

# Xuwei Lv

## List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Reduction Behavior of Panzhihua Titanomagnetite Concentrates with Coal. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 252-260.	2.1	130
2	Carbothermic Reduction of Vanadium Titanomagnetite by Microwave Irradiation and Smelting Behavior. ISIJ International, 2013, 53, 1115-1119.	1.4	80
3	Multistage utilization process for the gradient-recovery of V, Fe, and Ti from vanadium-bearing converter slag. Journal of Hazardous Materials, 2017, 336, 1-7.	12.4	75
4	A novel recycling approach for efficient extraction of titanium from high-titanium-bearing blast furnace slag. Waste Management, 2021, 120, 626-634.	7.4	64
5	Behavior of Liquid Phase Formation during Iron Ores Sintering. ISIJ International, 2011, 51, 722-727.	1.4	63
6	Effect of Cr<sub>2</sub>O<sub>3</sub> Addition on Viscosity and Structure of Ti-bearing Blast Furnace Slag. ISIJ International, 2015, 55, 1367-1376.	1.4	60
7	Removal of Impurity Elements from Molten Aluminum: A Review. Mineral Processing and Extractive Metallurgy Review, 2011, 32, 150-228.	5.0	58
8	Carbothermic Reduction of Titanomagnetite Concentrates with Ferrosilicon Addition. ISIJ International, 2013, 53, 557-563.	1.4	49
9	Novel Process of Ferronickel Nugget Production from Nickel Laterite by Semi-molten State Reduction. ISIJ International, 2014, 54, 1749-1754.	1.4	47
10	Mineral Change of Philippine and Indonesia Nickel Lateritic Ore during Sintering and Mineralogy of Their Sinter. ISIJ International, 2010, 50, 380-385.	1.4	44
11	Effect of TiO <sub>2</sub> Content on the Structure of CaO-SiO <sub>2</sub> -TiO <sub>2</sub> System by Molecular Dynamics Simulation. ISIJ International, 2013, 53, 1131-1137.	1.4	41
12	Transition of Blast Furnace Slag from Silicates-Based to Aluminates-Based: Viscosity. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1092-1099.	2.1	39
13	Enhancement Reduction of Panzhihua Ilmenite Concentrate with Coke and Conglomeration of Metal with Ferrosilicon. Steel Research International, 2013, 84, 892-899.	1.8	36
14	Transition of Blast Furnace Slag from Silicate-Based to Aluminate-Based: Structure Evolution by Molecular Dynamics Simulation and Raman Spectroscopy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 573-581.	2.1	36
15	Surface Tension of the Molten Blast Furnace Slag Bearing TiO <sub>2</sub> : Measurement and Evaluation. ISIJ International, 2014, 54, 2154-2161.	1.4	35
16	Dephosphorization of Iron Ore Bearing High Phosphorous by Carbothermic Reduction Assisted with Microwave and Magnetic Separation. ISIJ International, 2012, 52, 1579-1584.	1.4	34
17	Enhanced Reduction of Coal-Containing Titanomagnetite Concentrates Briquette with Multiple Layers in Rotary Hearth Furnace. Steel Research International, 2016, 87, 494-500.	1.8	34
18	Effect of Mechanical Activation Treatment on the Recovery of Vanadium from Converter Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2759-2767.	2.1	34

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19	Effect of basicity on the crystallization behavior of TiO <sub>2</sub> -CaO-SiO <sub>2</sub> ternary system slag. CrystEngComm, 2018, 20, 5422-5431.	2.6	33
20	Recovery of tailings from the vanadium extraction process by carbothermic reduction method: Thermodynamic, experimental and hazardous potential assessment. Journal of Hazardous Materials, 2018, 357, 128-137.	12.4	32
21	Crystallization Behavior of Perovskite in the Synthesized High-Titanium-Bearing Blast Furnace Slag Using Confocal Scanning Laser Microscope. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 76-85.	2.1	31
