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	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
2	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
3	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
4	Efficient formation of vivianite without anaerobic digester: Study in excess activated sludge. Journal of Environmental Chemical Engineering, 2022, 10, 107473.	6.7	9
5	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
6	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
7	Role of surface carboxylate deposition on the deactivation of cobalt on titania Fischer-Tropsch catalysts. Catalysis Today, 2021, 369, 144-149.	4.4	6
8	Strategies for synthesis of Prussian blue analogues. Royal Society Open Science, 2021, 8, 201779.	2.4	43
9	Vivianite scaling in wastewater treatment plants: Occurrence, formation mechanisms and mitigation solutions. Water Research, 2021, 197, 117045.	11.3	23
10	The role of H2 in Fe carburization by CO in Fischer-Tropsch catalysts. Journal of Catalysis, 2021, 400, 93-102.	6.2	17
11	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
12	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
13	Identification of Iron Carbides in Fe(âˆ'Naâˆ'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
14	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
15	Stability of Colloidal Iron Oxide Nanoparticles on Titania and Silica Support. Chemistry of Materials, 2020, 32, 5226-5235.	6.7	6
16	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
17	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
18	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

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19	Magnetic separation and characterization of vivianite from digested sewage sludge. Separation and Purification Technology, 2019, 224, 564-579.	7.9	71
20	Relationship between Iron Carbide Phases (Îµ-Fe₂C, Fe₇C₃, and) Tj ETQq0 0 0 rgBT /Overlock 10 Catalysts. ACS Catalysis, 2018, 8, 3304-3316.	11.2	200
21	Controlled formation of iron carbides and their performance in Fischer-Tropsch synthesis. Journal of Catalysis, 2018, 362, 106-117.	6.2	108
22	Synthesis of stable and low-CO ₂ selective Îµ-iron carbide Fischer-Tropsch catalysts. Science Advances, 2018, 4, eaau2947.	10.3	126
23	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
24	Understanding and improving the reusability of phosphate adsorbents for wastewater effluent polishing. Water Research, 2018, 145, 365-374.	11.3	49
25	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
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	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
28	Size and Promoter Effects on Stability of Carbon-Nanofiber-Supported Iron-Based Fischerâ€"Tropsch Catalysts. ACS Catalysis, 2016, 6, 4017-4024.	11.2	118
29	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
30	Size and Promoter Effects in Supported Iron Fischerâ€"Tropsch Catalysts: Insights from Experiment and Theory. ACS Catalysis, 2016, 6, 3147-3157.	11.2	138
31	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>< Physical Review B, 2016, 94, .	3.2	21
32	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
33	Vivianite as an important iron phosphate precipitate in sewage treatment plants. Water Research, 2016, 104, 449-460.	11.3	154
34	Fabrication of Fischerâ€"Tropsch Catalysts by Deposition of Iron Nanocrystals on Carbon Nanotubes. Advanced Functional Materials, 2015, 25, 5309-5319.	14.9	57
35	Metal organic framework-mediated synthesis of highly active and stable Fischer-Tropsch catalysts. Nature Communications, 2015, 6, 6451.	12.8	325
36	Chemical looping capabilities of olivine, used as a catalyst in indirect biomass gasification. Applied Catalysis B: Environmental, 2014, 145, 216-222.	20.2	44

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37	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
38	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
39	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
40	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
41	Supported Iron Nanoparticles as Catalysts for Sustainable Production of Lower Olefins. Science, 2012, 335, 835-838.	12.6	1,001
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	Direct Evidence of Water-Assisted Sintering of Cobalt on Carbon Nanofiber Catalysts during Simulated Fischerâˆ’Tropsch Conditions Revealed with in Situ MÃ¶ssbauer Spectroscopy. Journal of the American Chemical Society, 2010, 132, 8540-8541.	13.7	120
44	High-pressure sulfidation of a calcined CoMo/Al2O3 hydrodesulfurization catalyst. Catalysis Today, 2008, 130, 126-134.	4.4	32
45	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
46	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