Ao Huang

List of Publications by Year
in descending order

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71 papers	1,441 citations	279798 23 h-index	395702 33 g-index
74 all docs	74 docs citations	74 times ranked	337 citing authors

#	Article	IF	Citations
1	Adsorption mechanism of oxide inclusions by microporous magnesia aggregates in tundish. Ceramics International, 2022, 48, 427-435.	4.8	10
2	Comparison study on effect of nano-sized Al2O3 addition on the corrosion resistance of microporous magnesia aggregates against tundish slag. Ceramics International, 2022, 48, 5139-5144.	4.8	6
3	Design, fabrication and properties of lightweight wear lining refractories: A review. Journal of the European Ceramic Society, 2022, 42, 744-763.	5.7	38
4	Corrosion resistance and antiâ€reaction mechanism of Al₂O₃â€based refractory ceramic under weak static magnetic field. Journal of the American Ceramic Society, 2022, 105, 2869-2877.	3.8	8
5	Thickness monitoring and discontinuous degradation mechanism of wear lining refractories for refining ladle. Journal of Iron and Steel Research International, 2022, 29, 1110-1118.	2.8	10
6	Effect of carbon black on corrosion resistance of Al2O3â€“SiCâ€“C castables to SiO2â€“MgO slag. Ceramics International, 2022, , .	4.8	4
7	Pore evolution of microporous magnesia aggregates with the introduction of nano-sized MgO. Ceramics International, 2022, 48, 18513-18521.	4.8	8
8	Synthesis, characterization, visualization, and growth mechanism of macro-sized tubular MgO crystals formed in situ from refractory magnesia with aluminum. Ceramics International, 2022, 48, 23800-23807.	4.8	3
9	Effect of magnesia-calcium hexaaluminate refractories on the quality of low-carbon alloy steel. Ceramics International, 2022, 48, 31181-31190.	4.8	5
10	Numerical Simulation on Refractory Wear and Inclusion Formation in Continuous Casting Tundish. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 1344-1356.	2.1	20
11	Characterisation and properties of low-conductivity microporous magnesia based aggregates with in-situ intergranular spinel phases. Ceramics International, 2021, 47, 11063-11071.	4.8	25
12	Corrosion Behavior of Lightweight MgO in High Basicity Tundish Slag. Steel Research International, 2021, 92, 2100010.	1.8	13
13	Visual measurement and characterisation of quasi-volcanic corrosion at alumina ceramic-oxides melt-air interface. Journal of the European Ceramic Society, 2021, 41, 400-410.	5.7	10
14	A thermodynamic assessment of precipitation, growth, and control of MnS inclusion in U75V heavy rail steel. High Temperature Materials and Processes, 2021, 40, 178-192.	1.4	12
15	Corrosion modeling of magnesia aggregates in contact with CaOâ€“MgOâ€“SiO₂ slags. Journal of the American Ceramic Society, 2020, 103, 2128-2136.	3.8	31
16	Fabrication of lightweight alumina with nanoscale intracrystalline pores. Journal of the American Ceramic Society, 2020, 103, 2262-2271.	3.8	24
17	Fabrication and analysis of lightweight magnesia based aggregates containing nano-sized intracrystalline pores. Materials and Design, 2020, 186, 108326.	7.0	30
18	Corrosion mechanism of Al2O3â€“SiCâ€“C refractory by SiO2â€“MgO-based slag. Ceramics International, 2020, 46, 28262-28267.	4.8	25

