

# Rajender Gupta

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5374117/publications.pdf>

Version: 2024-02-01

105  
papers

7,416  
citations

101384

36  
h-index

54797

84  
g-index

108  
all docs

108  
docs citations

108  
times ranked

7969  
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical modeling of temperature profiles in hardening belitic calcium sulfoaluminate cement-based mortars for permafrost region applications. <i>Journal of Sustainable Cement-Based Materials</i> , 2023, 12, 331-344.	1.7	3
2	Effects of sodium gluconate on hydration reaction, setting, workability, and strength development of calcium sulfoaluminate belite cement mixtures. <i>Journal of Sustainable Cement-Based Materials</i> , 2022, 11, 273-285.	1.7	7
3	Particulate matter emission during municipal solid waste combustion: Submicron particulates formation mechanism. <i>Fuel</i> , 2022, 310, 122271.	3.4	13
4	The fate of char structure and active groups in petroleum coke gasification in a drop tube furnace. <i>Fuel</i> , 2022, 310, 122438.	3.4	9
5	Experimental and numerical verifications of biochar gasification kinetics using TGA. <i>Renewable Energy</i> , 2022, 185, 717-733.	4.3	3
6	Particulate matter emission during MSW/RDF/WW combustion: Inorganic minerals distribution, transformation and agglomeration. <i>Fuel Processing Technology</i> , 2022, 228, 107166.	3.7	13
7	Experimental and Numerical Study of Voltâ€ Ampere Characteristics of a Packed Tube Heated by Joule Heating. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2022, 144, .	1.4	4
8	Synergistic effect on the co-gasification of petroleum coke and carbon-based feedstocks: A state-of-the-art review. <i>Journal of the Energy Institute</i> , 2022, 102, 1-13.	2.7	33
9	Reduction of HgCl <sub>2</sub> to HgO in flue gas at high temperature. Part â€ Influences of oxidative species. <i>Fuel</i> , 2022, 324, 124417.	3.4	7
10	Reduction of HgCl <sub>2</sub> to HgO in flue gas at high temperature. Part â€ Acid remover. <i>Fuel</i> , 2022, 324, 124412.	3.4	5
11	An overview of inorganic particulate matter emission from coal/biomass/MSW combustion: Sampling and measurement, formation, distribution, inorganic composition and influencing factors. <i>Fuel Processing Technology</i> , 2021, 213, 106657.	3.7	113
12	Thermal properties of calcium sulfoaluminate cement-based mortars incorporated with expanded perlite cured at cold temperatures. <i>Construction and Building Materials</i> , 2021, 274, 122082.	3.2	20
13	Dissect the capacity of low-temperature oxidation of coal with different metamorphic degrees. <i>Fuel</i> , 2021, 292, 120256.	3.4	24
14	A Review of Hydrothermal Liquefaction of Biomass for Biofuels Production with a Special Focus on the Effect of Process Parameters, Co-Solvents, and Extraction Solvents. <i>Energies</i> , 2021, 14, 4916.	1.6	32
15	Thermo-catalytic reforming of alberta-based biomass feedstock to produce biofuels. <i>Biomass and Bioenergy</i> , 2021, 152, 106203.	2.9	6
16	Study on the spatial and temporal distribution of the bed density in an air dense medium fluidized bed (ADMFB) based on the electrical capacitance tomography (ECT) measurement system. <i>Powder Technology</i> , 2021, 393, 659-669.	2.1	7
17	Extending blending proportions of ordinary Portland cement and calcium sulfoaluminate cement blends: Its effects on setting, workability, and strength development. <i>Frontiers of Structural and Civil Engineering</i> , 2021, 15, 1249-1260.	1.2	9
18	A Comparative Study on Lignite Coal Drying by Different Methods. <i>International Journal of Coal Preparation and Utilization</i> , 2020, 40, 90-106.	1.2	6

