Sankar Sankar Bhattacharya

List of Publications by Year in descending order

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172 papers

6,605 citations

71102 41 h-index 72 g-index

175 all docs

175 docs citations

175 times ranked 5765 citing authors

#	Article	IF	CITATIONS
1	The effect of renewable energy consumption on economic growth: Evidence from top 38 countries. Applied Energy, 2016, 162, 733-741.	10.1	1,007
2	Volatilisation and catalytic effects of alkali and alkaline earth metallic species during the pyrolysis and gasification of Victorian brown coal. Part II. Effects of chemical form and valence. Fuel, 2002, 81, 151-158.	6.4	185
3	Study of Chemical Structure Changes of Chinese Lignite upon Drying in Superheated Steam, Microwave, and Hot Air. Energy & Samp; Fuels, 2012, 26, 3651-3660.	5.1	180
4	Review of Fuels for Direct Carbon Fuel Cells. Energy & Energy & 2012, 26, 1471-1488.	5.1	148
5	Quality of bio-oil from catalytic pyrolysis of microalgae Chlorella vulgaris. Fuel, 2018, 223, 12-19.	6.4	139
6	Kinetics of CO 2 and steam gasification of Victorian brown coal chars. Chemical Engineering Journal, 2016, 285, 331-340.	12.7	131
7	Pressurized chemical-looping combustion of coal using an iron ore as oxygen carrier in a pilot-scale unit. International Journal of Greenhouse Gas Control, 2012, 10, 363-373.	4.6	130
8	A kinetic study of microwave and fluidized-bed drying of a Chinese lignite. Chemical Engineering Research and Design, 2014, 92, 54-65.	5.6	130
9	A review on catalytic pyrolysis of microalgae to high-quality bio-oil with low oxygeneous and nitrogenous compounds. Renewable and Sustainable Energy Reviews, 2019, 108, 481-497.	16.4	127
10	Chemical looping combustion of coal in a 5 kWth interconnected fluidized bed reactor using hematite as oxygen carrier. Applied Energy, 2015, 157, 304-313.	10.1	105
11	The role of technology on the dynamics of coal consumption–economic growth: New evidence from China. Applied Energy, 2015, 154, 686-695.	10.1	102
12	Combinations of solid oxide fuel cell and several enhanced gas turbine cycles. Journal of Power Sources, 2003, 124, 65-75.	7.8	94
13	Combination of thermochemical recuperative coal gasification cycle and fuel cell for power generation. Fuel, 2005, 84, 1019-1021.	6.4	94
14	The properties and thermal effects of ash deposits in coal-fired furnaces. Progress in Energy and Combustion Science, 1993, 19, 487-504.	31.2	93
15	Thermogravimetric study of the combustion of Tetraselmis suecica microalgae and its blend with a Victorian brown coal in O2/N2 and O2/CO2 atmospheres. Bioresource Technology, 2013, 150, 15-27.	9.6	93
16	Energy recuperation in solid oxide fuel cell (SOFC) and gas turbine (GT) combined system. Journal of Power Sources, 2003, 117, 7-13.	7.8	87
17	Chemical Structure Changes Accompanying Fluidized-Bed Drying of Victorian Brown Coals in Superheated Steam, Nitrogen, and Hot Air. Energy & Superheated Steam, Nitrogen, Nitrogen	5.1	83
18	Direct carbon fuel cell operation on brown coal. Applied Energy, 2014, 120, 56-64.	10.1	82

