comparison of two nickel aluminate catalysts prepared by wet-impregnation and co-precipitation. <i>Catalysis Today</i> , 2013, 207, 13-20.	4.4	79
10	Catalytic Gas Conditioning: Application to Biomass and Waste Gasification. <i>Industrial & Engineering Chemistry Research</i> , 1997, 36, 4184-4192.	3.7	76
11	Thermal and catalytic dry reforming and cracking of ethanol for hydrogen and carbon nanofilaments' production. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 4769-4779.	7.1	74
12	Review: Fundamentals, applications and potentials of ultrasound-assisted drying. <i>Chemical Engineering Research and Design</i> , 2020, 154, 21-46.	5.6	61
13	Kinetics and Selectivity Study of Fischer-Tropsch Synthesis to C ₅ + Hydrocarbons: A Review. <i>Catalysts</i> , 2021, 11, 330.	3.5	56
14	Diesel steam reforming with a nickel-alumina spinel catalyst for solid oxide fuel cell application. <i>Journal of Power Sources</i> , 2011, 196, 7673-7680.	7.8	49
15	Modification of mesoporous alumina as a support for cobalt-based catalyst in Fischer-Tropsch synthesis. <i>Fuel Processing Technology</i> , 2017, 162, 55-65.	7.2	45
16	Using multiple Process Analytical Technology probes to monitor multivitamin blends in a tableting feed frame. <i>Talanta</i> , 2017, 164, 7-15.	5.5	45
17	Review of catalytic syngas production through steam or dry reforming and partial oxidation of studied liquid compounds. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2016, 5, 169-187.	4.1	42
18	Steam reforming of liquid hydrocarbons over a nickel-alumina spinel catalyst. <i>Journal of Power Sources</i> , 2010, 195, 3275-3283.	7.8	38

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19	Synthesis of nanocarbons via ethanol dry reforming over a carbon steel catalyst. <i>Chemical Engineering Journal</i> , 2008, 143, 186-194.	12.7	35
20	Fischer-Tropsch Synthesis in a Slurry Reactor Using a Nanoiron Carbide Catalyst Produced by a Plasma Spray Technique. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 6948-6955.	3.7	32
21	Insights into the Role of Electrostatic Forces on the Behavior of Dry Pharmaceutical Particulate Systems. <i>Pharmaceutical Research</i> , 2006, 23, 997-1007.	3.5	31
22	Performances of promoted cobalt catalysts supported on mesoporous alumina for Fischer-Tropsch synthesis. <i>Applied Catalysis A: General</i> , 2017, 547, 155-163.	4.3	31
23	Activation mechanism and microstructural evolution of a YSZ/Ni-alumina catalyst for dry reforming of methane. <i>Catalysis Today</i> , 2017, 291, 99-105.	4.4	29
24	Monitoring the concentration of flowing pharmaceutical powders in a tableting feed frame. <i>Pharmaceutical Development and Technology</i> , 2017, 22, 699-705.	2.4	28
25	In-line monitoring of Ibuprofen during and after tablet compression using near-infrared spectroscopy. <i>Talanta</i> , 2019, 195, 87-96.	5.5	25
26	Predicting the dissolution behavior of pharmaceutical tablets with NIR chemical imaging. <i>International Journal of Pharmaceutics</i> , 2015, 486, 242-251.	5.2	24
27	Recent Advances in the Decontamination and Upgrading of Waste Plastic Pyrolysis Products: An Overview. <i>Processes</i> , 2022, 10, 733.	2.8	24
28	Nano-iron carbide synthesized by plasma as catalyst for Fischer-Tropsch synthesis in slurry reactors: The role of iron loading and K, Cu promoters. <i>Catalysis Today</i> , 2014, 237, 150-156.	4.4	23
29	Synthesis and Characterization of Co/C and Fe/C Nanocatalysts for Fischer-Tropsch Synthesis: A Comparative Study Using a Fixed-Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 10661-10674.	3.7	23
