# Xidong Wang

List of Publications by Year
in descending order

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| 104 | 3,837 | 81839 | 143943 |
|---|---|---|---|
| papers | citations | 39 h-index | 57 g-index |

| 104 | 104 | 104 | 3311 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | ANN-based structure-viscosity relationship model of multicomponent slags for production design in mineral wool. Construction and Building Materials, 2022, 319, 126010. | 3.2 | 12 |
| 2 | Investigation of cooling processes of molten slags to develop multilevel control method for cleaner production in mineral wool. Journal of Cleaner Production, 2022, 339, 130548. | 4.6 | 7 |
| 3 | Ultralow loading of Cu2O/CuO nanoparticles on metal-organic framework-derived carbon octahedra and activated semi-coke for highly efficient SO2 removal. Journal of Cleaner Production, 2022, 341, 130823. | 4.6 | 17 |
| 4 | Experimental Investigation of Vitrification Process for the Disposal of Hazardous Solid Waste Containing Chlorides. Processes, 2022, 10, 526. | 1.3 | 0 |
| 5 | Designing Structureâ€“Thermodynamics-Informed Artificial Neural Networks for Surface Tension Prediction of Multi-component Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2022, 53, 2018-2029. | 1.0 | 4 |
| 6 | Mechanistic and Experimental Study of the CuxO@C Nanocomposite Derived from Cu3(BTC)2 for SO2 Removal. Catalysts, 2022, 12, 689. | 1.6 | 0 |
| 7 | Computational Screening and Synthesis of M (M = Mo and Cu)-Doped CeO<sub>2</sub>/silicalite-1 for Medium-/Low-Temperature NH<sub>3</sub>â€“SCR. Industrial & Engineering Chemistry Research, 2022, 61, 10091-10105. | 1.8 | 8 |
| 8 | Preparation, Sintering Behavior and Consolidation Mechanism of Vanadium-Titanium Magnetite Pellets. Crystals, 2021, 11, 188. | 1.0 | 11 |
| 9 | Three-Stage Method Energyâ€“Mass Coupling High-Efficiency Utilization Process of High-Temperature Molten Steel Slag. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3004-3015. | 1.0 | 7 |
| 10 | Structural and Viscous Insight into Impact of MoO3 on Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 3730-3743. | 1.0 | 11 |
| 11 | Development of structure-informed artificial neural network for accurately modeling viscosity of multicomponent molten slags. Ceramics International, 2021, 47, 30691-30701. | 2.3 | 16 |
| 12 | Promoting Effect of Ti Species in MnOx-FeOx/Silicalite-1 for the Low-Temperature NH3-SCR Reaction. Catalysts, 2020, 10, 566. | 1.6 | 8 |
| 13 | Highly dispersed MnO<sub>x</sub>â€“FeO<sub>x</sub> supported by silicalite-1 for the selective catalytic reduction of NO<sub>x</sub> with NH<sub>3</sub> at low temperatures. Catalysis Science and Technology, 2020, 10, 5525-5534. | 2.1 | 6 |
| 14 | In Situ DRIFTS Investigation on CeOx Catalyst Supported by Fly-Ash-Made Porous Cordierite Ceramics for Low-Temperature NH3-SCR of NOX. Catalysts, 2019, 9, 496. | 1.6 | 10 |
| 15 | Insight into the Relationship Between Viscosity and Structure of CaO-SiO2-MgO-Al2O3 Molten Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2930-2941. | 1.0 | 57 |
| 16 | Manganese oxide catalysts supported on zinc oxide nanorod arrays: A new composite for selective catalytic reduction of NOx with NH3 at low temperature. Applied Surface Science, 2019, 491, 579-589. | 3.1 | 25 |
| 17 | Kinetic studies on bituminous coal char gasification using CO<sub>2</sub> and H<sub>2</sub>O mixtures. International Journal of Green Energy, 2019, 16, 1144-1151. | 2.1 | 11 |
| 18 | Fabrication and characterization of porous cordierite ceramics prepared from fly ash and natural minerals. Ceramics International, 2019, 45, 18306-18314. | 2.3 | 40 |

| # | Article | IF | Citations |
