

SCI Journal Publication 2021

Sl. No.	Authors	Title	Journal Name	I F
1	Agarwalla, Hridesh , Senapati, Rabi Narayan and Das, Tarit Baran	Mercury emissions and partitioning from Indian coal-fired power plants.	Journal of Environmental Sciences, 100. pp. 28-33.	4.302
2	Ahirwal, Bhagirath and Banerjee , Gautam	<i>An Experimental Study on Importance of Bushing Used in Flameproof Enclosure for Hazardous Area.</i>	Journal of Failure Analysis and Prevention, 21. pp. 310-319.	
3	Chaturvedi,, Aaditya, Bhattacharjee, Santanu, Kumar, Vipin and Singh, Abhay Kumar	A study on the interdependence of heavy metals while contributing to groundwater pollution index.	Environmental Science and Pollution Research.	3.056
4	Chaulya, S.K., Chowdhury, A., Kumar, Sunil, Singh, R.S., Singh, S.K., Singh, R.K., Prasad, G.M, Mandal, S.K. and Banerjee, G.	Fugitive dust emission control study for a developed smart dry fog system.	Journal of Environmental Management.	5.647
5.	Dey, Prasanjit, Kumar, Chandan., Mitra, Mitrabarun., Mishra, Richa, Chaulya, S.K., Prasad, G.M., Mandal, S.K. and Banerjee, G.	Deep convolutional neural network based secure wireless voice communication for underground mines.	Journal of Ambient Intelligence and Humanized Computing.	4.594
6.	Giri, Soma, Mahato, Mukesh Kumar and Singh, Abhay Kumar	Multivariate linear regression models for predicting metal content and sources in leafy vegetables and human health risk assessment in metal mining areas of Southern Jharkhand, India.	Environmental Science and Pollution Research.	3.056
7.	Gupta, Pavan Kumar , Mahato, Abhishek, Gupta, Goutam Kishore., Sahu, Gajanan and Maity, Sudip	Fischer-Tropsch synthesis over Pd promoted cobalt based mesoporous supported catalyst.	Oil & Gas Science and Technology Revue d IFP Energies nouvelles, 76 (21).	1.395
8.	Hazra, Bodhisatwa, Singh, Deependra Pratap, Prasenjeet Chakraborty, Prasenjeet Chakraborty, Singh, Pradeep K., Sahu, Santi Gopal and Adaka, Ashis K.	Using rock-eval S4Tpeak as thermal maturity proxy for shales.	Marine and petroleum Geology, 127.	3.790
9	Hazra, Bodhisatwa, Singh, Deependra Pratap, Crosdale, Peter J., Singh, Vivek, Singh, Pradeep K., Gangopadhyay, Monalisa and Chakraborty, Prasenjeet	Critical insights from Rock-Eval analysis of vitrain.	International Journal of Coal Geology. ISSN 0166-5162,	5.692
10	Hazra, Bodhisatwa, Vishal,	Applicability of Low-	Energy & Fuel, 35	3.421

	Vikram and Singh, Deependra Pratap	Pressure CO ₂ and N ₂ Adsorption in Determining Pore Attributes of Organic-Rich Shales and Coals.	(1). pp. 456-464. ISSN 0887-0624,	
11	Sharma, Pushpendra., Kumar, Ashok, Shams, Noorullah, Verma, Amit Kumar., Kumar, Dheeraj., Singh, Arun Kumar and Ram, Sahendra	Parametric study to design competent irregular-shaped remnants in mechanised depillaring.	Arabian Journal of Geosciences, 14. ISSN 1866-7511,	1.327
12	Kumar, Ranjan., Mandal, Prabhat Kumar., Narayan, Ashish and Das, Arka Jyot	Evaluation of load transfer mechanism under axial loads in a novel coupler of dual height rock bolts.	International Journal of Mining Science and Technology. ISSN 2095-2686,	3.903
13	Kumari, K., Dey, Prasanjit, Kumar, Chandan., Pandit, Dewangshu., Mishra, S.S., Kisku, Vikash, Chaulya, S.K., Ray, S.K. and Prasad, G.M	UMAP and LSTM based fire status and explosibility prediction for sealed-off area in underground coal mine.	Process Safety and Environmental Protection, 146. pp. 837-852	4.966