22	Effect of TiO <sub>2</sub> on the Liquid Zone and Apparent Viscosity of SiO <sub>2</sub> -CaO-8wt%MgO-14wt%Al <sub>2</sub> O <sub>3</sub> System. ISIJ International, 2017, 57, 31-36.	1.4	31
23	Effect of Surface Properties of Iron Ores on their Granulation Behavior. ISIJ International, 2013, 53, 1491-1496.	1.4	27
24	Waste Heat Recovery from Blast Furnace Slag by Chemical Reactions. Jom, 2012, 64, 997-1001.	1.9	26
25	Viscosity of TiO <sub>2</sub> -FeO-Ti <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -MgO-CaO-Al <sub>2</sub> O <sub>3</sub> for High-Titania Slag Smelting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1963-1973.	2.1	26
26	Segregation and Morphological Evolution of Si Phase during Electromagnetic Directional Solidification of Hypereutectic Al-Si Alloys. Materials, 2019, 12, 10.	2.9	25
27	Effect of Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> Addition on Carbothermic Reduction of Ilmenite Concentrate. ISIJ International, 2016, 56, 2140-2146.	1.4	24
28	Transition of Blast Furnace Slag from Silicate Based to Aluminate Based: Density and Surface Tension. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1322-1330.	2.1	23
29	Desulphurisation ability of blast furnace slag containing high Al <sub>2</sub> O <sub>3</sub> and 5 mass% TiO <sub>2</sub> at 1773 K. Ironmaking and Steelmaking, 2016, 43, 378-384.	2.1	22
30	Influence of CaO Source on the Formation Behavior of Calcium Ferrite in Solid State. ISIJ International, 2013, 53, 1571-1579.	1.4	21
31	Dry Granulation of Molten Slag using a Rotating Multi-Nozzle Cup Atomizer and Characterization of Slag Particles. Steel Research International, 2013, 84, 852-862.	1.8	19
32	Isothermal Reduction Kinetics of Powdered Hematite and Calcium Ferrite with CO-N <sub>2</sub> Gas Mixtures. ISIJ International, 2016, 56, 2118-2125.	1.4	19
33	Effect of ultrasonic vibration treatment on solid-state reactions between Fe <sub>2</sub> O <sub>3</sub> and CaO. Ultrasonics Sonochemistry, 2017, 38, 281-288.	8.2	19
34	Effect of Pre-wetting Treatment on the Granulation Behavior of Iron Ore Fines. ISIJ International, 2014, 54, 2721-2727.	1.4	18
35	Mechanism on reduction and nitridation of micrometer-sized titania with ammonia gas. Journal of the American Ceramic Society, 2020, 103, 3905-3916.	3.8	18
36	Preparation of High-Grade Titania Slag from Ilmenite-Bearing High Ca and Mg by Vacuum Smelting Method. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 923-928.	2.1	17

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37	Crystallization Kinetics of $2\text{CaO}\cdot\text{Fe}\cdot\text{O}$ and $\text{CaO}\cdot\text{Fe}\cdot\text{O}$ in the $\text{CaO}\cdot\text{Fe}\cdot\text{O}$ System. ISIJ International, 2016, 56, 1157-1163.	1.4	17
38	Viscosity of Iron Oxide Aluminosilicate Melts. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 251-261.	2.1	17
39	Effect of Sodium Sulfate on Preparation of Ferronickel from Nickel Laterite by Carbothermal Reduction. ISIJ International, 2018, 58, 799-807.	1.4	16
40	The Dissolution Kinetics of $\text{Al}_2\text{O}_3$ into Molten $\text{CaO}\text{-}\text{Al}_2\text{O}_3\text{-}\text{Fe}_2\text{O}_3$ Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 2106-2117.	2.1	15
41	Wetting Behavior of $\text{Al}\cdot\text{O}$ Substrate by Calcium Ferrite Series Melts. ISIJ International, 2015, 55, 483-490.	1.4	15
42	Preparation of Rutile from Ilmenite Concentrate Through Pressure Leaching with Hydrochloric Acid. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1333-1341.	2.1	15