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19	Isolation and biochemical characterisation of two thermophilic green algal species- Asterarcys quadricellulare and Chlorella sorokiniana, which are tolerant to high levels of carbon dioxide and nitric oxide. Algal Research, 2018, 30, 28-37.	4.6	71
20	Dimethyl ether synthesis from Victorian brown coal through gasification – Current status, and research and development needs. Progress in Energy and Combustion Science, 2013, 39, 577-605.	31.2	70
21	Pyrolysis kinetics and reactivity of algae–coal blends. Biomass and Bioenergy, 2013, 55, 291-298.	5 . 7	70
22	Potential Chipless RFID Sensors for Food Packaging Applications: A Review. IEEE Sensors Journal, 2020, 20, 9618-9636.	4.7	70
23	Cost-benefit analysis of different hydrogen production technologies using AHP and Fuzzy AHP. International Journal of Hydrogen Energy, 2014, 39, 15293-15306.	7.1	67
24	Pyrolysis of mixed municipal solid waste: Characterisation, interaction effect and kinetic modelling using the thermogravimetric approach. Waste Management, 2019, 90, 152-167.	7.4	64
25	Catalytic pyrolysis of microalgae Tetraselmis suecica and characterization study using in situ Synchrotron-based Infrared Microscopy. Fuel, 2015, 161, 345-354.	6.4	57
26	Application of the distributed activation energy model to the kinetic study of pyrolysis of the fresh water algae Chlorococcum humicola. Bioresource Technology, 2012, 107, 476-481.	9.6	55
27	Sulfur Emission from Victorian Brown Coal Under Pyrolysis, Oxy-Fuel Combustion and Gasification Conditions. Environmental Science & Environmental Scie	10.0	55
28	Prediction of distribution of trace elements under Oxy-fuel combustion condition using Victorian brown coals. Fuel, 2013, 114, 135-142.	6.4	55
29	Use of Fe ₂ O ₃ -Containing Industrial Wastes As the Oxygen Carrier for Chemical-Looping Combustion of Coal: Effects of Pressure and Cycles. Energy & Energy	5.1	54
30	Turning Biodiesel Waste Glycerol into 1,3-Propanediol: Catalytic Performance of Sulphuric acid-Activated Montmorillonite Supported Platinum Catalysts in Glycerol Hydrogenolysis. Scientific Reports, 2018, 8, 7484.	3.3	54
31	An experimental study on thermo-catalytic pyrolysis of plastic waste using a continuous pyrolyser. Waste Management, 2017, 67, 143-154.	7.4	52
32	In situ synchrotron IR study relating temperature and heating rate to surface functional group changes in biomass. Bioresource Technology, 2014, 151, 36-42.	9.6	48
33	Control of Agglomeration and Defluidization Burning High-Alkali, High-Sulfur Lignites in a Small Fluidized Bed CombustorEffect of Additive Size and Type, and the Role of Calcium. Energy & Emp; Fuels, 2003, 17, 1014-1021.	5.1	46
34	Kinetics of Pyrolysis of Mixed Municipal Solid Waste-A Review. Procedia Environmental Sciences, 2016, 35, 513-527.	1.4	46
35	Comparison of CO2 and steam gasification reactivity of algal and woody biomass chars. Fuel Processing Technology, 2014, 117, 44-52.	7.2	45
36	A study on growth and pyrolysis characteristics of microalgae using Thermogravimetric Analysis-Infrared Spectroscopy and synchrotron Fourier Transform Infrared Spectroscopy. Bioresource Technology, 2017, 229, 1-10.	9.6	45

