

# Jarosław Brodny

## List of Publications by Year in descending order

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Version: 2024-02-01

85  
papers

1,764  
citations

218677

26  
h-index

302126

39  
g-index

85  
all docs

85  
docs citations

85  
times ranked

998  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of the efficiency and structure of energy consumption in the industrial sector in the European Union countries between 1995 and 2019. <i>Science of the Total Environment</i> , 2022, 808, 152052.	8.0	32
2	Business Digital Maturity in Europe and Its Implication for Open Innovation. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> , 2022, 8, 27.	5.2	24
3	Analysis of the level of energy security in the three seas initiative countries. <i>Applied Energy</i> , 2022, 311, 118649.	10.1	31
4	Use of Universal Simulation Software Tools for Optimization of Signal Plans at Urban Intersections. <i>Sustainability</i> , 2022, 14, 2079.	3.2	9
5	Applying Sensor-Based Information Systems to Identify Unplanned Downtime in Mining Machinery Operation. <i>Sensors</i> , 2022, 22, 2127.	3.8	7
6	Digitalization of Small and Medium-Sized Enterprises and Economic Growth: Evidence for the EU-27 Countries. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> , 2022, 8, 67.	5.2	21
7	Renewable energy consumption in economic sectors in the EU-27. The impact on economics, environment and conventional energy sources. A 20-year perspective. <i>Journal of Cleaner Production</i> , 2022, 345, 131076.	9.3	98
8	Analyzing the Level of Digitalization among the Enterprises of the European Union Member States and Their Impact on Economic Growth. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> , 2022, 8, 70.	5.2	30
9	The Use of the Open Innovation Concept to Develop a Method to Improve Safety during the Mining Production Process: A Case Study of the Integration of University and Industry. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> , 2022, 8, 75.	5.2	5
10	The Level of Digitization of Small, Medium and Large Enterprises in the Central and Eastern European Countries and Its Relationship with Economic Parameters. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> , 2022, 8, 113.	5.2	9
11	The analysis of similarities between the European Union countries in terms of the level and structure of the emissions of selected gases and air pollutants into the atmosphere. <i>Journal of Cleaner Production</i> , 2021, 279, 123641.	9.3	28
12	Assessing the Level of Energy and Climate Sustainability in the European Union Countries in the Context of the European Green Deal Strategy and Agenda 2030. <i>Energies</i> , 2021, 14, 1767.	3.1	56
13	Multi-Criteria Method for the Selection of Renewable Energy Sources in the Polish Industrial Sector. <i>Energies</i> , 2021, 14, 2386.	3.1	45
14	A Case Study: Simulation Traffic Model as a Tool to Assess One-Way vs. Two-Way Traffic on Urban Roads around the City Center. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5018.	2.5	6
15	Assessing the Level of Renewable Energy Development in the European Union Member States. A 10-Year Perspective. <i>Energies</i> , 2021, 14, 3765.	3.1	47
16	Assessing the level of digital maturity of enterprises in the Central and Eastern European countries using the MCDM and Shannon's entropy methods. <i>PLoS ONE</i> , 2021, 16, e0253965.	2.5	15
17	Assessing the level of digitalization and robotization in the enterprises of the European Union Member States. <i>PLoS ONE</i> , 2021, 16, e0254993.	2.5	18
18	Applying computational fluid dynamics in research on ventilation safety during underground hard coal mining: A systematic literature review. <i>Chemical Engineering Research and Design</i> , 2021, 151, 373-400.	5.6	24

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19	Availability Study of a Longwall Shearer Including Phases of its Operation. Multidisciplinary Aspects of Production Engineering, 2021, 4, 200-211.	0.2	0
20	The comparative assessment of sustainable energy security in the Visegrad countries. A 10-year perspective. Journal of Cleaner Production, 2021, 317, 128427.	9.3	38
21	Assessing sustainable energy development in the central and eastern European countries and analyzing its diversity. Science of the Total Environment, 2021, 801, 149745.	8.0	33
22	The Impact of the Ventilation System on the Methane Release Hazard and Spontaneous Combustion of Coal in the Area of Exploitation – A Case Study. Energies, 2020, 13, 4891.	3.1	65
23	Assessment of Work Conditions in a Production Enterprise – A Case Study. Sustainability, 2020, 12, 5390.	3.2	6
24	The Method of Combating Coal Spontaneous Combustion Hazard in Goafs – A Case Study. Energies, 2020, 13, 4538.	3.1	61
25	Analysis of methane hazard in longwall working equipped with a powered longwall complex. E3S Web of Conferences, 2020, 174, 01011.	0.5	3
26	Preliminary results of tests on nitrogen cushion for combating fire hazard in longwalls rich in methane. E3S Web of Conferences, 2020, 174, 01066.	0.5	0
27	Studying the Level of Sustainable Energy Development of the European Union Countries and Their Similarity Based on the Economic and Demographic Potential. Energies, 2020, 13, 6643.	3.1	55
28	Analyzing Similarities between the European Union Countries in Terms of the Structure and Volume of Energy Production from Renewable Energy Sources. Energies, 2020, 13, 913.	3.1	98
29	Forecasting the Structure of Energy Production from Renewable Energy Sources and Biofuels in Poland. Energies, 2020, 13, 2539.	3.1	44
30	Adapting the Powered Roof Support to Diverse Mining and Geological Conditions. Energies, 2020, 13, 405.	3.1	28
31	The Use of Artificial Neural Networks to Analyze Greenhouse Gas and Air Pollutant Emissions from the Mining and Quarrying Sector in the European Union. Energies, 2020, 13, 1925.	3.1	19
32	Migration Factor of Stimulating the Development of the Production Industry in Ukraine and Poland. Multidisciplinary Aspects of Production Engineering, 2020, 3, 732-744.	0.2	1
33	Analysis of Dustiness State in a Driven Underground Dog Heading Ventilating by Auxiliary Air-Duct. Management Systems in Production Engineering, 2020, 28, 73-77.	1.1	1
34	Analysis of Stoppages in the Process of Roadway Drivage Caused by Exceeding the Maximum Allowable Level of Methane Concentration. New Trends in Production Engineering, 2020, 3, 197-210.	0.3	0
35	Integrated Method of Reducing the Threat of Endogenous Fires in Hard Coal Mines. E3S Web of Conferences, 2019, 105, 01013.	0.5	12
36	Analysing the Utilisation Effectiveness of Mining Machines Using Independent Data Acquisition Systems: A Case Study. Energies, 2019, 12, 2505.	3.1	45

