Hankwon Lim

List of Publications by Year
in descending order

141 papers	3,327 citations	136950 32 h-index	223800 46 g-index
142 all docs	142 docs citations	142 times ranked	2800 citing authors

#	Article	IF	Citations
1	Economic evaluation with sensitivity and profitability analysis for hydrogen production from water electrolysis in Korea. International Journal of Hydrogen Energy, 2017, 42, 6462-6471.	7.1	134
2	Enhanced Oxygen Reduction Reaction Activity Due to Electronic Effects between Ag and Mn₃O₄ in Alkaline Media. ACS Catalysis, 2015, 5, 3995-4002.	11.2	115
3	Unveiling Electrodeâ€“Electrolyte Design-Based NO Reduction for NH₃ Synthesis. ACS Energy Letters, 2020, 5, 3647-3656.	17.4	97
4	Economic feasibility studies of high pressure PEM water electrolysis for distributed H2 refueling stations. Energy Conversion and Management, 2018, 162, 139-144.	9.2	74
5	Preliminary techno-economic analysis of biodiesel production over solid-biochar. Bioresource Technology, 2020, 306, 123086.	9.6	71
6	Effects of transition metal doping in Pt/M-TiO2 (MÂ=ÂV, Cr, and Nb) on oxygen reduction reaction activity. Journal of Power Sources, 2016, 320, 188-195.	7.8	65
7	Methane steam reforming using a membrane reactor equipped with a Pd-based composite membrane for effective hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 5863-5872.	7.1	60
8	Dark fermentative hydrogen production from pretreated lignocellulosic biomass: Effects of inhibitory byproducts and recent trends in mitigation strategies. Renewable and Sustainable Energy Reviews, 2020, 133, 110338.	16.4	60
9	Renewable methanol synthesis from renewable H2 and captured CO2: How can power-to-liquid technology be economically feasible?. Applied Energy, 2020, 279, 115827.	10.1	58
10	Direct propylene epoxidation with oxygen using a photo-electro-heterogeneous catalytic system. Nature Catalysis, 2022, 5, 37-44.	34.4	58
11	Studies of the effect of pressure and hydrogen permeance on the ethanol steam reforming reaction with palladium- and silica-based membranes. Journal of Membrane Science, 2012, 396, 119-127.	8.2	55
12	Uptake and biodegradation of emerging contaminant sulfamethoxazole from aqueous phase using Ipomoea aquatica. Chemosphere, 2019, 225, 696-704.	8.2	53
13	Enhanced anaerobic co-digestion of fat, oil, and grease by calcium addition: Boost of biomethane production and microbial community shift. Bioresource Technology, 2020, 296, 122353.	9.6	53
14	Sustainability-inspired upcycling of waste polyethylene terephthalate plastic into porous carbon for CO₂ capture. Green Chemistry, 2022, 24, 1494-1504.	9.0	51
15	Hydrogen production by steam methane reforming in a membrane reactor equipped with a Pd composite membrane deposited on a porous stainless steel. International Journal of Hydrogen Energy, 2018, 43, 7684-7692.	7.1	49
16	Assessment of the economic potential: CO -free hydrogen production from renewables via ammonia decomposition for small-sized H2 refueling stations. Renewable and Sustainable Energy Reviews, 2019, 113, 109262.	16.4	49
17	Platinum single atoms dispersed on carbon nanotubes as reusable catalyst for Suzuki coupling reaction. Journal of Catalysis, 2017, 352, 388-393.	6.2	46
18	Reaction of primary and secondary products in a membrane reactor: Studies of ethanol steam reforming with a silicaâ€“alumina composite membrane. Journal of Membrane Science, 2010, 351, 149-159.	8.2	45

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19	Capacity estimation of batteries: Influence of training dataset size and diversity on data driven prognostic models. Reliability Engineering and System Safety, 2021, 216, 108048.	8.9	43
20	Integrative techno-economic and environmental assessment for green H2 production by alkaline water electrolysis based on experimental data. Journal of Environmental Chemical Engineering, 2021, 9, 106349.	6.7	40