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19	Modified phenolic resin with aluminium and rectorite: Structure, characterization, and performance. Polymer Composites, 2020, 41, 4431-4441.	4.6	4
20	Novel phenomenon of quasiâ€volcanic corrosion on the alumina refractoryâ€slagâ€air interface. Journal of the American Ceramic Society, 2020, 103, 6639-6649.	3.8	13
21	Formation Mechanism of In Situ Intergranular CaZrO3 Phases in Sintered Magnesia Refractories. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5328-5338.	2.2	13
22	Enhancement of the densification and thermal properties of Ca2Mg2Al28O46 ceramic by MnO addition. Ceramics International, 2020, 46, 18734-18741.	4.8	4
23	Computational Modeling and Prediction on Viscosity of Slags by Big Data Mining. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock	2.0	15
24	Corrosion Mechanisms of Different Refractory Aggregates in Contact with SiO2-MgO-Based Slag. InterCeram: International Ceramic Review, 2020, 69, 22-29.	0.2	2
25	Slag corrosion-resistance mechanism of lightweight magnesia-based refractories under a static magnetic field. Corrosion Science, 2020, 167, 108517.	6.6	46
26	Fabrication and properties of in situ intergranular CaZrO3 modified microporous magnesia aggregates. Ceramics International, 2020, 46, 16956-16965.	4.8	28
27	Improved bonding properties of rectorite clay slurry after wet/dry grinding. Applied Clay Science, 2019, 183, 105318.	5.2	4
28	Enhanced corrosion resistance through the introduction of fine pores: Role of nano-sized intracrystalline pores. Corrosion Science, 2019, 161, 108182.	6.6	32
29	Role of liquid phase amounts in the pore evolution of lightweight bauxite: Experimental and thermal simulation studies. Ceramics International, 2019, 45, 6216-6222.	4.8	8
30	Computational Simulation and Prediction on Electrical Conductivity of Oxide-Based Melts by Big Data Mining. Materials, 2019, 12, 1059.	2.9	7
31	Towards chrome-free lining for plasma gasifiers using the CA6-SiC castable based on high-temperature water vapor corrosion. Ceramics International, 2019, 45, 12429-12435.	4.8	12
32	Mechanical performance and oxidation resistance of SiC castables with lamellar Ti3SiC2 coatings on SiC aggregates prepared by SPS. Journal of Alloys and Compounds, 2019, 791, 461-468.	5.5	10
33	Corrosion of alumina-magnesia castable by high manganese steel with respect to steel cleanness. Ceramics International, 2019, 45, 9884-9890.	4.8	15
34	Effect of Ti combined with Si and C on mechanical performance and oxidation resistance of SiC castables for plasma gasifier. Ceramics International, 2019, 45, 4147-4151.	4.8	10
35	Corrosion mechanism of lightweight microporous aluminaâ€based refractory by molten steel. Journal of the American Ceramic Society, 2019, 102, 3705-3714.	3.8	21
36	Incorporating Zr to achieve self-protecting and enhancement of silica sol bonded SiC castables at active oxidation condition. Ceramics International, 2018, 44, 6089-6095.	4.8	9

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37	Effect of lightweight refractories on the cleanness of bearing steels. Ceramics International, 2018, 44, 12965-12972.	4.8	12
38	Correlations among processing parameters and porosity of a lightweight alumina. Ceramics International, 2018, 44, 14076-14081.	4.8	45
39	Chemical interactions between a calcium aluminate glaze and molten stainless steel containing alumina inclusions. Ceramics International, 2018, 44, 1099-1103.	4.8	8
40	Towards prediction of local corrosion on alumina refractories driven by Marangoni convection. Ceramics International, 2018, 44, 1675-1680.	4.8	20
41	Slag corrosion mechanism of lightweight Al₂O₃â€“MgO castable in different atmospheric conditions. Journal of the American Ceramic Society, 2018, 101, 2096-2106.	3.8	24
42	Incorporating Zr combined Si and C to achieve self-repairing ability and enhancement of silica sol bonded SiC castables. Journal of Alloys and Compounds, 2018, 732, 396-405.	5.5	13
43	The Interfacial Behavior of Alumina-Magnesia Castables and Molten Slag under an Alternating Magnetic Field. InterCeram: International Ceramic Review, 2018, 67, 36-43.	0.2	4
44	The Interfacial Behavior of Alumina-Magnesia Castables and Molten Slag under an Alternating Magnetic Field. InterCeram: International Ceramic Review, 2018, 67, 58-65.	0.2	2
45	Fabrication of lightweight alumina containing fine closed pores by controlling the relationship between phase stress and superplasticity: Experimental and mathematical studies. Ceramics International, 2018, 44, 20034-20042.	4.8	13
46	Dynamic interaction of refractory and molten steel: Effect of alumina-magnesia castables on alloy steel cleanness. Ceramics International, 2018, 44, 22146-22153.	4.8	24
47	Properties and microstructures of lightweight alumina containing different types of nano-alumina. Ceramics International, 2018, 44, 17885-17894.	4.8	48
48	Influence of pore distribution on the equivalent thermal conductivity of low porosity ceramic closed-cell foams. Ceramics International, 2018, 44, 19319-19329.	4.8	26
49	Dynamic interaction of refractory and molten steel: Corrosion mechanism of alumina-magnesia castables. Ceramics International, 2018, 44, 14617-14624.	4.8	45
50	Towards chrome-free of high-temperature solid waste gasifier through in-situ SiC whisker enhanced silica sol bonded SiC castable. Ceramics International, 2017, 43, 3330-3338.	4.8	22
51	Enhancement of bonding network for silica sol bonded SiC castables by reactive micropowder. Ceramics International, 2017, 43, 8850-8857.	4.8	13
52	Isolation or corrosion of microporous alumina in contact with various CaO-Al 2 O 3 -SiO 2 slags. Corrosion Science, 2017, 120, 211-218.	6.6	55
53	Effects of aggregate microstructure on slag resistance of lightweight Al2O3-MgO castable. Ceramics International, 2017, 43, 16495-16501.	4.8	31
54	Corrosion Mechanism of Foamed Slag on the Lightweight Corundum-Spinel Castable. InterCeram: International Ceramic Review, 2016, 65, 226-231.	0.2	2