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| 19 | Reuse of mineral wool waste and recycled glass in ceramic foams. Ceramics International, 2019, 45, 15057-15064. | 2.3 | 55 |
| 20 | Synthesis of a foam ceramic based on ceramic tile polishing waste using SiC as foaming agent. Ceramics International, 2018, 44, 10078-10086. | 2.3 | 62 |
| 21 | Application of washed MSWI fly ash in cement composites: long-term environmental impacts. Environmental Science and Pollution Research, 2018, 25, 12127-12138. | 2.7 | 29 |
| 22 | Recycling of municipal solid waste incineration by-product for cement composites preparation. Construction and Building Materials, 2018, 162, 794-801. | 3.2 | 84 |
| 23 | Integrated utilization of fly ash and waste glass for synthesis of foam/dense bi-layered insulation ceramic tile. Energy and Buildings, 2018, 168, 67-75. | 3.1 | 32 |
| 24 | Roles of P<sub>2</sub>O<sub>5</sub> Addition on the Viscosity and Structure of CaOâ€“SiO<sub>2</sub>â€“Al<sub>2</sub>O<sub>3</sub>â€“Na<sub>2</sub>O</s Melts. ISIJ International, 2018, 58, 1644-1649. | 0.6 | 0â€“P<su |
| 25 | Recycling ground MSWI bottom ash in cement composites: Long-term environmental impacts. Waste Management, 2018, 78, 841-848. | 3.7 | 46 |
| 26 | Integrated utilization of high alumina fly ash for synthesis of foam glass ceramic. Ceramics International, 2018, 44, 13681-13688. | 2.3 | 55 |
| 27 | Long-term leaching behaviours of cement composites prepared by hazardous wastes. RSC Advances, 2018, 8, 27602-27609. | 1.7 | 5 |
| 28 | Solid wastes utilization in the iron and steel industry in China: towards sustainability. Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy, 2017, 126, 41-46. | 0.6 | 8 |
| 29 | Preparation and characterization of permeable bricks from gangue and tailings. Construction and Building Materials, 2017, 148, 484-491. | 3.2 | 47 |
| 30 | Preparation and characterization of the one-piece wall ceramic board by using solid wastes. Ceramics International, 2017, 43, 8564-8571. | 2.3 | 14 |
| 31 | Synthesis of a ceramic tile base based on high-alumina fly ash. Construction and Building Materials, 2017, 155, 930-938. | 3.2 | 42 |
| 32 | Promotional effect of rare earth-doped manganese oxides supported on activated semi-coke for selective catalytic reduction of NO with NH3. Environmental Science and Pollution Research, 2017, 24, 24473-24484. | 2.7 | 23 |
| 33 | Effect of water-washing on the co-removal of chlorine and heavy metals in air pollution control residue from MSW incineration. Waste Management, 2017, 68, 221-231. | 3.7 | 62 |
| 34 | Role of steel slags on biomass/carbon dioxide gasification integrated with recovery of high temperature heat. Bioresource Technology, 2017, 223, 1-9. | 4.8 | 21 |
| 35 | Integrated Utilization of Sewage Sludge and Coal Gangue for Cement Clinker Products: Promoting Tricalcium Silicate Formation and Trace Elements Immobilization. Materials, 2016, 9, 275. | 1.3 | 17 |
| 36 | Integrated biomass gasification using the waste heat from hot slags: Control of syngas and polluting gas releases. Energy, 2016, 114, 165-176. | 4.5 | 17 |

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| 37 | A Fe-C-Ca big cycle in modern carbon-intensive industries: toward emission reduction and resource utilization. Scientific Reports, 2016, 6, 22323. | 1.6 | 6 |
| 38 | Integration of biomass/steam gasification with heat recovery from hot slags: Thermodynamic characteristics. International Journal of Hydrogen Energy, 2016, 41, 5916-5926. | 3.8 | 24 |
| 39 | Effect of Al2O3 Addition on the Precipitated Phase Transformation in Ti-Bearing Blast Furnace Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 1390-1399. | 1.0 | 21 |