43	Effect of Silica on Reduction of Calcium Ferrite with $\text{CO}\cdot\text{N}_2$ Gas Mixtures. ISIJ International, 2017, 57, 634-642.	1.4	15
44	Microstructure and Mechanical Properties of Graphene Oxide-Reinforced Titanium Matrix Composites Synthesized by Hot-Pressed Sintering. Nanoscale Research Letters, 2019, 14, 114.	5.7	15
45	Wetting Behavior of Calcium Ferrite Melts on Sintered $\text{MgO}$ . ISIJ International, 2015, 55, 1558-1564.	1.4	14
46	Dissolution Kinetics of $\text{SiO}_2$ into $\text{CaO}\text{-}\text{Fe}_2\text{O}_3\text{-}\text{SiO}_2$ Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 2063-2071.	2.1	13
47	Reduction of $\text{CaO}\cdot\text{Fe}\cdot\text{O}$ Series Compounds by $\text{CO}$ . ISIJ International, 2017, 57, 1181-1190.	1.4	13
48	Co-recovery of iron, chromium, and vanadium from vanadium tailings by semi-molten reduction-magnetic separation process. Canadian Metallurgical Quarterly, 2018, 57, 262-273.	1.2	13
49	Relationship between Texture Features and Mineralogy Phases in Iron Ore Sinter Based on Gray-level Co-occurrence Matrix. ISIJ International, 2009, 49, 709-718.	1.4	12
50	Density of the Blast Furnace Slag Bearing $\text{TiO}_2$ at 1673 K. ISIJ International, 2014, 54, 2017-2024.	1.4	12
51	Viscosity evaluation of $\text{Fe}\cdot\text{Ni}\cdot\text{Co}$ ternary alloy from the measured binary systems. Journal of Industrial and Engineering Chemistry, 2015, 30, 106-111.	5.8	12
52	Direct Electro-deoxidation of Ilmenite Concentrate to Prepare $\text{FeTi}$ Alloy in $\text{CaCl}_2$ Molten Salt. High Temperature Materials and Processes, 2014, 33, 377-383.	1.4	11
53	The Dissolution Kinetics of $\text{MgO}$ into $\text{CaO}\text{-}\text{MgO}\text{-}\text{Fe}_2\text{O}_3$ Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 733-742.	2.1	11
54	A Novel Method of Smelting a Mixture of Two Types of Laterite Ore to Prepare Ferronickel. Jom, 2019, 71, 4191-4197.	1.9	11

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55	Drying Kinetics of a Philippine Nickel Laterite Ore by Microwave Heating. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2021, 42, 46-52.	5.0	11
56	Interpretation on Iron Ore Granulation Process Based on Particle-size Analysis. <i>ISIJ International</i> , 2016, 56, 1964-1972.	1.4	10
57	Transition of Blast Furnace Slag from Silicate Based to Aluminate Based: Sulfide Capacity. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2017, 48, 2607-2614.	2.1	10
58	Drying kinetics of Philippine nickel laterite by microwave heating. <i>Drying Technology</i> , 2018, 36, 849-858.	3.1	10
59	The Effect of Titanium Carbonitride on the Viscosity of High-Titanium-Type Blast Furnace Slag. <i>Metals</i> , 2019, 9, 395.	2.3	10
60	Slag-foaming phenomenon originating from reaction of titanium-bearing blast furnace slag: effects of TiO <sub>2</sub> content and basicity. <i>Canadian Metallurgical Quarterly</i> , 2020, 59, 151-158.	1.2	10
61	Effect of Preformed Calcium Ferrite Addition on Sintering Behavior of Vanadium Titanium Magnetite Ore. <i>Jom</i> , 2021, 73, 316-325.	1.9	10
62	Modeling Viscosity of High Titania Slag. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021, 52, 245-254.	2.1	10
63	Tuning the Electronic Structure of the CoP/Ni <sub>2</sub> P Nanostructure by Nitrogen Doping for an Efficient Hydrogen Evolution Reaction in Alkaline Media. <i>Inorganic Chemistry</i> , 2021, 60, 18544-18552.	4.0	10
64	Indication of the Measurement of Surface Area on Iron Ore Granulation. <i>ISIJ International</i> , 2011, 51, 1432-1438.	1.4	9