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37	Forecasting Methane Emissions from Hard Coal Mines Including the Methane Drainage Process. <i>Energies</i> , 2019, 12, 3840.	3.1	53
38	Application of a roof support monitoring system for analysis of work parameters of a powered longwall system. <i>E3S Web of Conferences</i> , 2019, 105, 03022.	0.5	2
39	Analysis of the Influence of Dynamic Load on the Work Parameters of a Powered Roof Support's Hydraulic Leg. <i>Sustainability</i> , 2019, 11, 2570.	3.2	45
40	Analysis of Selected Factors' Influence on the Specific Range of Modern Jet Transport Aircraft as a Complex Mechatronic System. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 360-376.	0.6	0
41	Predicting Methane Concentration in Longwall Regions Using Artificial Neural Networks. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 1406.	2.6	58
42	Fuzzy Modelling of the Methane Hazard Rate. <i>Communications in Computer and Information Science</i> , 2019, , 303-315.	0.5	1
43	The Impact of the Strength of Roof Rocks on the Extent of the Zone with a High Risk of Spontaneous Coal Combustion for Fully Powered Longwalls Ventilated with the Y-Type System – A Case Study. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 5315.	2.5	41
44	Bench tests of a support system of a powered roof support's hydraulic leg aimed at minimizing consequences of leaks. <i>E3S Web of Conferences</i> , 2019, 134, 01003.	0.5	1
45	Analysis of The Effects of the Position of the Air Duct Supplying Fresh Air to the Working Face of the Mined Dog Heading on Methane Concentration Levels. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 362, 012036.	0.3	0
46	Analysis of the Consequences of Methane Combustion in a Mined Dog Heading. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 362, 012037.	0.3	0
47	Tests of Geometry of the Powered Roof Support Section. <i>Energies</i> , 2019, 12, 3945.	3.1	20
48	Analysis of the diversity in emissions of selected gaseous and particulate pollutants in the European Union countries. <i>Journal of Environmental Management</i> , 2019, 231, 582-595.	7.8	35
49	Inter gases as one of the ways to reduce the risk of endogenous fires in hard coal mines. <i>Multidisciplinary Aspects of Production Engineering</i> , 2019, 2, 183-190.	0.2	3
50	Forecasting of Methane Hazard State in the Exploitation Wall Using Neural-Fuzzy System. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 119-133.	0.6	0
51	Application of Industrial Automatic Systems for Operating Parameters Identification of Mining Machines. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 38-51.	0.6	0
52	Impact of type of the roof rocks on location and range of endogenous fires particular hazard zone by in goaf with caving. <i>E3S Web of Conferences</i> , 2018, 29, 00005.	0.5	16
53	Analysis of the Impact of Auxiliary Ventilation Equipment on the Distribution and Concentration of Methane in the Tailgate. <i>Energies</i> , 2018, 11, 3076.	3.1	49
54	Research on the Effectiveness of the Actuating Element of the Electro Control System for the Powered Roof Support. <i>E3S Web of Conferences</i> , 2018, 41, 03016.	0.5	0