21	Integrated Bi 2 O 3 nanostructure modified with Au nanoparticles for enhanced photocatalytic activity under visible light irradiation. Progress in Natural Science: Materials International, 2017, 27, 289-296.	4.4	39
22	Hydrogen production by steam methane reforming in membrane reactor equipped with Pd membrane deposited on NiO/YSZ/NiO multilayer-treated porous stainless steel. Journal of Membrane Science, 2018, 563, 75-82.	8.2	39
23	Economic evaluation with uncertainty analysis using a Monte-Carlo simulation method for hydrogen production from high pressure PEM water electrolysis in Korea. International Journal of Hydrogen Energy, 2017, 42, 24612-24619.	7.1	39
24	Steam reforming of methanol for ultra-pure H2 production in a membrane reactor: Techno-economic analysis. International Journal of Hydrogen Energy, 2019, 44, 2330-2339.	7.1	38
25	Techno-economic and environmental assessment of methanol steam reforming for H2 production at various scales. International Journal of Hydrogen Energy, 2020, 45, 24146-24158.	7.1	38
26	Economic and environmental analysis for PEM water electrolysis based on replacement moment and renewable electricity resources. Energy Conversion and Management, 2020, 224, 113477.	9.2	38
27	An efficient process for sustainable and scalable hydrogen production from green ammonia. Renewable and Sustainable Energy Reviews, 2021, 152, 111562.	16.4	38
28	An operability level coefficient (OLC) as a useful tool for correlating the performance of membrane reactors. Chemical Engineering Journal, 2009, 151, 351-358.	12.7	37
29	Experimental and kinetic studies of the ethanol steam reforming reaction equipped with ultrathin Pd and Pdâ€“Cu membranes for improved conversion and hydrogen yield. Journal of Membrane Science, 2012, 409-410, 222-231.	8.2	36
30	Low permeable composite membrane based on sulfonated poly(phenylene oxide) (sPPO) and silica for vanadium redox flow battery. International Journal of Hydrogen Energy, 2017, 42, 19035-19043.	7.1	36
31	Integrated techno-economic analysis under uncertainty of glycerol steam reforming for H2 production at distributed H2 refueling stations. Energy Conversion and Management, 2019, 180, 250-257.	9.2	36
32	Energy-efficient pretreatments for the enhanced conversion of microalgal biomass to biofuels. Bioresource Technology, 2020, 309, 123333.	9.6	36
33	Methane steam reforming in a membrane reactor using high-permeable and low-selective Pd-Ru membrane. Korean Journal of Chemical Engineering, 2017, 34, 1260-1265.	2.7	31
34	Techno-economic analysis (TEA) for CO2 reforming of methane in a membrane reactor for simultaneous CO2 utilization and ultra-pure H2Âproduction. International Journal of Hydrogen Energy, 2018, 43, 5881-5893.	7.1	31
35	Carbon-neutral methanol synthesis as carbon dioxide utilization at different scales: Economic and environmental perspectives. Energy Conversion and Management, 2022, 252, 115119.	9.2	31
36	Catalytic activity and characterizations of Ni/K2Ti O â€“Al2O3 catalyst for steam methane reforming. International Journal of Hydrogen Energy, 2014, 39, 17645-17655.	7.1	30

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37	Design, economic evaluation, and market uncertainty analysis of LOHC-based, CO2 free, hydrogen delivery systems. Applied Energy, 2020, 274, 115314.	10.1	30
38	Technical and economic feasibility under uncertainty for methane dry reforming of coke oven gas as simultaneous H2 production and CO2 utilization. Renewable and Sustainable Energy Reviews, 2020, 133, 110056.	16.4	29
39	State-of-the-art assessment of cryogenic technologies for biogas upgrading: Energy, economic, and environmental perspectives. Renewable and Sustainable Energy Reviews, 2022, 154, 111826.	16.4	29
40	State-of-the-art process simulations and techno-economic assessments of ionic liquid-based biogas upgrading techniques: Challenges and prospects. Fuel, 2022, 314, 123064.	6.4	29
