Sarma V Pisupati

List of Publications by Year
in descending order

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Version: 2024-02-01

72	1,516	279487	344852
papers	citations	23 h-index	36 g-index

72	72	72	1565
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recovery of rare earth elements from coal fly ash through sequential chemical roasting, water leaching, and acid leaching processes. Journal of Cleaner Production, 2021, 284, 124725.	4.6	71
2	Dispersion mechanism of coal water slurry prepared by mixing various high-concentration organic waste liquids. Fuel, 2021, 287, 119340.	3.4	27
3	A FactsSage Simulation Study on the Interaction of Synthetic Petcoke Slags with Alumina Crucibles. Fuels, 2021, 2, 48-70.	1.3	1
4	Comparison of Natural and Synthetic Petroleum Coke Slag Viscosities under Reducing Conditions: Applicability of Predictive Models Using Factsage and Modified Urbain Model. Fuels, 2021, 2, 37-47.	1.3	5
5	Integrated modeling methodology for ash agglomeration in poly-disperse fluidized beds using particle population framework. Powder Technology, 2021, 384, 368-378.	2.1	4
6	Modeling char surface area evolution during coal pyrolysis: Evolving characteristics with coal rank. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105110.	2.6	6
7	The Mercer Clay in Pennsylvania as a Polymetallic Mineral Resource: Review and Update. Mining, Metallurgy and Exploration, 2021, 38, 2037-2054.	0.4	1
8	Effect of various ligands on the selective precipitation of critical and rare earth elements from acid mine drainage. Chemosphere, 2021, 280, 130684.	4.2	17
9	The effect of caustic soda treatment to recover rare earth elements from secondary feedstocks with low concentrations. Minerals Engineering, 2021, 173, 107184.	1.8	6
10	Partitioning behavior during coal combustion of potentially deleterious trace elements in Ge-rich coals from Wulantuga coal mine, Inner Mongolia, China. Fuel, 2021, 305, 121595.	3.4	6
11	Modeling the Impact of Operating Variables on Ash Agglomeration in Chemical Looping Combustion of Solid Fuels. Industrial & Engineering Chemistry Research, 2021, 60, 17970-17979.	1.8	2
12	Using yttrium as an indicator to estimate total rare earth element concentration: a case study of anthracite-associated clays from northeastern Pennsylvania. International Journal of Coal Science and Technology, 2020, 7, 652-661.	2.7	6
13	Precipitation of rare earth elements from acid mine drainage by CO2 mineralization process. Chemical Engineering Journal, 2020, 399, 125716.	6.6	53
14	Carbon deposition on Ni-based catalyst with TiO2 as additive during the syngas methanation process in a fluidized bed reactor. Fuel, 2019, 235, 85-91.	3.4	39
15	Multicycle Study on Chemical Looping Combustion with a CaSO4-CaO Mixed Oxygen Carrier. International Journal of Chemical Reactor Engineering, 2019, 17, .	0.6	0
16	Intrinsic gasification kinetics of coal chars generated in a high-pressure, high-temperature flow reactor. Chemical Engineering Journal, 2019, 375, 122028.	6.6	15
17	Influence of Pyrolysis Gas on Volatile Yield and CO2 Reaction Kinetics of the Char Samples Generated in a High-Pressure, High-Temperature Flow Reactor. Energies, 2019, 12, 107.	1.6	7
18	Effects of pressure and CO concentration on vanadium, nickel and iron phase transformations for petcoke slag viscosity correlation development. Fuel, 2019, 253, 238-248.	3.4	7

