# Jeongmin Ahn

List of Publications by Year
in descending order



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|---|---|---|---|
| 72 papers | 2,314 citations | 279701 23 h-index | 223716 46 g-index |
| 73 all docs | 73 docs citations | 73 times ranked | 1827 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A thermally self-sustained micro solid-oxide fuel-cell stack with high power density. Nature, 2005, 435, 795-798. | 13.7 | 583 |
| 2 | Gas-phase and catalytic combustion in heat-recirculating burners. Proceedings of the Combustion Institute, 2005, 30, 2463-2472. | 2.4 | 247 |
| 3 | Advances and challenges in the development of power-generation systems at small scales. Progress in Energy and Combustion Science, 2011, 37, 583-610. | 15.8 | 216 |
| 4 | Evaluation of Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ as a potential cathode for an anode-supported proton-conducting solid-oxide fuel cell. Journal of Power Sources, 2008, 180, 15-22. | 4.0 | 156 |
| 5 | Extinction limits of catalytic combustion in microchannels. Proceedings of the Combustion Institute, 2002, 29, 957-963. | 2.4 | 132 |
| 6 | Properties and performance of Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´+Sm0.2Ce0.8O1.9 composite cathode. Journal of Power Sources, 2008, 179, 60-68. | 4.0 | 89 |
| 7 | Electrochemical performance of silver-modified Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ cathodes prepared via electroless deposition. Electrochimica Acta, 2008, 53, 4370-4380. | 2.6 | 85 |
| 8 | Nanoparticle molybdenum dioxide: A highly active catalyst for partial oxidation of aviation fuels. Applied Catalysis B: Environmental, 2010, 98, 186-192. | 10.8 | 54 |
| 9 | High performance direct flame fuel cell using a propane flame. Proceedings of the Combustion Institute, 2011, 33, 3431-3437. | 2.4 | 51 |
| 10 | Micro-tubular flame-assisted fuel cells for micro-combined heat and power systems. Journal of Power Sources, 2016, 306, 148-151. | 4.0 | 48 |
| 11 | Synthesis and assessment of La0.8Sr0.2ScyMn1â^'yO3â^'Î´ as cathodes for solid-oxide fuel cells on scandium-stabilized zirconia electrolyte. Journal of Power Sources, 2008, 183, 471-478. | 4.0 | 44 |
| 12 | Demonstration of an external combustion micro-heat engine. Proceedings of the Combustion Institute, 2009, 32, 3099-3105. | 2.4 | 41 |
| 13 | Flame-assisted fuel cells running methane. International Journal of Hydrogen Energy, 2015, 40, 4659-4665. | 3.8 | 38 |
| 14 | Micro-tubular flame-assisted fuel cells running methane. International Journal of Hydrogen Energy, 2016, 41, 20670-20679. | 3.8 | 37 |
| 15 | Initialization of a methane-fueled single-chamber solid-oxide fuel cell with NiO+SDC anode and BSCF+SDC cathode. Journal of Power Sources, 2008, 179, 640-648. | 4.0 | 35 |
| 16 | Performance investigation of a micro-tubular flame-assisted fuel cell stack with 3,000 rapid thermal cycles. Journal of Power Sources, 2018, 394, 86-93. | 4.0 | 35 |
| 17 | Micro-tubular flame-assisted fuel cell stacks. International Journal of Hydrogen Energy, 2016, 41, 21489-21496. | 3.8 | 34 |
| 18 | Investigation of startup, performance and cycling of a residential furnace integrated with micro-tubular flame-assisted fuel cells for micro-combined heat and power. Energy, 2020, 196, 117148. | 4.5 | 29 |