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37	Performance of Fe2O3/CaSO4 composite oxygen carrier on inhibition of sulfur release in calcium-based chemical looping combustion. International Journal of Greenhouse Gas Control, 2013, 17, 1-12.	4.6	44
38	Comparison of entrained flow gasification behaviour of Victorian brown coal and biomass. Fuel, 2017, 203, 942-953.	6.4	44
39	The route towards sustainable production of ethylene glycol from a renewable resource, biodiesel waste: a review. Catalysis Science and Technology, 2019, 9, 567-577.	4.1	44
40	The character of ash deposits and the thermal performance of furnaces. Fuel Processing Technology, 1995, 44, 143-153.	7.2	43
41	Comparison of CuO and NiO as oxygen carrier in chemical looping combustion of a Victorian brown coal. International Journal of Hydrogen Energy, 2011, 36, 12048-12057.	7.1	43
42	In-situ observation of the combustion of air-dried and wet Victorian brown coal. Proceedings of the Combustion Institute, 2011, 33, 1739-1746.	3.9	43
43	Nitrogen Oxides, Sulfur Trioxide, and Mercury Emissions during Oxy-fuel Fluidized Bed Combustion of Victorian Brown Coal. Environmental Science & Eamp; Technology, 2014, 48, 14844-14850.	10.0	43
44	Investigating the dynamic structural changes on Cu/CeO2 catalysts observed during CO2 hydrogenation. Journal of Catalysis, 2020, 381, 415-426.	6.2	43
45	One-step peracetic acid pretreatment of hardwood and softwood biomass for platform chemicals production. Scientific Reports, 2021, 11, 11183.	3.3	43
46	Catalytic gasification of carbon in a direct carbon fuel cell. Fuel, 2016, 180, 270-277.	6.4	42
47	Gasification of torrefied oil palm biomass in a fixed-bed reactor: Effects of gasifying agents on product characteristics. Journal of the Energy Institute, 2020, 93, 711-722.	5.3	42
48	A Review on Synthesis of Methane as a Pathway for Renewable Energy Storage With a Focus on Solid Oxide Electrolytic Cell-Based Processes. Frontiers in Energy Research, 2020, 8, .	2.3	42
49	Oxy-fuel fluidized bed combustion using Victorian brown coal: An experimental investigation. Fuel Processing Technology, 2014, 117, 23-29.	7.2	41
50	Fuel Particle Conversion of Pulverized Biomass during Pyrolysis in an Entrained Flow Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 13973-13979.	3.7	40
51	Application of the self-heat recuperation technology for energy saving in biomass drying system. Fuel Processing Technology, 2014, 117, 66-74.	7.2	40
52	Dilute alkaline pretreatment for reducing sugar production from Tetraselmis suecica and Chlorella sp. biomass. Process Biochemistry, 2016, 51, 1757-1766.	3.7	40
53	Thermogravimetric analysis and kinetic characterization of lipid-extracted Tetraselmis suecica and Chlorella sp Algal Research, 2014, 6, 39-45.	4.6	39
54	Highâ€ŧemperature pyrolysis and CO ₂ gasification of Victorian brown coal and Rhenish lignite in an entrained flow reactor. AICHE Journal, 2016, 62, 2101-2111.	3.6	38