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19	Comparison of entrained flow CO2 gasification behaviour of three low-rank coals â€“ Victorian brown coal, Beulah lignite, and Inner Mongolia lignite. Fuel, 2019, 249, 206-218.	3.4	23
20	Effect of Temperature, Pressure, Feed Particle Size, and Feed Particle Density on Structural Characteristics and Reactivity of Chars Generated during Gasification of Pittsburgh No.8 Coal in a High-Pressure, High-Temperature Flow Reactor. Energies, 2019, 12, 4773.	1.6	8
21	Investigation of fluidized bed agglomerate growth process using simulations and SEM-EDX characterization of laboratory-generated agglomerates. Chemical Engineering Science, 2018, 184, 172-185.	1.9	11
22	Role of condensed phases in the agglomeration of low rank coal ash in fluidized beds. Fuel, 2018, 232, 1-11.	3.4	5
23	Analysis of tars formed during co-pyrolysis of coal and biomass at high temperature in carbon dioxide atmosphere. Journal of Analytical and Applied Pyrolysis, 2017, 128, 379-396.	2.6	32
24	A study on fragmentation behavior, inorganic melt phase formation, and carbon loss during high temperature gasification of mineral matter rich fraction of Pittsburgh No. 8 coal. Fuel, 2017, 208, 247-259.	3.4	14
25	Utilization of coal in IGCC systems. , 2017, , 83-120.		4
26	Effect of additives on interfacial interactions for viscosity reduction of carbonaceous solidâ€“water slurries. Fuel, 2016, 180, 50-58.	3.4	39
27	Review of Particle Physics and Chemistry in Fluidized Beds for Development of Comprehensive Ash Agglomeration Prediction Models. Energy & Fuels, 2016, 30, 3714-3734.	2.5	17
28	Fate of Sulfur during Entrained-Flow Gasification of Pittsburgh No. 8 Coal: Influence of Particle Size, Sulfur Forms, and Temperature. Energy & Fuels, 2016, 30, 3241-3250.	2.5	19
29	A Study on Removal of Rare Earth Elements from U.S. Coal Byproducts by Ion Exchange. Metallurgical and Materials Transactions E, 2016, 3, 6-17.	0.5	36
30	A Critical Review of Mineral Matter Related Issues during Gasification of Coal in Fixed, Fluidized, and Entrained Flow Gasifiers. Energies, 2015, 8, 10430-10463.	1.6	77
31	Effect of Heterogeneity in Coal Ash Chemical Composition on the Onset of Conditions Favorable for Agglomeration in Fluid Beds. Energies, 2015, 8, 12530-12545.	1.6	12
32	A study of Indian limestones for sulfur capture in FBC plants: Particle size sensitivity of sulfation behavior. Fuel, 2015, 161, 376-383.	3.4	3
33	Modeling the CO2-based enhanced geothermal system (EGS) paired with integrated gasification combined cycle (IGCC) for symbiotic integration of carbon dioxide sequestration with geothermal heat utilization. International Journal of Greenhouse Gas Control, 2015, 32, 197-212.	2.3	25
34	Interparticle Interactions in Highly Concentrated Coalâ€“Water Slurries and Their Effect on Slurry Viscosity. Energy & Fuels, 2015, 29, 3675-3683.	2.5	40
35	A study on initiation of ash agglomeration in fluidized bed gasification systems. Fuel, 2015, 152, 48-57.	3.4	28
36	Characterization of an entrained flow reactor for pyrolysis of coal and biomass at higher temperatures. Fuel, 2015, 156, 254-266.	3.4	35

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37	Effect of hydrophobicity on viscosity of carbonaceous solidâ€“water slurry. Fuel Processing Technology, 2015, 137, 124-130.	3.7	21
38	A Review of Thermal Co-Conversion of Coal and Biomass/Waste. Energies, 2014, 7, 1098-1148.	1.6	175
39	Models of agglomerate growth in fluidized bed reactors: Critical review, status and applications. Powder Technology, 2014, 264, 216-228.	2.1	40
40	Determination of Sticking Probability Based on the Critical Velocity Derived from a Visco-Elastoplastic Model to Characterize Ash Deposition in an Entrained Flow Gasifier. Energy & Fuels, 2014, 28, 5307-5317.	2.5	6
41	Image analysis measurements of particle coefficient of restitution for coal gasification applications. Powder Technology, 2013, 247, 30-43.	2.1	36
42	Utilization of carbon dioxide from coal-based power plants as a heat transfer fluid for electricity generation in enhanced geothermal systems (EGS). Energy, 2013, 57, 505-512.	4.5	32
43	Application of Particle Population Model To Determine the Contribution to Slag, Flyash, and Syngas in Entrained Flow Gasification from Particle Size Distribution. Energy & Fuels, 2013, 27, 7681-7695.	2.5	10
44	Development and use of a method for prediction of the ash split in a CFBC boiler to improve the energy efficiency. Fuel, 2012, 102, 9-15.	3.4	6
45	Pairing Integrated Gasification and Enhanced Geothermal Systems (EGS) in Semiarid Environments. Energy & Fuels, 2012, 26, 7378-7389.	2.5	5
46	Physical and Chemical Characterization of Coal Particles Used as Entrained Flow Gasifier Feedstock: Heterogeneity in Mineral Matter Distribution. Energy Procedia, 2012, 14, 1735-1740.	1.8	3
47	Oxy-fuel combustion: The effect of coal rank and the role of char-CO2 reaction. Fuel Processing Technology, 2012, 102, 156-165.	3.7	40
48	Co-primary thermolysis molecular modeling simulation of lignin and subbituminous coal via a reactive coarse-grained simplification. Journal of Analytical and Applied Pyrolysis, 2012, 95, 101-111.	2.6	13
49	Effect of Furnace Purging on Kinetic Rate Parameter Determination Using Isothermal Thermogravimetric Analysis. Energy & Fuels, 2011, 25, 4937-4943.	2.5	6
50	Effect of CO₂ during Coal Pyrolysis and Char Burnout in Oxy-Coal Combustion. Energy & Fuels, 2011, 25, 2452-2459.	2.5	56
51	Effect of size and density on the thermodynamic predictions of coal particle phase formation during coal gasification. Fuel Processing Technology, 2009, 90, 1114-1121.	3.7	23
52	Numerical modeling of NOx reduction using pyrolysis products from biomass-based materials. Biomass and Bioenergy, 2008, 32, 146-154.	2.9	30
53	Conditions for entrainment into a FeOx containing slag for a carbon-containing particle in an entrained coal gasifier. Fuel Processing Technology, 2008, 89, 1379-1385.	3.7	31
54	Interpretation of Char Reactivity Profiles Obtained Using a Thermogravimetric Analyzer. Energy & Fuels, 2008, 22, 317-320.	2.5	39