| 40 | In situ DRIFTS studies on MnO nanowires supported by activated semi-coke for low temperature selective catalytic reduction of NO with NH3. Applied Surface Science, 2016, 366, 139-147. | 3.1 | 71 |
| 41 | Environmental investigation on co-combustion of sewage sludge and coal gangue: SO 2 , NO x and trace elements emissions. Waste Management, 2016, 50, 213-221. | 3.7 | 108 |
| 42 | Integration of coal gasification and waste heat recovery from high temperature steel slags: an emerging strategy to emission reduction. Scientific Reports, 2015, 5, 16591. | 1.6 | 19 |
| 43 | Facile and Economical Preparation of SiAlON-Based Composites Using Coal Gangue: From Fundamental to Industrial Application. Energies, 2015, 8, 7428-7440. | 1.6 | 9 |
| 44 | Co-modification and Crystalline-control of Ti-bearing Blast Furnace Slags. ISIJ International, 2015, 55, 158-165. | 0.6 | 25 |
| 45 | Preparation and modeling of energy-saving building materials by using industrial solid waste. Energy and Buildings, 2015, 97, 6-12. | 3.1 | 10 |
| 46 | Integrated carbon dioxide/sludge gasification using waste heat from hot slags: Syngas production and sulfur dioxide fixation. Bioresource Technology, 2015, 181, 174-182. | 4.8 | 53 |
| 47 | Investigation on slag fiber characteristics: Mechanical property and anti-corrosion performance. Ceramics International, 2015, 41, 5677-5687. | 2.3 | 20 |
| 48 | Promoting effect of Nd on the reduction of NO with NH<sub>3</sub> over CeO<sub>2</sub> supported by activated semi-coke: an in situ DRIFTS study. Catalysis Science and Technology, 2015, 5, 2251-2259. | 2.1 | 105 |
| 49 | A Novel Kinematic Model for Molten Slag Fiberization: Prediction of Slag Fiber Properties. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 993-1001. | 1.0 | 12 |
| 50 | Achieving waste to energy through sewage sludge gasification using hot slags: syngas production. Scientific Reports, 2015, 5, 11436. | 1.6 | 27 |
| 51 | Heat Recovery from High Temperature Slags: A Review of Chemical Methods. Energies, 2015, 8, 1917-1935. | 1.6 | 83 |
| 52 | Synthesis, characterization and modeling of new building insulation material using ceramic polishing waste residue. Construction and Building Materials, 2015, 85, 119-126. | 3.2 | 63 |
| 53 | Fuel nitrogen conversion and release of nitrogen oxides during coal gangue calcination. Environmental Science and Pollution Research, 2015, 22, 7139-7146. | 2.7 | 23 |
| 54 | FTIR, Raman and NMR investigation of CaOâ€“SiO2â€“P2O5 and CaOâ€“SiO2â€“TiO2â€“P2O5 glasses. Journal of Non-Crystalline Solids, 2015, 420, 26-33. | 1.5 | 102 |

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| 55 | Facile and economical synthesis of porous activated semi-cokes for highly efficient and fast removal of microcystin-LR. Journal of Hazardous Materials, 2015, 299, 325-332. | 6.5 | 17 |
| 56 | Trace element partitioning behavior of coal gangue-fired CFB plant: experimental and equilibrium calculation. Environmental Science and Pollution Research, 2015, 22, 15469-15478. | 2.7 | 29 |
| 57 | Two-stage high temperature sludge gasification using the waste heat from hot blast furnace slags. Bioresource Technology, 2015, 198, 364-371. | 4.8 | 45 |
| 58 | Thermodynamic modeling of electrolyte solutions by a hybrid ion-interaction and solvation (HIS) model. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2015, 48, 79-88. | 0.7 | 5 |
| 59 | Effects of chemistry and mineral on structural evolution and chemical reactivity of coal gangue during calcination: towards efficient utilization. Materials and Structures/Materiaux Et Constructions, 2015, 48, 2779-2793. | 1.3 | 48 |
| 60 | Effect of P2O5 Addition on the Viscosity and Structure of Titanium Bearing Blast Furnace Slags. ISIJ International, 2014, 54, 1491-1497. | 0.6 | 23 |