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55	Process modelling of dimethyl ether production from Victorian brown coalâ€"Integrating coal drying, gasification and synthesis processes. Computers and Chemical Engineering, 2013, 48, 96-104.	3.8	37
56	Combustion of single char particles from Victorian brown coal under oxy-fuel fluidized bed conditions. Fuel, 2016, 165, 477-483.	6.4	37
57	A life cycle assessment of a new laterite processing technology. Journal of Cleaner Production, 2017, 142, 1765-1777.	9.3	36
58	Low temperature entrained flow pyrolysis and gasification of a Victorian brown coal. Fuel, 2015, 154, 107-113.	6.4	35
59	Use of Pyrite Cinder as an Iron-Based Oxygen Carrier in Coal-Fueled Chemical Looping Combustion. Energy & Combustion (2015), 29, 2645-2655.	5.1	35
60	In-situ synchrotron IR study on surface functional group evolution of Victorian and Thailand low-rank coals during pyrolysis. Journal of Analytical and Applied Pyrolysis, 2016, 122, 122-130.	5.5	35
61	Characteristics and composition of lignites and boiler ashes and their relation to slagging: The case of Mae Moh PCC boilers. Fuel, 2009, 88, 116-123.	6.4	33
62	Techno-Economic and Life Cycle Assessment of Pyrolysis of Unsegregated Urban Municipal Solid Waste in India. Industrial & Engineering Chemistry Research, 2021, 60, 1473-1482.	3.7	33
63	Direct Carbon Fuel Cell Operation on Brown Coal with a Ni-GDC-YSZ Anode. Electrochimica Acta, 2015, 178, 721-731.	5.2	32
64	CO ₂ Gasification Kinetics of Algal and Woody Char Procured under Different Pyrolysis Conditions and Heating Rates. ACS Sustainable Chemistry and Engineering, 2015, 3, 365-373.	6.7	32
65	Development of emittance of coal particles during devolatilisation and burnoff. Fuel, 1999, 78, 511-519.	6.4	31
66	Direct and two-step gasification behaviour of Victorian brown coals in an entrained flow reactor. Energy Conversion and Management, 2019, 195, 1044-1055.	9.2	31
67	Enhancement of performance and emission characteristics by co-gasification of biomass and coal using an entrained flow gasifier. Journal of the Energy Institute, 2021, 95, 166-178.	5.3	31
68	Ash partitioning during the oxy–fuel combustion of lignite and its dependence on the recirculation of flue gas impurities (H2O, HCl and SO2). Fuel, 2011, 90, 2207-2216.	6.4	30
69	Degradation Mechanism in a Direct Carbon Fuel Cell Operated with Demineralised Brown Coal. Electrochimica Acta, 2014, 143, 278-290.	5.2	30
70	Amine-based CO2 capture sorbents: A potential CO2 hydrogenation catalyst. Journal of CO2 Utilization, 2018, 26, 397-407.	6.8	30
71	Plastics—Villain or Hero? Polymers and Recycled Polymers in Mineral and Metallurgical Processing—A Review. Materials, 2019, 12, 655.	2.9	30
72	A study on the performance of coke resistive cerium modified zeolite Y catalyst for the pyrolysis of scrap tyres in a two-stage fixed bed reactor. Waste Management, 2020, 102, 139-148.	7.4	29

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73	Investigation of functional group changes in biomass during slow pyrolysis using synchrotron based infra-red microspectroscopy and thermogravimetry-infra-red spectroscopy. Journal of Analytical and Applied Pyrolysis, 2017, 127, 394-401.	5 . 5	28
74	Isothermal kinetic study of CO2 gasification of torrefied oil palm biomass. Biomass and Bioenergy, 2020, 134, 105487.	5.7	28
75	A review on steel slag valorisation <i>via</i> mineral carbonation. Reaction Chemistry and Engineering, 2021, 6, 1152-1178.	3.7	28
76	A theoretical investigation of the influence of optical constants and particle size on the radiative properties and heat transfer involving ash clouds and deposits. Chemical Engineering and Processing: Process Intensification, 2000, 39, 471-483.	3 . 6	27
77	Gasification Performance of Australian Lignites in a Pressurized Fluidized Bed Gasifier Process Development Unit Under Air and Oxygen-enriched Air Blown Conditions. Chemical Engineering Research and Design, 2006, 84, 453-460.	5.6	26
78	Chemical looping combustion of Victorian brown coal using NiO oxygen carrier. International Journal of Hydrogen Energy, 2011, 36, 3253-3259.	7.1	26
79	Comparison of Superheated Steam and Air Fluidized-Bed Drying Characteristics of Victorian Brown Coals. Energy & Samp; Fuels, 2013, 27, 6598-6606.	5.1	26
80	Kinetic study of torrefaction of oil palm shell, mesocarp and empty fruit bunch. Journal of Thermal Analysis and Calorimetry, 2016, 126, 709-715.	3.6	26
81	Ash characteristics during oxy-fuel fluidized bed combustion of a Victorian brown coal. Powder Technology, 2016, 288, 1-5.	4.2	25
82	Towards efficient calcium extraction from steel slag and carbon dioxide utilisation <i>via</i> pressure-swing mineral carbonation. Reaction Chemistry and Engineering, 2019, 4, 52-66.	3.7	25
83	Thermogravimetric study and modeling for the drying of a Chinese lignite. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 793-803.	1.5	24
84	Evaluation of high-temperature pyrolysis and CO2 gasification performance of bituminous coal in an entrained flow gasifier. Journal of the Energy Institute, 2021, 94, 294-309.	5. 3	24
85	Comparison of entrained flow CO2 gasification behaviour of three low-rank coals – Victorian brown coal, Beulah lignite, and Inner Mongolia lignite. Fuel, 2019, 249, 206-218.	6.4	23
86	Understanding dissolution characteristics of steel slag for resource recovery. Waste Management, 2020, 117, 179-187.	7.4	23
87	Chemical Looping Combustion (CLC) of two Victorian brown coals – Part 2: Assessment of interaction between CuO and minerals inherent in coals during multi cycle experiments. Fuel, 2012, 96, 335-347.	6.4	22
88	Investigation of Two Hematites as Oxygen Carrier and Two Low-Rank Coals as Fuel in Chemical Looping Combustion. Energy & Samp; Fuels, 2017, 31, 1896-1903.	5.1	21
89	Experimental Investigation of the Combustion of Bituminous Coal in Air and O ₂ /CO ₂ Mixtures: 1. Particle Imaging of the Combustion of Coal and Char. Energy & Doubleston of Coal and Char. Energy & Doubleston of Coal and Char.	5.1	19
90	Chemical looping combustion (CLC) of two Victorian brown coals – Part 1: Assessment of interaction between CuO and minerals inherent in coals during single cycle experiment. Fuel, 2013, 104, 262-274.	6.4	19