30	A review of filamentous carbon nanomaterial synthesis via catalytic conversion of waste plastic pyrolysis products. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107049.	6.7	23
31	Catalytic properties of carbon nano-filaments produced by iron-catalysed reforming of ethanol. <i>Chemical Engineering Journal</i> , 2008, 139, 532-539.	12.7	21
32	Iron oxide-functionalized carbon nanofilaments for hydrogen sulfide adsorption: The multiple roles of carbon. <i>Carbon</i> , 2015, 95, 794-801.	10.3	21
33	Development of a multivariate light-induced fluorescence (LIF) PAT tool for in-line quantitative analysis of pharmaceutical granules in a V-blender. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 86, 524-531.	4.3	19
34	Micro-syngas technology options for GtL. <i>Canadian Journal of Chemical Engineering</i> , 2016, 94, 613-622.	1.7	19
35	Dry reforming of methane with a new catalyst derived from a negative value mining residue spinellized with nickel. <i>Catalysis Today</i> , 2017, 291, 86-98.	4.4	19
36	Methanol to Formaldehyde: An Overview of Surface Studies and Performance of an Iron Molybdate Catalyst. <i>Catalysts</i> , 2021, 11, 893.	3.5	19

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37	Dry Reforming of Methane with a Ni/Al ₂ O ₃ -YSZ Catalyst: The Role of the Catalyst Preparation Protocol. Canadian Journal of Chemical Engineering, 2007, 85, 889-899.	1.7	18
38	In-line near infrared spectroscopy monitoring of pharmaceutical powder moisture in a fluidised bed dryer: An efficient methodology for chemometric model development. Canadian Journal of Chemical Engineering, 2012, 90, 299-303.	1.7	18
39	H ₂ S poisoning of NiAl ₂ O ₄ /Al ₂ O ₃ -YSZ catalyst during methane dry reforming. Canadian Journal of Chemical Engineering, 2016, 94, 650-654.	1.7	18
40	Autothermal dry reforming of methane with a nickel spinellized catalyst prepared from a negative value metallurgical residue. Renewable Energy, 2019, 138, 1239-1249.	8.9	18
41	Low-temperature Fischer-Tropsch synthesis using plasma-synthesized nanometric Co/C and Fe/C catalysts. Canadian Journal of Chemical Engineering, 2016, 94, 1504-1515.	1.7	17
42	Promotional effect of Mo and Ni in plasma-synthesized Co-Fe/C bimetallic nano-catalysts for Fischer-Tropsch synthesis. Journal of Industrial and Engineering Chemistry, 2017, 50, 199-212.	5.8	17
43	Prediction of Segregation Tendency Occurrence in Dry Particulate Pharmaceutical Mixtures: Development of a Mathematical Tool Adapted for Granular Systems Application. Pharmaceutical Development and Technology, 2005, 10, 59-70.	2.4	16
44	NiFe ₂ O ₄ production from Fe ₂ O ₃ via improved solid state reaction: Application as catalyst in CH ₄ dry reforming. Canadian Journal of Chemical Engineering, 2016, 94, 1801-1808.	1.7	16
45	Synthesis of Nano-catalysts by Induction Suspension Plasma Technology (SPS) for Fischer-Tropsch Reaction. Plasma Chemistry and Plasma Processing, 2016, 36, 1325-1348.	2.4	13
46	Synthetic fuels from 3- $\dot{\text{I}}$ Fischer-Tropsch synthesis using syngas feed and novel nanometric catalysts synthesised by plasma. Biomass and Bioenergy, 2016, 95, 330-339.	5.7	13
47	Use of Plasma-Synthesized Nano-Catalysts for CO Hydrogenation in Low-Temperature Fischer-Tropsch Synthesis: Effect of Catalyst Pre-Treatment. Nanomaterials, 2018, 8, 822.	4.1	13
48	Application of the induction plasma to the synthesis of two dimensional steam methane reforming Ni/Al ₂ O ₃ catalyst. Surface and Coatings Technology, 2006, 201, 2046-2053.	4.8	12
49	Toluene steam reforming using nickel based catalysts made from mining residues. Catalysis Today, 2021, 365, 111-121.	4.4	12