14	Mallick, Mousumi, Mitra Swapan Kumar., Basak, Debasish, Roy, nirmal Kumar and Maity, Joydeep	A novel approach of high-voltage low-current electric energy input to synthesise cost-effective ultra-strong ductile material.	Philosophical Magazine, 101 (5). pp. 555-575.	1.778
15	Murthy, Srikanta., Mendhe, Vinod Atmaram, Uhl, Dieter., Mathews, Runcie Paul., Mishra, Vivek Kumar and Gautam Saurabh	Palaeobotanical and biomarker evidence for Early Permian (Artinskian) wildfire in the Rajmahal Basin, India.	Journal of Palaeogeography.	2.020
16	Pandey, Bhanu Pandey, Singh, Siddharth, Roy, Lal Babu, Shekhar, Sameer and Singh, Ranjeet Kumar, Prasad, Bably and Singh, Krishna Kant Kumar	Phytostabilization of coal mine overburden waste, exploiting the phytoremedial efficacy of lemongrass under varying level of cow dung manure.	<u>Ecotoxicology and Environmental Safety</u> , Vol. 208,	4.872
17	Chandrakar, Shymal, Paul, P.S. and Sawmliana, C.	Influence of void ratio on “Blast Pull” for different confinement factors of development headings in underground metalliferous mines.	Tunnelling and Underground Space Technology, 108. ISSN 0886-7798,	4.450
18	Sharma, Pushpendra, Kumar, Ashok, Shams, Noorullah, Verma, Amit Kumar, Kumar, Dheeraj, Singh, Arun Kumar and Ram, Sahendra	Parametric stability analysis for optimum size of rib/snook in mechanized depillaring.	Arabian Journal of Geosciences, 14 (4). ISSN 1866-7511,	1.327
19	Singh, Arun Kumar, Kumar, Ashok, Kumar, Dheeraj, Singh, Rajendra, Ram, Sahendra, Kumar, Rakesh and Singh, Amit Kumar	Field and simulation studies for mechanised depillaring below incompetent geological formations of an Indian	Journal of The Geological Society of India.	0.899

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20	Singh, Jitendra Kumar, Mandal, Sujit Kumar and Banerjee , Gautam	An Empirical Modeling and Evaluation Approach for the Safe use of Industrial Electric Detonators in the Hazards of Radio Frequency Radiation.	Journal of Scientific & Industrial Research , 80. pp. 27-33.	0.729
21	Singh, Ranjeet Kumar, Debjit, Pal Singh, Shailendra Kr, Tripathi, Nimsha and Singh, Raj S	Utilization of Iron Ore Tailings for Brick Manufacture from Donimalai Mines of Karnataka, India.	Journal of Scientific & Industrial Research, 80. pp. 210-220.	0.729
22	Singh, Siddharth, Pandey, Bhanu, Roy, Lal Babu, Shekhar, Sameer and Singh , Ranjeet Kumar	Tree responses to foliar dust deposition and gradient of air pollution around opencast coal mines of Jharia coalfield, India: gas exchange, antioxidative potential and tolerance level.	Environmental Science and Pollution Research , 28. pp. 8637-8651.	3.056
23	<u>Arka Jyoti Das, Partha Sarathi Paul, Prabhat Kumar Mandal Ranjan Kumar & Subhashish Tewari</u>	Investigation of Failure Mechanism of Inclined Coal Pillars: Numerical Modelling and Tensorial Statistical Analysis with Field Validation	<u>Rock Mechanics and Rock Engineering</u>	4.140
24.	Gangopadhyay, Monalisa and Bayen, Gautam K. and Kumar, Manish and Mukherjee, Ashish and Ranjan, Rajiv and Kumar, Saroj	<i>Preheating up to Tarrification Point and Compaction: A Promising Way for Coke Quality Enhancement.</i>	International Journal of Coal Preparation and Utilization. ISSN 1939-2699	1.527
25	Himanshu, Vivek Kumar and Roy, M. P. and Shankar, Ravi and Mishra, A. K. and Singh, P. K. (2021)	Empirical Approach Based Estimation of Charge Factor and Dimensional Parameters in Underground Blasting.	Mining, Metallurgy & Exploration. pp. 1059-1069	1.020
