

## **SCI Publication 2020**

Sl. No.	Authors	Title	Journal Name	IF
1.	Anila Hoskere Ashoka, Firoj Ali, Rajeshwari Tiwari, Rina Kumari, Sumit Kumar Pramanik, Amitava Das	Recent Advances in Fluorescent Probes for Detection of HOCl and HNO.	ACS Omega, 5 (4). pp. 1730-1742. 2020	2.870
2.	Behera S.K., Ghosh C.N., Mishra D.P., Singh Prashant, Mishra K., Buragohain John, Mandal P K	Strength development and microstructural investigation of lead-zinc mill tailings based paste backfill with fly ash as alternative binder.	Cement and Concrete Composites, 109. 2020	6.257
3.	N. K. Bhagat, A. K. Mishra, M. M. Singh, Aditya Rana, S. Tewari and P. K. Singh	Blasting technique for stabilizing accident prone slope for sustainable railway route.	Current Science, 118 (6). pp. 901-909. 2020	0.725
4.	Chaulya S. K., Singh A. K., Singh T. B., Mondal G. C., Singh S., Singh, S. K., Singh R. S.	Modelling for Air Quality Estimation for a Planned Coal Washery to Control Air Pollution.	Environmental Modelling & Assessment (11). 2020	1.634
5.	Ranjeet Mandal, Raj Kumar, Md. Shahnawaz Ansari, Dinesh Kumar, Swades Kumar Chaulya, Girendra Mohan Prasad, Ajay Kumar Singh, Tanmoy Maity	Underground coal gasification techniques for different geo-mining conditions.	International Journal of Oil Gas and Coal Technology, 23 (2). pp. 199-217. 2020, ISSN 1753-3309	0.752
6.	Ranjeet Mandal, Tanmoy Maity, S.K.Chaulya, G.M.Prasad	Laboratory investigation on underground coal gasification technique with real-time analysis.	Fuel, 275. 2020, ISSN 0016-2361,	5.578
7.	Das Arka Jyoti, Mandal Prabhat Kumar, Prakash Amar, Roy Lal Babu, Tewari Subhashish	Underground extraction methodology of contiguous coal seams ensuring the safety of the parting and the surface structures.	Safety Science, 121. pp. 215-230. 2020, ISSN 0925-7535	4.105

8.	Deshmukh Suraj, Raina A.K., Murthy V.M.S.R., Trivedi R., Vajre R.	Roadheader – A comprehensive review.	Tunnelling and Underground Space Technology, 95. 2020, ISSN 0886-7798	<b>4.450</b>
9.	Ghosh Ashish Kumar, Bandopadhyay Anup Kumar	Formation of thermogenic gases with coalification: FTIR and DFT examination of vitrinite rich coals.	International Journal of Coal Geology, 219. 2020	<b>5.692</b>
10.	Ghosh Ashish Kumar	Theoretical and experimental examinations to substantiate the structure of coal derived asphaltene by formation of complex with o-chloranil.	Fuel, 276. 2020, ISSN 0016-2361	<b>5.578</b>
11.	Ghosh Ashish Kumar & Choudhury Debapriya	Spontaneous Combustion in Relation to Drying of Low Rank Coal.	International journal of coal preparation and Utilization., 2020	<b>2.034</b>
12.	Soma Giri, Mukesh Kumar Mahato, Santanu, Bhattacharjee, Abhay, Kumar Singh	Development of a new noncarcinogenic heavy metal pollution index for quality ranking of vegetable, rice, and milk.	Ecological Indicators, 113. 2020	<b>4.229</b>
13.	Giri Soma & Singh Abhay Kumar	Human Health Risk Assessment Due to Metals in Cow's Milk From Singhbhum Copper and Iron Mining Areas, India.	Journal of Food Science and Technology, 57 (4). pp. 1415-1420. 2020	<b>2.773</b>
14.	Gupta Pavan Kumar, Mahato Abhishek, Oraon Pikkoo, Gupta Goutam Kishore, Maity Sudip	Coal fly ash derived mesoporous SBA-15 as support material for production of liquid hydrocarbon through Fischer-Tropsch route.	Asia-Pacific Journal of Chemical Engineering, 2020	<b>1.060</b>
