

Hyung-Man Kim

List of Publications by Year in descending order

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Version: 2024-02-01

32
papers

569
citations

687220

13
h-index

642610

23
g-index

32
all docs

32
docs citations

32
times ranked

536
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical studies on the geometrical characterization of serpentine flow-field for efficient PEMFC. International Journal of Hydrogen Energy, 2011, 36, 1613-1627.	3.8	105
2	Comprehensive impedance investigation of low-cost anion exchange membrane electrolysis for large-scale hydrogen production. Scientific Reports, 2021, 11, 293.	1.6	65
3	Highly cost-effective platinum-free anion exchange membrane electrolysis for large scale energy storage and hydrogen production. RSC Advances, 2020, 10, 37429-37438.	1.7	36
4	Dynamic simulations of under-rib convection-driven flow-field configurations and comparison with experiment in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2015, 293, 447-457.	4.0	32
5	An experimental study on the enhancement of the water balance, electrochemical reaction and power density of the polymer electrolyte fuel cell by under-rib convection. Electrochemistry Communications, 2011, 13, 1387-1390.	2.3	28
6	Solutions to the water flooding problem for unitized regenerative fuel cells: status and perspectives. RSC Advances, 2020, 10, 16844-16860.	1.7	27
7	Flow control of under-rib convection enhancing the performance of proton exchange membrane fuel cell. Computers and Fluids, 2012, 69, 81-92.	1.3	26
8	Electrospinning Fabrication and Performance Evaluation of Polyacrylonitrile Nanofiber for Air Filter Applications. Applied Sciences (Switzerland), 2016, 6, 235.	1.3	26
9	Current Advances in Polymer Electrolyte Fuel Cells Based on the Promotional Role of Under-Rib Convection. Fuel Cells, 2012, 12, 908-938.	1.5	25
10	Effects of ambient temperature and relative humidity on the performance of Nexa fuel cell. Energy Conversion and Management, 2008, 49, 3505-3511.	4.4	23
11	Ocean-based electricity generating system utilizing the electrochemical conversion of wave energy by ionic polymer-metal composites. Electrochemistry Communications, 2017, 75, 64-68.	2.3	23
12	An experimental study on heat exchange effectiveness in the diesel engine EGR coolers. Journal of Mechanical Science and Technology, 2008, 22, 361-366.	0.7	20
13	Comparison of Numerical and Experimental Studies for Flow-Field Optimization Based on Under-Rib Convection in Polymer Electrolyte Membrane Fuel Cells. Energies, 2016, 9, 844.	1.6	18
14	Electroactive polymers for ocean kinetic energy harvesting: literature review and research needs. Journal of Ocean Engineering and Marine Energy, 2018, 4, 343-365.	0.9	16
15	An Experimental Study of Scale-up, Oxidant, and Response Characteristics in PEM Fuel Cells. IEEE Transactions on Energy Conversion, 2014, 29, 727-734.	3.7	14
16	Effects of PM fouling on the heat exchange effectiveness of wave fin type EGR cooler for diesel engine use. Heat and Mass Transfer, 2012, 48, 1081-1087.	1.2	10
17	Theoretical analyses of autothermal reforming methanol for use in fuel cell. Journal of Mechanical Science and Technology, 2006, 20, 864-873.	0.7	9
18	Discrete regenerative fuel cell reduces hysteresis for sustainable cycling of water. Scientific Reports, 2015, 4, 4592.	1.6	9

#	ARTICLE	IF	CITATIONS
19	An investigation of reaction progression through the catalyst bed in methanol autothermal reformation. <i>Journal of Mechanical Science and Technology</i> , 2008, 22, 367-373.	0.7	7
20	An experimental study of methanol autothermal reformation as a method of producing hydrogen for transportation applications. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 6210-6217.	3.8	7
21	Experimental characterization of cooled EGR in a gasoline direct injection engine for reducing fuel consumption and nitrogen oxide emission. <i>Heat and Mass Transfer</i> , 2015, 51, 1639-1651.	1.2	7
22	A Study of the Movement, Structural Stability, and Electrical Performance for Harvesting Ocean Kinetic Energy Based on IPMC Material. <i>Processes</i> , 2020, 8, 641.	1.3	7
23	Effects of the Internal Shape of EGR Cooler on Heat Exchanger Efficiencies. , 2007, , .		6
24	Experimental study on the spiral and oval spiral EGR cooler efficiencies in a diesel engine. <i>Heat and Mass Transfer</i> , 2014, 50, 1783-1789.	1.2	6
25	The WASP model on the symbiotic strategy of renewable and nuclear power for the future of "Renewable Energy 3020" policy in South Korea. <i>Renewable Energy</i> , 2021, 172, 929-940.	4.3	5
26	The experimental investigations of recirculated exhaust gas on exhaust emissions in a diesel engine. <i>Journal of Mechanical Science and Technology</i> , 2001, 15, 1588-1598.	0.4	4
27	Effects of stack array orientation on fuel cell efficiency for auxiliary power unit applications. <i>International Journal of Automotive Technology</i> , 2010, 11, 429-434.	0.7	3
28	Highly Active Ni-Fe Based Oxide Oxygen Evolution Reaction Electrocatalysts for Alkaline Anion Exchange Membrane Electrolyser. <i>Catalysts</i> , 2022, 12, 476.	1.6	2
29	The Effect of Relative Hydrogen Concentration on Catalytic Reaction over Platinum under Low Gravity Condition. <i>Combustion Science and Technology</i> , 2001, 164, 175-191.	1.2	1
30	Electrochemical Promotional Role of Under-Rib Convection-Based Flow-Field in Polymer Electrolyte Membrane Fuel Cells. , 2017, , 241-310.		1
31	Design of Serpentine Flow-field Stimulating Under-rib Convection for Improving the Water Discharge Performance in Polymer Electrolyte fuel cells. <i>Journal of the Korean Electrochemical Society</i> , 2012, 15, 74-82.	0.1	1
32	Performance Evaluation of Micro PEM Fuel Cell through the Numerical Analysis and Fabrication of Micro-Channel. <i>World Electric Vehicle Journal</i> , 2009, 3, 408-412.	1.6	0