26	Aditya Rana , Siddharth Singh , N.K. Bhagat , M.M. Singh , G.P. Jadaun , P.K. Singh	Evaluating the sustainability of a hydropower project in the Himalayas: A case study for resolving legal disputes in tribunals	Renewable Energy 174 pp.894-908	6.274
27	SujoyChattaraj, RajeevUpadhyay, DebaduttaMohanty, GopinathHalde, TarkeshwarKumar	Evaluating production behaviour of CBM wells from Raniganj Coalfield through reservoir characterization under constrained field data conditions	<u>Journal of Natural Gas Science and Engineering</u> Volume 92, August 2021, 103969	3.841
28	RanjanKumar Arka JyotiDas Prabhat KumarMandal RanaBhattacharjee SubhashishTewari	Probabilistic stability analysis of failed and stable cases of coal pillars	<u>International Journal of Rock Mechanics and Mining Sciences</u> Volume 144, 2021	3.780

29	Narayan Kumar Bhagat, Aditya Rana, Arvind K. Mishra, Madan M. Singh, Atul Singh & Pradeep K. Singh	Prediction of fly-rock during boulder blasting on infrastructure slopes using CART technique	Geomatics, Natural Hazards and Risk, Vol.12 No.1	3.333
30	<u>Sandeep Kumar</u> , <u>Reginald Ebhin Masto</u> & <u>Garima Kaushika</u>	Thermally processed biochar: preparation, characterisation and their application for cadmium removal from surface and groundwater	International journal of Environmental analytical Chemistry	1.431
31	Dey, Prasanjit and Chaulya, S.K.	<i>Hybrid CNN-LSTM and IoT-based coal mine hazards monitoring and prediction system.</i>	Process Safety and Environmental Protection. Vol152, pp249-263	4.966
32	Gangopadhyay, Monalisa and Bayen, Gautam K. and Kumar, Manish and Mukherjee, Ashish and Ranjan, Rajiv and Kumar, Saroj	<i>Preheating upto Tarrification Point and Compaction: A Promising Way for Coke Quality Enhancement.</i>	International Journal of Coal Preparation and Utilization. ISSN 1939-2699,	2.034
33	Chaulya, Swades Kumar	<i>Secure decision tree twin support vector machine training and classification process for encrypted IoT data via Blockchain platform.</i>	Concurrency and Computation Practice and Experience. Vol.33	1.536
34	Abhay Kumar Bharti & Amar Prakash & Aniket Verma & K. K. K. Singh	Assessment of hydrological condition in strata associated with old mine working during and post-monsoon using electrical resistivity tomography: a case study	Bulletin of Engineering Geology and the Environment	3.041
35	<u>Pinaki Sarkar</u> , <u>Santi G. Sahu</u> , <u>Omkar S. Patange</u> , <u>Amit Garg</u> , <u>Ashis Mukherjee</u> , <u>Manish Kumar</u> & <u>Pradeep K. Singh</u>	Impacts of changes in commercial non-coking coal grading system and other coal policies towards estimation of CO ₂ emission in Indian power sector	Carbon Management Vol.12 No.1 pp 69 – 80 Feb 2021	3.182
36	<u>Sangeeta Mukhopadhyay</u> , <u>Pinaki Sarkar</u> , <u>Reginald E. Masto</u> , <u>Ashok K. Singh</u> & <u>Pradeep K. Singh</u>	Investigation on the combustion characteristics of different plant parts of <i>Cassia siamea</i> by DSC-TGA	<i>Journal of Thermal Analysis and Calorimetry</i>	4.626
39	<u>Singh, M K</u> ; <u>Mallick, M</u> ; <u>Verma, M K</u>	Study on the failure of guide ropes used in mines	<u>Insight - Non-Destructive Testing and Condition Monitoring</u> , Volume	0.783

