Remzi Can Samsun

List of Publications by Year
in descending order

64 papers	1,740 citations	257101 24 h-index	288905 40 g-index
67 all docs	67 docs citations	67 times ranked	1236 citing authors

#	Article	IF	Citations
1	Power-to-fuel as a key to sustainable transport systems â€“ An analysis of diesel fuels produced from CO 2 and renewable electricity. Fuel, 2017, 205, 198-221.	3.4	138
2	A review of high-temperature polymer electrolyte membrane fuel-cell (HT-PEMFC)-based auxiliary power units for diesel-powered road vehicles. Journal of Power Sources, 2016, 311, 91-102.	4.0	127
3	H2-based synthetic fuels: A techno-economic comparison of alcohol, ether and hydrocarbon production. International Journal of Hydrogen Energy, 2020, 45, 5395-5414.	3.8	109
4	Design and test of a 5 kW high-temperature polymer electrolyte fuel cell system operated with diesel and kerosene. Applied Energy, 2014, 114, 238-249.	5.1	87
5	Methanol as a renewable energy carrier: An assessment of production and transportation costs for selected global locations. Advances in Applied Energy, 2021, 3, 100050.	6.6	81
6	Autothermal reforming of commercial Jet A-1 on a 5kWe scale. International Journal of Hydrogen Energy, 2007, 32, 4847-4858.	3.8	72
7	How to reduce the greenhouse gas emissions and air pollution caused by light and heavy duty vehicles with battery-electric, fuel cell-electric and catenary trucks. Environment International, 2021, 152, 106474.	4.8	65
8	A techno economic analysis of the power to gas route. Journal of CO2 Utilization, 2019, 34, 616-634.	3.3	61
9	The separation of CO2 from ambient air â€“ A techno-economic assessment. Applied Energy, 2018, 218, 361-381.	5.1	56
10	Fuel cell systems with reforming of petroleum-based and synthetic-based diesel and kerosene fuels for APU applications. International Journal of Hydrogen Energy, 2015, 40, 6405-6421.	3.8	55
11	A novel reactor type for autothermal reforming of diesel fuel and kerosene. Applied Energy, 2015, 150, 176-184.	5.1	51
12	Fuel Processing of Diesel and Kerosene for Auxiliary Power Unit Applications. Energy & Fuels, 2013, 27, 4386-4394.	2.5	50
13	Deployment of Fuel Cell Vehicles and Hydrogen Refueling Station Infrastructure: A Global Overview and Perspectives. Energies, 2022, 15, 4975.	1.6	48
14	Long-term stability at fuel processing of diesel and kerosene. International Journal of Hydrogen Energy, 2014, 39, 18027-18036.	3.8	38
15	Off-grid power-to-fuel systems for a market launch scenario â€“ A techno-economic assessment. Applied Energy, 2019, 250, 1099-1109.	5.1	37
16	Test of a waterâ€“gas-shift reactor on a 3kWe-scaleâ€"design points for high- and low-temperature shift reaction. Journal of Power Sources, 2005, 152, 189-195.	4.0	35
17	A battery-fuel cell hybrid auxiliary power unit for trucks: Analysis of direct and indirect hybrid configurations. Energy Conversion and Management, 2016, 127, 312-323.	4.4	34
18	Promising catalytic synthesis pathways towards higher alcohols as suitable transport fuels based on H2 and CO2. Journal of CO2 Utilization, 2018, 27, 223-237.	3.3	33

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19	Greener production of dimethyl carbonate by the Power-to-Fuel concept: a comparative techno-economic analysis. Green Chemistry, 2021, 23, 1734-1747.	4.6	31
20	Advances in autothermal reformer design. Applied Energy, 2017, 198, 88-98.	5.1	29
21	The impact of diesel vehicles on NOx and PM10 emissions from road transport in urban morphological zones: A case study in North Rhine-Westphalia, Germany. Science of the Total Environment, 2020, 727, 138583.	3.9	29
22	Evaluation of multifunctional fuel cell systems in aviation using a multistep process analysis methodology. Applied Energy, 2013, 111, 46-63.	5.1	28
23	Analysis and optimization of solid oxide fuel cell-based auxiliary power units using a generic zero-dimensional fuel cell model. Journal of Power Sources, 2011, 196, 9500-9509.	4.0	25
24	HT-PEFC Systems Operating with Diesel and Kerosene for APU Application. Energy Procedia, 2012, 29, 541-551.	1.8	25
25	A diesel fuel processor for fuel-cell-based auxiliary power unit applications. Journal of Power Sources, 2017, 355, 44-52.	4.0	25
26	An Overview of Promising Alternative Fuels for Road, Rail, Air, and Inland Waterway Transport in Germany. Energies, 2022, 15, 1443.	1.6	25
27	Heat exchanger design for autothermal reforming of diesel. International Journal of Hydrogen Energy, 2018, 43, 11830-11846.	3.8	24
28	Electrical start-up for diesel fuel processing in a fuel-cell-based auxiliary power unit. Journal of Power Sources, 2016, 302, 315-323.	4.0	23
29	Recent advances in diesel autothermal reformer design. International Journal of Hydrogen Energy, 2020, 45, 2279-2288.	3.8	22
30	Elimination of by-products of autothermal diesel reforming. Chemical Engineering Journal, 2016, 306, 107-116.	6.6	20
31	An integrated diesel fuel processing system with thermal start-up for fuel cells. Applied Energy, 2018, 226, 145-159.	5.1	20
32	Catalytic burner with internal steam generation for a fuel-cell-based auxiliary power unit for middle distillates. International Journal of Hydrogen Energy, 2014, 39, 4131-4142.	3.8	18
33	Operating strategies for fuel processing systems with a focus on waterâ€“gas shift reactor stability. Applied Energy, 2016, 164, 540-552.	5.1	18
34	An autothermal reforming system for diesel and jet fuel with quick start-up capability. International Journal of Hydrogen Energy, 2019, 44, 27749-27764.	3.8	17
35	Reforming of diesel and jet fuel for fuel cells on a systems level: Steady-state and transient operation. Applied Energy, 2020, 279, 115882.	5.1	15
36	Future Power Train Solutions for Long-Haul Trucks. Sustainability, 2021, 13, 2225.	1.6	14

