

Huazhi Gu

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

1,365
citations

279487

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395343

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all docs

70
docs citations

70
times ranked

331
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Design, fabrication and properties of lightweight wear lining refractories: A review. Journal of the European Ceramic Society, 2022, 42, 744-763. | 2.8 | 38 |
| 2 | Corrosion resistance and anti-oxidation reaction mechanism of Al ₂ O ₃ -based refractory ceramic under weak static magnetic field. Journal of the American Ceramic Society, 2022, 105, 2869-2877. | 1.9 | 8 |
| 3 | Effect of zirconia sol on the microstructure and properties of Al ₂ O ₃ -based ceramic fabricated from natural bauxite. Ceramics International, 2022, 48, 12954-12961. | 2.3 | 4 |
| 4 | Pore evolution of microporous magnesia aggregates with the introduction of nano-sized MgO. Ceramics International, 2022, 48, 18513-18521. | 2.3 | 8 |
| 5 | 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. | 2.3 | 3 |
| 6 | Preparation and water vapor corrosion behavior of AlN polytype bonded SiC bricks. Journal of Alloys and Compounds, 2022, , 165727. | 2.8 | 1 |
| 7 | Effect of magnesia-calcium hexaaluminate refractories on the quality of low-carbon alloy steel. Ceramics International, 2022, 48, 31181-31190. | 2.3 | 5 |
| 8 | Numerical simulation of heat transfer for Al-Si@Al ₂ O ₃ composite phase change heat storage particles. Journal of Energy Storage, 2022, 52, 104953. | 3.9 | 4 |
| 9 | Characterisation and properties of low-conductivity microporous magnesia based aggregates with in-situ intergranular spinel phases. Ceramics International, 2021, 47, 11063-11071. | 2.3 | 25 |
| 10 | Bonding mechanism and performance of rectorite/ball clay bonded unfired high alumina bricks. Ceramics International, 2021, 47, 10749-10763. | 2.3 | 2 |
| 11 | Enhanced thermoelectric performance in aluminum-doped zinc oxide by porous architecture and nano-inclusions. Journal of the European Ceramic Society, 2021, 41, 3466-3472. | 2.8 | 2 |
| 12 | Microstructures and properties of in situ lamellar Al ₄ SiC ₄ bonded SiC bricks: The effect of induction heating. Journal of Alloys and Compounds, 2021, 870, 159463. | 2.8 | 3 |
| 13 | Improvement of low carbon MgO-based refractories by MAO-CA 2 additives fabricated from metallurgical waste. International Journal of Applied Ceramic Technology, 2021, 18, 2314. | 1.1 | 2 |
| 14 | 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. | 2.8 | 10 |
| 15 | Fabrication of in-situ Ti(C,N) phase toughened Al ₂ O ₃ based ceramics from natural bauxite. Ceramics International, 2021, 47, 25497-25504. | 2.3 | 10 |
| 16 | Evolution on phase composition and properties of alumina-based ceramics fabricated from high-titania special-grade natural bauxite micropowder. Ceramics International, 2021, 47, 24574-24581. | 2.3 | 0 |
| 17 | Experiment and numerical simulation of aluminum silicon alloy corrosive treatment in the water vapor generation autoclaves. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 630, 127515. | 2.3 | 0 |
| 18 | Fabrication of CaO-MgO-Al ₂ O ₃ materials from metallurgical waste industrial residue and their potential usage in MgO-C refractories. Ceramics International, 2020, 46, 959-967. | 2.3 | 22 |