41	Green energy from brown seaweed: Sustainable polygeneration industrial process via fast pyrolysis of S. Japonica combined with the Brayton cycle. Energy Conversion and Management, 2019, 195, 1244-1254.	9.2	28
42	Stochastic techno-economic analysis of power-to-gas technology for synthetic natural gas production based on renewable H2 cost and CO2 tax credit. Journal of Energy Storage, 2019, 24, 100791.	8.1	27
43	CO2 reforming of methane for H2 production in a membrane reactor as CO2 utilization: Computational fluid dynamics studies with a reactor geometry. International Journal of Hydrogen Energy, 2019, 44, 2298-2311.	7.1	27
44	Conceptual feasibility studies for cost-efficient and bi-functional methylcyclohexane dehydrogenation in a membrane reactor for H2 storage and production. Energy Conversion and Management, 2021, 227, 113576.	9.2	27
45	Three-dimensional CFD simulation of proton exchange membrane water electrolyser: Performance assessment under different condition. Applied Energy, 2022, 306, 118016.	10.1	27
46	Fast pyrolysis of acid-washed oil palm empty fruit bunch for bio-oil production in a bubbling fluidized-bed reactor. Energy, 2019, 179, 517-527.	8.8	26
47	Which water electrolysis technology is appropriate?: Critical insights of potential water electrolysis for green ammonia production. Renewable and Sustainable Energy Reviews, 2021, 143, 110963.	16.4	26
48	Stochastic techno-economic analysis of H₂ production from power-to-gas using a high-pressure PEM water electrolyzer for a small-scale H₂ fueling station. Sustainable Energy and Fuels, 2019, 3, 2521-2529.	4.9	25
49	Techno-economic assessment of conventional and direct-transesterification processes for microalgal biomass to biodiesel conversion. Bioresource Technology, 2019, 294, 122173.	9.6	25
50	Energy, economic, and environmental impacts of sustainable biochar systems in rural China. Critical Reviews in Environmental Science and Technology, 2022, 52, 1063-1091.	12.8	25
51	A novel combined multi-battery dataset based approach for enhanced prediction accuracy of data driven prognostic models in capacity estimation of lithium ion batteries. Energy and AI, 2021, 5, 100089.	10.6	25
52	Catalytic pyrolysis of spent coffee waste for upgrading sustainable bio-oil in a bubbling fluidized-bed reactor: Experimental and techno-economic analysis. Chemical Engineering Journal, 2022, 427, 130956.	12.7	25
53	Hydrogen selective thin palladiumâ€“copper composite membranes on alumina supports. Journal of Membrane Science, 2011, 378, 179-185.	8.2	24
54	Systematic assessment of the anode flow field hydrodynamics in a new circular PEM water electrolyser. International Journal of Hydrogen Energy, 2020, 45, 20765-20775.	7.1	24

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55	Comparative numerical analysis for an efficient hydrogen production via a steam methane reforming with a packed-bed reactor, a membrane reactor, and a sorption-enhanced membrane reactor. Energy Conversion and Management, 2020, 213, 112839.	9.2	24
56	Numerical modeling studies for a methane dry reforming in a membrane reactor. Journal of Natural Gas Science and Engineering, 2016, 34, 1251-1261.	4.4	23
57	Comprehensive feasibility assessment of a poly-generation process integrating fast pyrolysis of S. japonica and the Rankine cycle. Applied Energy, 2019, 254, 113704.	10.1	23
58	An integrative process of blast furnace and SOEC for hydrogen utilization: Techno-economic and environmental impact assessment. Energy Conversion and Management, 2021, 250, 114922.	9.2	23
59	Hydrogen selectivity and permeance effect on the water gas shift reaction (WGSR) in a membrane reactor. Korean Journal of Chemical Engineering, 2015, 32, 1522-1527.	2.7	22
