

Detlef Stolten

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

346
papers

12,069
citations

53
h-index

98
g-index

358
ext. papers

14,866
ext. citations

5.9
avg, IF

6.99
L-index

#	Paper	IF	Citations
346	Challenges and important considerations when benchmarking single-cell alkaline electrolyzers. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 4294-4303	6.7	2
345	Development of an open framework for a qualitative and quantitative comparison of power system and electricity grid models for Europe. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 159, 112055	16.2	1
344	An Overview of Promising Alternative Fuels for Road, Rail, Air, and Inland Waterway Transport in Germany. <i>Energies</i> , 2022 , 15, 1443	3.1	1
343	Mobility Trends in Transport Sector Modeling. <i>Future Transportation</i> , 2022 , 2, 184-215		
342	LoadProfileGenerator: An Agent-Based Behavior Simulation for Generating Residential Load Profiles. <i>Journal of Open Source Software</i> , 2022 , 7, 3574	5.2	0
341	Cation-Exchange Method Enables Uniform Iridium Oxide Nanospheres for Oxygen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2022 , 5, 4062-4071	5.6	0
340	A Versatile Model for Estimating the Fuel Consumption of a Wide Range of Transport Modes. <i>Energies</i> , 2022 , 15, 2232	3.1	2
339	Classification of Building Types in Germany: A Data-Driven Modeling Approach. <i>Data</i> , 2022 , 7, 45	2.3	1
338	A Techno-Economic Assessment of Fischer-Tropsch Fuels Based on Syngas from Co-Electrolysis. <i>Processes</i> , 2022 , 10, 699	2.9	1
337	The Pareto-optimal temporal aggregation of energy system models. <i>Applied Energy</i> , 2022 , 315, 119029	10.7	1
336	Fabrication of High Performing and Durable Nickel-Based Catalyst Coated Diaphragms for Alkaline Water Electrolyzers. <i>Journal of the Electrochemical Society</i> , 2022 , 169, 054502	3.9	1
335	Economics of Hydrogen 2022 , 75-102		
334	Nickel Structures as a Template Strategy to Create Shaped Iridium Electrocatalysts for Electrochemical Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 13576-13585	9.5	1
333	The biogas-oxyfuel process as a carbon source for power-to-fuel synthesis: Enhancing availability while reducing separation effort. <i>Journal of CO2 Utilization</i> , 2021 , 45, 101410	7.6	4
332	Hydrogen Road Transport Analysis in the Energy System: A Case Study for Germany through 2050. <i>Energies</i> , 2021 , 14, 3166	3.1	5
331	Hybrid Hydrogen Home Storage for Decentralized Energy Autonomy. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 21748-21763	6.7	10
330	A review of decarbonization options for the glass industry. <i>Energy Conversion and Management: X</i> , 2021 , 10, 100083	2.5	5

329	Comparison of single-cell testing, short-stack testing and mathematical modeling methods for a direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 4844-4856	6.7	10
328	Ecological assessment of fuel cell electric vehicles with special focus on type IV carbon fiber hydrogen tank. <i>Journal of Cleaner Production</i> , 2021 , 278, 123277	10.3	21
327	The development of stationary battery storage systems in Germany [status 2020]. <i>Journal of Energy Storage</i> , 2021 , 33, 101982	7.8	14
326	Future Power Train Solutions for Long-Haul Trucks. <i>Sustainability</i> , 2021 , 13, 2225	3.6	5
325	Urban transportation at an inflection point: An analysis of potential influencing factors. <i>Transportation Research, Part D: Transport and Environment</i> , 2021 , 92, 102733	6.4	6
324	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. <i>Environment International</i> , 2021 , 152, 106474	12.9	21
323	Methanol as a renewable energy carrier: An assessment of production and transportation costs for selected global locations. <i>Advances in Applied Energy</i> , 2021 , 3, 100050		19
322	Power-to-Ships: Future electricity and hydrogen demands for shipping on the Atlantic coast of Europe in 2050. <i>Energy</i> , 2021 , 228, 120660	7.9	11
321	Potential of green ammonia production in India. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 27247-27267	4.7	17
320	The Potential of Variable Renewable Energy Sources in Mexico: A Temporally Evaluated and Geospatially Constrained Techno-Economical Assessment. <i>Energies</i> , 2021 , 14, 5779	3.1	0
319	A methodological contribution to failure prediction of glass ceramics sealings in high-temperature solid oxide fuel cell stacks. <i>Journal of Power Sources</i> , 2021 , 507, 230301	8.9	2
318	Analysing the water and land system impacts of Germany's future energy system. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 150, 111469	16.2	0
317	A modeler's guide to handle complexity in energy systems optimization. <i>Advances in Applied Energy</i> , 2021 , 4, 100063		16
316	Typical periods or typical time steps? A multi-model analysis to determine the optimal temporal aggregation for energy system models. <i>Applied Energy</i> , 2021 , 304, 117825	10.7	3
315	Greener production of dimethyl carbonate by the Power-to-Fuel concept: a comparative techno-economic analysis. <i>Green Chemistry</i> , 2021 , 23, 1734-1747	10	9
314	Robust design of a future 100% renewable european energy supply system with hydrogen infrastructure. <i>International Journal of Hydrogen Energy</i> , 2021 ,	6.7	19
313	Passenger car cost development through 2050. <i>Transportation Research, Part D: Transport and Environment</i> , 2021 , 101, 103110	6.4	0
312	Effect of power quality on the design of proton exchange membrane water electrolysis systems. <i>Applied Energy</i> , 2020 , 279, 115791	10.7	6

