DanteÂ A Simonetti

List of Publications by Year
in descending order

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	Dissolution Amplification by Resonance and Cavitational Stimulation at Ultrasonic and Megasonic Frequencies. Journal of Physical Chemistry C, 2022, 126, 3432-3442.	1.5	5
2	Process Simulations Reveal the Carbon Dioxide Removal Potential of a Process That Mineralizes Industrial Waste Streams via an Ion Exchange-Based Regenerable pH Swing. ACS Sustainable Chemistry and Engineering, 2022, 10, 6255-6264.	3.2	3
3	How Brine Composition Affects Fly Ash Reactions: The Influence of (Cat-, An-)ion Type. Advances in Civil Engineering Materials, 2022, 11, 619-638.	0.2	3
4	The role of gas flow distributions on CO₂ mineralization within monolithic cemented composites: coupled CFD-factorial design approach. Reaction Chemistry and Engineering, 2021, 6, 494-504.	1.9	5
5	Saline Water-Based Mineralization Pathway for Gigatonne-Scale CO₂ Management. ACS Sustainable Chemistry and Engineering, 2021, 9, 1073-1089.	3.2	53
6	Impacts of metal oxide additives on the capacity and stability of calcium oxide based materials for the reactive sorption of CO2. Sustainable Energy and Fuels, 2021, 5, 767-778.	2.5	6
7	A Career in Catalysis: James A. Dumesic. ACS Catalysis, 2021, 11, 2310-2339.	5.5	5
8	Selective sulfur removal from semi-dry flue gas desulfurization coal fly ash for concrete and carbon dioxide capture applications. Waste Management, 2021, 121, 117-126.	3.7	23
9	Predicting zeolitesâ€™ stability during the corrosion of nuclear waste immobilization glasses: Comparison with glass corrosion experiments. Journal of Nuclear Materials, 2021, 547, 152813.	1.3	3
10	Fly Ashâ€"Ca(OH)₂ Reactivity in Hypersaline NaCl and CaCl₂ Brines. ACS Sustainable Chemistry and Engineering, 2021, 9, 8561-8571.	3.2	7
11	Controls on CO₂ Mineralization Using Natural and Industrial Alkaline Solids under Ambient Conditions. ACS Sustainable Chemistry and Engineering, 2021, 9, 10727-10739.	3.2	25
12	New insights into the mechanisms of carbon dioxide mineralization by portlandite. AICHE Journal, 2021, 67, e17160.	1.8	14
13	Lanthanum induced lattice strain improves hydrogen sulfide capacities of copper oxide adsorbents. AICHE Journal, 2021, 67, e17484.	1.8	3
14	Linear Driving Force Approximations as Predictive Models for Reactive Sorption. Energy Technology, 2020, 8, 1900718.	1.8	3
15	Insights into Copper Sulfide Formation from Cu and S K edge XAS and DFT studies. Inorganic Chemistry, 2020, 59, 15276-15288.	1.9	8
16	Atomic Dislocations and Bond Rupture Govern Dissolution Enhancement under Acoustic Stimulation. ACS Applied Materials & Interfaces, 2020, 12, 55399-55410.	4.0	6
17	Enhancing Polyvalent Cation Rejection Using Perfluorophenylazide-Grafted-Copolymer Membrane Coatings. ACS Applied Materials & Interfaces, 2020, 12, 42030-42040.	4.0	11
18	Implementation of Ion Exchange Processes for Carbon Dioxide Mineralization Using Industrial Waste Streams. Frontiers in Energy Research, 2020, 8, .	1.2	6