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|---|---|---|---|
| 19 | Rich-burn, flame-assisted fuel cell, quick-mix, lean-burn (RFQL) combustor and power generation. Journal of Power Sources, 2018, 381, 18-25. | 4.0 | 28 |
| 20 | Solid-oxide fuel cell operated on in situ catalytic decomposition products of liquid hydrazine. Journal of Power Sources, 2008, 177, 323-329. | 4.0 | 27 |
| 21 | Micro-tubular flame-assisted fuel cells running methane, propane and butane: On soot, efficiency and power density. Energy, 2019, 169, 776-782. | 4.5 | 26 |
| 22 | Review and analysis of fuel cell-based, micro-cogeneration for residential applications: Current state and future opportunities. Science and Technology for the Built Environment, 2017, 23, 1224-1243. | 0.8 | 25 |
| 23 | Microcombustion for micro-tubular flame-assisted fuel cell power and heat cogeneration. Journal of Power Sources, 2019, 413, 191-197. | 4.0 | 23 |
| 24 | Performance variation with SDC buffer layer thickness. International Journal of Hydrogen Energy, 2016, 41, 9500-9506. | 3.8 | 22 |
| 25 | Investigation of oxygen transport membrane reactors for oxy-fuel combustion and carbon capture purposes. Proceedings of the Combustion Institute, 2017, 36, 3969-3976. | 2.4 | 22 |
| 26 | A Thermally Self-Sustaining Miniature Solid Oxide Fuel Cell. Journal of Fuel Cell Science and Technology, 2009, 6, . | 0.8 | 20 |
| 27 | Performance Investigation of Dual Layer Yttria-Stabilized Zirconiaâ€“Samaria-Doped Ceria Electrolyte for Intermediate Temperature Solid Oxide Fuel Cells. Journal of Electrochemical Energy Conversion and Storage, 2016, 13, . | 1.1 | 18 |
| 28 | Investigation of microcombustion reforming of ethane/air and micro-Tubular Solid Oxide Fuel Cells. Journal of Power Sources, 2020, 450, 227606. | 4.0 | 16 |
| 29 | Thermal Transpiration Based Pumping and Power Generation Devices. Journal of Thermal Science and Technology, 2013, 8, 370-379. | 0.6 | 13 |
| 30 | Impact of low concentration hydrocarbons in natural gas on thermal partial oxidation in a micro-flow reactor for solid oxide fuel cell applications. Journal of Power Sources, 2020, 477, 229007. | 4.0 | 13 |
| 31 | A self-sustaining thermal transpiration gas pump and SOFC power generation system. Proceedings of the Combustion Institute, 2013, 34, 3327-3334. | 2.4 | 12 |
| 32 | Interfacial Impedance Studies of Multilayer Structured Electrolyte Fabricated With Solvent-Casted PEO10â€“LiN(CF3SO2)2 and Ceramic Li1.3Al0.3Ti1.7(PO4)3 and Its Application in All-Solid-State Lithium Ion Batteries. Journal of Electrochemical Energy Conversion and Storage, 2016, 13, . | 1.1 | 12 |
| 33 | Micro-tubular flame-assisted fuel cells. Journal of Fluid Science and Technology, 2017, 12, JFST0021-JFST0021. | 0.2 | 12 |
| 34 | EFFECTS OF SINTERING TEMPERATURE ON THE PERFORMANCE OF SrSc0.1Co0.9O3-Î´OXYGEN SEMIPERMEABLE MEMBRANE. Brazilian Journal of Chemical Engineering, 2015, 32, 757-765. | 0.7 | 9 |
| 35 | Thermal partial oxidation of n-butane in a micro-flow reactor and solid oxide fuel cell stability assessment. Energy Conversion and Management, 2022, 254, 115222. | 4.4 | 9 |
| 36 | Combustion Characterization and Model Fuel Development for Micro-tubular Flame-assisted Fuel Cells. Journal of Visualized Experiments, 2016, , . | 0.2 | 7 |