311	Integration of Large-Scale Variable Renewable Energy Sources into the Future European Power System: On the Curtailment Challenge. <i>Energies</i> , 2020 , 13, 5490	3.1	9
310	Clean mobility infrastructure and sector integration in long-term energy scenarios: The case of Italy. <i>Renewable and Sustainable Energy Reviews</i> , 2020 , 133, 110086	16.2	9
309	The development of stationary battery storage systems in Germany [A market review. <i>Journal of Energy Storage</i> , 2020 , 29, 101153	7.8	75
308	Life cycle assessment of a small-scale methanol production system: A Power-to-Fuel strategy for biogas plants. <i>Journal of Cleaner Production</i> , 2020 , 271, 122476	10.3	28
307	Extreme events in time series aggregation: A case study for optimal residential energy supply systems. <i>Applied Energy</i> , 2020 , 275, 115223	10.7	14
306	Property Data Estimation for Hemiformals, Methylene Glycols and Polyoxymethylene Dimethyl Ethers and Process Optimization in Formaldehyde Synthesis. <i>Energies</i> , 2020 , 13, 3401	3.1	4
305	Thermodynamic and ecological preselection of synthetic fuel intermediates from biogas at farm sites. <i>Energy, Sustainability and Society</i> , 2020 , 10,	3.9	7
304	A Review on Time Series Aggregation Methods for Energy System Models. <i>Energies</i> , 2020 , 13, 641	3.1	37
303	Synchrotron Radiography for a Proton Exchange Membrane (PEM) Electrolyzer. <i>Fuel Cells</i> , 2020 , 20, 300-306	3.0	4
302	Technical potential of salt caverns for hydrogen storage in Europe. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 6793-6805	6.7	91
301	Options of natural gas pipeline reassignment for hydrogen: Cost assessment for a Germany case study. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 12095-12107	6.7	36
300	Reusability of decal substrates for the fabrication of catalyst coated membranes. <i>International Journal of Adhesion and Adhesives</i> , 2020 , 98, 102473	3.4	2
299	Impact of porous transport layer compression on hydrogen permeation in PEM water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 4008-4014	6.7	18
298	Bottom-up energy supply optimization of a national building stock. <i>Energy and Buildings</i> , 2020 , 209, 109667	6.7	15
297	Geospatial modelling of the hydrogen infrastructure in France in order to identify the most suited supply chains. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 3053-3072	6.7	12
296	A techno-economic perspective on solar-to-hydrogen concepts through 2025. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 5818-5834	5.8	7
295	On the socio-technical potential for onshore wind in Europe: A response to Enevoldsen et al. (2019), <i>Energy Policy</i> , 132, 1092-1100. <i>Energy Policy</i> , 2020 , 145, 111693	7.2	5
294	45% Cell Efficiency in DMFCs via Process Engineering. <i>Fuel Cells</i> , 2020 , 20, 507-514	2.9	1