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55	Influence of Calcium Content of Biomass-Based Materials on Simultaneous NO_X and SO₂ Reduction. Environmental Science & Technology, 2008, 42, 2509-2514.	4.6	14
56	Identification of Significant Factors in Reburning with Coal Volatiles. Environmental Science & Technology, 2008, 42, 2004-2008.	4.6	4
57	Prediction of Sorbent Performance in a Circulating Fluidized Bed Boiler Based on Petrographic Properties. Journal of Engineering for Gas Turbines and Power, 2007, 129, 565-571.	0.5	8
58	Effect of Fuel Properties on the Bottom Ash Generation Rate by a Laboratory Fluidized Bed Combustor. Journal of Energy Resources Technology, Transactions of the ASME, 2007, 129, 144-151.	1.4	4
59	Evaluation of the use of coal volatiles as reburning fuel for NOx reduction. Fuel, 2007, 86, 554-559.	3.4	21
60	Special Issue on Advances in Fluidized Bed Combustion. Journal of Energy Resources Technology, Transactions of the ASME, 2006, 128, 89-89.	1.4	1
61	An Integrative Approach for Combustor Design Using CFD Methods. Energy & Fuels, 2002, 16, 622-633.	2.5	16
62	The Effect of Mixing Model and Mixing Characteristics on Nox Reduction during Reburning. Energy & Fuels, 2001, 15, 363-371.	2.5	8
63	The measurement of flyash and bottom ash flow rates from a circulating fluidized bed boiler. Environmental Progress, 2000, 19, 175-182.	0.8	5
64	Introduction. Journal of Hazardous Materials, 2000, 74, ix.	6.5	0
65	Partitioning behavior of trace elements during pilot-scale combustion of pulverized coal and coalâ€“water slurry fuel. Journal of Hazardous Materials, 2000, 74, 47-59.	6.5	25
66	An investigation on polycyclic aromatic hydrocarbon emissions from pulverized coal combustion systems. Journal of Hazardous Materials, 2000, 74, 91-107.	6.5	29
67	Sorbent behaviour in circulating fluidized bed combustors: Relevance of thermally induced fractures to particle size dependence. Fuel, 1996, 75, 759-768.	3.4	13
68	Effects of natural weathering and low-temperature oxidation on some aspects of the combustion behaviour of bituminous coals. Fuel, 1993, 72, 779-785.	3.4	11
69	Natural weathering and laboratory oxidation of bituminous coals: Organic and inorganic structural changes. Fuel, 1993, 72, 531-542.	3.4	49
70	Devolatilization behaviour of naturally weathered and laboratory oxidized bituminous coals. Fuel, 1993, 72, 165-173.	3.4	19
71	Effect of blending low-grade anthracite products with bituminous coals on combustion characteristics in a bench-scale stoker simulator. Fuel Processing Technology, 1992, 32, 159-179.	3.7	7
72	Combustion characteristics of naturally weathered (in situ) bituminous coals. Fuel Processing Technology, 1991, 28, 49-66.	3.7	9