

# Dr-Ing hc Bernd Friedrich

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3800698/publications.pdf>

Version: 2024-02-01

249  
papers

4,734  
citations

136950

32  
h-index

155660

55  
g-index

259  
all docs

259  
docs citations

259  
times ranked

3928  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrometallurgical recycling of waste NdFeB magnets: design of experiment, optimisation of low concentrations of sulphuric acid leaching and process analysis. Canadian Metallurgical Quarterly, 2023, 62, 107-118.	1.2	11
2	Mixed Oxides NiO/ZnO/Al <sub>2</sub> O <sub>3</sub> Synthesized in a Single Step via Ultrasonic Spray Pyrolysis (USP) Method. Metals, 2022, 12, 73.	2.3	8
3	Assessment of Metallurgical Slags as Solar Heat Absorber Particles. Minerals (Basel, Switzerland), 2022, 12, 121.	2.0	2
4	Proposition of a Thermogravimetric Method to Measure the Ferrous Iron Content in Metallurgical-Grade Chromite. Minerals (Basel, Switzerland), 2022, 12, 109.	2.0	4
5	Characterization of Defined Pt Particles Prepared by Ultrasonic Spray Pyrolysis for One-Step Synthesis of Supported ORR Composite Catalysts. Metals, 2022, 12, 290.	2.3	6
6	Electrochemical Investigation of Lateritic Ore Leaching Solutions for Ni and Co Ions Extraction. Metals, 2022, 12, 325.	2.3	1
7	Influence of P and Ti on Phase Formation at Solidification of Synthetic Slag Containing Li, Zr, La, and Ta. Minerals (Basel, Switzerland), 2022, 12, 310.	2.0	4
8	Advances in Understanding of Unit Operations in Non-Ferrous Extractive Metallurgy 2021. Metals, 2022, 12, 554.	2.3	0
9	Model and Mechanism of Anode Effect of an Electrochemical Cell for Nd or (Nd, Pr) Reduction. Metals, 2022, 12, 498.	2.3	2
10	Ex-situ mineral carbonation – A parameter study on carbon mineralisation in an autoclave as part of a large-scale utilisation process. Journal of CO <sub>2</sub> Utilization, 2022, 58, 101928.	6.8	4
11	Spray-Pyrolytic Tunable Structures of Mn Oxides-Based Composites for Electrocatalytic Activity Improvement in Oxygen Reduction. Metals, 2022, 12, 22.	2.3	5
12	Synthesis of Ni/Y <sub>2</sub> O <sub>3</sub> Nanocomposite through USP and Lyophilisation for Possible Use as Coating. Materials, 2022, 15, 2856.	2.9	3
13	Nanofiltration-Enhanced Solvent Extraction of Scandium from TiO <sub>2</sub> Acid Waste. ACS Sustainable Chemistry and Engineering, 2022, 10, 6063-6071.	6.7	6
14	Options for Hydrometallurgical Treatment of Ni-Co Lateritic Ores for Sustainable Supply of Nickel and Cobalt for European Battery Industry from South-Eastern Europe and Turkey. Metals, 2022, 12, 807.	2.3	3
15	Rare-Earth/Manganese Oxide-Based Composites Materials for Electrochemical Oxygen Reduction Reaction. Catalysts, 2022, 12, 641.	3.5	0
16	Environmentally Friendly Recovery of Lithium from Lithium–Sulfur Batteries. Metals, 2022, 12, 1108.	2.3	5
17	Influence of Rare Earth Oxide Concentration on Electrochemical Co-Deposition of Nd and Pr from NdF <sub>3</sub> -PrF <sub>3</sub> -LiF Based Melts. Metals, 2022, 12, 1204.	2.3	3
18	Removal of Copper, Nickel, and Iron from Lead–Tin Composite by Segregation of Intermetallic Silicon Phases. Metals, 2021, 11, 81.	2.3	0

#	ARTICLE	IF	CITATIONS
19	Carbonation of minerals and slags under high pressure in an autoclave. <i>Military Technical Courier</i> , 2021, 69, 486-498.	0.7	1
20	Electrodeposition of Aluminium-Vanadium Alloys from Chloroaluminate Based Molten Salt Containing Vanadium Ions. <i>Metals</i> , 2021, 11, 123.	2.3	1
21	The Influence of Initial Purity Level on the Refining Efficiency of Aluminum via Zone Refining. <i>Metals</i> , 2021, 11, 201.	2.3	1
22	Synthesis of Silica Particles Using Ultrasonic Spray Pyrolysis Method. <i>Metals</i> , 2021, 11, 463.	2.3	9
23	New Science Based Concepts for Increased Efficiency in Battery Recycling. <i>Metals</i> , 2021, 11, 533.	2.3	8
24	Use of Treated Non-Ferrous Metallurgical Slags as Supplementary Cementitious Materials in Cementitious Mixtures. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4028.	2.5	12
25	NdFeB Magnets Recycling Process: An Alternative Method to Produce Mixed Rare Earth Oxide from Scrap NdFeB Magnets. <i>Metals</i> , 2021, 11, 716.	2.3	29
26	Synergism Red Mud-Acid Mine Drainage as a Sustainable Solution for Neutralizing and Immobilizing Hazardous Elements. <i>Metals</i> , 2021, 11, 620.	2.3	6
27	Alternative fractional crystallization-based methods to produce high-purity aluminum. <i>Journal of Materials Research and Technology</i> , 2021, 12, 796-806.	5.8	10
28	Advances in Understanding of the Application of Unit Operations in Metallurgy of Rare Earth Elements. <i>Metals</i> , 2021, 11, 978.	2.3	16
29	Aluminium Recycling in Single- and Multiple-Capillary Laboratory Electrolysis Cells. <i>Metals</i> , 2021, 11, 1053.	2.3	6
30	Electrorefining Process of the Non-Commercial Copper Anodes. <i>Metals</i> , 2021, 11, 1187.	2.3	3
31	New glass-based binders from engineered mixtures of inorganic waste. <i>International Journal of Applied Glass Science</i> , 2021, 12, 570-580.	2.0	5
32	Towards Understanding the Cathode Process Mechanism and Kinetics in Molten LiF-AlF <sub>3</sub> during the Treatment of Spent Pt/Al <sub>2</sub> O <sub>3</sub> Catalysts. <i>Metals</i> , 2021, 11, 1431.	2.3	3
33	Electrochemical Study of Nd and Pr Co-Deposition onto Mo and W from Molten Oxyfluorides. <i>Metals</i> , 2021, 11, 1494.	2.3	4
34	High- and Ultra-High-Purity Aluminum, a Review on Technical Production Methodologies. <i>Metals</i> , 2021, 11, 1407.	2.3	12
35	The roles of constituting oxides in rare-earth cobaltite-based perovskites on their pseudocapacitive behavior. <i>Journal of Electroanalytical Chemistry</i> , 2021, 897, 115556.	3.8	4
36	One Step Production of Silver-Copper (AgCu) Nanoparticles. <i>Metals</i> , 2021, 11, 1466.	2.3	11