293	H ₂ -based synthetic fuels: A techno-economic comparison of alcohol, ether and hydrocarbon production. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 5395-5414	6.7	51
292	Uniformly constrained land eligibility for onshore European wind power. <i>Renewable Energy</i> , 2020 , 146, 921-931	8.1	14
291	CO ₂ emission reduction in the cement industry by using a solar calciner. <i>Renewable Energy</i> , 2020 , 145, 1578-1596	8.1	29
290	The impact of diesel vehicles on NO and PM ₁₀ emissions from road transport in urban morphological zones: A case study in North Rhine-Westphalia, Germany. <i>Science of the Total Environment</i> , 2020 , 727, 138583	10.2	15
289	Techno-economic analysis of a potential energy trading link between Patagonia and Japan based on CO ₂ free hydrogen. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 12733-12747	6.7	45
288	Impact of gas diffusion layer mechanics on PEM fuel cell performance. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 23406-23415	6.7	9
287	A techno economic analysis of the power to gas route. <i>Journal of CO₂ Utilization</i> , 2019 , 34, 616-634	7.6	35
286	Electrochemical Performance and Degradation Analysis of an SOFC Short Stack for Operation of More than 100,000 Hours. <i>ECS Transactions</i> , 2019 , 91, 687-696	1	4
285	Development and Testing of a 5kW-Class Reversible Solid Oxide Cell System. <i>ECS Transactions</i> , 2019 , 91, 2495-2506	1	4
284	An autothermal reforming system for diesel and jet fuel with quick start-up capability. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 27749-27764	6.7	12
283	Solar hydrogen production: a bottom-up analysis of different photovoltaic-electrolysis pathways. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 801-813	5.8	24
282	Quantitative analysis of sub-ppm traces of hydrocarbons in the product gas from diesel reforming. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 4020-4030	6.7	8
281	Steering and in situ monitoring of drying phenomena during film fabrication 2019 , 16, 1213-1221		3
280	Syngas production performance and degradation analysis of a solid oxide electrolyzer stack. <i>Journal of Power Sources</i> , 2019 , 433, 126666	8.9	8
279	The future of European onshore wind energy potential: Detailed distribution and simulation of advanced turbine designs. <i>Energy</i> , 2019 , 182, 1222-1238	7.9	39
278	Off-grid power-to-fuel systems for a market launch scenario – A techno-economic assessment. <i>Applied Energy</i> , 2019 , 250, 1099-1109	10.7	20
277	A hydrogen supply chain with spatial resolution: Comparative analysis of infrastructure technologies in Germany. <i>Applied Energy</i> , 2019 , 247, 438-453	10.7	70
276	A solid oxide fuel cell operating on liquid organic hydrogen carrier-based hydrogen – A kinetic model of the hydrogen release unit and system performance. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 13794-13806	6.7	17

275	Flexible sector coupling with hydrogen: A climate-friendly fuel supply for road transport. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 12918-12930	6.7	37
274	Robust optimal discrete arc sizing for tree-shaped potential networks. <i>Computational Optimization and Applications</i> , 2019 , 73, 791-819	1.4	15
273	Dealloyed PtNi-CoreShell Nanocatalysts Enable Significant Lowering of Pt Electrode Content in Direct Methanol Fuel Cells. <i>ACS Catalysis</i> , 2019 , 9, 3764-3772	13.1	42
272	Water management in membrane electrolysis and options for advanced plants. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 10147-10155	6.7	12
271	Initial approaches in benchmarking and round robin testing for proton exchange membrane water electrolyzers. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 9174-9187	6.7	48
270	Semiempirical thermodynamic modeling of a direct methanol fuel cell system. <i>International Journal of Energy Research</i> , 2019 , 43, 3601-3615	4.5	15
269	A completely slot die coated membrane electrode assembly. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 7053-7058	6.7	18
268	Optimized electrolyzer operation: Employing forecasts of wind energy availability, hydrogen demand, and electricity prices. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 4387-4397	6.7	31
267	Impact of clamping pressure and stress relaxation on the performance of different polymer electrolyte membrane water electrolysis cell designs. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 23556-23567	6.7	11
266	Architectural Concept and Evaluation of a Framework for the Efficient Automation of Computational Scientific Workflows: An Energy Systems Analysis Example. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 728	2.6	3
265	Reducing Computational Load for Mixed Integer Linear Programming: An Example for a District and an Island Energy System. <i>Energies</i> , 2019 , 12, 2825	3.1	11
264	The techno-economic potential of offshore wind energy with optimized future turbine designs in Europe. <i>Applied Energy</i> , 2019 , 255, 113794	10.7	28
263	Impact of different weather years on the design of hydrogen supply pathways for transport needs. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 25442-25456	6.7	5
262	Characterization of a New Flat Sheet Membrane Module Type for Gas Permeation. <i>Chemie-Ingenieur-Technik</i> , 2019 , 91, 30-37	0.8	1
261	Influence of Stoichiometry on the Two-Phase Flow Behavior of Proton Exchange Membrane Electrolyzers. <i>Energies</i> , 2019 , 12, 350	3.1	7
260	Role of electricity interconnections and impact of the geographical scale on the French potential of producing hydrogen via electricity surplus by 2035. <i>Energy</i> , 2019 , 172, 977-990	7.9	19
259	Non-fossil CO ₂ recycling—the technical potential for the present and future utilization for fuels in Germany. <i>Journal of CO₂ Utilization</i> , 2019 , 30, 130-141	7.6	34
258	Cost Uncertainties in Energy System Optimization Models: A Quadratic Programming Approach for Avoiding Penny Switching Effects. <i>Energies</i> , 2019 , 12, 4006	3.1	4