65	Numerical Simulation of Particle Mixing Behavior in High Speed Shear Mixer and Cylinder Mixer. <i>ISIJ International</i> , 2021, 61, 2059-2065.	1.4	9
66	Relationship between Mineragraphy Features of Sinter Ore and Its Gray Histogram. <i>ISIJ International</i> , 2008, 48, 186-193.	1.4	8
67	Mechanochemical Effects on the Roasting Behavior of Vanadium-bearing LD Converter Slag in the Air. <i>ISIJ International</i> , 2017, 57, 970-977.	1.4	8
68	Evaluation Model for Viscosity of Fe-Ni-Cr Alloys Using Gibbs Free Energy of Mixing and Geometric Methods. <i>ISIJ International</i> , 2017, 57, 1296-1302.	1.4	8
69	Wetting Behavior of TiO <sub>2</sub> by Calcium Ferrite Slag at 1523 K. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 2667-2680.	2.1	8
70	Reduction and Nitridation of Iron/Vanadium Oxides by Ammonia Gas: Mechanism and Preparation of FeV45N Alloy. <i>Metals</i> , 2020, 10, 356.	2.3	8
71	A Novel Method for Quantifying the Composition of Mineralogical Phase in Iron Ore Sinter. <i>ISIJ International</i> , 2009, 49, 703-708.	1.4	7
72	Structure-based viscosity model development for titania aluminosilicate slags. <i>Ironmaking and Steelmaking</i> , 2020, 47, 203-209.	2.1	7

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73	Mathematical Modeling on the Removal of Impurity Elements from Molten Aluminum. <i>Mineral Processing and Extractive Metallurgy Review</i> , 2012, 33, 1-54.	5.0	6
74	Effect of Al on the Wetting Behavior Between TiC <sub>x</sub> and Molten Ti-Al Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 4783-4792.	2.2	6
75	Non-isothermal crystallization kinetics for CaO-Fe <sub>2</sub> O <sub>3</sub> system. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 124, 509-518.	3.6	6
76	Preparation of Mo <sub>2</sub> C by reduction and carbonization of MoO <sub>2</sub> with CH <sub>3</sub> OH. <i>Journal of Materials Science</i> , 2018, 53, 10059-10070.	3.7	6
77	The wettability and interfacial characterization between $\hat{3}$ -TiAl alloy and ceramic reinforcements. <i>Composite Interfaces</i> , 2018, 25, 713-723.	2.3	6
78	Mineralogical characterisation and magnetic separation of vanadium-bearing converter slag. <i>Waste Management and Research</i> , 2018, 36, 1083-1091.	3.9	6
79	Generation of titania-rich slag and iron from ilmenite concentrate by carbothermic reduction and magnetic separation in the presence of Na <sub>2</sub> CO <sub>3</sub> . <i>Canadian Metallurgical Quarterly</i> , 2020, 59, 393-404.	1.2	6
80	Improving the property of calcium ferrite using a sonochemical method. <i>Ultrasonics Sonochemistry</i> , 2018, 43, 110-113.	8.2	5
81	Wetting Behavior of Calcium Ferrite Slags on Cristobalite Substrates. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 1331-1345.	2.1	5
82	First-principle study of interfacial properties between $\hat{3}$ -TiAl and TiC, VN. <i>Molecular Simulation</i> , 2019, 45, 50-57.	2.0	5
83	Novel process for deep removal of chlorine and recycling of chlorinated tailings from titanium-bearing blast-furnace slag. <i>Chemical Engineering Research and Design</i> , 2022, 159, 842-849.	5.6	5
84	P-doped MoS <sub>2</sub> /Ni <sub>2</sub> P/Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> heterostructures for efficient hydrogen evolution reaction in alkaline media. <i>Journal of the American Ceramic Society</i> , 2022, 105, 6096-6104.	3.8	5
85	Reduction Behavior of Aluminate Calcium Ferrite (CFA) in CO <sub>2</sub> Atmosphere. <i>Steel Research International</i> , 2018, 89, 1700452.	1.8	4
86	The adhesion, stability, and electronic structure of $\hat{3}$ -TiAl/VN interface: a first-principle study. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	4