#	ARTICLE	IF	CITATIONS
37	A cleaner approach for recovering Al and Ti from coal fly ash via microwave-assisted baking, leaching, and precipitation. <i>Hydrometallurgy</i> , 2021, 206, 105754.	4.3	18
38	Behavior of Al <sub>2</sub> C <sub>3</sub> Particles During Flotation and Sedimentation in Aluminum Melts. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021, 52, 743-754.	2.1	5
39	Early-Stage Recovery of Lithium from Tailored Thermal Conditioned Black Mass Part I: Mobilizing Lithium via Supercritical CO <sub>2</sub> -Carbonation. <i>Metals</i> , 2021, 11, 177.	2.3	31
40	Comparing the environmental performance of industrial recycling routes for lithium nickel-cobalt-manganese oxide 111 vehicle batteries. <i>Procedia CIRP</i> , 2021, 98, 97-102.	1.9	7
41	Recyclable Porous Glass-Ceramics from the Smelting of MSWI Bottom Ash. <i>Ceramics</i> , 2021, 4, 1-11.	2.6	1
42	Replacing Fossil Carbon in the Production of Ferroalloys with a Focus on Bio-Based Carbon: A Review. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 1286.	2.0	18
43	Cobalt Recovery from Li-Ion Battery Recycling: A Critical Review. <i>Metals</i> , 2021, 11, 1999.	2.3	37
44	Sustainable Supply of Scandium for the EU Industries from Liquid Iron Chloride Based TiO <sub>2</sub> Plants. , 2021, 5, .		3
45	Ni-Cr-Al Alloy for neutron scattering at high pressures. <i>Materials Science and Technology</i> , 2020, 36, 949-954.	1.6	3
46	Computation-assisted analyzing and forecasting on impurities removal behavior during zone refining of antimony. <i>Journal of Materials Research and Technology</i> , 2020, 9, 1221-1230.	5.8	9
47	Structural and Electrochemical Properties of Nesting and Core/Shell Pt/TiO <sub>2</sub> Spherical Particles Synthesized by Ultrasonic Spray Pyrolysis. <i>Metals</i> , 2020, 10, 11.	2.3	14
48	Electrochemical Deposition of Al-Ti Alloys from Equimolar AlCl <sub>3</sub> + NaCl Containing Electrochemically Dissolved Titanium. <i>Metals</i> , 2020, 10, 88.	2.3	3
49	Recycling Potential of Lithium-Sulfur Batteries A First Concept Using Thermal and Hydrometallurgical Methods. <i>Metals</i> , 2020, 10, 1513.	2.3	14
50	Recycling Strategies for Ceramic All-Solid-State Batteries Part I: Study on Possible Treatments in Contrast to Li-Ion Battery Recycling. <i>Metals</i> , 2020, 10, 1523.	2.3	24
51	A Combined Pyro- and Hydrometallurgical Approach to Recycle Pyrolyzed Lithium-Ion Battery Black Mass Part 2: Lithium Recovery from Li Enriched Slag Thermodynamic Study, Kinetic Study, and Dry Digestion. <i>Metals</i> , 2020, 10, 1558.	2.3	19
52	Recovery of Gallium from Smartphones Part II: Oxidative Alkaline Pressure Leaching of Gallium from Pyrolysis Residue. <i>Metals</i> , 2020, 10, 1565.	2.3	6
53	Numerical and Experimental Investigation of Germanium Refining via Fractional Crystallization Based Innovative Rotary Cooling Device. <i>Metals</i> , 2020, 10, 973.	2.3	1
54	Dross Formation in Aluminum Melts During the Charging of Beverage Can Scrap Bales with Different Densities Using Various Thermal Pretreatments. <i>Jom</i> , 2020, 72, 3383-3392.	1.9	4

