

Dante A Simonetti

List of Publications by Year in descending order

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Version: 2024-02-01

41
papers

2,238
citations

430754

18
h-index

265120

42
g-index

43
all docs

43
docs citations

43
times ranked

2598
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic Conversion of Biomass to Monofunctional Hydrocarbons and Targeted Liquid-Fuel Classes. <i>Science</i> , 2008, 322, 417-421.	6.0	840
2	The role of rhenium in the conversion of glycerol to synthesis gas over carbon supported platinum-rhenium catalysts. <i>Journal of Catalysis</i> , 2008, 260, 164-177.	3.1	171
3	Catalytic conversion of biomass-derived carbohydrates to fuels and chemicals by formation and upgrading of mono-functional hydrocarbon intermediates. <i>Catalysis Today</i> , 2009, 147, 115-125.	2.2	127
4	Catalytic Production of Liquid Fuels from Biomass-Derived Oxygenated Hydrocarbons: Catalytic Coupling at Multiple Length Scales. <i>Catalysis Reviews - Science and Engineering</i> , 2009, 51, 441-484.	5.7	110
5	Coupling of glycerol processing with Fischer-Tropsch synthesis for production of liquid fuels. <i>Green Chemistry</i> , 2007, 9, 1073.	4.6	103
6	An integrated catalytic approach for the production of hydrogen by glycerol reforming coupled with water-gas shift. <i>Applied Catalysis B: Environmental</i> , 2009, 90, 693-698.	10.8	103
7	Catalytic Strategies for Changing the Energy Content and Achieving C-H/C Coupling in Biomass-Derived Oxygenated Hydrocarbons. <i>ChemSusChem</i> , 2008, 1, 725-733.	3.6	93
8	Mechanistic details of acid-catalyzed reactions and their role in the selective synthesis of triptane and isobutane from dimethyl ether. <i>Journal of Catalysis</i> , 2011, 277, 173-195.	3.1	81
9	Reaction Kinetics of Ethylene Glycol Reforming over Platinum in the Vapor versus Aqueous Phases. <i>Journal of Physical Chemistry C</i> , 2011, 115, 961-971.	1.5	68
10	Acid strength and solvation effects on methylation, hydride transfer, and isomerization rates during catalytic homologation of C1 species. <i>Journal of Catalysis</i> , 2012, 285, 19-30.	3.1	57
11	Saline Water-Based Mineralization Pathway for Gigatonne-Scale CO ₂ Management. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 1073-1089.	3.2	53
12	How Microstructure and Pore Moisture Affect Strength Gain in Portlandite-Enriched Composites That Mineralize CO ₂ . <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13053-13061.	3.2	44
13	Selective Homogeneous and Heterogeneous Catalytic Conversion of Methanol/Dimethyl Ether to Triptane. <i>Accounts of Chemical Research</i> , 2012, 45, 653-662.	7.6	39
14	Catalytic C-Homologation of Alkanes and Dimethyl Ether and Promotion by Adamantane as a Hydride Transfer Co-catalyst. <i>ChemCatChem</i> , 2011, 3, 704-718.	1.8	26
15	Controls on CO ₂ Mineralization Using Natural and Industrial Alkaline Solids under Ambient Conditions. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10727-10739.	3.2	25
16	Selective sulfur removal from semi-dry flue gas desulfurization coal fly ash for concrete and carbon dioxide capture applications. <i>Waste Management</i> , 2021, 121, 117-126.	3.7	23
17	Effect of heating rate on kinetics of high-temperature reactions: Mo-Si system. <i>AIChE Journal</i> , 2005, 51, 261-270.	1.8	22
18	Effects of Morphology and Surface Properties of Copper Oxide on the Removal of Hydrogen Sulfide from Gaseous Streams. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 18836-18847.	1.8	21

