

# Liang-ying Wen

## List of Publications by Year in descending order

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49  
papers

821  
citations

567281

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h-index

552781

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53  
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53  
docs citations

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times ranked

538  
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel method for removing organic sulfur from high-sulfur coal: Migration of organic sulfur during microwave treatment with NaOH-H <sub>2</sub> O <sub>2</sub> . <i>Fuel</i> , 2021, 289, 119800.	6.4	70
2	Strength degradation mechanism of iron coke prepared by mixed coal and Fe <sub>2</sub> O <sub>3</sub> . <i>Journal of Analytical and Applied Pyrolysis</i> , 2020, 150, 104897.	5.5	62
3	Cold model of coal gas component concentration distribution in blast furnace raceway. <i>Journal of Iron and Steel Research International</i> , 2009, 16, 1-6.	2.8	55
4	Structure Analysis of CaO-SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> Slag by Molecular Dynamics Simulation and FT-IR Spectroscopy. <i>ISIJ International</i> , 2014, 54, 734-742.	1.4	46
5	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. <i>ISIJ International</i> , 2013, 53, 1131-1137.	1.4	41
6	Structural transformation of fluid phase extracted from coal matrix during thermoplastic stage of coal pyrolysis. <i>Fuel</i> , 2018, 232, 374-383.	6.4	40
7	Thermal behavior and kinetics of the pyrolysis of the coal used in the COREX process. <i>Journal of Analytical and Applied Pyrolysis</i> , 2013, 104, 660-666.	5.5	39
8	The adsorption behaviors of CO and H <sub>2</sub> on FeO surface: A density functional theory study. <i>Powder Technology</i> , 2016, 303, 100-108.	4.2	35
9	A Review on Recycling and Reutilization of Blast Furnace Dust as a Secondary Resource. <i>Journal of Sustainable Metallurgy</i> , 2021, 7, 340-357.	2.3	30
10	Thermal behavior and organic functional structure of poplar-fat coal blends during co-pyrolysis. <i>Renewable Energy</i> , 2019, 136, 308-316.	8.9	25
11	Preparation and characterization of porous titanium using space-holder technique. <i>Rare Metals</i> , 2009, 28, 338-342.	7.1	22
12	The competitive adsorption behavior of CO and H <sub>2</sub> molecules on FeO surface in the reduction process. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 6427-6436.	7.1	22
13	Gas-Particle Flow and Combustion Characteristics of Pulverized Coal Injection in Blast Furnace Raceway. <i>Journal of Iron and Steel Research International</i> , 2010, 17, 8-12.	2.8	21
14	Density Functional Theory Study on the Carbon-Adhering Reaction on Fe <sub>3</sub> O <sub>4</sub> (111) Surface. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015, 46, 2288-2295.	2.1	17
15	Microscopic behavior and metallic iron morphology from reduction of iron oxide by CO/H <sub>2</sub> in a fluidized bed. <i>Journal of Applied Crystallography</i> , 2018, 51, 1641-1651.	4.5	17
16	Effects of iron compounds on pyrolysis behavior of coals and metallurgical properties of resultant cokes. <i>Journal of Iron and Steel Research International</i> , 2017, 24, 1169-1176.	2.8	16
17	Effects of Additives on Sulfur Transformation, Crystallite Structure and Properties of Coke during Coking Of High-sulfur Coal. <i>Journal of Iron and Steel Research International</i> , 2015, 22, 897-904.	2.8	15
18	Transformation of organic sulfur and its functional groups in nantong and laigang coal under microwave irradiation. <i>Journal of Computational Chemistry</i> , 2019, 40, 2749-2760.	3.3	15