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19	The effects of (diâ€;triâ€valent)â€cation partitioning and intercalant anionâ€type on the solubility of hydrotalcites. Journal of the American Ceramic Society, 2020, 103, 6025-6039.	1.9	14
20	Mineral Dissolution under Electric Stimulation. Journal of Physical Chemistry C, 2020, 124, 16515-16523.	1.5	1
21	Targeted morphology of copper oxide based electrospun nanofibers. Chemical Engineering Science, 2020, 219, 115547.	1.9	4
22	How Microstructure and Pore Moisture Affect Strength Gain in Portlandite-Enriched Composites That Mineralize CO₂. ACS Sustainable Chemistry and Engineering, 2019, 7, 13053-13061.	3.2	44
23	Effects of Morphology and Surface Properties of Copper Oxide on the Removal of Hydrogen Sulfide from Gaseous Streams. Industrial & Engineering Chemistry Research, 2019, 58, 18836-18847.	1.8	21
24	Improved Sorptionâ€Enhanced Steam Methane Reforming via Calcium Oxideâ€"Based Sorbents with Targeted Morphology. Energy Technology, 2019, 7, 1800807.	1.8	16
25	Isothermal Stimulation of Mineral Dissolution Processes by Acoustic Perturbation. Journal of Physical Chemistry C, 2018, 122, 28665-28673.	1.5	10
26	Direct observation of the kinetics of gasâ€"solid reactions using <i>in situ</i> kinetic and spectroscopic techniques. Reaction Chemistry and Engineering, 2018, 3, 668-675.	1.9	8
27	Catalytic routes to fuels from C₁ and oxygenate molecules. Faraday Discussions, 2017, 197, 9-39.	1.6	20
28	Selective Homogeneous and Heterogeneous Catalytic Conversion of Methanol/Dimethyl Ether to Triptane. Accounts of Chemical Research, 2012, 45, 653-662.	7.6	39
29	Acid strength and solvation effects on methylation, hydride transfer, and isomerization rates during catalytic homologation of C1 species. Journal of Catalysis, 2012, 285, 19-30.	3.1	57
30	Reaction Kinetics of Ethylene Glycol Reforming over Platinum in the Vapor versus Aqueous Phases. Journal of Physical Chemistry C, 2011, 115, 961-971.	1.5	68
31	Mechanistic details of acid-catalyzed reactions and their role in the selective synthesis of triptane and isobutane from dimethyl ether. Journal of Catalysis, 2011, 277, 173-195.	3.1	81
32	Catalytic Coâ€Homologation of Alkanes and Dimethyl Ether and Promotion by Adamantane as a Hydride Transfer Coâ€Catalyst. ChemCatChem, 2011, 3, 704-718.	1.8	26
33	Catalytic conversion of biomass-derived carbohydrates to fuels and chemicals by formation and upgrading of mono-functional hydrocarbon intermediates. Catalysis Today, 2009, 147, 115-125.	2.2	127
34	An integrated catalytic approach for the production of hydrogen by glycerol reforming coupled with water-gas shift. Applied Catalysis B: Environmental, 2009, 90, 693-698.	10.8	103
35	Catalytic Production of Liquid Fuels from Biomassâ€Derived Oxygenated Hydrocarbons: Catalytic Coupling at Multiple Length Scales. Catalysis Reviews - Science and Engineering, 2009, 51, 441-484.	5.7	110
36	Catalytic Strategies for Changing the Energy Content and Achieving Cï£¿C Coupling in Biomassâ€Derived Oxygenated Hydrocarbons. ChemSusChem, 2008, 1, 725-733.	3.6	93

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37	Catalytic Conversion of Biomass to Monofunctional Hydrocarbons and Targeted Liquid-Fuel Classes. Science, 2008, 322, 417-421.	6.0	840
38	The role of rhenium in the conversion of glycerol to synthesis gas over carbon supported platinumâ€"rhenium catalysts. Journal of Catalysis, 2008, 260, 164-177.	3.1	171
39	Coupling of glycerol processing with Fischerâ€"Tropsch synthesis for production of liquid fuels. Green Chemistry, 2007, 9, 1073.	4.6	103
40	Effect of heating rate on kinetics of high-temperature reactions: Mo-Si system. AIChE Journal, 2005, 51, 261-270.	1.8	22
41	Rapid Elemental Extraction from Ordered and Disordered Solutes by Acoustically-Stimulated Dissolution. ACS Engineering Au, 0, , .	2.3	1