#	ARTICLE	IF	CITATIONS
19	Catalytic routes to fuels from C ₁ and oxygenate molecules. Faraday Discussions, 2017, 197, 9-39.	1.6	20
20	Improved Sorption-Enhanced Steam Methane Reforming via Calcium Oxide-Based Sorbents with Targeted Morphology. Energy Technology, 2019, 7, 1800807.	1.8	16
21	The effects of (divalent) cation partitioning and intercalant anion type on the solubility of hydrotalcites. Journal of the American Ceramic Society, 2020, 103, 6025-6039.	1.9	14
22	New insights into the mechanisms of carbon dioxide mineralization by portlandite. AIChE Journal, 2021, 67, e17160.	1.8	14
23	Enhancing Polyvalent Cation Rejection Using Perfluorophenylazide-Grafted-Copolymer Membrane Coatings. ACS Applied Materials & Interfaces, 2020, 12, 42030-42040.	4.0	11
24	Isothermal Stimulation of Mineral Dissolution Processes by Acoustic Perturbation. Journal of Physical Chemistry C, 2018, 122, 28665-28673.	1.5	10
25	Direct observation of the kinetics of gas-solid reactions using <i>in situ</i> kinetic and spectroscopic techniques. Reaction Chemistry and Engineering, 2018, 3, 668-675.	1.9	8
26	Insights into Copper Sulfide Formation from Cu and S K edge XAS and DFT studies. Inorganic Chemistry, 2020, 59, 15276-15288.	1.9	8
27	Fly Ash-Ca(OH) ₂ Reactivity in Hypersaline NaCl and CaCl ₂ Brines. ACS Sustainable Chemistry and Engineering, 2021, 9, 8561-8571.	3.2	7
28	Atomic Dislocations and Bond Rupture Govern Dissolution Enhancement under Acoustic Stimulation. ACS Applied Materials & Interfaces, 2020, 12, 55399-55410.	4.0	6
29	Implementation of Ion Exchange Processes for Carbon Dioxide Mineralization Using Industrial Waste Streams. Frontiers in Energy Research, 2020, 8, .	1.2	6
30	Impacts of metal oxide additives on the capacity and stability of calcium oxide based materials for the reactive sorption of CO ₂ . Sustainable Energy and Fuels, 2021, 5, 767-778.	2.5	6
31	The role of gas flow distributions on CO ₂ mineralization within monolithic cemented composites: coupled CFD-factorial design approach. Reaction Chemistry and Engineering, 2021, 6, 494-504.	1.9	5
32	A Career in Catalysis: James A. Dumesic. ACS Catalysis, 2021, 11, 2310-2339.	5.5	5
33	Dissolution Amplification by Resonance and Cavitational Stimulation at Ultrasonic and Megasonic Frequencies. Journal of Physical Chemistry C, 2022, 126, 3432-3442.	1.5	5
34	Targeted morphology of copper oxide based electrospun nanofibers. Chemical Engineering Science, 2020, 219, 115547.	1.9	4
35	Linear Driving Force Approximations as Predictive Models for Reactive Sorption. Energy Technology, 2020, 8, 1900718.	1.8	3
36	Predicting zeolites™ stability during the corrosion of nuclear waste immobilization glasses: Comparison with glass corrosion experiments. Journal of Nuclear Materials, 2021, 547, 152813.	1.3	3

#	ARTICLE	IF	CITATIONS
37	Lanthanum induced lattice strain improves hydrogen sulfide capacities of copper oxide adsorbents. <i>AIChE Journal</i> , 2021, 67, e17484.	1.8	3
38	Process Simulations Reveal the Carbon Dioxide Removal Potential of a Process That Mineralizes Industrial Waste Streams via an Ion Exchange-Based Regenerable pH Swing. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6255-6264.	3.2	3
39	How Brine Composition Affects Fly Ash Reactions: The Influence of (Cat-, An-)ion Type. <i>Advances in Civil Engineering Materials</i> , 2022, 11, 619-638.	0.2	3
40	Mineral Dissolution under Electric Stimulation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 16515-16523.	1.5	1
41	Rapid Elemental Extraction from Ordered and Disordered Solutes by Acoustically-Stimulated Dissolution. <i>ACS Engineering Au</i> , 0, , .	2.3	1