| 61 | Effect of B2O3 on the Structure and Viscous Behavior of Ti-Bearing Blast Furnace Slags. Jom, 2014, 66, 2168-2175. | 0.9 | 55 |
| 62 | Multi-Stage Control of Waste Heat Recovery from High Temperature Slags Based on Time Temperature Transformation Curves. Energies, 2014, 7, 1673-1684. | 1.6 | 42 |
| 63 | Preparation of Slag Wool by Integrated Waste-Heat Recovery and Resource Recycling of Molten Blast Furnace Slags: From Fundamental to Industrial Application. Energies, 2014, 7, 3121-3135. | 1.6 | 40 |
| 64 | Characteristics of low temperature biomass gasification and syngas release behavior using hot slag. RSC Advances, 2014, 4, 62105-62114. | 1.7 | 36 |
| 65 | Numerical modeling and experimental study of heat transfer in ceramic fiberboard. Textile Reseach Journal, 2014, 84, 411-421. | 1.1 | 16 |
| 66 | Pyrite transformation and sulfur dioxide release during calcination of coal gangue. RSC Advances, 2014, 4, 42506-42513. | 1.7 | 27 |
| 67 | Experimental investigation and modeling of cooling processes of high temperature slags. Energy, 2014, 76, 761-767. | 4.5 | 61 |
| 68 | Development of the random simulation model for estimating the effective thermal conductivity of insulation materials. Building and Environment, 2014, 80, 221-227. | 3.0 | 21 |
| 69 | In situ DRIFTS investigation on the SCR of NO with NH3 over V2O5 catalyst supported by activated semi-coke. Applied Surface Science, 2014, 313, 660-669. | 3.1 | 145 |
| 70 | Investigation of the Viscosity and Structural Properties of CaO-SiO2-TiO2 Slags. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1389-1397. | 1.0 | 99 |
| 71 | The Effect of P2O5 on the Crystallization Behaviors of Ti-Bearing Blast Furnace Slags Using Single Hot Thermocouple Technique. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1446-1455. | 1.0 | 40 |
| 72 | Low-temperature SCR of NO with NH3 over activated semi-coke composite-supported rare earth oxides. Applied Surface Science, 2014, 309, 1-10. | 3.1 | 71 |

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| 73 | Tailoring CoOâ€“ZnO nanorod and nanotube arrays for Li-ion battery anode materials. Journal of Materials Chemistry A, 2013, 1, 9654. | 5.2 | 59 |
| 74 | Raman spectroscopic study of the structural properties of CaOâ€“MgOâ€“SiO2â€“TiO2 slags. Journal of Non-Crystalline Solids, 2013, 376, 209-215. | 1.5 | 79 |
| 75 | Activated Semi-coke in SO<sub>2</sub> Removal from Flue Gas: Selection of Activation Methodology and Desulfurization Mechanism Study. Energy & Fuels, 2013, 27, 3080-3089. | 2.5 | 78 |
| 76 | Influence of Basicity and TiO2 Content on the Precipitation Behavior of the Ti-bearing Blast Furnace Slags. ISIJ International, 2013, 53, 1696-1703. | 0.6 | 50 |
| 77 | Hydrothermal Synthesis of CeO<sub>2</sub> Nanoparticles on Activated Carbon with Enhanced Desulfurization Activity. Energy & Fuels, 2012, 26, 5879-5886. | 2.5 | 45 |
| 78 | Effect of Substrate Pretreatment on Controllable Growth of TiO2 Nanorod Arrays. Journal of Materials Science and Technology, 2012, 28, 577-586. | 5.6 | 20 |
| 79 | Ultrasensitive sorption behavior of isostructural lanthanideâ€“organic frameworks induced by lanthanide contraction. Journal of Materials Chemistry, 2012, 22, 21076. | 6.7 | 48 |
| 80 | Conductivity properties of Î²-SiAlON ceramics. Science China Technological Sciences, 2012, 55, 2409-2415. | 2.0 | 7 |
| 81 | Pore size-controlled gases and alcohols separation within ultramicroporous homochiral lanthanideâ€“organic frameworks. Journal of Materials Chemistry, 2012, 22, 7813. | 6.7 | 53 |
| 82 | Effect of Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub> Ratio on the Viscosity and Structure of Slags. ISIJ International, 2012, 52, 753-758. | 0.6 | 90 |