50	Stress distribution in lubricated vs unlubricated pharmaceutical powder columns and their container walls during translational and torsional shear testing. Powder Technology, 2010, 203, 534-547.	4.2	11
51	Carbon Nanofilaments Functionalized with Iron Oxide Nanoparticles for in-Depth Hydrogen Sulfide Adsorption. Industrial & Engineering Chemistry Research, 2015, 54, 9230-9237.	3.7	11
52	Developing a quality by design approach to model tablet dissolution testing: an industrial case study. Pharmaceutical Development and Technology, 2018, 23, 646-654.	2.4	11
53	Application of computational fluid dynamics for modeling of Fischer-Tropsch synthesis as a sustainable energy resource in different reactor configurations: A review. Renewable and Sustainable Energy Reviews, 2022, 160, 112287.	16.4	11
54	Influence of hopper geometry on radial and axial concentration profiles of segregated and homogenized granular mixture flows. Powder Technology, 2014, 262, 42-50.	4.2	10

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55	Effect of CO Concentration on the $\hat{\mu}$ -Value of Plasma-Synthesized Co/C Catalyst in Fischer-Tropsch Synthesis. <i>Catalysts</i> , 2017, 7, 69.	3.5	10
56	From Nanoparticles to Process: An Aberration-Corrected TEM Study of Fischer-Tropsch Catalysts at Various Steps of the Process. <i>Advanced Materials Research</i> , 0, 324, 197-200.	0.3	9
57	Gold-promoted plasma-synthesized Ni-Co-Fe/C catalyst for Fischer-Tropsch synthesis. <i>Gold Bulletin</i> , 2017, 50, 147-162.	2.4	8
58	Activation and deactivation scenarios in a plasma-synthesized Co/C catalyst for Fischer-Tropsch synthesis. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 2127-2137.	1.7	8
59	Phase Quantification of Carbon Support by X-Ray Photoelectron Spectroscopy (XPS) in Plasma-Synthesized Fischer-Tropsch Nanocatalysts. <i>Catalysis Letters</i> , 2018, 148, 2149-2161.	2.6	7
60	Prediction of segregation tendency in dry particulate pharmaceutical mixtures: Application of an adapted mathematical tool to cohesive and non-cohesive mixtures. <i>Pharmaceutical Development and Technology</i> , 2010, 15, 113-123.	2.4	6
61	NIRS methodology for measuring radial and axial concentration profiles in flowing granular mixtures. <i>Powder Technology</i> , 2012, 224, 223-232.	4.2	6
62	New insights on the role of YSZ in a NiAl ₂ O ₄ /Al ₂ O ₃ -YSZ catalyst. <i>Applied Catalysis A: General</i> , 2015, 497, 42-50.	4.3	6
63	Catalytic Dry Reforming and Cracking of Ethylene for Carbon Nanofilaments and Hydrogen Production Using a Catalyst Derived from a Mining Residue. <i>Catalysts</i> , 2019, 9, 1069.	3.5	6
64	Concentration monitoring with near infrared chemical imaging in a tableting press. <i>Journal of Spectral Imaging</i> , 0, , .	0.0	6
65	H ₂ S Poisoning and Regeneration of a Nickel Spinellized Catalyst Prepared from Waste Metallurgical Residues, During Dry Autothermal Methane Reforming. <i>Catalysis Letters</i> , 2019, 149, 1730-1742.	2.6	5
66	Kinetics study on cnt-supported RuKCo FTS catalyst in a fixed bed reactor. <i>Canadian Journal of Chemical Engineering</i> , 2011, 89, 1441-1450.	1.7	4
67	Inhibition of carbon formation during steam reforming of methane over ethyldisulfide-impregnated metallic nickel catalysts. <i>Catalysis Today</i> , 2013, 207, 21-27.	4.4	4
68	Non-invasive detection technologies of solid foreign matter and their applications to lyophilized pharmaceutical products: A review. <i>Talanta</i> , 2021, 224, 121885.	5.5	4
69	Moisture Transport Coefficients Determination on a Model Pharmaceutical Tablet. <i>Processes</i> , 2022, 10, 254.	2.8	4