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55	Improvement of Durability of Purging Plugs Using MgO Micropowder for Refining Ladles. International Journal of Applied Ceramic Technology, 2016, 13, 1104-1111.	2.1	5
56	An approach for matrix densification based on particle packing and its effect on lightweight Al2O3-MgO castables. Ceramics International, 2016, 42, 18560-18567.	4.8	14
57	Towards slag-resistant, anti-clogging and chrome-free castable for gas purging. Ceramics International, 2016, 42, 18674-18680.	4.8	17
58	Fabrication and characterization of lightweight microporous alumina with guaranteed slag resistance. Ceramics International, 2016, 42, 8724-8728.	4.8	27
59	Effect of nano-alumina sol on the sintering properties and microstructure of microporous corundum. Materials and Design, 2016, 89, 21-26.	7.0	40
60	Effects of particle distribution of matrix on microstructure and slag resistance of lightweight Al 2 O 3 â€“MgO castables. Ceramics International, 2016, 42, 1964-1972.	4.8	23
61	Toward CFD Modeling of Slag Entrainment in Gas Stirred Ladles. Steel Research International, 2015, 86, 1447-1454.	1.8	29
62	Study on a Lime-Fluorite Slag Melting Agent for Ladle Slag Buildup. InterCeram: International Ceramic Review, 2015, 64, 116-118.	0.2	0
63	Slag Resistance Mechanism of Lightweight Microporous Corundum Aggregate. Journal of the American Ceramic Society, 2015, 98, 1658-1663.	3.8	68
64	Effect of MgO micropowder on sintering properties and microstructures of microporous corundum aggregates. Ceramics International, 2015, 41, 5857-5862.	4.8	27
65	Dynamic slag/refractory interaction of lightweight Al2O3â€“MgO castable for refining ladle. Ceramics International, 2015, 41, 8149-8154.	4.8	36
66	Corrosion of Al2O3â€“Cr2O3 refractory lining for high-temperature solid waste incinerator. Ceramics International, 2015, 41, 14748-14753.	4.8	50
67	Possible improvements of aluminaâ€“magnesia castable by lightweight microporous aggregates. Ceramics International, 2015, 41, 1263-1270.	4.8	86
68	Effects of MgO micropowder on microstructure and resistance coefficient of Al2O3â€“MgO castable matrix. Ceramics International, 2014, 40, 7023-7028.	4.8	33
69	Mathematical Modeling on Erosion Characteristics of Refining Ladle Lining with Application of Purging Plug. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 744-749.	2.1	30
70	Oxidation Resistance and Mechanical Enhancement of Ferro-Silicon Nitride on Silica Sol Bonded SiC Castable. Key Engineering Materials, 0, 768, 286-290.	0.4	0
71	Mathematical Simulation and Physical Modeling of Self-Source Magnetization by Liquid Electrolyte Flow. Materials Science Forum, 0, 982, 165-172.	0.3	0