| 83 | Crystallization Behavior of Rutile in the Synthesized Ti-bearing Blast Furnace Slag Using Single Hot Thermocouple Technique. ISIJ International, 2011, 51, 1396-1402. | 0.6 | 58 |
| 84 | The Influence of SiO<sub>2</sub> on the Extraction of Ti Element from Tiâ€bearing Blast Furnace Slag. Steel Research International, 2011, 82, 607-614. | 1.0 | 55 |
| 85 | Electrochemical deposition of branched hierarchical ZnO nanowire arrays and its photoelectrochemical properties. Electrochimica Acta, 2011, 56, 5776-5782. | 2.6 | 68 |
| 86 | Hydrothermal growth of well-aligned TiO2 nanorod arrays: Dependence of morphology upon hydrothermal reaction conditions. Rare Metals, 2010, 29, 286-291. | 3.6 | 40 |
| 87 | Hydrothermal synthesis and characterization of TiO2 nanorod arrays on glass substrates. Materials Research Bulletin, 2009, 44, 1232-1237. | 2.7 | 98 |
| 88 | Calculations of Freezing Point Depression, Boiling Point Elevation, Vapor Pressure and Enthalpies ofÂVaporization of Electrolyte Solutions by a Modified Three-Characteristic Parameter Correlation Model. Journal of Solution Chemistry, 2009, 38, 1097-1117. | 0.6 | 22 |
| 89 | Thermodynamic study and syntheses of Î²-SiAlON ceramics. Science in China Series D: Earth Sciences, 2009, 52, 3122-3127. | 0.9 | 9 |
| 90 | Estimation of Freezing Point Depression, Boiling Point Elevation, and Vaporization Enthalpies of Electrolyte Solutions. Industrial & Engineering Chemistry Research, 2009, 48, 2229-2235. | 1.8 | 34 |

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| 91 | A Simple Two-Parameter Correlation Model for Aqueous Electrolyte Solutions across a Wide Range of Temperatures. Journal of Chemical & Engineering Data, 2009, 54, 179-186. | 1.0 | 17 |
| 92 | Effects of preparing conditions on the electrodeposition of well-aligned ZnO nanorod arrays. Electrochimica Acta, 2008, 53, 4633-4641. | 2.6 | 62 |
| 93 | Correlation and Prediction of Thermodynamic Properties of Nonaqueous Electrolytes by the Modified TCPC Model. Journal of Chemical & Engineering Data, 2008, 53, 149-159. | 1.0 | 16 |
| 94 | Correlation and Prediction of Thermodynamic Properties of Some Complex Aqueous Electrolytes by the Modified Three-Characteristic-Parameter Correlation Model. Journal of Chemical & Engineering Data, 2008, 53, 950-958. | 1.0 | 22 |
| 95 | Correlation and Prediction of Activity and Osmotic Coefficients of Aqueous Electrolytes at 298.15 K by the Modified TCPC Model. Journal of Chemical & Engineering Data, 2007, 52, 538-547. | 1.0 | 43 |
| 96 | Density-controlled hydrothermal growth of well-aligned ZnO nanorod arrays. Nanotechnology, 2007, 18, 035605. | 1.3 | 169 |
| 97 | A new three-particle-interaction model to predict the thermodynamic properties of different electrolytes. Journal of Chemical Thermodynamics, 2007, 39, 602-612. | 1.0 | 11 |
| 98 | Synthesis, evaluation and characterization of alumina ceramics with elongated grains. Ceramics International, 2005, 31, 953-958. | 2.3 | 28 |
| 99 | Kinetic studies of oxidation of Î³-AlONâ€“TiN composites. Journal of Alloys and Compounds, 2005, 387, 74-81. | 2.8 | 12 |
| 100 | Slag corrosion of gamma aluminium oxynitride. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 2002, 73, 91-96. | 0.2 | 3 |
| 101 | Estimation of viscosity of ternary-metallic melts. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3201-3204. | 1.1 | 16 |
| 102 | Kinetic studies of the oxidation of Î³-aluminum oxynitride. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2002, 33, 201-207. | 1.0 | 16 |
| 103 | Thermodynamic study and synthesis of gamma-aluminum oxynitride. Scandinavian Journal of Metallurgy, 2002, 31, 1-6. | 0.3 | 23 |
| 104 | Preparation and Numerical Modelling of Ceramic Foam Insulation for Energy Saving in Buildings. , 0, , . | | 0 |