#	ARTICLE	IF	CITATIONS
19	Particulate Emission from Municipal Solid Waste Combustion: Effect of Si-Al-Based Additives for Its Mitigation. <i>Energy &amp; Fuels</i> , 2020, 34, 15399-15410.	2.5	14
20	Effect of the Composition of Additive Ash on the Thermal Behavior of Petroleum Coke Ash during Gasification. <i>Energy &amp; Fuels</i> , 2020, 34, 12126-12134.	2.5	6
21	The performance of calcium sulfoaluminate cement for preventing early-age frost damage. <i>Construction and Building Materials</i> , 2020, 254, 119322.	3.2	20
22	Utilization and performance evaluation of molasses as a retarder and plasticizer for calcium sulfoaluminate cement-based mortar. <i>Construction and Building Materials</i> , 2020, 243, 118201.	3.2	27
23	Hydrothermal liquefaction of lignocellulosic biomass feedstock to produce biofuels: Parametric study and products characterization. <i>Fuel</i> , 2020, 271, 117534.	3.4	74
24	Microbially-mediated de-watering and consolidation (Biodensification) of oil sands mature fine tailings, amended with agri-business by-products. <i>Nova Scientia</i> , 2020, 12, .	0.0	3
25	Metal oxide nanoparticle-modified graphene oxide for removal of elemental mercury. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 3602-3610.	1.2	7
26	Hydration reaction and strength development of calcium sulfoaluminate cement-based mortar cured at cold temperatures. <i>Construction and Building Materials</i> , 2019, 224, 493-503.	3.2	53
27	Changes in Physicochemical Properties and the Release of Inorganic Species during Hydrothermal Dewatering of Lignite. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 13294-13302.	1.8	13
28	27th International Conference on the Impact of Fuel Quality on Power Production and Environment. <i>Energy &amp; Fuels</i> , 2019, 33, 5789-5789.	2.5	2
29	Effect of Acidic Conditions on Surface Properties and Metal Binding Capacity of Clay Minerals. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2421-2429.	1.2	24
30	Thermal behaviour of nitrogen oxides relevant to oxidative denitrogenation. <i>Journal of Chemical Thermodynamics</i> , 2019, 136, 28-43.	1.0	5
31	What is the production cost of renewable diesel from woody biomass and agricultural residue based on experimentation? A comparative assessment. <i>Fuel Processing Technology</i> , 2019, 191, 79-92.	3.7	27
32	Performance Evaluation of Functionalized Biocarbon for Mercury Capture. <i>Energy &amp; Fuels</i> , 2019, 33, 5867-5874.	2.5	6
33	A review on mercury in coal combustion process: Content and occurrence forms in coal, transformation, sampling methods, emission and control technologies. <i>Progress in Energy and Combustion Science</i> , 2019, 73, 26-64.	15.8	327
34	Inherent thermal regeneration performance of different MnO <sub>2</sub> crystallographic structures for mercury removal. <i>Journal of Hazardous Materials</i> , 2019, 374, 267-275.	6.5	50
35	A Techno-Economic Assessment of Renewable Diesel and Gasoline Production from Aspen Hardwood. <i>Waste and Biomass Valorization</i> , 2019, 10, 2745-2760.	1.8	25
36	Predicting the biomass conversion performance in a fluidized bed reactor using isoconversional model-free method. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 1263-1273.	0.9	5