#	ARTICLE	IF	CITATIONS
55	Basic Sulfate Precipitation of Zirconium from Sulfuric Acid Leach Solution. <i>Metals</i> , 2020, 10, 1099.	2.3	17
56	Effectiveness of Fly Ash and Red Mud as Strategies for Sustainable Acid Mine Drainage Management. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 707.	2.0	16
57	A Combined Pyro- and Hydrometallurgical Approach to Recycle Pyrolyzed Lithium-Ion Battery Black Mass Part 1: Production of Lithium Concentrates in an Electric Arc Furnace. <i>Metals</i> , 2020, 10, 1069.	2.3	36
58	Investigation on the Electrochemical Behaviour and Deposition Mechanism of Neodymium in NdF <sub>3</sub> -LiF-Nd <sub>2</sub> O <sub>3</sub> Melt on Mo Electrode. <i>Metals</i> , 2020, 10, 576.	2.3	14
59	Elimination of edge cracks and centerline segregation of twin-roll cast aluminum strip by ultrasonic melt treatment. <i>Journal of Materials Research and Technology</i> , 2020, 9, 5034-5044.	5.8	12
60	Evaluation of Recyclability of a WEEE Slag by Means of Integrative X-Ray Computer Tomography and SEM-Based Image Analysis. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 309.	2.0	15
61	Stable nano-silver colloid production via Laser Ablation Synthesis in Solution (LASiS) under laminar recirculatory flow. <i>Advances in Materials and Processing Technologies</i> , 2020, 6, 677-685.	1.4	7
62	Recovery of Diamond and Cobalt Powder from Polycrystalline Drawing Die Blanks via Ultrasound-Assisted Leaching Process—Part 1: Process Design and Efficiencies. <i>Metals</i> , 2020, 10, 731.	2.3	1
63	Recovery of Diamond and Cobalt Powders from Polycrystalline Drawing Die Blanks via Ultrasound Assisted Leaching Process—Part 2: Kinetics and Mechanisms. <i>Metals</i> , 2020, 10, 741.	2.3	2
64	Mechanism of Nickel, Magnesium, and Iron Recovery from Olivine Bearing Ore during Leaching with Hydrochloric Acid Including a Carbonation Pre-Treatment. <i>Metals</i> , 2020, 10, 811.	2.3	6
65	Mineral Processing and Metallurgical Treatment of Lead Vanadate Ores. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 197.	2.0	18
66	Shape Factor Effect on Inclusion Sedimentation in Aluminum Melts. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020, 51, 850-860.	2.1	6
67	Separation behavior of arsenic and lead from antimony during vacuum distillation and zone refining. <i>Journal of Materials Research and Technology</i> , 2020, 9, 4386-4398.	5.8	28
68	Electrodeposition of titanium-vanadium alloys from chloride-based molten salts: influence of electrolyte chemistry and deposition potential on composition, morphology and microstructure. <i>Journal of Applied Electrochemistry</i> , 2020, 50, 355-366.	2.9	10
69	New Proposal for Size and Size-Distribution Evaluation of Nanoparticles Synthesized via Ultrasonic Spray Pyrolysis Using Search Algorithm Based on Image-Processing Technique. <i>Materials</i> , 2020, 13, 38.	2.9	22
70	Mechanism of Sc poisoning of Al-5Ti-1B grain refiner. <i>Scripta Materialia</i> , 2020, 180, 88-92.	5.2	23
71	Valorization of Rare Earth Elements from a Steenstrupine Concentrate Via a Combined Hydrometallurgical and Pyrometallurgical Method. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 248.	2.0	10
72	Review of the past, present, and future of the hydrometallurgical production of nickel and cobalt from lateritic ores. <i>Metallurgical and Materials Engineering</i> , 2020, 26, 199-208.	0.5	19

#	ARTICLE	IF	CITATIONS
73	Deposition of silica in hydrometallurgical processes. <i>Military Technical Courier</i> , 2020, 68, 65-78.	0.7	3
74	Advance in ultrasonic spray pyrolysis (USP) for the synthesis of gold nanoparticles. <i>Military Technical Courier</i> , 2020, 68, 877-894.	0.7	0
75	Recovery of cobalt from primary and secondary materials: An overview. <i>Military Technical Courier</i> , 2020, 68, 321-337.	0.7	1
76	Sustainable Utilization of Metals-Processing, Recovery and Recycling. <i>Metals</i> , 2019, 9, 769.	2.3	7
77	Synthesis of Nanosilica via Olivine Mineral Carbonation under High Pressure in an Autoclave. <i>Metals</i> , 2019, 9, 708.	2.3	28
78	Solid-State Conversion of Scandium Phosphate into Scandium Oxide with Sodium Compounds. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 14609-14620.	3.7	5
79	Hydrometallurgical Treatment of an Eudialyte Concentrate for Preparation of Rare Earth Carbonate. <i>Johnson Matthey Technology Review</i> , 2019, 63, 2-13.	1.0	19
80	Economical Feasibility of Rare Earth Mining outside China. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 576.	2.0	21
81	Interactive promotion of supercapacitance of rare earth/CoO <sub>3</sub> -based spray pyrolytic perovskite microspheres hosting the hydrothermal ruthenium oxide. <i>Electrochimica Acta</i> , 2019, 321, 134721.	5.2	4
82	Selective recovery and separation of Zr and Hf from sulfuric acid leach solution using anion exchange resin. <i>Hydrometallurgy</i> , 2019, 189, 105143.	4.3	10
83	Synthesis of Scandium Phosphate after Peroxide Assisted Leaching of Iron Depleted Bauxite Residue (Red Mud) Slags. <i>Scientific Reports</i> , 2019, 9, 11803.	3.3	15
84	Selective rare earth element extraction using high-pressure acid leaching of slags arising from the smelting of bauxite residue. <i>Hydrometallurgy</i> , 2019, 184, 162-174.	4.3	42
85	Kinetic Investigation and Dissolution Behavior of Cyanide Alternative Gold Leaching Reagents. <i>Scientific Reports</i> , 2019, 9, 7191.	3.3	52
86	Plasmon enhanced luminescence in hierarchically structured Ag@ (Y <sub>0.95</sub> Eu <sub>0.05</sub> ) <sub>2</sub> O <sub>3</sub> nanocomposites synthesized by ultrasonic spray pyrolysis. <i>Advanced Powder Technology</i> , 2019, 30, 1409-1418.	4.1	5
87	Kinetic Investigation of Silver Recycling by Leaching from Mechanical Pre-Treated Oxygen-Depolarized Cathodes Containing PTFE and Nickel. <i>Metals</i> , 2019, 9, 187.	2.3	10
88	Refining Principles and Technical Methodologies to Produce Ultra-Pure Magnesium for High-Tech Applications. <i>Metals</i> , 2019, 9, 85.	2.3	21
89	Selective silica gel free scandium extraction from Iron-depleted red mud slags by dry digestion. <i>Hydrometallurgy</i> , 2019, 185, 266-272.	4.3	33
90	Deep insight into the photoluminescent monocrystalline particles: Heat-treatment, structure, mechanisms and mechanics. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2466-2472.	5.8	1