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91	Toward the Sustainable Synthesis of Propanols from Renewable Glycerol over MoO3-Al2O3 Supported Palladium Catalysts. Catalysts, 2018, 8, 385.	3.5	19
92	Entrained flow gasification behaviour of Victorian brown coal char at low temperature. Fuel, 2018, 234, 549-557.	6.4	19
93	Effect of reactant types (steam, <scp> CO ₂ </scp> and steam + <scp> CO ₂) of Energy Research, 2021, 45, 9492-9501.</scp>) Tj ETQq1 4.5	1 0.7843 <mark>14</mark>
94	Experimental investigation of the combustion of bituminous coal in air and O2/CO2 mixtures: 2. Variation of the transformation behaviour of mineral matter with bulk gas composition. Fuel, 2011, 90, 1361-1369.	6.4	18
95	Intrinsic kinetics of CO2 gasification of a Victorian coal char. Journal of Thermal Analysis and Calorimetry, 2016, 123, 1685-1694.	3.6	18
96	Effects of gasification condition on the overall performance of methanol-electricity polygeneration system. Energy Conversion and Management, 2019, 184, 362-373.	9.2	18
97	Thermal and in situ infrared analysis to characterise the slow pyrolysis of mixed municipal solid waste (MSW) and its components. Renewable Energy, 2020, 148, 388-401.	8.9	18
98	Effect of elevated carbon dioxide and nitric oxide on the physiological responses of two green algae, Asterarcys quadricellulare and Chlorella sorokiniana. Journal of Applied Phycology, 2020, 32, 189-204.	2.8	18
99	Gasification kinetic modelling of Victorian brown coal chars and validity for entrained flow gasification in CO2. International Journal of Mining Science and Technology, 2021, 31, 473-481.	10.3	18
100	Valorisation of glycerol through catalytic hydrogenolysis routes for sustainable production of value-added C ₃ chemicals: current and future trends. Sustainable Energy and Fuels, 2022, 6, 596-639.	4.9	18
101	Evaluation of Sc2O3–CeO2–ZrO2 electrolyte-based tubular fuel cells using activated charcoal and hydrogen fuels. Electrochimica Acta, 2018, 259, 143-150.	5.2	17
102	Mineral Transformation and Morphological Change during Pyrolysis and Gasification of Victorian Brown Coals in an Entrained Flow Reactor. Energy & Energy & 2019, 33, 6134-6147.	5.1	17
103	Optimization of reaction parameters for bio-oil production by catalytic pyrolysis of microalga Tetraselmis suecica: Influence of Ni-loading on the bio-oil composition. Renewable Energy, 2019, 142, 426-436.	8.9	17
104	Chipless RFID Tags: Co- or Cross-Polar Tag?., 2019,,.		17
105	Fate of a biomass particle during CO2 gasification: A mathematical model under entrained flow condition at high temperature. Energy, 2019, 168, 1045-1062.	8.8	17
106	Cellulose fast pyrolysis for platform chemicals: assessment of potential targets and suitable reactor technology. Biofuels, Bioproducts and Biorefining, 2020, 14, 446-468.	3.7	17
107	A study on the importance of dependent radiative effects in determining the spectral and total emittance of particulate ash deposits in pulverised fuel fired furnaces. Chemical Engineering and Processing: Process Intensification, 1997, 36, 423-432.	3.6	16
108	Effect of Coal Drying on the Behavior of Inorganic Species during Victorian Brown Coal Pyrolysis and Combustion. Energy & Energy & 2011, 25, 2764-2771.	5.1	16