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40	Singh, D.P., Singh, V., Singh, P.K. and Hazra, B.,	Source rock properties and pore structural features of distinct thermally mature Permian shales from South Rewa and Jharia basins, India	<i>Arabian Journal of Geosciences</i> , 14(10), pp.1-16.	1.827
41	Chakraborty, P., Hazra, B., Sarkar, P., Singh, A.K., Singh, P.K. and Kumar, S.	Thermal behavior of some Indian coals: inferences from simultaneous thermogravimetry–calorimetry and rock–eval.	<i>Natural Resources Research</i> , 30(3), pp.2161-2177.	5.146
42	Hazra, B., Singh, D.P., Chakraborty, P., Singh, P.K., Sahu, S.G. and Adak, A.K.	Using Rock-Eval S4Tpeak as thermal maturity proxy for shales.	<i>Marine and Petroleum Geology</i> , p.104977.	4.348
43	Hazra, B., Singh, D.P., Crosdale, P.J., Singh, V., Singh, P.K., Gangopadhyay, M. and Chakraborty, P	Critical insights from Rock-Eval analysis of vitrains. .	<i>International Journal of Coal Geology</i> , p.103717.	6.806
44	<p><u>Gorai, A. K., Himanshu, V. K., Santi, C. .2021. Development of ANN-Based Universal Predictor for Prediction of Blast-Induced Vibration Indicators and its Performance Comparison with Existing Empirical Models. Mining, Metallurgy & Exploration. https://doi.org/10.1007/s42461-021-00449-0</u></p> <p><u>Gorai, A. K., Himanshu, V. K., Santi, C. .2021. Development of ANN-Based Universal Predictor for Prediction of Blast-Induced Vibration Indicators and its Performance Comparison with Existing Empirical Models. Mining, Metallurgy & Exploration. https://doi.org/10.1007/s42461-021-00449-0</u></p> <p><u>Amit Kumar Gorai, ,Vivek Kumar Himanshu & Chiranjibi Santi</u></p> <p><u>Amit Kumar Gorai, ,Vivek Kumar Himanshu & Chiranjibi Santi</u></p> <p><u>Amit Kumar Gorai, ,Vivek Kumar Himanshu & Chiranjibi Santi</u></p> <p><u>Amit Kumar Gorai, Vivek Kumar</u></p>	Development of ANN-Based Universal Predictor for Prediction of Blast-Induced Vibration Indicators and its Performance Comparison with Existing Empirical Models	<i>Mining, Metallurgy & Exploration</i> July	1.421

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45	Vivek K. Himanshu, A.K. Mishra, M.P. Rao and Singh P.K.	Numerical simulation based approach for assessment of blast induced deformation pattern in slot raise excavation	<u>International Journal of Rock Mechanics and Mining Sciences</u> <u>Volume 144</u> , August 2021, 104816	2.836
46	Himanshu, Vivek K, Mishra, A. K., Priyadarshi, V. , Shankar, R., Yadav, R. S., Singh, P. K.,	Estimation of optimum burden for blasting of different rock strata in an Indian Iron Ore Mine	Journal of the Geological Society of India, 97, 760-66. https://doi.org/10.1007/s12594-021-1757-4	0.632
47	Sawmliana C., Singh R. K., Hembram P. and Dawngliana Orizen MS	Ground vibration generated by hydraulic rock breakers and its impact on the safety of nearby earthfill dam in a graphite mine.	Quarterly Journal of Engineering Geology and Hydrogeology, Geological Society of London, 19 th March 2021, https://doi.org/10.1144/qjegh2020-113	1.897
48	Ali F., Roy M. P., Pingua B. M. P., Mukherjee R., Agarwal L., Singh P. K.	Utilization of Waste Lubricant Oil in Fuel Phase of ANFO Explosives: It's Field applications and Environmental Impact.	Propellants Explosives, Pyrotechnics, DOI: 10.1002/prop.202100011. (Wiley-VCH). <i>June</i>	<i>IF: 1.887.</i>
49	Mariam J., Ashoka A. H., Gaded V., Ali F., Malvi H., Das A., Anand R.	Deciphering protein microenvironment by using a cysteine specific switch-ON fluorescent probe.	Organic and Biomolecular Chemistry, 19, 5161-5168. DOI: 10.1039/d1ob00698c. (RSC) June	<i>(I.F: 3.876)</i>