#	ARTICLE	IF	CITATIONS
91	Magnesiothermic Reduction from Titanium Dioxide to Produce Titanium Powder. Journal of Sustainable Metallurgy, 2019, 5, 219-229.	2.3	15
92	Behaviour of Aluminium Carbide in Al-Melts During Re-melting. Minerals, Metals and Materials Series, 2019, , 1033-1039.	0.4	3
93	Morphology of Composite Fe@Au Submicron Particles, Produced with Ultrasonic Spray Pyrolysis and Potential for Synthesis of Fe@Au Core-Shell Particles. Materials, 2019, 12, 3326.	2.9	6
94	Synthesis of Poly-Alumino-Ferric Sulphate Coagulant from Acid Mine Drainage by Precipitation. Metals, 2019, 9, 1166.	2.3	14
95	Metallothermic Al-Sc Co-Reduction by Vacuum Induction Melting Using Ca. Metals, 2019, 9, 1223.	2.3	5
96	Mixed RuO <sub>2</sub> /TiO <sub>2</sub> uniform microspheres synthesized by low-temperature ultrasonic spray pyrolysis and their advanced electrochemical performances. Applied Surface Science, 2019, 464, 1-9.	6.1	15
97	Gas generation measurement and evaluation during mechanical processing and thermal treatment of spent Li-ion batteries. Waste Management, 2019, 84, 102-111.	7.4	102
98	Synthesis and characterisation of spherical core-shell Ag/ZnO nanocomposites using single and two steps ultrasonic spray pyrolysis (USP). Catalysis Today, 2019, 321-322, 26-33.	4.4	17
99	QUALITY ASSESSMENT OF NONFERROUS METALS RECOVERED FROM LANDFILL MINING: A CASE STUDY IN BELGIUM. Detritus, 2019, Volume 08 - December 2019, 1.	0.9	4
100	STRONG POROUS GLASS-CERAMICS FROM ALKALI ACTIVATION AND SINTER-CRYSTALLIZATION OF VITRIFIED MSWI BOTTOM ASH. Detritus, 2019, Volume 08 - December 2019, 1.	0.9	3
101	INTEGRATION OF RESOURCE RECOVERY INTO CURRENT WASTE MANAGEMENT THROUGH (ENHANCED) LANDFILL MINING. Detritus, 2019, Volume 08 - December 2019, 1.	0.9	5
102	Leaching of rare earth elements from bastnasite ore (third part). Military Technical Courier, 2019, 67, 561-572.	0.7	4
103	Leaching of rare earth elements from bastnasite ore: Second part. Military Technical Courier, 2019, 67, 241-254.	0.7	2
104	Screening of Non-cyanide Leaching Reagents for Gold Recovery from Waste Electric and Electronic Equipment. Journal of Sustainable Metallurgy, 2018, 4, 265-275.	2.3	26
105	Conditions and Mechanisms of Gas Emissions from Didymium Electrolysis and Its Process Control. Minerals, Metals and Materials Series, 2018, , 1435-1441.	0.4	5
106	An Estimation of PFC Emission by Rare Earth Electrolysis. Minerals, Metals and Materials Series, 2018, , 1507-1517.	0.4	6
107	Metallurgical Effects of Introducing Powdered WEEE to a Molten Slag Bath. Journal of Sustainable Metallurgy, 2018, 4, 233-250.	2.3	5
108	Novel Approach for Enhanced Scandium and Titanium Leaching Efficiency from Bauxite Residue with Suppressed Silica Gel Formation. Scientific Reports, 2018, 8, 5676.	3.3	81

#	ARTICLE	IF	CITATIONS
109	Comparative Analysis About Degradation Mechanisms of Printed Circuit Boards (PCBs) in Slow and Fast Pyrolysis: The Influence of Heating Speed. <i>Journal of Sustainable Metallurgy</i> , 2018, 4, 205-221.	2.3	20
110	The Submerged Arc Furnace (SAF): State-of-the-Art Metal Recovery from Nonferrous Slags. <i>Journal of Sustainable Metallurgy</i> , 2018, 4, 77-94.	2.3	6
111	Porous Titanium Parts Fabricated by Sintering of TiH <sub>2</sub> and Ti Powder Mixtures. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 228-242.	2.5	21
112	Effect of vanadium ion valence state on the deposition behaviour in molten salt electrolysis. <i>Journal of Applied Electrochemistry</i> , 2018, 48, 427-434.	2.9	11
113	Phase characterization and thermochemical simulation of (landfilled) bauxite residue (â€œred mudâ€œ) in different alkaline processes optimized for aluminum recovery. <i>Hydrometallurgy</i> , 2018, 176, 49-61.	4.3	37
114	Comparison of dysprosium production from different resources by life cycle assessment. <i>Resources, Conservation and Recycling</i> , 2018, 130, 248-259.	10.8	23
115	Numerical and experimental analysis of the single droplet evaporation in a ultrasonic spray pyrolysis device. <i>Drying Technology</i> , 2018, 36, 11-20.	3.1	5
116	Scandium Recovery from an Ammonium Fluoride Strip Liquor by Anti-Solvent Crystallization. <i>Metals</i> , 2018, 8, 767.	2.3	20
117	Purification of Aluminium Cast Alloy Melts through Precipitation of Fe-Containing Intermetallic Compounds. <i>Metals</i> , 2018, 8, 796.	2.3	12
118	â€œZero-Wasteâ€œ: A Sustainable Approach on Pyrometallurgical Processing of Manganese Nodule Slags. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 544.	2.0	31
119	Preparation of Vanadium Oxides from a Vanadium (IV) Strip Liquor Extracted from Vanadium-Bearing Shale Using an Eco-Friendly Method. <i>Metals</i> , 2018, 8, 994.	2.3	13
120	Synthesis of Magnesium Carbonate via Carbonation under High Pressure in an Autoclave. <i>Metals</i> , 2018, 8, 993.	2.3	32
121	Thermochemical Modelling and Experimental Validation of In Situ Indium Volatilization by Released Halides during Pyrolysis of Smartphone Displays. <i>Metals</i> , 2018, 8, 1040.	2.3	4
122	Characterization and Interpretation of the Aluminum Zone Refining through Infrared Thermographic Analysis. <i>Materials</i> , 2018, 11, 2039.	2.9	3
123	Structureâ€œActivity/Stability Correlations from the Electrochemical Dynamic Responses of Titanium Anode Coatings Formed of Ordered TiO <sub>2</sub> @RuO <sub>2</sub> Microspheres. <i>Journal of the Electrochemical Society</i> , 2018, 165, J3363-J3370.	2.9	0
124	Recovery of Zr, Hf, Nb from eudialyte residue by sulfuric acid dry digestion and water leaching with H <sub>2</sub> O <sub>2</sub> as a promoter. <i>Hydrometallurgy</i> , 2018, 181, 206-214.	4.3	23
125	Formation of Bimetallic Fe/Au Submicron Particles with Ultrasonic Spray Pyrolysis. <i>Metals</i> , 2018, 8, 278.	2.3	11
126	Degradation Mechanism of Nickel-Cobalt-Aluminum (NCA) Cathode Material from Spent Lithium-Ion Batteries in Microwave-Assisted Pyrolysis. <i>Metals</i> , 2018, 8, 565.	2.3	40