60	Diffusion barrier coating using a newly developed blowing coating method for a thermally stable Pd membrane deposited on porous stainless-steel support. International Journal of Hydrogen Energy, 2017, 42, 12310-12319.	7.1	22
61	Al2O3-Coated Ni/CeO2 nanoparticles as coke-resistant catalyst for dry reforming of methane. Catalysis Science and Technology, 2020, 10, 8283-8294.	4.1	22
62	CFD simulation of methane steam reforming in a membrane reactor: Performance characteristics over range of operating window. International Journal of Hydrogen Energy, 2021, 46, 30402-30411.	7.1	22
63	Improving revenue from lignocellulosic biofuels: An integrated strategy for coproducing liquid transportation fuels and high value-added chemicals. Fuel, 2021, 287, 119369.	6.4	21
64	Thorough economic and carbon footprint analysis of overall hydrogen supply for different hydrogen carriers from overseas production to inland distribution. Journal of Cleaner Production, 2021, 316, 128326.	9.3	21
65	Techno-economic analysis for CO2 reforming of a medium-grade landfill gas in a membrane reactor for H2 production. Journal of Cleaner Production, 2018, 172, 2585-2593.	9.3	20
66	Projected economic outlook and scenario analysis for H₂ production by alkaline water electrolysis on the basis of the unit electricity price, the learning rate, and the automation level. Sustainable Energy and Fuels, 2019, 3, 1799-1807.	4.9	20
67	Sorption enhanced catalytic CF4 hydrolysis with a three-stage catalyst-adsorbent reactor. Frontiers of Chemical Science and Engineering, 2017, 11, 537-544.	4.4	19
68	Maximizing the sustainability of a macroalgae biorefinery: a superstructure optimization of a volatile fatty acid platform. Green Chemistry, 2020, 22, 4174-4186.	9.0	19
69	Critical aspect of renewable syngas production for power-to-fuel via solid oxide electrolysis: Integrative assessment for potential renewable energy source. Renewable and Sustainable Energy Reviews, 2022, 161, 112398.	16.4	19
70	An innovative high energy efficiencyâ€“based process enhancement of hydrogen liquefaction: Energy, exergy, and economic perspectives. Fuel, 2022, 320, 123964.	6.4	19
71	Conceptual feasibility studies of a COX-free hydrogen production from ammonia decomposition in a membrane reactor for PEM fuel cells. Korean Journal of Chemical Engineering, 2018, 35, 1509-1516.	2.7	18
72	High Oxidizing Stability and Ion Selectivity of Hybrid Polymer Electrolyte Membrane for Improving Electrochemical Performance in Vanadium Redox Flow Battery. Journal of the Electrochemical Society, 2018, 165, A2321-A2329.	2.9	18

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73	Renewable LNG production: Biogas upgrading through CO2 solidification integrated with single-loop mixed refrigerant biomethane liquefaction process. Energy Conversion and Management, 2021, 243, 114363.	9.2	18
74	Hybrid CFD-neural networks technique to predict circulating fluidized bed reactor riser hydrodynamics. Journal of Cleaner Production, 2022, 337, 130490.	9.3	18
75	Costâ€competitive methane steam reforming in a membrane reactor for <scp>H</scp> ₂ production: Technical and economic evaluation with a window of a <scp>H</scp> ₂ selectivity. International Journal of Energy Research, 2019, 43, 1468-1478.	4.5	17
76	An Assessment of Drag Models in Eulerianâ€“Eulerian CFD Simulation of Gasâ€“Solid Flow Hydrodynamics in Circulating Fluidized Bed Riser. ChemEngineering, 2020, 4, 37.	2.4	17
77	Scenario-Based Techno-Economic Analysis of Steam Methane Reforming Process for Hydrogen Production. Applied Sciences (Switzerland), 2021, 11, 6021.	2.5	17
78	Machine learning based predictive model for methanol steam reforming with technical, environmental, and economic perspectives. Chemical Engineering Journal, 2021, 426, 131639.	12.7	17
79	Techno-economic analysis: Ethane steam reforming in a membrane reactor with H2 selectivity effect and profitability analysis. International Journal of Hydrogen Energy, 2018, 43, 7693-7702.	7.1	16