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19	Effects of Fe <sub>2</sub> O <sub>3</sub> addition on the thermoplasticity and structure of coking coal matrix during thermoplastic stage of pyrolysis. <i>Fuel</i> , 2020, 260, 116305.	6.4	15
20	Carbonization and nitridation of vanadium-bearing titanomagnetite during carbothermal reduction with coal. <i>Journal of Materials Research and Technology</i> , 2020, 9, 4272-4282.	5.8	15
21	The Review of Microwave Applications in Metallurgical Process in China. <i>ISIJ International</i> , 2007, 47, 528-532.	1.4	13
22	Theoretical study on influence of CaO and MgO on the reduction of FeO by CO. <i>Applied Surface Science</i> , 2017, 399, 630-637.	6.1	13
23	Nonisothermal Carbothermal Reduction Kinetics of Titanium-Bearing Blast Furnace Slag. <i>Jom</i> , 2018, 70, 1443-1448.	1.9	13
24	Synthesis of TiC nanotube arrays and their excellent supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2022, 10, 9932-9940.	10.3	13
25	Radiant Image Simulation of Pulverized Coal Combustion in Blast Furnace Raceway. <i>Journal of Iron and Steel Research International</i> , 2006, 13, 18-21.	2.8	11
26	Numerical simulation of iron whisker growth with changing oxygen content in iron oxide using phase-field method. <i>Computational Materials Science</i> , 2016, 125, 263-270.	3.0	10
27	Interaction mechanism between coal combustion products and coke in raceway of blast furnaces. <i>Journal of Iron and Steel Research International</i> , 2017, 24, 8-17.	2.8	10
28	Transient Interaction Between Reduction and Slagging Reactions of Wustite in Simulated Cohesive Zone of Blast Furnace. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2018, 49, 2308-2321.	2.1	10
29	Influence of TiO <sub>2</sub> addition on the structure and metallurgical properties of coke. <i>International Journal of Coal Preparation and Utilization</i> , 2021, 41, 521-537.	2.1	10
30	Effects of poplar addition on tar formation during the co-pyrolysis of fat coal and poplar at high temperature. <i>RSC Advances</i> , 2019, 9, 28053-28060.	3.6	9
31	Phase Transformations and Deoxidation Kinetics during the Electrochemical Reduction of TiO <sub>2</sub> in Molten CaCl <sub>2</sub> . <i>Materials Transactions</i> , 2019, 60, 416-421.	1.2	9
32	Prediction of structural and electronic properties of Cl <sub>2</sub> adsorbed on TiO <sub>2</sub> (100) surface with C or CO in fluidized chlorination process: A first-principles study. <i>Journal of Central South University</i> , 2021, 28, 29-38.	3.0	9
33	Smelting Vanadium-Titanium Magnetite by COREX Process: Effect of V-Ti Bearing Pellet Ratio on the Softening and Melting Behavior of Mixed Burden. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021, 52, 4096-4108.	2.1	9
34	Cu-ZnO anchored on APS modified activated carbon as an enhanced catalyst for methanol synthesis-The role of ZnO. <i>Journal of Materials Research</i> , 2018, 33, 1625-1631.	2.6	8
35	Carbon formation on the surface during the reduction of iron oxide particles by CO and CO/H <sub>2</sub> mixtures. <i>Chemical Engineering Science</i> , 2019, 205, 238-247.	3.8	8
36	Chemical Thermodynamics and Kinetics of Thiophenic Sulfur Removed from Coal by Microwave: A Density Functional Theory Study. <i>Journal of Sustainable Metallurgy</i> , 2021, 7, 1379-1392.	2.3	7

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37	Preparation of active coke combining coal with biomass and its denitrification performance. Journal of Iron and Steel Research International, 2021, 28, 1203-1211.	2.8	6
38	First-principle study of interfacial properties between $\hat{\text{I}}^3\text{-TiAl}$ and $\text{TiC}$ , $\text{VN}$ . Molecular Simulation, 2019, 45, 50-57.	2.0	5
39	Effect of Microwave Treating the Blast Furnace Slag Bearing Titanium on Thermal Action. ISIJ International, 2007, 47, 1239-1244.	1.4	4
40	The adhesion, stability, and electronic structure of $\hat{\text{I}}^3\text{-TiAl/VN}$ interface: a first-principle study. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	4
41	Phase-field method for growth of iron whiskers in the presence of $\text{CO}$ gas convection. Journal of Iron and Steel Research International, 2019, 26, 829-837.	2.8	4
42	Density Functional Theory Analysis of the Adsorption Behavior of $\text{C}_4$ and $\text{Cl}_2$ on the $\text{TiO}_2$ (110) Surface. Jom, 2020, 72, 3483-3490.	1.9	4
43	Prediction of Structural and Electronic Properties of $\text{C}$ and $\text{Cl}_{\text{sub}2\text{sub}}$ Adsorbed on the Rutile $\text{TiO}_{\text{sub}2\text{sub}}$ (110) Surface. ACS Omega, 2020, 5, 29002-29008.	3.5	3
44	Reducing Carbon Contamination by Controlling $\text{CO}_3^{2-}$ Formation During Electrochemical Reduction of $\text{TiO}_2$ . Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 1061-1070.	2.1	3
45	Effects of annealing temperature and time on decrepitation of lump coals and characteristics of resultant coal chars. Asia-Pacific Journal of Chemical Engineering, 2017, 12, 732-744.	1.5	2
46	Effects of Calcium Peroxide on Desulfurization and Combustion Efficiency during Coal Combustion. Journal of Energy Engineering - ASCE, 2017, 143, 04016042.	1.9	2
47	Effect of titanium additives on carbon anode reactivity. Russian Journal of Non-Ferrous Metals, 2017, 58, 218-224.	0.6	2
48	Effect of Liquid Addition on Gas-Solid Fluidization. Chemical Engineering and Technology, 2021, 44, 1596-1603.	1.5	2
49	Effect of additives on coke metallurgical property and sulfide phase. , 2011, , .		0