#	ARTICLE	IF	CITATIONS
127	Effect of Aqueous Media on the Recovery of Scandium by Selective Precipitation. <i>Metals</i> , 2018, 8, 314.	2.3	22
128	Tuning the Morphology of ZnO Nanostructures with the Ultrasonic Spray Pyrolysis Process. <i>Metals</i> , 2018, 8, 569.	2.3	33
129	Combined multi-step precipitation and supported ionic liquid phase chromatography for the recovery of rare earths from leach solutions of bauxite residues. <i>Hydrometallurgy</i> , 2018, 180, 229-235.	4.3	26
130	Successful Synthesis of Gold Nanoparticles through Ultrasonic Spray Pyrolysis from a Gold(III) Nitrate Precursor and Their Interaction with a High Electron Beam. <i>ChemistryOpen</i> , 2018, 7, 533-542.	1.9	28
131	Realization of the Zone Length Measurement during Zone Refining Process via Implementation of an Infrared Camera. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 875.	2.5	6
132	Alternative Silver Production by Environmental Sound Processing of a Sulfo Salt Silver Mineral Found in Bolivia. <i>Metals</i> , 2018, 8, 114.	2.3	6
133	Neural Network Modeling for the Extraction of Rare Earth Elements from Eudialyte Concentrate by Dry Digestion and Leaching. <i>Metals</i> , 2018, 8, 267.	2.3	25
134	Characteristics of Ti6Al4V Powders Recycled from Turnings via the HDH Technique. <i>Metals</i> , 2018, 8, 336.	2.3	13
135	Preface to Innovations in WEEE Recycling. <i>Journal of Sustainable Metallurgy</i> , 2018, 4, 155-156.	2.3	2
136	Production of High Purity Metals: A Review on Zone Refining Process. <i>Journal of Crystallization Process and Technology</i> , 2018, 08, 33-55.	0.6	17
137	Leaching of rare earth elements with sulfuric acid from bastnasite ores. <i>Military Technical Courier</i> , 2018, 66, 757-770.	0.7	2
138	Leaching of rare earth elements from eudialyte concentrate by suppressing silica gel formation. <i>Minerals Engineering</i> , 2017, 108, 115-122.	4.3	63
139	Formation mechanisms for gold nanoparticles in a redesigned Ultrasonic Spray Pyrolysis. <i>Advanced Powder Technology</i> , 2017, 28, 876-883.	4.1	26
140	Pyrometallurgical Treatment of High Manganese Containing Deep Sea Nodules. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 219-229.	2.3	18
141	Application of Gold(III) Acetate as a New Precursor for the Synthesis of Gold Nanoparticles in PEG Through Ultrasonic Spray Pyrolysis. <i>Journal of Cluster Science</i> , 2017, 28, 1647-1665.	3.3	21
142	Anodic dissolution of vanadium in molten LiCl-KCl-TiCl <sub>2</sub> . <i>Journal of Applied Electrochemistry</i> , 2017, 47, 573-581.	2.9	6
143	Development of Secondary Antimony Oxides from Metallurgical Slags for the Application in Plastic Products. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 683-689.	2.3	9
144	Precipitation Trends of Scandium in Synthetic Red Mud Solutions with Different Precipitation Agents. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 90-98.	2.3	27