80	The effect of changing the number of membranes in methane carbon dioxide reforming: A CFD study. Journal of Industrial and Engineering Chemistry, 2020, 87, 110-119.	5.8	16
81	Integrated strategy for coproducing bioethanol and adipic acid from lignocellulosic biomass. Journal of Cleaner Production, 2021, 311, 127849.	9.3	16
82	Removal of volatile organic compounds from air using activated carbon impregnated cellulose acetate electrospun mats. Environmental Engineering Research, 2019, 24, 600-607.	2.5	16
83	Comparative Economic Optimization for an Overseas Hydrogen Supply Chain Using Mixed-Integer Linear Programming. ACS Sustainable Chemistry and Engineering, 2021, 9, 14249-14262.	6.7	16
84	Comprehensive assessment of CO₂ methanation: which H₂ production pathway is practicable for green methane production in terms of technical, economic, and environmental aspects?. Green Chemistry, 2021, 23, 9502-9514.	9.0	16
85	Techno-economic and environmental assessments for sustainable bio-methanol production as landfill gas valorization. Waste Management, 2022, 150, 90-97.	7.4	16
86	Mixed refrigerantâ€“based simplified hydrogen liquefaction process: Energy, exergy, economic, and environmental analysis. Journal of Cleaner Production, 2022, 367, 132947.	9.3	16
87	Parametric studies for CO2 reforming of methane in a membrane reactor as a new CO2 utilization process. Korean Journal of Chemical Engineering, 2017, 34, 199-205.	2.7	15
88	Comparative techno-economic analysis for steam methane reforming in a sorption-enhanced membrane reactor: Simultaneous H2 production and CO2 capture. Chemical Engineering Research and Design, 2021, 171, 383-394.	5.6	15
89	Life cycle techno-economic and carbon footprint analysis of H2 production via NH3 decomposition: A Case study for the Republic of Korea. Energy Conversion and Management, 2021, 250, 114881.	9.2	15
90	Economic Parity Analysis of Green Methanol Synthesis Using Water Electrolysis Based on Renewable Energy. ACS Sustainable Chemistry and Engineering, 2021, 9, 15807-15818.	6.7	15

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91	Biogas upgrading through blends of deep eutectic solvents and monoethanol amine: 4 E analysis (energy, exergy, environmental, and economic). Green Chemistry, 2021, 23, 6076-6089.	9.0	14
92	Economic and environmental sustainability for anaerobic biological treatment of wastewater from paper and cardboard manufacturing industry. Chemosphere, 2022, 289, 133166.	8.2	14
93	Optimized H2 fueling station arrangement model based on total cost of ownership (TCO) of fuel cell electric vehicle (FCEV). International Journal of Hydrogen Energy, 2021, 46, 34116-34127.	7.1	13
94	Hydrogen enrichment by CO2 anti-sublimation integrated with triple mixed refrigerant-based liquid hydrogen production process. Journal of Cleaner Production, 2022, 341, 130745.	9.3	13
95	Quantification of economic uncertainty for synthetic natural gas production in a H2O permeable membrane reactor as simultaneous power-to-gas and CO2 utilization technologies. Energy, 2019, 182, 1058-1068.	8.8	12
96	Experiment and multiphase CFD simulation of gas-solid flow in a CFB reactor at various operating conditions: Assessing the performance of 2D and 3D simulations. Korean Journal of Chemical Engineering, 2020, 37, 2094-2103.	2.7	12
97	Comparative feasibility studies of H2 supply scenarios for methanol as a carbon-neutral H2 carrier at various scales and distances. Renewable Energy, 2021, 180, 552-559.	8.9	12
98	Techno-economic analysis of H2 energy storage system based on renewable energy certificate. Renewable Energy, 2021, 167, 91-98.	8.9	11
99	What is the best green propylene production pathway?: technical, economic, and environmental assessment. Green Chemistry, 2021, 23, 7635-7645.	9.0	11
