Kyu-Seop Kim

List of Publications by Year
in descending order

62	1,014	331670 21	477307 29
papers	citations	h-index	g-index

64	64	64	622
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scaling and Evaluation of Pt/Al2O3 Catalytic Reactor for Hydrogen Peroxide Monopropellant Thruster. Journal of Propulsion and Power, 2009, 25, 1041-1045.	2.2	59
2	Design, fabrication, and testing of MEMS solid propellant thruster array chip on glass wafer. Sensors and Actuators A: Physical, 2010, 157, 126-134.	4.1	53
3	Ignition of boron-based green hypergolic fuels with hydrogen peroxide. Fuel, 2019, 255, 115729.	6.4	53
4	Green hypergolic combination: Diethylenetriamine-based fuel and hydrogen peroxide. Acta Astronautica, 2017, 137, 25-30.	3.2	47
5	Sodium borohydride hydrogen generator using Coâ€“P/Ni foam catalysts for 200ÂW proton exchange membrane fuel cell system. Energy, 2015, 90, 1163-1170.	8.8	42
6	Performance evaluation of hydrogen generation system with electroless-deposited Coâ€“P/Ni foam catalyst for NaBH4 hydrolysis. International Journal of Hydrogen Energy, 2013, 38, 6425-6435.	7.1	41
7	Chugging Instability of H2O2 Monopropellant Thrusters with Reactor Aspect Ratio and Pressures. Journal of Propulsion and Power, 2011, 27, 422-427.	2.2	40
8	Mixing efficiency of a multilamination micromixer with consecutive recirculation zones. Chemical Engineering Science, 2009, 64, 1223-1231.	3.8	37
9	Catalyst preparation for fabrication of a MEMS fuel reformer. Chemical Engineering Journal, 2006, 123, 93-102.	12.7	31
10	Electrocatalysts supported on multiwalled carbon nanotubes for direct borohydrideâ€“hydrogen peroxide fuel cell. International Journal of Hydrogen Energy, 2014, 39, 6977-6986.	7.1	31
11	Lanthanum doping for longevity of alumina catalyst bed in hydrogen peroxide thruster. Aerospace Science and Technology, 2015, 46, 197-203.	4.8	29
12	Ultrafast igniting, low toxicity hypergolic hybrid solid fuels and hydrogen peroxide oxidizer. Fuel, 2021, 286, 119307.	6.4	28
13	Simple catalyst bed sizing of a NaBH 4 hydrogen generator with fast startup for small unmanned aerial vehicles. International Journal of Hydrogen Energy, 2016, 41, 1018-1026.	7.1	26
14	Chugging Instability of H2O2 Monopropellant Thrusters with Catalyst Reactivity and Support Sizes. Journal of Propulsion and Power, 2011, 27, 920-924.	2.2	24
15	The proton exchange membrane fuel cell systems using methanolysis of sodium borohydride as a hydrogen source with cobalt catalysts. International Journal of Green Energy, 2016, 13, 1224-1231.	3.8	24
16	Ground simulation of a hybrid power strategy using fuel cells and solar cells for high-endurance unmanned aerial vehicles. Energy, 2017, 141, 1547-1554.	8.8	24
17	Fuel cell system with sodium borohydride hydrogen generator for small unmanned aerial vehicles. International Journal of Green Energy, 2018, 15, 385-392.	3.8	24
18	Design of Multiport Grain with Hydrogen Peroxide Hybrid Rocket. Journal of Propulsion and Power, 2018, 34, 1189-1197.	2.2	23

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19	Performance evaluation of direct borohydrideâ€“hydrogen peroxide fuel cells with electrocatalysts supported on multiwalled carbon nanotubes. Energy, 2014, 76, 911-919.	8.8	22
20	Autoignition and combustion characteristics of sodium borohydride-based non-toxic hypergolic fuel droplet at elevated temperatures. Combustion and Flame, 2017, 181, 149-156.	5.2	22
21	All-in-one portable electric power plant using proton exchange membrane fuel cells for mobile applications. International Journal of Hydrogen Energy, 2018, 43, 6331-6339.	7.1	22
22	Autoignitable and Restartable Hybrid Rockets Using Catalytic Decomposition of an Oxidizer. Journal of Propulsion and Power, 2014, 30, 514-518.	2.2	19
23	Fabrication of a liquid monopropellant microthruster with built-in regenerative micro-cooling channels. Sensors and Actuators A: Physical, 2017, 263, 332-340.	4.1	19
24	Estimating the energy density of direct borohydrideâ€“hydrogen peroxide fuel cell systems for air-independent propulsion applications. Energy, 2015, 90, 980-986.	8.8	16
25	Rapid ignition of â€œgreenâ€•bipropellants enlisting hypergolic copper (II) promoter-in-fuel. Fuel, 2021, 297, 120734.	6.4	16
26	Transient behavior of proton exchange membrane fuel cells over a cobaltâ€“phosphorous/nickel foam catalyst with sodium borohydride. International Journal of Hydrogen Energy, 2016, 41, 524-533.	7.1	15
27	Integration validation of key components for small sounding rockets. Aerospace Science and Technology, 2020, 100, 105823.	4.8	15
28	Effect of H2O2 injection patterns on catalyst bed characteristics. Acta Astronautica, 2017, 130, 75-83.	3.2	14
29	Effect of dual-catalytic bed using two different catalyst sizes for hydrogen peroxide thruster. Aerospace Science and Technology, 2018, 78, 26-32.	4.8	14
30	Effect of heat treatment of electrodes on direct borohydride-hydrogen peroxide fuel cell performance. Journal of Power Sources, 2014, 268, 63-68.	7.8	13
31	Experimental analysis of hydrogen peroxide film-cooling method for nontoxic hypergolic thruster. Aerospace Science and Technology, 2017, 71, 751-762.	4.8	13
32	High performance microthruster with ammonium-dinitramide-based monopropellant. Sensors and Actuators A: Physical, 2018, 283, 211-219.	4.1	12
33	A MEMS Piston-Cylinder Device Actuated by Combustion. Journal of Heat Transfer, 2003, 125, 487-493.	2.1	11
34	Microcatalytic Combustion of H₂on Pt/Al₂O₃-Coated Nickel Foam. Combustion Science and Technology, 2009, 181, 211-225.	2.3	11
35	NUMERICAL SIMULATION OF FLAME PROPAGATION NEAR EXTINCTION CONDITION IN A MICRO COMBUSTOR. Microscale Thermophysical Engineering, 2004, 8, 71-89.	1.2	10
36	Synergistic effect of a hybrid additive for hydrogen peroxide-based low toxicity hypergolic propellants. Combustion and Flame, 2021, 231, 111450.	5.2	10