#	ARTICLE	IF	CITATIONS
145	Hydrometallurgical Processing of Eudialyte Bearing Concentrates to Recover Rare Earth Elements Via Low-Temperature Dry Digestion to Prevent the Silica Gel Formation. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 79-89.	2.3	44
146	Reducing Greenhouse Gas Emission from the Neodymium Oxide Electrolysis. Part I: Analysis of the Anodic Gas Formation. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 99-107.	2.3	33
147	Influencing Factors on the Melting Characteristics of NdFeB-Based Production Wastes for the Recovery of Rare Earth Compounds. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 168-178.	2.3	12
148	Selectivity potential of ionic liquids for metal extraction from slags containing rare earth elements. <i>Hydrometallurgy</i> , 2017, 169, 59-67.	4.3	23
149	Preface for Thematic Section: Green Rare Earth Elementsâ€”Innovations in Ore Processing, Hydrometallurgy, and Electrolysis. <i>Journal of Sustainable Metallurgy</i> , 2017, 3, 1-2.	2.3	4
150	A Comparison between Two Cell Designs for Electrochemical Neodymium Reduction Using Numerical Simulation. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2017, 48, 2187-2194.	2.1	4
151	A continuous process for the ultrasonic spray pyrolysis synthesis of RuO <sub>2</sub> /TiO <sub>2</sub> particles and their application as a coating of activated titanium anode. <i>Advanced Powder Technology</i> , 2017, 28, 43-49.	4.1	19
152	Definition of a First Process Window for Purification of Aluminum via â€œCooled Fingerâ€• Crystallization Technique. <i>Metals</i> , 2017, 7, 341.	2.3	17
153	Structure and Formation Model of Ag/TiO <sub>2</sub> and Au/TiO <sub>2</sub> Nanoparticles Synthesized through Ultrasonic Spray Pyrolysis. <i>Metals</i> , 2017, 7, 389.	2.3	16
154	Concentration and Separation of Scandium from Ni Laterite Ore Processing Streams. <i>Metals</i> , 2017, 7, 557.	2.3	29
155	Morphology, Aggregation Properties, Cytocompatibility, and Anti-Inflammatory Potential of Citrate-Stabilized AuNPs Prepared by Modular Ultrasonic Spray Pyrolysis. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-17.	2.7	12
156	The EURARE Project: Development of a Sustainable Exploitation Scheme for Europeâ€™s Rare Earth Ore Deposits. <i>Johnson Matthey Technology Review</i> , 2017, 61, 142-153.	1.0	27
157	Mechanically Activated Rutile and Ilmenite as the Starting Materials for Process of Titanium Alloys Production. , 2017, , .		2
158	A Mineralogical Assessment on Residues after Acidic Leaching of Bauxite Residue (Red Mud) for Titanium Recovery. <i>Metals</i> , 2017, 7, 458.	2.3	37
159	Challenges in the Electrolytic Refining of Silverâ€”Influencing the Co-deposition Through Parameter Control. <i>Minerals, Metals and Materials Series</i> , 2017, , 103-117.	0.4	2
160	Dross Formation Mechanisms of Thermally Pre-Treated Used Beverage Can Scrap Bales with Different Density. <i>Minerals, Metals and Materials Series</i> , 2017, , 1105-1113.	0.4	6
161	Reducing Greenhouse Gas Emission from the Neodymium Oxide Electrolysis. Part II: Basics of a Process Control Avoiding PFC Emission. <i>International Journal of Nonferrous Metallurgy</i> , 2017, 06, 27-46.	0.3	20
162	High Purity Germanium, a Review on Principle Theories and Technical Production Methodologies. <i>Journal of Crystallization Process and Technology</i> , 2017, 07, 65-84.	0.6	19

#	ARTICLE	IF	CITATIONS
163	Effect of Process Parameter Variation on Purity during Rotary Fractional Crystallization of Aluminum. Open Journal of Metal, 2017, 07, 25-38.	0.7	8
164	Understanding of Interactions Between Pyrolysis Gases and Liquid Aluminum and Their Impact on Dross Formation. Minerals, Metals and Materials Series, 2017, , 1457-1464.	0.4	2
165	Examination of an alternative method for the pyrometallurgical production of copper-chromium alloys. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012016.	0.6	1
166	Deoxidation Limits of Titanium Alloys during Pressure Electro Slag Remelting. IOP Conference Series: Materials Science and Engineering, 2016, 143, 012009.	0.6	7
167	Environmental Impacts of Rare Earth Mining and Separation Based on Eudialyte: A New European Way. Resources, 2016, 5, 32.	3.5	50
168	Lead removal from brass scrap by fluorine-free compound separation. Materials Science and Technology, 2016, 32, 1782-1788.	1.6	8
169	Methods for Alkaline Recovery of Aluminum from Bauxite Residue. Journal of Sustainable Metallurgy, 2016, 2, 353-364.	2.3	45
170	The Controlled Single-Step Synthesis of Ag/TiO <sub>2</sub> and Au/TiO <sub>2</sub> by Ultrasonic Spray Pyrolysis (USP). Jom, 2016, 68, 330-335.	1.9	11
171	Porous TiAl alloys fabricated by sintering of TiH <sub>2</sub> and Al powder mixtures. Journal of Alloys and Compounds, 2016, 656, 530-538.	5.5	42
172	Assessment of Settling Behavior of Particles with Different Shape Factors by LIMCA Data Analysis. , 2016, , 843-848.		1
173	A Review on Alternative Gold Recovery Re-agents to Cyanide. Journal of Materials Science and Chemical Engineering, 2016, 04, 8-17.	0.4	25
174	Hydrometallurgical processing of nickel lateritic ores. Military Technical Courier, 2016, 64, 1033-1047.	0.7	11
175	Role of hydrometallurgy and nanotechnology in environmental protection. Materials Protection, 2016, 57, 128-135.	0.9	0
176	Optimized Slag Design for Maximum Metal Recovery during the Pyrometallurgical Processing of Polymetallic Deep-Sea Nodules. , 2016, , 97-104.		1
177	Pre-Treatment of Beverage Can Scrap to Increase Recycling Efficiency. Journal of Materials Science and Engineering A, 2016, 6, .	0.1	3
178	Potenzielle thermischer Verfahren für ressourceneffizientes Metallrecycling. Chemie-Ingenieur-Technik, 2015, 87, 1439-1439.	0.8	0
179	Mass Flow Analysis and Metal Losses by the Degradation Process of Organic-Containing WEEE Scraps. Chemie-Ingenieur-Technik, 2015, 87, 1599-1608.	0.8	5
180	Recovery Concept of Value Metals from Automotive Lithium-Ion Batteries. Chemie-Ingenieur-Technik, 2015, 87, 1550-1557.	0.8	93