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|----|---|-----|-----------|
| 19 | Corrosion modeling of magnesia aggregates in contact with CaO-MgO-SiO ₂ slags. Journal of the American Ceramic Society, 2020, 103, 2128-2136. | 1.9 | 31 |
| 20 | Thermal properties of Al-Si/Al ₂ O ₃ core-shell particles prepared by using steam hydration method. Journal of Alloys and Compounds, 2020, 817, 152801. | 2.8 | 21 |
| 21 | Fabrication of lightweight alumina with nanoscale intracrystalline pores. Journal of the American Ceramic Society, 2020, 103, 2262-2271. | 1.9 | 24 |
| 22 | Fabrication and analysis of lightweight magnesia based aggregates containing nano-sized intracrystalline pores. Materials and Design, 2020, 186, 108326. | 3.3 | 30 |
| 23 | Corrosion mechanism of Al ₂ O ₃ -SiC refractory by SiO ₂ -MgO-based slag. Ceramics International, 2020, 46, 28262-28267. | 2.3 | 25 |
| 24 | Novel phenomenon of quasi-volcanic corrosion on the alumina refractory-slag-air interface. Journal of the American Ceramic Society, 2020, 103, 6639-6649. | 1.9 | 13 |
| 25 | Formation Mechanism of In Situ Intergranular CaZrO ₃ Phases in Sintered Magnesia Refractories. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5328-5338. | 1.1 | 13 |
| 26 | Al-Si @ Al ₂ O ₃ @ mullite microcapsules for thermal energy storage: Preparation and thermal properties. Solar Energy Materials and Solar Cells, 2020, 217, 110697. | 3.0 | 33 |
| 27 | Computational Modeling and Prediction on Viscosity of Slags by Big Data Mining. Minerals (Basel), 2020, 10, 784-797. | 0.8 | 15 |
| 28 | Research on thermal shock resistance of porous refractory material by strain-life fatigue approach. Ceramics International, 2020, 46, 14884-14893. | 2.3 | 18 |
| 29 | Corrosion Mechanisms of Different Refractory Aggregates in Contact with SiO ₂ -MgO-Based Slag. InterCeram: International Ceramic Review, 2020, 69, 22-29. | 0.2 | 2 |
| 30 | Slag corrosion-resistance mechanism of lightweight magnesia-based refractories under a static magnetic field. Corrosion Science, 2020, 167, 108517. | 3.0 | 46 |
| 31 | Fabrication and properties of in situ intergranular CaZrO ₃ modified microporous magnesia aggregates. Ceramics International, 2020, 46, 16956-16965. | 2.3 | 28 |
| 32 | Improved bonding properties of rectorite clay slurry after wet/dry grinding. Applied Clay Science, 2019, 183, 105318. | 2.6 | 4 |
| 33 | Enhanced corrosion resistance through the introduction of fine pores: Role of nano-sized intracrystalline pores. Corrosion Science, 2019, 161, 108182. | 3.0 | 32 |
| 34 | Role of liquid phase amounts in the pore evolution of lightweight bauxite: Experimental and thermal simulation studies. Ceramics International, 2019, 45, 6216-6222. | 2.3 | 8 |
| 35 | 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. | 2.3 | 12 |
| 36 | Mechanical performance and oxidation resistance of SiC castables with lamellar Ti ₃ SiC ₂ coatings on SiC aggregates prepared by SPS. Journal of Alloys and Compounds, 2019, 791, 461-468. | 2.8 | 10 |

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|----|---|-----|-----------|
| 37 | Effect of Ti combined with Si and C on mechanical performance and oxidation resistance of SiC castables for plasma gasifier. <i>Ceramics International</i> , 2019, 45, 4147-4151. | 2.3 | 10 |
| 38 | Corrosion mechanism of lightweight microporous alumina-based refractory by molten steel. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3705-3714. | 1.9 | 21 |
| 39 | Improvement in fatigue resistance performance of corundum castables with addition of different size calcium hexaluminate particles. <i>Ceramics International</i> , 2019, 45, 225-232. | 2.3 | 15 |
| 40 | Incorporating Zr to achieve self-protecting and enhancement of silica sol bonded SiC castables at active oxidation condition. <i>Ceramics International</i> , 2018, 44, 6089-6095. | 2.3 | 9 |
| 41 | Effect of lightweight refractories on the cleanness of bearing steels. <i>Ceramics International</i> , 2018, 44, 12965-12972. | 2.3 | 12 |
| 42 | Correlations among processing parameters and porosity of a lightweight alumina. <i>Ceramics International</i> , 2018, 44, 14076-14081. | 2.3 | 45 |
| 43 | Chemical interactions between a calcium aluminate glaze and molten stainless steel containing alumina inclusions. <i>Ceramics International</i> , 2018, 44, 1099-1103. | 2.3 | 8 |
| 44 | Towards prediction of local corrosion on alumina refractories driven by Marangoni convection. <i>Ceramics International</i> , 2018, 44, 1675-1680. | 2.3 | 20 |
| 45 | Slag corrosion mechanism of lightweight Al_2O_3 -MgO castable in different atmospheric conditions. <i>Journal of the American Ceramic Society</i> , 2018, 101, 2096-2106. | 1.9 | 24 |
| 46 | Incorporating Zr combined Si and C to achieve self-repairing ability and enhancement of silica sol bonded SiC castables. <i>Journal of Alloys and Compounds</i> , 2018, 732, 396-405. | 2.8 | 13 |
| 47 | The Interfacial Behavior of Alumina-Magnesia Castables and Molten Slag under an Alternating Magnetic Field. <i>InterCeram: International Ceramic Review</i> , 2018, 67, 36-43. | 0.2 | 4 |
| 48 | The Interfacial Behavior of Alumina-Magnesia Castables and Molten Slag under an Alternating Magnetic Field. <i>InterCeram: International Ceramic Review</i> , 2018, 67, 58-65. | 0.2 | 2 |
| 49 | Fabrication of lightweight alumina containing fine closed pores by controlling the relationship between phase stress and superplasticity: Experimental and mathematical studies. <i>Ceramics International</i> , 2018, 44, 20034-20042. | 2.3 | 13 |
| 50 | Properties and microstructures of lightweight alumina containing different types of nano-alumina. <i>Ceramics International</i> , 2018, 44, 17885-17894. | 2.3 | 48 |
| 51 | Influence of pore distribution on the equivalent thermal conductivity of low porosity ceramic closed-cell foams. <i>Ceramics International</i> , 2018, 44, 19319-19329. | 2.3 | 26 |
| 52 | Dynamic interaction of refractory and molten steel: Corrosion mechanism of alumina-magnesia castables. <i>Ceramics International</i> , 2018, 44, 14617-14624. | 2.3 | 45 |
| 53 | Towards chrome-free of high-temperature solid waste gasifier through in-situ SiC whisker enhanced silica sol bonded SiC castable. <i>Ceramics International</i> , 2017, 43, 3330-3338. | 2.3 | 22 |
| 54 | Enhancement of bonding network for silica sol bonded SiC castables by reactive micropowder. <i>Ceramics International</i> , 2017, 43, 8850-8857. | 2.3 | 13 |

