Achim Iulian Dugulan

List of Publications by Year
in descending order

46 papers	4,084 citations	218677 26 h-index	223800 46 g-index
46 all docs	46 docs citations	46 times ranked	3781 citing authors

#	Article	IF	Citations
1	Supported Iron Nanoparticles as Catalysts for Sustainable Production of Lower Olefins. Science, 2012, 335, 835-838.	12.6	1,001
2	Iron Particle Size Effects for Direct Production of Lower Olefins from Synthesis Gas. Journal of the American Chemical Society, 2012, 134, 16207-16215.	13.7	390
3	Metal organic framework-mediated synthesis of highly active and stable Fischer-Tropsch catalysts. Nature Communications, 2015, 6, 6451.	12.8	325
4	Effects of sodium and sulfur on catalytic performance of supported iron catalysts for the Fischerâ€“Tropsch synthesis of lower olefins. Journal of Catalysis, 2013, 303, 22-30.	6.2	217
5	Relationship between Iron Carbide Phases (Îµ-Fe₂C, Fe₇C₃, and) Tj ETQq1 1 0.784314 rgBT /Ove Catalysts. ACS Catalysis, 2018, 8, 3304-3316.	11.2	200
6	Vivianite as the main phosphate mineral in digested sewage sludge and its role for phosphate recovery. Water Research, 2018, 144, 312-321.	11.3	186
7	Elucidating the Nature of Fe Species during Pyrolysis of the Fe-BTC MOF into Highly Active and Stable Fischerâ€“Tropsch Catalysts. ACS Catalysis, 2016, 6, 3236-3247.	11.2	176
8	Vivianite as an important iron phosphate precipitate in sewage treatment plants. Water Research, 2016, 104, 449-460.	11.3	154
9	Size and Promoter Effects in Supported Iron Fischerâ€“Tropsch Catalysts: Insights from Experiment and Theory. ACS Catalysis, 2016, 6, 3147-3157.	11.2	138
10	Synthesis of stable and low-CO ₂ selective Îµ-iron carbide Fischer-Tropsch catalysts. Science Advances, 2018, 4, eaau2947.	10.3	126
11	Direct Evidence of Water-Assisted Sintering of Cobalt on Carbon Nanofiber Catalysts during Simulated Fischerâ^'Tropsch Conditions Revealed with in Situ MÃ¶ssbauer Spectroscopy. Journal of the American Chemical Society, 2010, 132, 8540-8541.	13.7	120
12	Size and Promoter Effects on Stability of Carbon-Nanofiber-Supported Iron-Based Fischerâ€“Tropsch Catalysts. ACS Catalysis, 2016, 6, 4017-4024.	11.2	118
13	Controlled formation of iron carbides and their performance in Fischer-Tropsch synthesis. Journal of Catalysis, 2018, 362, 106-117.	6.2	108
14	Effect of precursor on the catalytic performance of supported iron catalysts for the Fischerâ€“Tropsch synthesis of lower olefins. Catalysis Today, 2013, 215, 95-102.	4.4	76
15	Magnetic separation and characterization of vivianite from digested sewage sludge. Separation and Purification Technology, 2019, 224, 564-579.	7.9	71
16	Full-scale increased iron dosage to stimulate the formation of vivianite and its recovery from digested sewage sludge. Water Research, 2020, 182, 115911.	11.3	68
17	Fabrication of Fischerâ€“Tropsch Catalysts by Deposition of Iron Nanocrystals on Carbon Nanotubes. Advanced Functional Materials, 2015, 25, 5309-5319.	14.9	57
18	On the structure and hydrotreating performance of carbon-supported CoMo- and NiMo-sulfides. Applied Catalysis B: Environmental, 2013, 142-143, 178-186.	20.2	49