#	ARTICLE	IF	CITATIONS
181	Reductive Smelting of Red Mud for Iron Recovery. <i>Chemie-Ingenieur-Technik</i> , 2015, 87, 1535-1542.	0.8	43
182	Processing of Grinding Slurries Arising from $\text{NdFeB}$ Magnet Production. <i>Chemie-Ingenieur-Technik</i> , 2015, 87, 1589-1598.	0.8	10
183	Recovery of Antimony Trioxide Flame Retardants from Lead Refining Residues by Slag Conditioning and Fuming. <i>Chemie-Ingenieur-Technik</i> , 2015, 87, 1569-1579.	0.8	14
184	A Closed-Loop Recycling Technology for $\text{TiAl}$ from Precision Cast Low Pressure Turbine Blades. <i>Chemie-Ingenieur-Technik</i> , 2015, 87, 1580-1588.	0.8	2
185	Development of a Highly Efficient Hydrometallurgical Recycling Process for Automotive Li-Ion Batteries. <i>Journal of Sustainable Metallurgy</i> , 2015, 1, 168-178.	2.3	66
186	Corrosion behavior of calcium zirconate refractories in contact with titanium aluminide melts. <i>Journal of the European Ceramic Society</i> , 2015, 35, 1097-1106.	5.7	31
187	Investigating the corrosion resistance of calcium zirconate in contact with titanium alloy melts. <i>Journal of the European Ceramic Society</i> , 2015, 35, 259-266.	5.7	45
188	Formation of Non-Toxic Au Nanoparticles with Bimodal Size Distribution by a Modular Redesign of Ultrasonic Spray Pyrolysis. <i>Nanoscience and Nanotechnology Letters</i> , 2015, 7, 920-929.	0.4	13
189	Au-nanoparticle synthesis via ultrasonic spray pyrolysis with a separate evaporation zone. <i>Materiali in Tehnologije</i> , 2015, 49, 791-796.	0.5	12
190	Aluminothermic production of titanium alloys (Part 2): Impact of activated rutile on process sustainability. <i>Metallurgical and Materials Engineering</i> , 2015, 21, 101-114.	0.5	7
191	Use of ionic liquid in leaching process of brass wastes for copper and zinc recovery. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2014, 21, 138-143.	4.9	35
192	Kinetic modeling of thermal decomposition of zinc ferrite from neutral leach residues based on stochastic geometric model. <i>Journal of Magnetism and Magnetic Materials</i> , 2014, 358-359, 105-118.	2.3	12
193	Kinetic Analysis of Isothermal Decomposition Process of Zinc Leach Residue in an Inert Atmosphere. The Estimation of the Apparent Activation Energy Distribution. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2014, 35, 239-256.	5.0	5
194	Clinical Ethics and Patient Advocacy. <i>HEC Forum</i> , 2014, 26, 111-124.	0.8	7
195	Kinetic-Statistical Approach in a Detailed Study of the Mechanism of Thermal Decomposition of Zinc-Iron-Intermetallic Phase. <i>Transactions of the Indian Institute of Metals</i> , 2014, 67, 629-650.	1.5	1
196	Recycling of Rare Metals. , 2014, , 125-150.		12
197	Kinetic and thermodynamic investigations of non-isothermal decomposition process of a commercial silver nitrate in an argon atmosphere used as the precursors for ultrasonic spray pyrolysis (USP): The mechanistic approach. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 82, 71-87.	3.6	20
198	EAF Carbothermic Co-Reduction of Alumina and Silica for the Direct Production of Al-Si Master Alloy. , 2014, , 789-794.		0

#	ARTICLE	IF	CITATIONS
199	Size-Dependent Effects of Gold Nanoparticles Uptake on Maturation and Antitumor Functions of Human Dendritic Cells In Vitro. PLoS ONE, 2014, 9, e96584.	2.5	117
200	Aluminothermic Production of Titanium alloys (part 1): Synthesis of TiO <sub>2</sub> as input material. Metallurgical and Materials Engineering, 2014, 20, 141-154.	0.5	5
201	Synthesis of TiO <sub>2</sub> core/RuO <sub>2</sub> shell particles using multistep ultrasonic spray pyrolysis. Materials Research Bulletin, 2013, 48, 3633-3635.	5.2	21
202	Experimental Research on the Absorption of Fluorine in Gamma-tiAl During Electroslag Remelting. , 2013, , 65-70.		0
203	Cytotoxicity of Gold Nanoparticles Prepared by Ultrasonic Spray Pyrolysis. Journal of Biomaterials Applications, 2012, 26, 595-612.	2.4	27
204	Immunomodulatory Properties of Nanoparticles Obtained by Ultrasonic Spray Pirolysis from Gold Scrap. Journal of Biomedical Nanotechnology, 2012, 8, 528-538.	1.1	16
205	Designing of Copper Nanoparticle Size Formed via Aerosol Pyrolysis. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4427-4435.	2.2	2
206	The application of the formalism of dispersive kinetics for investigation of the isothermal decomposition of zinc leach residue in an inert atmosphere. Thermochemica Acta, 2012, 546, 102-112.	2.7	4
207	Gene expression analysis on a single cell level in Purkinje cells of Huntington's disease transgenic mice. Neuroscience Letters, 2012, 517, 7-12.	2.1	6
208	Autotherme Wertmetallrückgewinnung aus WEEE-Schrott durch energieoptimierte Zero-waste-Metallurgie. Chemie-Ingenieur-Technik, 2012, 84, 1733-1739.	0.8	1
209	An Integrated Process for Innovative Extraction of Metals from Kupferschiefer Mine Dumps, Germany. Chemie-Ingenieur-Technik, 2012, 84, 1694-1703.	0.8	14
210	Comparative analyses of Purkinje cell gene expression profiles reveal shared molecular abnormalities in models of different polyglutamine diseases. Brain Research, 2012, 1481, 37-48.	2.2	20
211	Synthesis of LiFePO <sub>4</sub> by Ultrasonic and Nozzle Spray Pyrolysis. Zeitschrift Fur Physikalische Chemie, 2012, 226, 177-183.	2.8	5
212	Computer modeling of high-pressure leaching process of nickel laterite by design of experiments and neural networks. International Journal of Minerals, Metallurgy and Materials, 2012, 19, 584-594.	4.9	16
213	Development of a recycling process for Li-ion batteries. Journal of Power Sources, 2012, 207, 173-182.	7.8	595
214	The Influence of Pyrolytic Reactions on the Aluminum Dross Formation during the Twin Chamber Remelting Process. , 2012, , 1327-1336.		1
215	Immunomodulatory properties of nanoparticles obtained by ultrasonic spray pirolysis from gold scrap. Journal of Biomedical Nanotechnology, 2012, 8, 528-38.	1.1	4
216	Recycling of gamma titanium aluminide scrap from investment casting operations. Intermetallics, 2011, 19, 762-768.	3.9	45