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37	Scaling of catalyst bed for hydrogen peroxide monopropellant thrusters using catalytic decomposition modeling. Acta Astronautica, 2021, 187, 167-180.	3.2	10
38	Optimum Nozzle Angle of a Micro Solid-Propellant Thruster. Nanoscale and Microscale Thermophysical Engineering, 2011, 15, 165-178.	2.6	9
39	Compact design of oxidative steam reforming of methanol assisted by blending hydrogen peroxide. International Journal of Hydrogen Energy, 2015, 40, 12697-12704.	7.1	9
40	Port diameter design of multiport solid fuel in hydrogen peroxide hybrid rockets. Aerospace Science and Technology, 2021, 110, 106485.	4.8	9
41	Stall inception and warning in a single-stage transonic axial compressor with axial skewed slot casing treatment. Journal of Mechanical Science and Technology, 2014, 28, 3569-3581.	1.5	8
42	Micro Shear-Stress Sensor for Separation Detection During Flight of Unmanned Aerial Vehicles Using a Strain Gauge. IEEE Sensors Journal, 2014, 14, 1012-1019.	4.7	7
43	A mixture of hydrogen peroxide and tetraglyme as a green energetic monopropellant. Combustion and Flame, 2019, 210, 43-53.	5.2	7
44	Conceptual design of high-speed underwater jet engine using high concentration of hydrogen peroxide. Ocean Engineering, 2018, 153, 193-200.	4.3	6
45	Design and fabrication of micromachined internal combustion engine as a power source for microsystems. , 0, , .		5
46	Performance of MEMS-Based Monopropellant Microthruster With Insulating Effect. Journal of Microelectromechanical Systems, 2022, 31, 612-624.	2.5	5
47	Evaluation of Silver-coated Magnesium Bipolar Plate for Lightweight PEM Fuel Cell Stack. International Journal of Green Energy, 0, , 141111165052003.	3.8	4
48	Manganese oxide lanthanum-doped alumina catalyst for application in 95Âwt.% hydrogen peroxide thruster. CEAS Space Journal, 2021, 13, 189-196.	2.3	4
49	Effect of Unsteadiness and Nozzle Asymmetry on Thrust of a Microthruster. Nanoscale and Microscale Thermophysical Engineering, 2012, 16, 50-63.	2.6	3
50	Performance Evaluation of Small-scale Liquid Pump using a Radial Turbine with H₂O₂ Gas Generator. Transactions of the Japan Society for Aeronautical and Space Sciences, 2015, 58, 253-260.	0.7	3
51	Parametric Study of Solid Fuel for Hydrogen Peroxide Hybrid Rocket Design. Journal of Propulsion and Power, 2022, 38, 229-240.	2.2	3
52	Statistical analysis of the fractal nature of turbulent premixed flames. Combustion Science and Technology, 2003, 175, 1317-1332.	2.3	2
53	Hydrogen Peroxide-Based Gas Generator Design and Performance Testing as an Aircraft Emergency Power Unit. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	2
54	Geostationary Orbit Transfer with Lunar Gravity Assist from Non-equatorial Launch Site. Journal of the Astronautical Sciences, 2021, 68, 1014-1033.	1.5	2

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55	Optical visualization of hypergolic burning spray structure using blue light spectrum. Acta Astronautica, 2022, 193, 230-236.	3.2	2
56	The Effect of Volume Expansion on the Propagation of Wrinkled Laminar Premixed Flame. Combustion Science and Technology, 1999, 146, 85-103.	2.3	1
57	Design and performance evaluation of a bellows-type mixture ratio stabilizer for a liquid bipropellant rocket engine. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2009, 223, 723-731.	2.1	1
58	Lightweight Magnesium Bipolar Plates of Direct NaBH4/H2O2 Fuel Cell for AIP Application. International Journal of Turbo and Jet Engines, 2015, 32, .	0.7	1
59	Preparation and Performance Evaluation of Platinum Barium Hexaaluminate Catalyst for Green Propellant Hydroxylamine Nitrate Thrusters. Materials, 2021, 14, 2828.	2.9	1
60	Integrated fabrication of a micro methanol reformer and a hydrogen peroxide heat source. , 2007, , .		0
61	Ground Simulation of High Altitude Test of Turbo-Refrigeration Cycle. International Journal of Turbo and Jet Engines, 2018, 35, 281-290.	0.7	0
62	Combustion Characteristics of Multi-Element Swirl Coaxial Jet Injectors under Varying Momentum Ratios. Energies, 2021, 14, 4064.	3.1	0