50	Das, P. and Singh, K.K.K	Broad-spectrum contaminant removal from water using sustainable pressure assisted osmosis.	Journal of Environmental Chemical Engineering, 9 (1)	5.909
51	Das, Pallabi, Datta Suman and Singh, Krishnakant Kumar	Insights into membrane crystallization: A sustainable tool for value added product recovery from effluent streams	. Separation and Purification Technology, 257 (117666)	7.312
52	Prasad, Bably and Maity, Sudip and Mondal, Mukul Ranjan and Singh, Krishna Kant Kumar	Evaluation of Treatment Techniques for Utilising Acid Mine Water in Agriculture.	Water, Air, & Soil Pollution , 232.	1.900
53	Das,Pallab , Upadhyay, Sidhidatri and Singh, Krishnakant K.	Waste to wealth: Recovery of value-added products from steel slag	. Journal of Environmental Chemical Engineering,	4.300

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54	Mahato, Mukesh Kumar, Singh, Abhay Kumar, Singh Prasoon Kumar and Gurdeep Singh	Evaluation of factors influencing surface water quality in a coalfield area of Damodar valley, India: a sustainable uses.	INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY. ISSN 0306-7319 July	1.431
55	Giri, Soma and Mahato, Mukesh Kumar and Singh, Pramod Kumar and Singh, Abhay Kumar	Non-carcinogenic health risk assessment for fluoride and nitrate in the groundwater of the mica belt of Jharkhand, India.	Human and Ecological Risk Assessment: An International Journal, 27 (7) June	2.300
56	Naik, A.S., Behera, B., Shukla, U.K., Sahu, H.B., Singh, P.K., Mohanty, D., Sahoo, K., and Chatterjee, D.	Mineralogical studies of Mahanadi Basin coals based on FTIR, XRD, and Microscopy: A Geological Perspective.	Journal Geological Society of India, 97. pp. 1019-1027. Sep.	
57	Adarsh Tripathi, Noorpur Gupa, Singh, Ashok Kumar <u>Sarada P. Mohanty, Nachiketa Rai & Anindya Pain</u>	Effects of Elevated Temperatures on the Microstructural, Physico-Mechanical and Elastic Properties of Barakar Sandstone: A Study from One of the World's Largest Underground Coalmine Fire Region, Jharia, India.	Rock Mechanics and Rock Engineering , 54. pp. 1293-1314. ISSN 0723-2632 (Jan)	4.140
58	<u>A. K. Raina</u>	Importance and Sensitivity of Variables Defining the Performance of Pre-split Blasting Using Artificial Neural Networks	<u>Mining, Metallurgy & Exploration</u> volume 38 , pages1817–1829 (2021) (May)	1.413
59	Behera, S.K and Singh, Prashant and Mishra, K. and Mandal, Sujit K. and Ghosh, C.N. and Kumar, Ritesh and Mandal, Phanil K.	Utilization of mill tailings, fly ash and slag as mine paste backfill material: Review and future perspective.	Construction and Building Materials, 309.	4.419
60	Bagde, Manoj Namdeo and Kumar, Ajit and Kumbhakar, Subodh and Jhanwar, Jagdish Chandra	<i>The tunnel wall collapse and pothole creation on the hilly terrain surface: a case study of stabilization.</i>	Innovative Infrastructure Solutions. 2021 (Oct)	1.154
61	Singh, Deependra Pratap and Hazra, Bodhisatwa and Sarkar, Pinaki	Impact of Degassing Time and Temperature on the Estimation of Pore Attributes in Shale. .	Energy & Fuels, 35 (19). 2021 pp. 15628-15641	3.421
62	Singh, Deependra Pratap and Hazra, Bodhisatwa and Singh, Pradeep K.	Pore Properties in Organic-Rich Shales Derived Using Multiple Fractal Determination Models Applied to Two Indian Permian Basins.	Energy & Fuels, 35 2021 (18). pp. 14618-14633.	3.421