15.	Kumar Manish & Tiwari H.P.	Efficient utilization of Indian Coking Coal: Opportunities and challenges.	Metallurgical Research and Technology, 117 (209). pp. 1-9. 2020	<b>0.646</b>
16.	Raja Kumar, Alok Sinha, Gautam C. Mondal, Reginald E. Masto	Effective scrap iron particles (SIP) pre-treatment for complete mineralization of benzidine based azo dye effluent.	Arabian Journal of Chemistry, 13 (1). pp. 134-145. 2020	<b>4.762</b>
17.	Srikanta Murthy, Vinod Atmaram Mendhe, Pauline Sabina Kavali, Vikram Partap Singh	Evidence of recurrent wildfire from the Permian coal deposits of India: Petrographic, scanning electron microscopic and palynological analyses of fossil charcoal.	Palaeoworld. 2020	<b>1.447</b>

18.	Suresh Kumar Samad, Divya Kumari Mishra, Runcie P. Mathews, Santanu Ghosh, Vinod Atmaram Mendhe, Atul Kumar Varma	Geochemical attributes for source rock and palaeoclimatic reconstruction of the Auranga Basin, India.	Journal of Petroleum Science and Engineering, 185. 2020	3.706
19.	Balram Tiwari, Anwita Ojha, Santanu Ghosh, Atul Kumar Varma, Vinod Atmaram Mendhe, Asutosh Mondal	A composite microstructural and geochemical approach to quench the quest for hydrocarbon from Barren Measures shales of Jharia Basin, India.	Journal of Natural Gas Science and Engineering, 78. 2020, ISSN 1875-5100	3.841
20.	Runcie Paul Mathews, Bhagwan D. Singh, Vikram Partap Singh, Alpana Singh, Hukam Singh, Mahesh Shivanna, Suryendu Dutta, Vinod A. Mendhe, Rimpy Chetia	Organo-petrographic and geochemical characteristics of Gurha lignite deposits, Rajasthan, India: Insights into the palaeovegetation, palaeoenvironment and hydrocarbon source rock potential.	Geoscience Frontiers, 11 (3). pp. 965-988. 2020	4.202
21.	Niroj Kumar Mohalik, Edward Lester, Ian S. Lowndes	Application of TG technique to determine spontaneous heating propensity of coals.	Journal of Thermal Analysis and Calorimetry. 2020, ISSN 1388-6150,	2.731
22	Annesha Ghosh, Bhanu Pandey, Madhoolika Agrawal, Shashi Bhushan Agrawal	Interactive effects and competitive shift between <i>Triticum aestivum</i> L.(wheat) and <i>Chenopodium album</i> L. (fat-hen) under ambient and elevated ozone.	Environmental Pollution. 2020	6.792
23	Tushar Ranjan Dash, Debi Prasad Tripathy & Jai Krishna Pandey	Chemical characterization of PM10 and evaluation of health risk for the people residing around a highly mechanized opencast coal mine using FTIR spectroscopy.	Arabian Journal of Geosciences, 13 (4) 2020 ISSN 1866-7511,	1.327
24	Paul Avinash, Murthy VMSR, Prakash Amar, Singh Ajoy Kumar	Prediction of rock load emphasizing excavation damage of in situ rocks caused by blasting in coal mines.	Current Science, 118 (1). pp. 123-132. 2020	0.725
25	A Prakash, V M S R Murthy, K B Singh, C Kumar, L A.	A methodology for designing cutting drum of surface miner to achieve production of desired chip	Sādhanā, 45 (1). 2020 ISSN 0256-2499	0.849

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26	Ray Santosh Kumar, Mohalik Niroj Kumar, Khan Asfar Mobin, Mishra Debashish, Varma Nikhil Kumar, Pandey Jai Krishna, Singh Pradeep Kumar	CFD modeling to study the effect of particle size on dispersion in 20l explosion chamber: An overview.	International Journal of Mining Science and Technology. 2020	3.903