#	ARTICLE	IF	CITATIONS
37	Enrichment characteristics, thermal stability and volatility of hazardous trace elements in fly ash from a coal-fired power plant. <i>Fuel</i> , 2018, 225, 490-498.	3.4	43
38	Carbon dioxide capture under postcombustion conditions using amine-functionalized SBA-15: Kinetics and multicyclic performance. <i>Separation Science and Technology</i> , 2018, 53, 2683-2694.	1.3	8
39	Thermal stability, chemical speciation and leaching characteristics of hazardous trace elements in FGD gypsum from coal-fired power plants. <i>Fuel</i> , 2018, 231, 94-100.	3.4	54
40	Influence of coal properties on the CO <sub>2</sub> adsorption capacity of coal gasification residues. <i>Energy Science and Engineering</i> , 2018, 6, 321-335.	1.9	17
41	Chemical speciation and leaching characteristics of hazardous trace elements in coal and fly ash from coal-fired power plants. <i>Fuel</i> , 2018, 232, 463-469.	3.4	94
42	Statistical Analysis of Coal Beneficiation Performance in a Continuous Air Dense Medium Fluidized Bed Separator. <i>International Journal of Coal Preparation and Utilization</i> , 2017, 37, 12-32.	1.2	17
43	Bromination of petroleum coke for elemental mercury capture. <i>Journal of Hazardous Materials</i> , 2017, 336, 232-239.	6.5	47
44	Intrinsic gasification rate of oil sands fluid coke with carbon dioxide and steam. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 1045-1053.	0.9	3
45	Evaluation of ash-free coal for chemical looping combustion – part I: Thermogravimetric single cycle study and the reaction mechanism. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 623-633.	0.9	7
46	Review on chemical upgrading of coal: Production processes, potential applications and recent developments. <i>Fuel Processing Technology</i> , 2017, 158, 35-56.	3.7	87
47	Evaluation of ash-free coal for chemical looping combustion – part II: Thermogravimetric multi-cycle performance. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 832-838.	0.9	1
48	Silica-Silver Nanocomposites as Regenerable Sorbents for Hg <sup>0</sup> Removal from Flue Gases. <i>Environmental Science &amp; Technology</i> , 2017, 51, 11909-11917.	4.6	49
49	Mercury co-beneficial capture in air pollution control devices of coal-fired power plants. <i>International Journal of Coal Geology</i> , 2017, 170, 48-53.	1.9	57
50	Elemental mercury reaction chemistry on brominated petroleum cokes. <i>Carbon</i> , 2017, 124, 89-96.	5.4	25
51	Single Particle Asphaltene Pyrolysis in a Drop-Tube Furnace. <i>Energy &amp; Fuels</i> , 2016, 30, 6132-6142.	2.5	6
52	Effect of initial coal particle size on coal liquefaction conversion. <i>International Journal of Oil, Gas and Coal Technology</i> , 2016, 12, 63.	0.1	3
53	Release Behaviors of Arsenic in Fine Particles Generated from a Typical High-Arsenic Coal at a High Temperature. <i>Energy &amp; Fuels</i> , 2016, 30, 6201-6209.	2.5	55
54	Contribution to the Understanding of Secondary Pyrolysis of Biomass-Based Slurry under Entrained-Flow Gasification Conditions. <i>Energy &amp; Fuels</i> , 2016, 30, 6448-6457.	2.5	13