100	Comparative Techno-economic analysis of methanol production via carbon dioxide reforming of landfill gas using a highly active and stable Nickel-based catalyst. Energy Conversion and Management, 2022, 259, 115585.	9.2	11
101	Utilization of CO2 arising from methane steam reforming reaction: Use of CO2 membrane and heterotic reactors. Journal of Industrial and Engineering Chemistry, 2020, 91, 201-212.	5.8	10
102	Integrative Technical, Economic, and Environmental Feasibility Analysis for Ethane Steam Reforming in a Membrane Reactor for H₂ Production. ACS Sustainable Chemistry and Engineering, 2020, 8, 7011-7019.	6.7	10
103	Iron-impregnated spent coffee ground biochar for enhanced degradation of methylene blue during cold plasma application. Journal of Industrial and Engineering Chemistry, 2021, 98, 383-388.	5.8	10
104	Parametric Study for Thermal and Catalytic Methane Pyrolysis for Hydrogen Production: Techno-Economic and Scenario Analysis. Energies, 2021, 14, 6102.	3.1	10
105	Projected cost analysis of hybrid methanol production from tri-reforming of methane integrated with various water electrolysis systems: Technical and economic assessment. Renewable and Sustainable Energy Reviews, 2022, 155, 111876.	16.4	10
106	Thermodynamic, economic, and emissions assessment of integrated power to methanol concept with membrane-based biogas up-gradation and plasma electrolysis. Journal of Cleaner Production, 2022, 363, 132367.	9.3	10
107	Process simulation and economic analysis of reactor systems for perfluorinated compounds abatement without HF effluent. Frontiers of Chemical Science and Engineering, 2016, 10, 526-533.	4.4	9
108	Preliminary technoâ€economic analysis of a multiâ€bed series reactor as a simultaneous CF₄ abatement and utilization process. , 2017, 7, 542-549.		9

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109	Conceptual design of a new SF₆ abatement technology using a multiâ€bed series reactor for the production of valuable chemicals free of toxic wastes. Energy Science and Engineering, 2018, 6, 73-82.	4.0	8
110	CFD simulation of hydrodynamics and heat transfer characteristics in gasâ€“solid circulating fluidized bed riser under fast pyrolysis flow condition. Applied Thermal Engineering, 2022, 212, 118555.	6.0	8
111	Concept for Temperature-Cascade Hydrogen Release from Organic Liquid Carriers Coupled with SOFC Power Generation. Cell Reports Physical Science, 2020, 1, 100032.	5.6	7
112	Comprehensive analysis of overall H2 supply for different H2 carriers from overseas production to inland distribution with respect to economic, environmental, and technological aspects. Renewable Energy, 2021, 177, 422-432.	8.9	7
113	Sustainable and carbon-neutral green diesel synthesis with thermochemical and electrochemical approach: Techno-economic and environmental assessments. Energy Conversion and Management, 2022, 254, 115242.	9.2	7
114	Hybrid machine learning-based model for solubilities prediction of various gases in deep eutectic solvent for rigorous process design of hydrogen purification. Separation and Purification Technology, 2022, 298, 121651.	7.9	7
115	Solutions of Navier-Stokes Equation with Coriolis Force. Advances in Mathematical Physics, 2017, 2017, 1-9.	0.8	6
116	The power of molten salt in methane dry reforming: Conceptual design with a CFD study. Chemical Engineering and Processing: Process Intensification, 2021, 159, 108230.	3.6	6
117	Impact of voltage degradation in water electrolyzers on sustainability of synthetic natural gas production: Energy, economic, and environmental analysis. Energy Conversion and Management, 2021, 245, 114516.	9.2	6
118	Au Nanoparticles Supported Nanoporous ZnO Sphere for Enhanced Photocatalytic Activity Under UV-Light Irradiation. Journal of Cluster Science, 2016, 27, 1159-1170.	3.3	5
119	Experimental and simulation studies for reaction enhancement of catalytic CF₄ hydrolysis by consecutive HF removal using a multiâ€stage catalystâ€adsorbent reactor. , 2017, 7, 1141-1149.		5