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109	Chemical looping combustion of low-ash and high-ash low rank coals using different metal oxides – A thermogravimetric analyser study. Fuel, 2012, 97, 137-150.	6.4	16
110	Synchrotron-Based Infra-Red Spectroscopic Insights on Thermo-Catalytic Conversion of Cellulosic Feedstock to Levoglucosenone and Furans. ACS Omega, 2019, 4, 8747-8757.	3.5	16
111	Ultrafast surfactant-templating of *BEA zeolite: An efficient catalyst for the cracking of polyethylene pyrolysis vapours. Chemical Engineering Journal, 2021, 412, 128566.	12.7	16
112	Evolution of organically bound metals during coal combustion in air and O2/CO2 mixtures: A case study of Victorian brown coal. Proceedings of the Combustion Institute, 2011, 33, 2795-2802.	3.9	15
113	Coupling of a distributed activation energy model with particle simulation for entrained flow pyrolysis of biomass. Fuel Processing Technology, 2015, 137, 131-138.	7.2	15
114	Performance of a Victorian brown coal and iron ore during chemical looping combustion in a 10 kWth alternating fluidized bed. Fuel, 2016, 183, 245-252.	6.4	15
115	The regulated coal sector and CO2 emissions in Indian growth process: Empirical evidence over half a century and policy suggestions. Applied Energy, 2017, 204, 667-678.	10.1	15
116	Process modelling for the production of hydrogen-rich gas from gasification of coal using oxygen, CO2 and steam reactants. International Journal of Hydrogen Energy, 2021, 46, 24051-24059.	7.1	15
117	The temperature-dependent release of volatile inorganic species from Victorian brown coals and German lignites under CO2 and H2O gasification conditions. Fuel, 2015, 158, 72-80.	6.4	14
118	Release behavior of Hg, Se, Cr and As during oxy-fuel combustion using Loy Yang brown coal in a bench-scale fluidized bed unit. Powder Technology, 2016, 302, 328-332.	4.2	14
119	Attrition of Victorian brown coal during drying in a fluidized bed. Drying Technology, 2016, 34, 793-801.	3.1	14
120	One-pot synthesis of bio-fuel additives from glycerol and benzyl alcohol: Mesoporous MCM-41 supported iron (III) chloride as a highly efficient tandem catalyst. Renewable Energy, 2020, 156, 883-892.	8.9	14
121	Influence of Temperature on the Release of Inorganic Species from Victorian Brown Coals and German Lignites under CO ₂ Gasification Conditions. Energy & En	5.1	13
122	Master curve behaviour in superheated steam drying of small porous particles. Applied Thermal Engineering, 2013, 52, 460-467.	6.0	12
123	Determination and Comparison of CuO Reduction/Oxidation Kinetics in CLC Experiments with CO/Air by the Shrinking Core Model and Its Characterization. Energy & Samp; Fuels, 2014, 28, 3495-3510.	5.1	12
124	Preliminary understanding on the ash behavior of algae during co-gasification in an entrained flow reactor. Fuel Processing Technology, 2018, 175, 26-34.	7.2	12
125	Dual-Polarized Keratin-Based UWB Chipless RFID Relative Humidity Sensor. IEEE Sensors Journal, 2022, 22, 1924-1932.	4.7	12
126	Reactions and Transformations of Mineral and Nonmineral Inorganic Species during the Entrained Flow Pyrolysis and CO ₂ Gasification of Low Rank Coals. Energy & Ener	5.1	11