70	Rheological characterisation and phenomenological modelling of non-aqueous nano-suspensions of iron carbide produced by plasma spray. <i>Canadian Journal of Chemical Engineering</i> , 2014, 92, 68-74.	1.7	3
71	Co-doped ZnO thin films grown by pulsed electron beam ablation as model nano-catalysts in fischer-tropsch synthesis. <i>AIChE Journal</i> , 2018, 64, 3332-3340.	3.6	3
72	Gravity mass powder flow through conical hoppers -Part I: A mathematical model predicting the radial velocity profiles of free-flowing granular systems as a function of cohesion and adhesion properties. <i>Canadian Journal of Chemical Engineering</i> , 2021, 99, 1643-1653.	1.7	3

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73	Wet granulation end point prediction using dimensionless numbers in a mixer torque rheometer: Relationship between capillary and Weber numbers and the optimal wet mass consistency. International Journal of Pharmaceutics, 2021, 605, 120823.	5.2	3
74	Specificity of process analytical tools in the monitoring of multicomponent pharmaceutical powders. Pharmaceutical Development and Technology, 2019, 24, 380-389.	2.4	2
75	Evaluation of a Dry Coating Technology as a Substitute for Roller Compaction for Dry Agglomeration Applications in the Pharmaceutical Industry. Journal of Pharmaceutical Innovation, 2019, 14, 286-303.	2.4	2
76	Gravity mass powder flow through conical hoppers –Part II: A mathematical model predicting the axial and radial profiles of normal stresses from flow velocity measurements. Canadian Journal of Chemical Engineering, 2021, 99, 1654-1662.	1.7	2
77	Prediction of segregation tendency in dry particulate pharmaceutical mixtures: Application of an adapted mathematical tool to cohesive and non-cohesive mixtures. Pharmaceutical Development and Technology, 2009, 00, 090706063938028-11.	2.4	2
78	Stability of Extemporaneously Prepared Acetazolamide Oral Suspensions at Two Temperatures. Journal of Pediatric Pharmacology and Therapeutics, 2020, 25, 723-729.	0.5	2
79	Pharmaceutical tablet compression: measuring temporal and radial concentration profiles to better assess segregation. Pharmaceutical Development and Technology, 2022, 27, 448-458.	2.4	2
80	Cold and hot gas filtration using a novel mobile granular bed with an inner fluidized section. Canadian Journal of Chemical Engineering, 2002, 80, 17-27.	1.7	1
81	Geometrical triple phase boundary length measurement using focused ion beam tomography. Canadian Journal of Chemical Engineering, 2012, 90, 712-718.	1.7	1
82	Powder Blending Equipment. , 2015, , 287-310.		1
83	Methods of coating ceramic supports with carbon and Ni-based catalytically active formulations. Canadian Journal of Chemical Engineering, 0, , .	1.7	1
84	The “Green”™ Ni-UGSO Catalyst for Hydrogen Production under Various Reforming Regimes. Catalysts, 2021, 11, 771.	3.5	1
85	A Continuous Conical-Mill Operation for Dry Coating of Pharmaceutical Powders: The Role of Processing Time. Processes, 2022, 10, 540.	2.8	1
86	Investigation of the Role of Surface Nanometric Sulfur and Carbon Moieties in Ni-Catalyzed Steam Reforming of Hydrocarbons. ACS Symposium Series, 2012, , 1-23.	0.5	0
87	Equipment Qualification, Process and Cleaning Validation. , 2015, , 369-399.		0
88	Rheological behavior of porous pharmaceutical materials: Linking torque profiles during wet massing to water diffusion coefficients and penetration time. Chemical Engineering and Processing: Process Intensification, 2020, 157, 108152.	3.6	0
89	Proven Anti-Wetting Properties of Molybdenum Tested for High-Temperature Corrosion-Resistance with Potential Application in the Aluminum Industry. Materials, 2021, 14, 5355.	2.9	0