27	Murari Prasad Roy, Arvind Kumar Mishra, Hemant Agrawal & Pradeep Kumar Singh	Blast vibration dependence on total explosives weight in open-pit blasting.	Arabian Journal of Geosciences. 2020 ISSN 1866-7511	1.327
28	Rabinarayan Senapati, D. Pathak & P. Dutta	A Versatile VMPO Catalyst Prepared In Situ for Oxidative Ammonolysis of Isomeric Picolines and Xylenes.	Russian Journal of General Chemistry, 90 (2). pp. 292-298. 2020	0.716
29	M. Misz-Kennan, J. Kus, D. Flores, C. Avilad, Z. Bücküne, N. Choudhury, K. Christanis, J.P. Jouberth, S. Kalaitzidis, A.I. Karayigit, M. Malecha, M. Marques, P. Martizzi, J.M.K. O'Keefe, W. Pickel, G. Predeanu, S. Pusz, J. Ribeiro, S. Rodrigues, A.K. Singh, I. Suárez-Ruiz, I. Sýkorová, N.J. Wagner, D. Životić, ICCP	Development of a petrographic classification system for organic particles affected by self-heating in coal waste. (An ICCP Classification System, Self-heating Working Group – Commission III).	International Journal of Coal Geology, 220. 2020 ISSN 0166-5162,	5.692
30	Akanksha, A. K. Singh, D. Mohanty, H. M. Jena & Deepak Singh Panwar	Prospective evaluation of hydrocarbon generation potential of Umarsar lignite, India. ,	Energy Sources, Part A: Recovery Utilization, and Environmental Effects, 42 (6). pp. 664-675. 2020, ISSN 1556-7036,	1.184
31	Nimisha Tripathi, Colin D. Hills, R. S. Singh, Jamuna S. Singh	Offsetting anthropogenic carbon emissions from biomass waste and mineralised carbon dioxide.	Nature Group Scientific Reports (793). 2020 ISSN 0028-0836 ,	3.99
32	Soni A.K	Estimation of Mine Water Quantity: Development of Guidelines for Indian Mines.	Mine Water and the Environment, 39 (2). pp. 397-406. 2020 ISSN 1616-1068	3.184

33	Tewari Subhashish, Himanshu V K, Porathur John Loui, Bhattacharjee Rana, Das Arka Jyoti, Mandal Prabhat Kumar	Exploitation of mica deposits at Nellore mica belt, Andhra Pradesh, India.	CURRENT SCIENCE, 118 (4). 2020	.725
34	Shishir Tiwary, Suhas B. Ghugare, Prakash D. Chavan, Sujan Saha, Sudipta Datta, Gajanan Sahu, Sanjeev S. Tambe	Co-gasification of High Ash Coal–Biomass Blends in a Fluidized Bed Gasifier: Experimental Study and Computational Intelligence-Based Modelling.	Waste and Biomass Valorization, 11 (1). pp. 323-341 2020	2.851
35	P. Gopinathan, C.V. Nandini, S. Parthiban, S. Sathish, Ashok K. Singh, Pradeep K. Singh	A geo-spatial approach to perceive the groundwater regime of hard rock terrain- a case study from Morappur area, Dharmapuri district, South India.	Groundwater for Sustainable Development, 10. 2020	0.865
36	Gopinathan P., Singh Ashok K, Singh Pradeep K, S Parthiban, T Magendran, Al-Quraishi Ayad M. Fadhil	Mapping of ferric (Fe3+) and ferrous (Fe2+) iron oxides distribution using band ratio techniques with ASTER data and geochemistry of Kanjamalai and Godumalai, Tamil Nadu, south India.	Remote Sensing Applications: Society and Environment, 18. pp. 1-9., 2020	0.713
37	Bhagat N. K., Mishra A.K., Singh M.M., Rana Aditya, Singh P.K.	Innovative Directional Controlled Blasting Technique for Excavation of Unstable Slopes Along a Busy Transportation Route: a Case Study of Konkan Railway in India.	Mining, Metallurgy & Exploration. 2020	1.020