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127	Rational design of thermogravimetric experiments to determine intrinsic char gasification kinetics. Proceedings of the Combustion Institute, 2019, 37, 3023-3031.	3.9	11
128	Kinetics of steel slag dissolution: from experiments to modelling. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180830.	2.1	11
129	Steady state kinetic model for entrained flow CO gasification of biomass at high temperature. Energy, 2020, 196, 117073.	8.8	11
130	Characterisation of Australian ilmenite oxygen carrier during chemical looping combustion of Victorian brown coal. Fuel Processing Technology, 2021, 213, 106669.	7.2	11
131	Process simulation and exergy analysis of two nickel laterite processing technologies. International Journal of Mineral Processing, 2017, 161, 83-93.	2.6	10
132	Use of synthetic oxygen carriers for Chemical Looping Combustion of Victorian brown coal. Proceedings of the Combustion Institute, 2015, 35, 3619-3627.	3.9	9
133	Evaluations of Australian coals as fuel for carbon fuel cell. Fuel, 2021, 287, 119414.	6.4	9
134	An alternative process for nitric oxide and hydrogen production using metal oxides. Chemical Engineering Research and Design, 2016, 112, 36-45.	5.6	8
135	Exergy efficiency improvement in hydrogen production process by recovery of chemical energy versus thermal energy. Clean Technologies and Environmental Policy, 2016, 18, 1391-1404.	4.1	8
136	Screen printed chipless RFID tags on packaging substrates. Flexible and Printed Electronics, 2021, 6, 025009.	2.7	8
137	Co-Gasification Characteristics of Coal and Biomass Using CO2 Reactant under Thermodynamic Equilibrium Modelling. Energies, 2021, 14, 7384.	3.1	8
138	Spectral Emittance of Particulate Ash-Like Deposits: Theoretical Predictions Compared to Experimental Measurement. Journal of Heat Transfer, 2004, 126, 286-289.	2.1	7
139	CO2 gasification behavior of biomass chars in an entrained flow reactor. Biomass Conversion and Biorefinery, 2016, 6, 49-59.	4.6	7
140	<i>In situ</i> synthesis of methane using Ag–GDC composite electrodes in a tubular solid oxide electrolytic cell: new insight into the role of oxide ion removal. Sustainable Energy and Fuels, 2021, 5, 2055-2064.	4.9	7
141	Fermentable Sugars from Lignocellulosic Biomass: Technical Challenges. , 2013, , 3-27.		6
142	Laboratory-Scale Performance of Pyrolysis of Unsegregated Municipal Solid Waste. Industrial & Engineering Chemistry Research, 2020, 59, 22656-22666.	3.7	6
143	Catalyst-induced enhancement of direct methane synthesis in solid oxide electrolyser. Electrochimica Acta, 2021, 391, 138934.	5.2	6
144	Syngas production from two-step CO2 gasification of low rank coal in an entrained flow reactor. Journal of the Energy Institute, 2022, 103, 169-176.	5.3	6