#	ARTICLE	IF	CITATIONS
217	Enhanced Homogenization Strategy by Electroslag Remelting of High-Manganese TRIP and TWIP Steels. <i>Advanced Engineering Materials</i> , 2011, 13, 395-399.	3.5	17
218	Pressure hydrometallurgy: A new chance to non-polluting processes. <i>Military Technical Courier</i> , 2011, 59, 29-44.	0.7	2
219	Decreased Lin7b Expression in Layer 5 Pyramidal Neurons May Contribute to Impaired Corticostriatal Connectivity in Huntington Disease. <i>Journal of Neuropathology and Experimental Neurology</i> , 2010, 69, 880-895.	1.7	18
220	Gewinnung von Kupfer aus metallurgischen Schlacken. <i>Chemie-Ingenieur-Technik</i> , 2010, 82, 1961-1964.	0.8	1
221	Rückgewinnung von Wertmetallen aus Batterieschrott. <i>Chemie-Ingenieur-Technik</i> , 2010, 82, 1985-1990.	0.8	6
222	Behaviour of non-standard composition copper bearing anodes from the copper refining process. <i>Journal of Hazardous Materials</i> , 2010, 182, 55-63.	12.4	8
223	Numerical simulation of the twin-roll casting process of magnesium alloy strip. <i>Journal of Materials Processing Technology</i> , 2009, 209, 2321-2328.	6.3	65
224	Nanocrystalline spherical iron-nickel (Fe-Ni) alloy particles prepared by ultrasonic spray pyrolysis and hydrogen reduction (USP-HR). <i>Journal of Alloys and Compounds</i> , 2009, 480, 529-533.	5.5	60
225	Synthesis of nano-crystalline spherical cobalt-iron (Co-Fe) alloy particles by ultrasonic spray pyrolysis and hydrogen reduction. <i>Journal of Alloys and Compounds</i> , 2009, 481, 600-604.	5.5	37
226	Thermodynamic calculations in alloys Ti-Al, Ti-Fe, Al-Fe and Ti-Al-Fe. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2008, 44, 49-61.	0.8	31
227	Cost Reduction of TiAl by Alternative Production and Integration of TiAl Scrap Recycling – Concepts and Vacuum-Metallurgical Equipment. <i>Advances in Materials Science</i> , 2008, 8, .	1.0	1
228	Semi-Solid Processing of Tailored Aluminium-Lithium Alloys for Automotive Applications. <i>Advanced Engineering Materials</i> , 2007, 9, 253-258.	3.5	6
229	ESR Refining Potential for Titanium Alloys using a CaF <sub>2</sub> -based Active Slag. <i>Advanced Engineering Materials</i> , 2007, 9, 246-252.	3.5	18
230	Challenges in Measuring of Physical Properties of Liquid Phases for Material and Process Optimisation. <i>Advanced Engineering Materials</i> , 2007, 9, 280-285.	3.5	2
231	Selective removal of heavy metals from metal-bearing wastewater in a cascade line reactor. <i>Environmental Science and Pollution Research</i> , 2007, 14, 518-522.	5.3	27
232	Feasibility assessment of electrocoagulation towards a new sustainable wastewater treatment. <i>Environmental Science and Pollution Research</i> , 2007, 14, 477-482.	5.3	51
233	Thermodynamic predicting of Si-Me (Me = Ti, Al) binary systems. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2007, 43, 29-38.	0.8	13
234	Development of Aluminum-Lithium Alloys Processed by the Rheo Container Process. <i>Solid State Phenomena</i> , 2006, 116-117, 513-517.	0.3	3

#	ARTICLE	IF	CITATIONS
235	Predicting thermodynamic properties in Ti-Al binary system by FactSage. Computational Materials Science, 2006, 37, 355-360.	3.0	17
236	Predicting thermodynamic stability of crucible oxides in molten titanium and titanium alloys. Computational Materials Science, 2006, 38, 374-385.	3.0	82
237	Development of a recycling process for nickel-metal hydride batteries. Journal of Power Sources, 2006, 158, 1498-1509.	7.8	158
238	Synthesis of nanosized spherical cobalt powder by ultrasonic spray pyrolysis. Materials Research Bulletin, 2006, 41, 1882-1890.	5.2	63
239	Thermodynamic study of Ti-V and Al-V systems using FactSage. Journal of Mining and Metallurgy, Section B: Metallurgy, 2006, 42, 57-65.	0.8	12
240	Atmospheric leaching of EAF dust with diluted sulphuric acid. Hydrometallurgy, 2005, 77, 41-50.	4.3	118
241	Evaluation and Modeling of Chemical Segregation Effects for Thixoforming Processing. Advanced Engineering Materials, 2003, 5, 156-160.	3.5	6
242	Synovial chondromatosis of the glenohumeral joint: a rare condition. Archives of Orthopaedic and Trauma Surgery, 2001, 121, 109-111.	2.4	38
243	Properties of Zr(V <sub>0.25</sub> Ni <sub>0.75</sub> ) <sub>2</sub> metal hydride as active electrode material. Journal of Alloys and Compounds, 1996, 239, 175-182.	5.5	23
244	Large-scale production and quality assurance of hydrogen storage (battery) alloys. Journal of Materials Engineering and Performance, 1994, 3, 37-46.	2.5	12
245	Semi-Solid Casting of High-Reactive Wrought Alloys by Means of the Alloy AlLi <sub>2</sub> .1Mg <sub>5.5</sub> ScZr (AA1420*). Solid State Phenomena, 0, 141-143, 145-150.	0.3	1
246	Simulation of Flow Field and Particle Trajectory in EB Cold Hearth Melting Process. Materials Science Forum, 0, 618-619, 93-96.	0.3	1
247	Design of Al and Al-Li Alloys for Thixoforming. , 0, , 105-145.		0
248	Nanoscale Particles Enhanced Gold Plating. Advanced Materials Research, 0, 320, 210-215.	0.3	2
249	Melt Treatment of Copper and Aluminium - The Complex Step Before Casting. , 0, , 1-22.		9