38	Ghosh Nilabjendu, Agrawal Harshit, Singh Satyendra Kumar, Banerjee Gautam	Optimum Chain Pillar Design at the Deepest Multi-Seam Longwall Workings in India.	Mining, Metallurgy & Exploration, 37. pp. 651-664. 2020	1.020
39	Aditya Rana, N. K. Bhagat, G. P. Jadaun, Saurav Rukhaiyar, Anindya Pain, P. K. Singh	Predicting Blast-Induced Ground Vibrations in Some Indian Tunnels: a Comparison of Decision Tree, Artificial Neural Network and Multivariate Regression Methods.	Mining, Metallurgy & Exploration. 2020	1.020
40.	Behera, S.K., Ghosh, C.N., Mishra, K., Mishra, D.P., Singh, P., Buragohain, J., Mandal P.K., Sethi M.K.,	(2020) Utilisation of lead–zinc mill tailings and slag as paste backfill materials.	Environmental Earth Sci 79, 389 2020.	2.180

41	Avinash Paul, Niraj Kumar, Pramod Kumar & Ashok Kumar Singh	Application of CMRI-ISM RMR for Stability Analysis of Development Workings for Ballarpur Underground Coal Mine — An Empirical and Numerical Approach	Journal of the Geological Society of India volume 96, pages 163–170, (Aug 2020)	0.826
42	Tarit Baran Das, Rabi Narayan Senapati & Hridesh Agarwalla	Mercury in Indian Thermal Coals.	Bulletin of Environmental Contamination and Toxicology volume 105, pages 502–512, 2020	1.480
43	Santosh Kumar Ray, Asfar Mobin Khan, Niroj Kumar Mohalik, Debashish Mishra, Nikhil Kumar Varma, Jai Krishna Pandey and Pradeep Kumar Singh	Methodology in early detection of conveyor belt fire in coal transportation.	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 29 Sep 2020	1.184
44	Paul Avinash, Prakash Amar, Singh Ajoy Kumar, Murthy V M S R	Estimation of rock load for junctions based on roof failure cases for safe mining operation.	Arabian Journal of Geosciences volume, 13 (1069) 2020	1.327
45	P. Kalpana, S. Parthiban, P. Gopinathan, T. Subramani, P. D. Roy, S. Gautam & J. Brema	Spatio-temporal estimation of rainfall patterns in north and northwestern states of India between 1901 and 2015: change point detections and trend assessments.	Arabian Journal of Geosciences volume 13, No. 21 November, (2020)	1.327
46	Mukhopadhyay Sangeeta, Masto, R. Ebhin Singh, Ashok K. and Singh, Pradeep K.	Impact of the Combined Application of Biochar and Compost on Mine Soil Quality and Growth of Lady's Finger ( <i>Abelmoschus esculentus</i> ).	Bulletin of Environmental Contamination and Toxicology. ISSN 0007-4861 2020	1.657
47	M. Gangopadhyay, Gautam K. Bayen, M. Kumar & A. Mukherjee	Alternative Coke from Inferior Coal for Ferro-Alloy Industry. 1	Solid Fuel Chemistry volume 54, pages 406–410, 2020	0.54
48	Gaurav Raghuvanshi, Prasenjeet Chakraborty, Bodhisatwa Hazra, Ashis K. Adak, Pradeep K. Singh, Ashok K. Singh & Vivek Singh	Pyrolysis and combustion behaviour of few high-ash Indian coals. International	Journal of Coal Preparation and Utilization, 2020	2.034

49	Arun Kumar Singh, Ashok Kumar, Dheeraj Kumar, Rajendra Singh, Sahendra Ram, Rakesh Kumar & Amit Kumar Singh	Coal Pillar Extraction Under Weak Roof.	Mining, Metallurgy & Exploration volume 37, pages 1451–1459, 2020	1.020
50	S. Kumar, G. Kaushik, and R. E. Masto,	Evaluation of the Fuel Value and Soil Application Potential of the Cadmium Contaminated Biochar Obtained after Water Treatment.	Solid Fuel Chemistry, 2020, Vol. 54, No. 6, pp. 411–417.	0.541