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64	Ram, Sahendra and Singh, Arun Kumar and Kumar, Rakesh and Kumar, Ashok and Kumar, Niraj <u>Petr Waclawik</u> , <u>Abhishek Gautam</u> and Raja , Mudassar	Design of rock bolt-based goaf edge support for conventional depillaring with stowing.	Arabian Journal of Geosciences. Oct 2021 ISSN 1866-7511	1.327
65	Kumar, Ashok , <u>Kumar Dheeraj</u> , Singh, Arun Kumar Ram, SahendOra and Kumar, Rakesh .	Development of empirical model for strength estimation of irregular-shaped-heightened-rib/snook for mechanised depillaring.	International Journal of Rock Mechanics and Mining Sciences, V.148 Dec 2021	4.151
66	Kumari, Sushma and Choudhary, Monika and Kumari, Khushboo and Kumar, Virendra and Chowdhury, Abhishek and Chaulya, Swades Kumar and Prasad, Girendra Mohan and Mandal, Sujit Kumar	Intelligent driving system at opencast mines during foggy weather.	International Journal of Mining, Reclamation and Environment. ISSN 1748-0930 Dec 2021	1.917
67	Topno, Seema Ashishan and Sahoo, Lalit Kumar .	Energy efficiency assessment of electric shovel operating in opencast mine.	Energy, 230	7.147
68	Gopinathan, P. and Singh, Ashok K. and Singh, Pradeep K. and Jha, Madhu	Sulphur in Jharia and Raniganj coalfields: Chemical fractionation and its environmental implications	Environmental Research . ISSN 0013-9351	6.498
69	Chaulya, Swades Kumar and Tiwary, Rajni Kant and Singh, Krishna Kant Kumar and Nikhil, Kumar and Mondal, Gautam Chandra and Singh, Shailendra Kumar and Shekhar, Sameer	Air quality modeling for impact evaluation of a mica, feldspar, and quartz mine in Nellore district, Andhra Pradesh, India	Arabian Journal of Geosciences. Dec2021	1.327
70	Chauhan, Vishal and Chavan, Prakash D. and Gupta, Navneet K and Datta, Sudipta and Saha, Sujan and Sahu, Gajanan	Establishing fluidization parameters of different size of coal ash particles in bubbling fluidized bed.	Chemical Engineering Communications , 208 (2)	1.802
71	Bannerjee, Mollika and Mendhe, Vinod Atmaram and Kamble, Alka Damodhar and Varma, Atul Kumar and Singh, Bhagwan D. and Kumar, Susheel .	<i>Facets of coalbed methane reservoir in East Bokaro Basin, India.</i>	Journal of Petroleum Science and Engineering	3.706
72	Buragohain, John and Mendhe, Vinod Atmaram and Varma, Atul Kumar and Shukla, Priyanka	<i>Organo-Lithotype Controls on Cleat/Fractures, Matrix-Associated Pores, and Physicomechanical Properties of Coal Seams of Raniganj Coalfield, India.</i>	ACS Omega, 6 (31). pp. 20218-20248	2.870
73	Das, Tarit Baran and Chattopadhyay, U. S. and Singh , P. K.	<i>Preparation and Certification of Indian Reference Material of Bituminous Coal.</i>	MAPAN, 36 (1). pp. 129-138	1.033
74	Khargar, Ranjit G. and Mendhe, Vinod Atmaram and Varma, Atul Kumar and Mishra, Vivek Kumar and Pandey, Shashanka	<i>Organo-inorganic facets of shale gas reservoir of Jharia Basin of Damodar Valley, India.</i>	Journal of Natural Gas Science and Engineering, 95. ISSN 1875-5100	3.841

75	Mallick, Mousumi and Mitra, Swapan Kumar and Basak, Debasish and Roy, Nirmal Kumar and Maity, Maity	<i>Hardening of Steel Through High-Voltage Low-Current Energy Input.</i>	Steel Research International	1.810
76	Singh, Jitendra Kumar and Mandal, Sujit Kumar and Banerjee , Gautam	<i>Refractive index of different perovskite materials.</i>	Journal of Materials Research.	2.502