120	Techno-economic analysis of a biological desulfurization process for a landfill gas in Korea. Separation Science and Technology, 2018, 53, 2769-2781.	2.5	5
121	Deterministic and stochastic economic analysis based on historical natural gas and CO2 allowance prices for steam reforming of methanol. Energy Conversion and Management, 2019, 193, 140-148.	9.2	5
122	Techno-economic analysis of livestock urine and manure as a microalgal growth medium. Waste Management, 2021, 135, 276-286.	7.4	5
123	Steam Reforming of Hydrothermal Liquefaction Liquid from Macro Algae over Ni-K₂Ti_xO_y Catalysts. Clean Technology, 2017, 23, 104-112.	0.1	5
124	Demonstration of feasible waste plastic pyrolysis through decentralized biomass heating business model. Journal of Cleaner Production, 2022, 361, 132092.	9.3	5
125	Machine learning based prediction of subcooled bubble condensation behavior, validation with experimental and numerical results. Nuclear Engineering and Design, 2022, 393, 111794.	1.7	5
126	Statistical and stochastic feasibility studies of potential liquid organic hydrogen carriers in a membrane reactor for simultaneous hydrogen storage and production: Technical, economic, and environmental aspects. Renewable Energy, 2022, 195, 1393-1411.	8.9	4

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127	Removal of Hazardous Hydrogen Fluoride (HF) from Water Through Homogeneous Nanostructured CaO-SiO2 Sorbents: Optimization of Binder. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	3
128	A novel structured nanosized CaO on nanosilica surface as an alternative solid reducing agent for hydrogen fluoride removal from industrial waste water. Journal of Environmental Management, 2019, 231, 1076-1081.	7.8	3
129	H2 production from catalytic dry reforming of landfill gas utilizing membrane reactor with combined heat and power system: 3E (energy, economic and environmental) feasibility analysis. Energy Conversion and Management, 2021, 247, 114704.	9.2	3
130	Hydrogen Production by Steam Reforming of Aqueous Bio-Oil from Marine Algae. Korean Chemical Engineering Research, 2016, 54, 94-100.	0.2	3
131	Variation of the Number of Heat Sources in Methane Dry Reforming: A Computational Fluid Dynamics Study. International Journal of Chemical Engineering, 2021, 2021, 1-15.	2.4	3
132	A 4E feasibility analysis of an on-site, ammonia sourced, hydrogen refueling station. Journal of Cleaner Production, 2022, , 132356.	9.3	3
133	Comparative studies for the performance of a natural gas steam reforming in a membrane reactor. Journal of the Korean Institute of Gas, 2016, 20, 95-101.	0.1	2
134	What is the best scenario to utilize landfill gas? Quantitative and qualitative approaches for technical, economic, and environmental feasibility. Green Chemistry, 0, , .	9.0	2
135	About vortex equations of two dimensional flows. Indian Journal of Physics, 2017, 91, 1089-1094.	1.8	1
136	Efficient solid reducing agent CaO/SiO₂ hybrid composite for hydrogen fluoride elimination. Advanced Composite Materials, 0, , 1-13.	1.9	1
137	Feasibility Study of Employing a Catalytic Membrane Reactor for a Pressurized CO₂and Purified H₂Production in a Water Gas Shift Reaction. Clean Technology, 2014, 20, 425-432.	0.1	1
138	Ethanol Steam Reforming Reaction for a Clean Hydrogen Production and its Application in a Membrane Reactor. Clean Technology, 2013, 19, 379-387.	0.1	1
139	Performance Analysis of Water Gas Shift Reaction in a Membrane Reactor. Applied Chemistry for Engineering, 2014, 25, 204-208.	0.2	0
140	Pressure Swing-Based Reactive Distillation and Dividing Wall Column for Improving Manufacture of Propylene Glycol Monomethyl Ether Acetate. Energies, 2021, 14, 7416.	3.1	0
141	Debye shielding of an electron in various plasma distributions. Journal of the Korean Physical Society, 0, , 1.	0.7	0