51	Manash Gope, Reginald Ebhin Masto, Aman Basu, Debopriya Bhattacharyya, Rajnarayan Saha, Raza Rafiqul Hoque, PS Khillare, Srinivasan Balachandran	Elucidating the distribution and sources of street dust bound PAHs in Durgapur, India: A probabilistic health risk assessment study by Monte-Carlo simulation,	Environmental Pollution, Volume: 267, December 2020	6.792
52	Reginald E Masto, Ankita Pandit, Sandeep Kumar, Sreemanta Datta, Sangeeta Mukhopadhyay, Vetrivel A Selvi, Pashupati Dutta, Pinaki Sarkar	Comparative evaluation of aquatic biomass feedstocks for energy application and potential for extraction of plant nutrients from their ash.	Biomass and Bioenergy, Volume: 142, November 2020	.3.551
53	Sangeeta Mukhopadhyay, R Ebhin Masto, Ashok K Singh, Pradeep K Singh	Impact of the Combined Application of Biochar and Compost on Mine Soil Quality and Growth of Lady's Finger ( <i>Abelmoschus esculentus</i> ).	Bulletin of Environmental Contamination and Toxicology Pages: 1-7, 2020	1.657
54	Dipita Ghosh, Reginald Ebhin Masto, Subodh Kumar Maiti	Ameliorative effect of <i>Lantana camara</i> biochar on coal mine spoil and growth of maize ( <i>Zea mays</i> ),	Soil Use and Management, Volume: 36, Issue: 4, Pages: 726-739, 2020	1.690
55	Tanmay Laha, Manash Gope, Sreemanta Datta, Reginald Ebhin Masto, Srinivasan Balachandran	Oral bioaccessibility of potentially toxic elements (PTEs) and related health risk in urban playground soil from a medieval bell metal industrial town Khagra, India.	Environmental Geochemistry and Health, Pages: 1-19, 2020	3.472
56	Azeem Uddin Siddiqui, Manish Kumar Jain, Reginald Ebhin Masto	Pollution evaluation, spatial distribution, and source apportionment of trace metals around coal mines soil: the case study of eastern India,	Environmental Science and Pollution Research, 27, pages 10822–10834 2020	3.056
57	Tarit Baran Das, U. S.	Preparation and Certification of Indian Reference	MAPAN: Journal of Metrology Society	1.033

	Chattopadhyay, D. Soni, K. Singh & P. K. Singh	Material of Bituminous Coal. ‘of India’, 2020 <a href="https://doi.org/10.1007/s12647-020-00403-3">https://doi.org/10.1007/s12647-020-00403-3</a>	
58	Binu Kumari, Rajani Kant Tiwary, Mahendra Yadav & Krishna Murari Prasad Singh	Nonlinear regression analysis and response surface modeling of Cr (VI) removal from synthetic wastewater by an agro-waste Cocos Nucifera: Box Behnken Design (BBD).	INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, 21 Dec 2020, <a href="https://doi.org/10.1080/15226514.2020.1858399">https://doi.org/10.1080/15226514.2020.1858399</a> , <span style="color:red">2.528</span>
59	Firoj Ali, Braj M. P. Pingua, Ananta Dey, Murari Prasad Roy & Pradeep Kumar Singh	Surface Functionalized Ammonium Nitrate Prills with Enhanced Water Resistance Property: Characterizations and its Application as Commercial Explosives.	Propellants, Explosives, Pyrotechnics, 2020 <span style="color:red">1.544</span>
60	D. Basak and S. Waghmare	Comparative study of 36 mm-diameter rope in five aerial ropeway installations using a non-destructive method",	Insight, Vol. 62, No. 10, October 2020, pp 598-600. 2020 <span style="color:red">0.783</span>
61	Mishra, R., Chaulya, S.K., Prasad, G.M., Mandal, S.K. and Banerjee, G.	Design of a low cost, smart and stand-alone PV cold storage system using a domestic split air conditioner.	Journal of Stored Products Research, 89, 101720, 1-10. 2020 DOI: <a href="https://doi.org/10.1016/j.jspr.2020.101720">https://doi.org/10.1016/j.jspr.2020.101720</a> , <span style="color:red">2.123</span>