#	ARTICLE	IF	CITATIONS
55	Analysis of syngas cooler fouling from asphaltene gasification. Fuel Processing Technology, 2016, 152, 7-14.	3.7	11
56	High-purity hydrogen production from ash-free coal by catalytic steam gasification integrated with dry-sorption CO <sub>2</sub> capture. Fuel, 2016, 178, 272-282.	3.4	37
57	Distribution of Vanadium, Nickel, and Other Trace Metals in Soot and Char from Asphaltene Pyrolysis and Gasification. Energy & Fuels, 2016, 30, 1605-1615.	2.5	13
58	Steam Regeneration of Polyethylenimine-Impregnated Silica Sorbent for Postcombustion CO <sub>2</sub> Capture: A Multicyclic Study. Industrial & Engineering Chemistry Research, 2016, 55, 2210-2220.	1.8	57
59	Understanding of physicochemical properties and formation mechanisms of fine particular matter generated from Canadian coal combustion. Fuel, 2016, 165, 224-234.	3.4	29
60	Investigation of corrosion and fouling in syngas cooler tubes. Fuel Processing Technology, 2016, 141, 202-209.	3.7	22
61	Modelling Underground Coal Gasification—A Review. Energies, 2015, 8, 12603-12668.	1.6	59
62	Kinetic Study and Thermal Decomposition Behavior of Lignite Coal. International Journal of Chemical Engineering, 2015, 2015, 1-9.	1.4	112
63	Effect of Direct Coal Liquefaction Conditions on Coal Liquid Quality. Energy & Fuels, 2015, 29, 3649-3657.	2.5	14
64	Postcombustion CO <sub>2</sub> capture using N-(3-trimethoxysilylpropyl)diethylenetriamine-grafted solid adsorbent. Energy Science and Engineering, 2015, 3, 207-220.	1.9	50
65	Inorganic Matter Behavior during Coal Gasification: Effect of Operating Conditions and Particle Trajectory on Ash Deposition and Slag Formation. Energy & Fuels, 2015, 29, 1503-1519.	2.5	24
66	Nanocomposites of graphene oxide, Ag nanoparticles, and magnetic ferrite nanoparticles for elemental mercury (Hg <sup>0</sup> ) removal. RSC Advances, 2015, 5, 15634-15640.	1.7	39
67	Numerical simulation of 3-phase fluidized bed particle segregation. Fuel, 2015, 150, 347-359.	3.4	14
68	Chemistry, mineralogical, and residence of arsenic in a typical high arsenic coal. International Journal of Mineral Processing, 2015, 141, 61-67.	2.6	15
69	Pyrolysis of asphaltenes in an atmospheric entrained flow reactor: A study on char characterization. Fuel, 2015, 152, 29-37.	3.4	15
70	Post-combustion CO <sub>2</sub> capture using polyethyleneimine impregnated mesoporous cellular foams. Separation and Purification Technology, 2015, 156, 259-268.	3.9	40
71	Development of a process simulation model for energy analysis of hydrogen production from underground coal gasification (UCG). International Journal of Hydrogen Energy, 2015, 40, 10705-10719.	3.8	20
72	Analysis of Soot Formed during the Pyrolysis of Athabasca Oil Sand Asphaltenes. Energy & Fuels, 2015, 29, 6823-6831.	2.5	10

#	ARTICLE	IF	CITATIONS
73	Effect of Synthesis Route on Properties of CuO as a High Temperature Oxygen Carrier. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 18852-18862.	1.8	4
74	Evaluation of Copper-Aluminum Oxides as Sorbents for High-Temperature Air Separation. <i>Energy &amp; Fuels</i> , 2014, 28, 319-328.	2.5	8
75	Adsorption Behavior of CO <sub>2</sub> in Coal and Coal Char. <i>Energy &amp; Fuels</i> , 2014, 28, 5241-5251.	2.5	23
76	Understanding of mineralogy and residence of trace elements in coals via a novel method combining low temperature ashing and float-sink technique. <i>International Journal of Coal Geology</i> , 2014, 131, 162-171.	1.9	35
77	ZrO <sub>2</sub> -CuO Sorbents for High-Temperature Air Separation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 10990-10999.	1.8	5
78	Characterization and Refining Pathways of Straight-Run Heavy Naphtha and Distillate from the Solvent Extraction of Lignite. <i>Energy &amp; Fuels</i> , 2014, 28, 4486-4495.	2.5	6
79	K <sub>2</sub> CO <sub>3</sub> catalyzed CO <sub>2</sub> gasification of ash-free coal. Interactions of the catalyst with carbon in N <sub>2</sub> and CO <sub>2</sub> atmosphere. <i>Fuel</i> , 2014, 117, 1181-1189.	3.4	154
80	Chemical-mechanical bromination of biomass ash for mercury removal from flue gases. <i>Fuel</i> , 2013, 108, 54-59.	3.4	44
81	Production and characterization of ash-free coal from low-rank Canadian coal by solvent extraction. <i>Fuel Processing Technology</i> , 2013, 115, 88-98.	3.7	82
82	Carbon Dioxide Adsorption on Amine-Impregnated Mesoporous SBA-15 Sorbents: Experimental and Kinetics Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 6480-6491.	1.8	158
83	Study of factors affecting syngas quality and their interactions in fluidized bed gasification of lignite coal. <i>Fuel</i> , 2013, 103, 308-320.	3.4	75
84	Evaluation of the Performance of Air Dense Medium Fluidized Bed (ADMFB) for Low-Ash Coal Beneficiation. Part 1: Effect of Operating Conditions. <i>Energy &amp; Fuels</i> , 2013, 27, 5595-5606.	2.5	57
85	Evaluation of the Performance of Air Dense Medium Fluidized Bed (ADMFB) for Low-Ash Coal Beneficiation. Part 2: Characteristics of the Beneficiated Coal. <i>Energy &amp; Fuels</i> , 2013, 27, 5607-5616.	2.5	34
86	Numerical Simulation and Evaluation of Cavity Growth in In Situ Coal Gasification. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 11712-11722.	1.8	13
87	Post-Combustion CO <sub>2</sub> Capture Using Solid Sorbents: A Review. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 1438-1463.	1.8	1,524
88	Solvent-Coal-Mineral Interaction during Solvent Extraction of Coal. <i>Energy &amp; Fuels</i> , 2012, 26, 6834-6842.	2.5	15
89	Entrained-Flow Gasification of Oil Sand Coke with Coal: Assessment of Operating Variables and Blending Ratio via Response Surface Methodology. <i>Energy &amp; Fuels</i> , 2012, 26, 219-232.	2.5	22
90	Trace elements in coal: Associations with coal and minerals and their behavior during coal utilization - A review. <i>Fuel</i> , 2010, 89, 904-911.	3.4	325