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55	Use of IT platform in determination of efficiency of mining machines. E3S Web of Conferences, 2018, 29, 00014.	0.5	8
56	Analysis of load of a powered roof support's hydraulic leg. E3S Web of Conferences, 2018, 71, 00002.	0.5	2
57	Exposure to Harmful Dusts on Fully Powered Longwall Coal Mines in Poland. International Journal of Environmental Research and Public Health, 2018, 15, 1846.	2.6	62
58	Analysis of Young's modulus for Carboniferous sedimentary rocks and its relationship with uniaxial compressive strength using different methods of modulus determination. Journal of Sustainable Mining, 2018, 17, 145-157.	0.2	55
59	Dynamic Tests of a Leg in a Powered Roof Support Equipped with an Innovative Hydraulic System. E3S Web of Conferences, 2018, 41, 03019.	0.5	8
60	Application of Neural-Fuzzy System in Prediction of Methane Hazard. Advances in Intelligent Systems and Computing, 2018, , 151-160.	0.6	11
61	Use of Intelligent Informatics Module for Registration and Assessment of Causes of Breaks in Selected Mining Machines. Advances in Intelligent Systems and Computing, 2018, , 74-84.	0.6	13
62	Literature Research in the Field of Technology Assessment Using a Tool of a Systematic Literature Review. Multidisciplinary Aspects of Production Engineering, 2018, 1, 109-115.	0.2	5
63	New Way of Monitoring of the Production Environment with Application of Augmented Reality and Artificial Intelligence. Multidisciplinary Aspects of Production Engineering, 2018, 1, 307-313.	0.2	1
64	Exploitation Policy in the Aspect of Industry 4.0 Concept – Overview of Selected Research. Multidisciplinary Aspects of Production Engineering, 2018, 1, 353-359.	0.2	6
65	Analysis of Influence of Types of Rocks Forming the Goaf with Caving on the Physical Parameters of Air Stream Flowing Through These Gob and Adjacent Headings. Mechanika, 2018, 24, .	0.5	25
66	The Foamed Metal Structures in Numerical Testing. Mechanika, 2018, 24, .	0.5	0
67	Analysis of Powered Roof Support Operation Based on a Virtual Driver. Multidisciplinary Aspects of Production Engineering, 2018, 1, 415-421.	0.2	0
68	Analysis of the Impact of Unscheduled Downtimes on their Availability in Machine Operations. Multidisciplinary Aspects of Production Engineering, 2018, 1, 145-151.	0.2	0
69	Application of Industrial Automatics Systems for Monitoring of Operational States of Machines. Multidisciplinary Aspects of Production Engineering, 2018, 1, 315-321.	0.2	0
70	Innovative Visualization System Designed to Monitor Parameters of Mining Systems Operation. Multidisciplinary Aspects of Production Engineering, 2018, 1, 361-368.	0.2	2
71	Availability analysis of selected mining machinery. Archives of Control Sciences, 2017, 27, 197-209.	1.7	27
72	Application of Elements of TPM Strategy for Operation Analysis of Mining Machine. IOP Conference Series: Earth and Environmental Science, 2017, 95, 042019.	0.3	6

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73	Analysis of Availability of Longwall-Shearer Based On Its Working Cycle. IOP Conference Series: Earth and Environmental Science, 2017, 95, 042020.	0.3	3
74	Analysis of Influence of Goaf Sealing from Tailgate On the Methane Concentration at the Outlet from the Longwall. IOP Conference Series: Earth and Environmental Science, 2017, 95, 042025.	0.3	47
75	Determination of Particular Endogenous Fires Hazard Zones in Goaf with Caving of Longwall. IOP Conference Series: Earth and Environmental Science, 2017, 95, 042026.	0.3	38
76	The Use of the TGÅSP Module as a Database to Identify Breaks in the Work of Mining Machinery. Communications in Computer and Information Science, 2017, , 441-452.	0.5	10
77	A Data Warehouse as an Indispensable Tool to Determine the Effectiveness of the Use of the Longwall Shearer. Communications in Computer and Information Science, 2017, , 453-465.	0.5	22
78	ANALYSIS OF INFLUENCE OF THE AIR CONDITIONING ON THE AIR PARAMETERS IN UNDERGROUND MINE WORKINGS. , 2017, , .		0
79	DATA WAREHOUSE AS AN INFORMATICS TOOL SUPPORTING A STUDY ON THE EFFECTIVENESS OF USING MINING MACHINES. , 2017, , .		0
80	ASSESSMENT OF HYDRODYNAMICS OF GAS FLOW THROUGH HOMOGENEOUS AND HETEROGENEOUS POROUS ROCK MEDIA. , 2017, , .		0
81	APPLICATION OF THE TPM STRATEGY TO ANALYZE THE EFFECTIVENESS OF USING A SET OF MINING MACHINES. , 2016, , .		18
82	DETERMINATION OF THE ZONE ENDANGERED BY METHANE EXPLOSION IN GOAF WITH CAVING OF OPERATING LONGWALLS. , 2016, , .		18
83	THE IMPACT OF THE FLOW VOLUME FLOW VENTILATION TO THE LOCATION OF THE SPECIAL HAZARD SPONTANEOUS FIRE ZONE IN GOAF WITH CAVING OF OPERATING LONGWALLS. , 2016, , .		15
84	ANALYSIS OF OPERATION OF ARCH FRICTIONAL JOINT LOADED WITH THE IMPACT OF FREELY FALLING MASS. Studia Geotechnica Et Mechanica, 2013, 35, 59-71.	0.5	2
85	Analysis of operation of new construction of the frictional joint with the resistance wedge / Analiza pracy nowej konstrukcji zÅÄ...cza ciernego z klinem oporowym. Archives of Mining Sciences, 2012, 57, 209-227.	0.6	22