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145	An analysis of the angular scatter measurement to determine the optical constants of coal and ashy materials. International Communications in Heat and Mass Transfer, 1996, 23, 809-821.	5.6	5
146	Gasification characteristics of Bangladeshi Barapukurian coal in a high-temperature entrained flow gasifier under CO2 atmosphere. AIP Conference Proceedings, 2019, , .	0.4	5
147	EFFECT OF PORE DIFFUSION ON THE GASIFICATION CHARACTERISTICS OF COAL CHAR UNDER CO2 ATMOSPHERE. International Journal of Energy for A Clean Environment, 2021, 22, 85-102.	1.1	5
148	Pretreatment of Automotive Shredder Residues, Their Chemical Characterisation, and Pyrolysis Kinetics. Sustainability, 2021, 13, 10549.	3.2	5
149	Process modelling and techno-economic analysis of a 550MWe chemical looping power plant with victorian brown coal. International Journal of Greenhouse Gas Control, 2022, 113, 103547.	4.6	5
150	Apparent emittance of non-isothermal particulate deposits. International Communications in Heat and Mass Transfer, 1999, 26, 771-780.	5 . 6	4
151	In situ studies of structural changes in DME synthesis catalyst with synchrotron powder diffraction. Applied Catalysis A: General, 2014, 486, 49-54.	4.3	4
152	Thermodynamic evaluation of chemical looping based nitric oxide and hydrogen production. Chemical Engineering Research and Design, 2018, 132, 252-275.	5.6	4
153	Gasification kinetics of Barapukurian coal char using carbon dioxide and steam reactants. Chemical Papers, 2022, 76, 4459-4470.	2,2	4
154	An Overview of Advanced Power generation Technologies Using Brown Coal., 2004,, 360-400.		3
155	Experimental investigation of fluidized bed chemical looping combustion of Victorian brown coal using hematite. Journal of Environmental Chemical Engineering, 2014, 2, 1642-1654.	6.7	3
156	A Theoretical Study on Reversible Solid Oxide Cells as Key Enablers of Cyclic Conversion between Electrical Energy and Fuel. Energies, 2021, 14, 4517.	3.1	3
157	A Study on CO ₂ Hydrogenation Using a Ceria–Zirconia Mixed Oxide (Ce _{<i>x</i>} Zr _{1–<i>x</i>} O ₂)-Supported Fe Catalyst. Industrial & amp; Engineering Chemistry Research, 2021, 60, 14410-14423.	3.7	3
158	A Study on Pyrolysis of Pretreated Automotive Shredder Residueâ€"Thermochemical Calculations and Experimental Work. Frontiers in Sustainability, 2022, 3, .	2.6	3
159	Effects of Char and Volatiles Extraction on the Performance of Dual Bed Pyrolysis Gasification System. Energy & System. Energ	5.1	2
160	Co-slagging characteristics of coal and biomass ashes considering entrained flow slagging gasifier. Biomass Conversion and Biorefinery, 0, , 1 .	4.6	2
161	Evaluation of novel ZnO–Ag cathode for CO2 electroreduction in solid oxide electrolyser. Journal of Solid State Electrochemistry, 2022, 26, 695-707.	2.5	2
162	Modeling the Impact of Operating Variables on Ash Agglomeration in Chemical Looping Combustion of Solid Fuels. Industrial & Engineering Chemistry Research, 2021, 60, 17970-17979.	3.7	2

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163	Insights into the options of energy and metal recovery from automotive shredder residue: A review. Resources, Conservation & Recycling Advances, 2022, 15, 200097.	2.5	2
164	Substituting coal with renewable biomass for electricity production using co-gasification technique: A short-term sustainable pathway for developing countries. , 2022, , 179-202.		2
165	In situ high-temperature powder diffraction studies of solid oxide electrolyte direct carbon fuel cell materials in the presence of brown coal. Journal of Materials Science, 2016, 51, 3928-3940.	3.7	1
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167	Gasification Kinetics of Victorian Brown Coal-Derived Char in Fluidized Bed Reactor. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	2.3	1
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