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19	Understanding and improving the reusability of phosphate adsorbents for wastewater effluent polishing. Water Research, 2018, 145, 365-374.	11.3	49
20	Chemical looping capabilities of olivine, used as a catalyst in indirect biomass gasification. Applied Catalysis B: Environmental, 2014, 145, 216-222.	20.2	44
21	Strategies for synthesis of Prussian blue analogues. Royal Society Open Science, 2021, 8, 201779.	2.4	43
22	Ordered Mesoporous Materials as Supports for Stable Iron Catalysts in the Fischerâ€"Tropsch Synthesis of Lower Olefins. ChemCatChem, 2016, 8, 2846-2852.	3.7	35
23	Active phases for high temperature Fischer-Tropsch synthesis in the silica supported iron catalysts promoted with antimony and tin. Applied Catalysis B: Environmental, 2021, 292, 120141.	20.2	35
24	High-pressure sulfidation of a calcined CoMo/Al2O3 hydrodesulfurization catalyst. Catalysis Today, 2008, 130, 126-134.	4.4	32
25	Efficient Promoters and Reaction Paths in the CO₂ Hydrogenation to Light Olefins over Zirconia-Supported Iron Catalysts. ACS Catalysis, 2022, 12, 3211-3225.	11.2	29
26	Promoted Iron Nanocrystals Obtained via Ligand Exchange as Active and Selective Catalysts for Synthesis Gas Conversion. ACS Catalysis, 2017, 7, 5121-5128.	11.2	26
27	Vivianite scaling in wastewater treatment plants: Occurrence, formation mechanisms and mitigation solutions. Water Research, 2021, 197, 117045.	11.3	23
28	Kinetic-arrest-induced phase coexistence and metastability in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mm Physical Review B, 2016, 94, .	3.2	21
29	High-pressure in situ MÃ¶ssbauer emission spectroscopy study of the sulfidation of calcined Coâ€"Mo/Al2O3 hydrodesulfurization catalysts. Journal of Catalysis, 2004, 222, 281-284.	6.2	18
30	The role of H2 in Fe carburization by CO in Fischer-Tropsch catalysts. Journal of Catalysis, 2021, 400, 93-102.	6.2	17
31	High-temperature Fischer-Tropsch synthesis over FeTi mixed oxide model catalysts: Tailoring activity and stability by varying the Ti/Fe ratio. Applied Catalysis A: General, 2017, 533, 38-48.	4.3	16
32	The evolution of the active phase in CoMo/C hydrodesulfurization catalysts under industrial conditions: a high-pressure Mï¿½ssbauer emission spectroscopy study. Journal of Catalysis, 2005, 229, 276-282.	6.2	15
33	The role of chromium in iron-based high-temperature water-gas shift catalysts under industrial conditions. Applied Catalysis B: Environmental, 2021, 297, 120465.	20.2	15
34	Identification of Iron Carbides in Fe(â^'Naâ^'S)/Î±â€•Al₂O₃ Fischerâ€•Tropsch Synthesis Catalysts with Xâ€•ray Powder Diffractometry and MÃ¶ssbauer Absorption Spectroscopy. ChemCatChem, 2020, 12, 5121-5139.	3.7	13
35	Sintering and carbidization under simulated high conversion on a cobalt-based Fischer-Tropsch catalyst; manganese oxide as a structural promotor. Journal of Catalysis, 2022, 413, 106-118.	6.2	12
36	Synthesis and activation for catalysis of Fe-SAPO-34 prepared using iron polyamine complexes as structure directing agents. Catalysis Science and Technology, 2017, 7, 4366-4374.	4.1	10

#	Article	IF	Citations
37	Isotopic Exchange Study on the Kinetics of Fe Carburization and the Mechanism of the Fischerâ€"Tropsch Reaction. ACS Catalysis, 2022, 12, 2877-2887.	11.2	10
38	Efficient formation of vivianite without anaerobic digester: Study in excess activated sludge. Journal of Environmental Chemical Engineering, 2022, 10, 107473.	6.7	9
39	Copper promotion of chromium-doped iron oxide water-gas shift catalysts under industrially relevant conditions. Journal of Catalysis, 2022, 405, 391-403.	6.2	7
40	Stability of Colloidal Iron Oxide Nanoparticles on Titania and Silica Support. Chemistry of Materials, 2020, 32, 5226-5235.	6.7	6
41	Role of surface carboxylate deposition on the deactivation of cobalt on titania Fischer-Tropsch catalysts. Catalysis Today, 2021, 369, 144-149.	4.4	6
42	Effect of pressure on the sulfidation behavior of NiW catalysts: A 182W MÃ¶ssbauer spectroscopy study. Catalysis Today, 2010, 150, 224-230.	4.4	4
43	Siteâ€Specific Iron Substitution in STAâ€28, a Large Pore Aluminophosphate Zeotype Prepared by Using 1,10â€Phenanthrolines as Frameworkâ€Bound Templates. Angewandte Chemie - International Edition, 2020, 59, 15186-15190.	13.8	4
44	Siteâ€Specific Iron Substitution in STAâ€28, a Large Pore Aluminophosphate Zeotype Prepared by Using 1,10â€Phenanthrolines as Frameworkâ€Bound Templates. Angewandte Chemie, 2020, 132, 15298-15302.	2.0	2
45	Effect of Co and Ni doping on the structure, magnetic and magnetocaloric properties of Fe-rich (Mn,Fe)2(P,Si) compounds. Journal of Magnetism and Magnetic Materials, 2022, 561, 169710.	2.3	2
46	Synthesis of Stable and Low-CO₂Selective Phase-Pure Îµ-Iron Carbide Catalysts in Synthesis Gas Conversion. ACS Symposium Series, 2020, , 229-255.	0.5	1