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37	Startâ€Up of HTâ€PEFC Systems Operating with Diesel and Kerosene for APU Applications. Fuel Cells, 2014, 14, 266-276.	1.5	13
38	A Techno-Economic Assessment of Fischerâ€“Tropsch Fuels Based on Syngas from Co-Electrolysis. Processes, 2022, 10, 699.	1.3	13
39	Operational Experience from a 5 kWe HT-PEFC System with Reforming of Diesel and Kerosene. ECS Transactions, 2013, 58, 165-174.	0.3	12
40	Spray formation of middle distillates for autothermal reforming. International Journal of Hydrogen Energy, 2017, 42, 16946-16960.	3.8	11
41	Water-gas shift reactor for fuel cell systems: Stable operation for 5000Âhours. International Journal of Hydrogen Energy, 2018, 43, 19222-19230.	3.8	11
42	Autothermal Reforming of Jet A-1 and Diesel: General Aspects and Experimental Results. ECS Transactions, 2008, 12, 589-600.	0.3	10
43	Quantitative analysis of sub-ppm traces of hydrocarbons in the product gas from diesel reforming. International Journal of Hydrogen Energy, 2019, 44, 4020-4030.	3.8	10
44	Thermodynamic and ecological preselection of synthetic fuel intermediates from biogas at farm sites. Energy, Sustainability and Society, 2020, 10, .	1.7	10
45	Enhancing the Efficiency of SOFCâ€Based Auxiliary Power Units by Intermediate Methanation. Fuel Cells, 2012, 12, 474-486.	1.5	7
46	Investigation of Operating Parameters in Conjunction with Catalyst Deactivation of the Water-Gas Shift Reactor in a Fuel Cell System. ECS Transactions, 2015, 65, 99-114.	0.3	7
47	The biogas-oxyfuel process as a carbon source for power-to-fuel synthesis: Enhancing availability while reducing separation effort. Journal of CO2 Utilization, 2021, 45, 101410.	3.3	7
48	Startâ€Up and Loadâ€Change Behavior of a Catalytic Burner for a Fuelâ€Cellâ€Based APU for Diesel Fuel. Fuel Cells, 2015, 15, 15-26.	1.5	6
49	Property Data Estimation for Hemiformals, Methylene Glycols and Polyoxymethylene Dimethyl Ethers and Process Optimization in Formaldehyde Synthesis. Energies, 2020, 13, 3401.	1.6	6
50	Highly integrated catalytic burner with laser-additive manufactured manifolds. Reaction Chemistry and Engineering, 2017, 2, 437-445.	1.9	5
51	The autothermal reforming of oxymethylenether from the power-to-fuel process. International Journal of Hydrogen Energy, 2021, 46, 31984-31994.	3.8	5
52	Start-up Behavior of Fuel Processing Systems. ECS Transactions, 2009, 17, 599-610.	0.3	4
53	Methodologies for Fuel Cell Process Engineering. , 2012, , 597-644.		4
54	A Compact, Self-Sustaining Fuel Cell Auxiliary Power Unit Operated on Diesel Fuel. Energies, 2021, 14, 5909.	1.6	4

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55	Control of an afterburner in a diesel fuel cell power unit under variable load. Journal of Power Sources, 2017, 338, 117-128.	4.0	3
56	Principles of Systems Engineering. , 2012, , 917-961.		2
57	CFD-unterstÃ¼tzte Optimierung des Startvorgangs eines Brenngaserzeugungspackages fÃ¼r die Bordstromversorgung. Chemie-Ingenieur-Technik, 2014, 86, 1440-1441.	0.4	1
58	Global Development Status of Fuel Cell Vehicles. , 2016, , 37-60.		1
59	Entwicklung und Charakterisierung eines Gesamtsystems. , 2015, , 281-332.		1
60	Operational Experience from a 5 kWe HT-PEFC System With Reforming of Diesel and Kerosene. ECS Meeting Abstracts, 2013, , .	0.0	0
61	Fuel cell — Battery hybrid systems for auxiliary power units. , 2014, , .		0
62	Strategien fÃ¼r den optimierten Betrieb von Brennstoffzellensystemen als Hilfsstromaggregate. Chemie-Ingenieur-Technik, 2014, 86, 1436-1436.	0.4	0
63	Fuels for APU Applications. , 2016, , 183-196.		0
64	Prozessketten zur Bereitstellung von Kraftstoffen aus Kohlendioxid und Wasserstoff. Chemie-Ingenieur-Technik, 2016, 88, 1262-1262.	0.4	0