62	Singh P., Singh, V.A. and Chaulya, S.K.	Numerical analysis of LSPR based fiber sensor for low refractive index detection	Optik, 2020, DOI: <a href="https://doi.org/10.1016/j.ijleo.2020.165704">https://doi.org/10.1016/j.ijleo.2020.165704</a> , <span style="color:red">2.187</span>
63	Singh, P, Chaulya, S.K. and Singh, V.A.	Development of microwave radar based periphery surveillance system in a selected mining area.	Journal of Electromagnetic Waves and Applications, 2020, DOI: <a href="https://doi.org/10.1080/09205071.2020.1847694">https://doi.org/10.1080/09205071.2020.1847694</a> <span style="color:red">1.373</span>
64	Saurabh, K., Chaulya, S.K., Singh, R.S., Kumar, S. and Mishra, K.K.	Intelligent dry fog dust suppression system: an efficient technique for controlling air pollution in mineral processing plant.	Clean Technologies and Environmental Policy, 2020, DOI: <a href="https://doi.org/10.1007/s10098-020-01991-z">https://doi.org/10.1007/s10098-020-01991-z</a> , <span style="color:red">2.429</span>
65	V. P. Jaiswal, S. K. Shukla, Lalan Sharma, Ishwar Singh, A. D.	Potassium Influencing Physiological Parameters, Photosynthesis and Sugarcane Yield in Subtropical	Sugar Tech 2020 <span style="color:red">1.194</span>

	Pathak, Mona Nagargade, Arup Ghosh, C. Gupta, Asha Gaur, S. K. Awasthi, Raghvendra Tiwari, Abhay Srivastava & Ebhin Masto	India		
66	Mahesh Prashant Rawat, K.K. Singh and P.K. Singh	Comparison of steel and fiber-reinforced polymer rebars for mining applications: A numerical approach	Materials Today: Proceedings 2020 <a href="https://doi.org/10.1016/j.matpr.2020.02.840">https://doi.org/10.1016/j.matpr.2020.02.840</a>	0.304
67	B. Hazra, D. A. Wood, P K Singh, A. K. Singh, O.P. Kumar, G. Raghuvanshi, D.P. Singh, P. Chakraborty, P.S. Rao, K. Mahanta and G. Sahu,	Source rock properties and pore structural framework of the gas-prone Lower Permian shales in the Jharia basin, India. Arabian	Journal of Geosciences, 13(13), pp.1-18. 2020	1.327
68	B. Hazra, P. Sarkar, P. Chakraborty, A. Mahato, G. Raghuvanshi, P K Singh, A. K. Singh, and A. Mukherjee	Coal combustion analysis using Rock-Eval: importance of S4-T peak.	Arabian Journal of Geosciences, 13(12), pp.1-10. 2020	1.327
69	Pavan K Gupta Vineet Kumar Sudip Maity	Renewable fuels from different carbonaceous feedstocks: a sustainable route through Fischer–Tropsch synthesis,	Journal of Chemical Technology and Biotechnology 2020	2.75
70	Neelam Kumari, Sujan Saha, Gajanan Sahu, Vishal Chauhan, Rupak Roy, Sudipta Datta, Prakash D. Chavan	Comparison of CO <sub>2</sub> gasification reactivity and kinetics: pet coke, biomass and high ash coal	Journal: Biomass Conversion and Biorefinery 2020	2.602
71.	Debasish Basak	Performance Evaluation of 42 mm Diameter Stranded Ungalvanised Haulage Rope in a Mono-Cable Passenger Ropeway",	Russian Journal of Nondestructive Testing, Vol. 56, No. 7, pp 592-594, 2020	0.585
72	Prasad Bhukya and Debasish Basak	Nondestructive Evaluation of Track and Haulage Ropes of Aerial Ropeway Installation in India—A Case Study	Russian Journal of Nondestructive Testing, Vol. 56, No. 11, pp. 927–935 2020	0.585