#	ARTICLE	IF	CITATIONS
91	Carbon Nanotube-Silver Composite for Mercury Capture and Analysis. Energy & Fuels, 2010, 24, 419-426.	2.5	71
92	Co-gasification of Biomass with Coal and Oil Sand Coke in a Drop Tube Furnace. Energy & Fuels, 2010, 24, 232-240.	2.5	66
93	Simulations of Axial Mixing of Liquids in a Long Horizontal Pipe for Industrial Applications. Energy & Fuels, 2010, 24, 5844-5850.	2.5	21
94	Emission Control of Mercury and Sulfur by Mild Thermal Upgrading of Coal. Energy & Fuels, 2009, 23, 766-773.	2.5	19
95	Characterization of Ash Deposition and Heat Transfer Behavior of Coals during Combustion in a Pilot-Scale Facility and Full-Scale Utility. Energy & Fuels, 2009, 23, 2570-2575.	2.5	12
96	Low-Grade Coals: A Review of Some Prospective Upgrading Technologies. Energy & Fuels, 2009, 23, 3392-3405.	2.5	179
97	Progress in carbon dioxide separation and capture: A review. Journal of Environmental Sciences, 2008, 20, 14-27.	3.2	1,765
98	A first approximation kinetic model to predict methane generation from an oil sands tailings settling basin. Chemosphere, 2008, 72, 1573-1580.	4.2	46
99	Advanced Coal Characterization: A Review. Energy & Fuels, 2007, 21, 451-460.	2.5	151
100	Factors affecting the vaporisation of silica during coal combustion. Fuel Processing Technology, 2007, 88, 157-164.	3.7	4
101	Assessing slagging and fouling during biomass combustion: A thermodynamic approach allowing for alkali/ash reactions. Fuel Processing Technology, 2007, 88, 1044-1052.	3.7	125
102	Thermomechanical analysis of laboratory ash, combustion ash and deposits from coal combustion. Fuel Processing Technology, 2007, 88, 1099-1107.	3.7	13
103	The physical character of coal char formed during rapid pyrolysis at high pressure. Fuel, 2005, 84, 63-69.	3.4	56
104	The char structure characterization from the coal reflectogram. Fuel, 2005, 84, 1268-1276.	3.4	19
105	A computational fluid dynamics based study of the combustion characteristics of coal blends in pulverised coal-fired furnace. Fuel, 2004, 83, 1543-1552.	3.4	85