87	Influence of Ferrous Sulfide on Carbothermic Reduction of Panzihua Ilmenite Concentrate. <i>Jom</i> , 2020, 72, 3393-3400.	1.9	4
88	Recovery of Titania Slag and Iron from Semi-molten State Reduced Ilmenite Concentrate: Liberation Characteristics and Magnetic Separation. <i>Journal of Sustainable Metallurgy</i> , 2022, 8, 228-238.	2.3	4
89	A Novel Process for Preparing High-Strength Pellets of Ilmenite Concentrate. <i>Journal of Sustainable Metallurgy</i> , 2022, 8, 551-565.	2.3	4
90	Solidification of Calcium Ferrite Melt Using Ultrasonic Vibration: Effect and Mechanism. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 2658-2666.	2.1	3

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91	The isothermal reduction kinetics of chromium-bearing vanadium-titanium magnetite sinter. Canadian Metallurgical Quarterly, 2019, 58, 177-186.	1.2	3
92	Non-isothermal kinetic studies on the carbothermic reduction of Panzhihua ilmenite concentrate. Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy, 2019, 128, 239-247.	0.2	3
93	Thermodynamic properties of sodium trititanate ( $\text{Na}_2\text{Ti}_3\text{O}_7$ ) at high temperature (298.15–1403 K). Journal of the American Ceramic Society, 2021, 104, 4782-4787.	3.8	3
94	Andradite titanium: Preparation, characterization and metallurgical performance. Journal of the American Ceramic Society, 2022, 105, 2209-2220.	3.8	3
95	Periodic DFT Study on the Adsorption and Deoxygenation Process of $\text{NH}_3$ on $\text{V}_2\text{O}_5$ (001) Surface. Jom, 2022, 74, 1870-1877.	1.9	3
96	Nano-sized TiN-reinforced composites: Fabrication, microstructure, and mechanical properties. Journal of Materials Research, 2019, 34, 2582-2589.	2.6	2
97	Dissolution kinetics of calcium vanadates in sulfuric acid: a fundamental study for the vanadium extraction process. Journal of Chemical Technology and Biotechnology, 2020, 95, 1773-1780.	3.2	2
98	Effect of $\text{CO}_2$ Gasification on High-Temperature Characteristics of Iron Coke: In-Situ Compressive Strength. Steel Research International, 2022, 93, .	1.8	2
99	Double pyrovanadates $\text{CaMgV}_2\text{O}_7$ : Formation mechanism, phase structure, and thermodynamic properties. Journal of the American Ceramic Society, 2022, 105, 6359-6369.	3.8	2
100	Effects of operation parameters on particle mixing performance in a horizontal high shear mixer. International Journal of Chemical Reactor Engineering, 2022, 20, 1083-1094.	1.1	2
101	Metallurgical Slag. Crystals, 2022, 12, 407.	2.2	1
102	Phase Equilibrium of the $\text{V}_2\text{O}_5$ - $\text{Na}_2\text{O}$ System. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 2695-2703.	2.1	1
103	Kinetics of the decomposition reaction of phosphorite concentrate. Chemical Industry and Chemical Engineering Quarterly, 2014, 20, 215-221.	0.7	0
104	Comprehensive Research on Basicity and Coal Dosage of Sinter Based on Cost Analysis. , 2015, , 179-186.		0
105	Solidification Behavior of Calcium Ferrite Under Ultrasonic Vibration. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 3200-3210.	2.1	0
106	Characterization on the Roughness of the Iron Ore Particles. , 0, , 123-129.		0
107	Electric Resistivity of Fine Chromite Ore. , 0, , 139-146.		0
108	Homogeneous and well-aligned GaN nanowire arrays via a modified HVPE process and their cathodoluminescence properties. Nanoscale, 2022, , .	5.6	0

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109	Characterisation of titania slag produced by a novel process: acidolysis performance. Canadian Metallurgical Quarterly, 0, , 1-10.	1.2	0