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|---|---|---|---|
| 37 | Investigation of the effects of electrochemical reactions on complex metal tribocorrosion within the human body. Heliyon, 2021, 7, e07023. | 1.4 | 6 |
| 38 | Micro-Tubular Solid Oxide Fuel Cell Polarization and Impedance Variation With Thin Porous Samarium-Doped Ceria and Gadolinium-Doped Ceria Buffer Layer Thickness. Journal of Electrochemical Energy Conversion and Storage, 2021, 18, . | 1.1 | 6 |
| 39 | TiOX-polyanilne composite films for high-performance supercapacitors. Journal of the Korean Physical Society, 2014, 64, 182-185. | 0.3 | 5 |
| 40 | Novel investigation of perovskite membrane based electrochemical nitric oxide control phenomenon. Scientific Reports, 2020, 10, 18750. | 1.6 | 5 |
| 41 | The anode supported internal cathode tubular solid oxide fuel cell: Novel production of a cell geometry for combined heat and power applications. International Journal of Hydrogen Energy, 2021, 46, 37429-37439. | 3.8 | 5 |
| 42 | Investigation of Rapid, Moderate Temperature Change Thermal Cycles of a Micro-Tubular Flame-Assisted Fuel Cell. Journal of Electrochemical Energy Conversion and Storage, 2021, 18, . | 1.1 | 3 |
| 43 | Effects of Synthesis Gas Concentration, Composition, and Operational Time on Tubular Solid Oxide Fuel Cell Performance. Sustainability, 2022, 14, 7983. | 1.6 | 3 |
| 44 | Effect of Scale on the Performance of Heat-Recirculating Reactors. , 2006, , . | | 2 |
| 45 | Thermal Transpiration Based Micro-Scale Pumping and Power Generation Devices. , 2009, , . | | 2 |
| 46 | Performance Investigation of YSZ-SDC Solid Oxide Fuel Cells. , 2012, , . | | 2 |
| 47 | Driving electrochemical corrosion of implanted CoCrMo metal via oscillatory electric fields without mechanical wear. Scientific Reports, 2021, 11, 22366. | 1.6 | 2 |
| 48 | A High-Performance No-Chamber Fuel Cell Operated on Flame. , 2008, , . | | 1 |
| 49 | Methane-Based Flame Fuel Cell Using Anode Supported Solid Oxide Fuel Cells. , 2011, , . | | 1 |
| 50 | Exploring the performance of dual-phase oxygen transport membranes for carbon capture purposes. Journal of Fluid Science and Technology, 2017, 12, JFST0028-JFST0028. | 0.2 | 1 |
| 51 | Investigation of a Piston Engine and Solid Oxide Fuel Cell Combined Hybrid Modular Powerplant for Unmanned Aerial Vehicles. , 0, , . | | 1 |
| 52 | Effect of Ammonia Treatment on Pt Catalyst Used for Low-Temperature Reaction. , 2007, , 135. | | 0 |
| 53 | Plastic Mesoscale Combustors/Heat Exchangers. , 2007, , 141. | | 0 |
| 54 | A Thermally Self-Sustaining Miniature Solid Oxide Fuel Cell. , 2007, , 117. | | 0 |

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| 55 | Plastic Mesoscale Heat Exchangers. , 2007, , . | | 0 |
| 56 | A Thermally Self-Sustaining Miniature Solid Oxide Fuel Cell. , 2007, , . | | 0 |
| 57 | Development of Combustion-Driven Thermoacoustic Engine. , 2008, , . | | 0 |
| 58 | A High-Performance Flame Fuel Cell Using Ethanol as Fuels. , 2008, , . | | 0 |
| 59 | Catalytic Combustion-Driven Thermal Transpiration Pump and Power Generation Device. , 2011, , . | | 0 |
| 60 | Evaluation of methane-based flame fuel cell using anode supported solid oxide fuel cells. , 2011, , . | | 0 |
| 61 | Non-Propulsive Miniature Power Device Based on SOFC and Combustion-Driven Thermal Transpiration Pump. , 2011, , . | | 0 |
| 62 | Methane-Based Flame Fuel Cell Using Anode Supported Solid Oxide Fuel Cells. , 2011, , . | | 0 |
| 63 | Power Generation From Thermal Transpiration Based Pumping Devices. , 2014, , . | | 0 |
| 64 | A Ceramic-Membrane-Based Methane Combustion Reactor With Tailored Function of Simultaneous Separation of Carbon Dioxide From Nitrogen. , 2014, , . | | 0 |
| 65 | A Ceramic-Membrane-Based Methane Combustion Reactor With Tailored Function of Simultaneous Separation of Carbon Dioxide From Nitrogen. , 2014, , . | | 0 |
| 66 | Thermal Transpiration Based Propulsion. , 2014, , . | | 0 |
| 67 | Experimental study of oxygen transport membranes for oxy-fuel combustion reactors. Journal of Fluid Science and Technology, 2016, 11, JFST0025-JFST0025. | 0.2 | 0 |
| 68 | Micro-Tubular Flame-Assisted Fuel Cell Power Generation Running Propane and Butane. , 2018, , . | | 0 |
| 69 | Investigation of a Hybrid Powertrain Utilizing Solid Oxide Fuel Cells and Internal Combustion Engine for Unmanned Aerial Vehicles. , 2021, , . | | 0 |
| 70 | An Electricity and Value-Added Gases Co-Generation via Solid Oxide Fuel Cells. , 2013, , . | | 0 |
| 71 | Single-Phase Ceramic Membranes Integrated With Combustion Processes. , 2013, , . | | 0 |
| 72 | Comparison of in vitro corrosion products on CoCrMo generated via oscillatory electric fields before and after removal of proteinaceous layer. Materialia, 2022, 22, 101400. | 1.3 | 0 |