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|----|---|-----|-----------|
| 55 | Isolation or corrosion of microporous alumina in contact with various CaO-Al ₂ O ₃ -SiO ₂ slags. <i>Corrosion Science</i> , 2017, 120, 211-218. | 3.0 | 55 |
| 56 | Improving mullite-silicon carbide refractory in coke dry quenching using aluminum nitride whiskers formed in situ. <i>Ceramics International</i> , 2017, 43, 16993-16999. | 2.3 | 12 |
| 57 | Effects of aggregate microstructure on slag resistance of lightweight Al ₂ O ₃ -MgO castable. <i>Ceramics International</i> , 2017, 43, 16495-16501. | 2.3 | 31 |
| 58 | Corrosion Mechanism of Foamed Slag on the Lightweight Corundum-Spinel Castable. <i>InterCeram: International Ceramic Review</i> , 2016, 65, 226-231. | 0.2 | 2 |
| 59 | Improvement of Durability of Purging Plugs Using MgO Micropowder for Refining Ladles. <i>International Journal of Applied Ceramic Technology</i> , 2016, 13, 1104-1111. | 1.1 | 5 |
| 60 | Fabrication and characterization of lightweight microporous alumina with guaranteed slag resistance. <i>Ceramics International</i> , 2016, 42, 8724-8728. | 2.3 | 27 |
| 61 | Mechanical Strength and Thermal Conductivity of Modified Expanded Vermiculite/Forsterite Composite Materials. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 15-19. | 1.2 | 5 |
| 62 | Effect of nano-alumina sol on the sintering properties and microstructure of microporous corundum. <i>Materials and Design</i> , 2016, 89, 21-26. | 3.3 | 40 |
| 63 | Effects of particle distribution of matrix on microstructure and slag resistance of lightweight Al ₂ O ₃ -MgO castables. <i>Ceramics International</i> , 2016, 42, 1964-1972. | 2.3 | 23 |
| 64 | Slag Resistance Mechanism of Lightweight Microporous Corundum Aggregate. <i>Journal of the American Ceramic Society</i> , 2015, 98, 1658-1663. | 1.9 | 68 |
| 65 | Effect of MgO micropowder on sintering properties and microstructures of microporous corundum aggregates. <i>Ceramics International</i> , 2015, 41, 5857-5862. | 2.3 | 27 |
| 66 | Corrosion of Al ₂ O ₃ -Cr ₂ O ₃ refractory lining for high-temperature solid waste incinerator. <i>Ceramics International</i> , 2015, 41, 14748-14753. | 2.3 | 50 |
| 67 | Possible improvements of alumina-magnesia castable by lightweight microporous aggregates. <i>Ceramics International</i> , 2015, 41, 1263-1270. | 2.3 | 86 |
| 68 | Effects of MgO micropowder on microstructure and resistance coefficient of Al ₂ O ₃ -MgO castable matrix. <i>Ceramics International</i> , 2014, 40, 7023-7028. | 2.3 | 33 |
| 69 | Mathematical Modeling on Erosion Characteristics of Refining Ladle Lining with Application of Purging Plug. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013, 44, 744-749. | 1.0 | 30 |