257	Modeling hydrogen networks for future energy systems: A comparison of linear and nonlinear approaches. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 32136-32150	6.7	7
256	Future Hydrogen Markets for Transportation and Industry: The Impact of CO2 Taxes. <i>Energies</i> , 2019 , 12, 4707	3.1	18
255	Electrochemical Performance and Degradation Analysis of an SOFC Short Stack Following Operation of More than 100,000 Hours. <i>Journal of the Electrochemical Society</i> , 2019 ,	3.9	8
254	Iridium nanoparticles for the oxygen evolution reaction: Correlation of structure and activity of benchmark catalyst systems. <i>Electrochimica Acta</i> , 2019 , 302, 472-477	6.7	13
253	Energy Storage Using Hydrogen Produced From Excess Renewable Electricity 2019 , 165-199		10
252	Modeling polymer electrolyte fuel cells: A high precision analysis. <i>Applied Energy</i> , 2019 , 233-234, 1094-1103	10.7	13
251	Impact of silicate substrate and cosintering on cathode performance in an inert substrate-supported solid oxide fuel cell. <i>Journal of Power Sources</i> , 2019 , 413, 334-343	8.9	9
250	Design and evaluation of hydrogen electricity reconversion pathways in national energy systems using spatially and temporally resolved energy system optimization. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 9594-9607	6.7	29
249	PEM water electrolysis: Innovative approaches towards catalyst separation, recovery and recycling. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 3450-3455	6.7	33
248	Simulation of a hybrid vehicle powertrain having direct methanol fuel cell system through a semi-theoretical approach. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 18981-18992	6.7	13
247	Energetically-optimal PEM electrolyzer pressure in power-to-gas plants. <i>Applied Energy</i> , 2018 , 218, 192-198	10.7	36
246	Bypassing renewable variability with a reversible solid oxide cell plant. <i>Applied Energy</i> , 2018 , 217, 101-112	10.7	32
245	Heat exchanger design for autothermal reforming of diesel. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 11830-11846	6.7	20
244	Time series aggregation for energy system design: Modeling seasonal storage. <i>Applied Energy</i> , 2018 , 213, 123-135	10.7	86
243	Impact of different time series aggregation methods on optimal energy system design. <i>Renewable Energy</i> , 2018 , 117, 474-487	8.1	114
242	Solid oxide fuel cell operating on liquid organic hydrogen carrier-based hydrogen [making full use of heat integration potentials. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 1758-1768	6.7	40
241	Interface resolving two-phase flow simulations in gas channels relevant for polymer electrolyte fuel cells using the volume of fluid approach. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 2961-2976	6.7	23
240	The stability challenge on the pathway to high-current-density polymer electrolyte membrane water electrolyzers. <i>Electrochimica Acta</i> , 2018 , 278, 324-331	6.7	39

239	In-situ two-phase flow investigation of different porous transport layer for a polymer electrolyte membrane (PEM) electrolyzer with neutron spectroscopy. <i>Journal of Power Sources</i> , 2018 , 390, 108-115	8.9	43
238	The separation of CO ₂ from ambient air [A techno-economic assessment. <i>Applied Energy</i> , 2018 , 218, 361-381	10.7	38
237	Effect of cascade storage system topology on the cooling energy consumption in fueling stations for hydrogen vehicles. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 6256-6265	6.7	21
236	Life Cycle Assessment of hydrogen transport and distribution options. <i>Journal of Cleaner Production</i> , 2018 , 199, 431-443	10.3	45
235	The Impact of Drive Cycles and Auxiliary Power on Passenger Car Fuel Economy. <i>Energies</i> , 2018 , 11, 1010	3.1	10
234	Evaluating Land Eligibility Constraints of Renewable Energy Sources in Europe. <i>Energies</i> , 2018 , 11, 1246	3.1	26
233	Analysis of the Cathode Electrical Contact in SOFC Stacks. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F677-F683	3.9	11
232	Carsharing with fuel cell vehicles: Sizing hydrogen refueling stations based on refueling behavior. <i>Applied Energy</i> , 2018 , 228, 1540-1549	10.7	42
231	The Future of Fossil Fired Power Plants in Germany [A Lifetime Analysis. <i>Energies</i> , 2018 , 11, 1616	3.1	12
230	Promising catalytic synthesis pathways towards higher alcohols as suitable transport fuels based on H ₂ and CO ₂ . <i>Journal of CO₂ Utilization</i> , 2018 , 27, 223-237	7.6	27
229	Study of the catalytic combustion of lean hydrogen-air mixtures in a monolith reactor. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 17520-17530	6.7	13
228	A review of current challenges and trends in energy systems modeling. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 96, 156-166	16.2	103
227	An integrated diesel fuel processing system with thermal start-up for fuel cells. <i>Applied Energy</i> , 2018 , 226, 145-159	10.7	15
226	Homogeneity analysis of square meter-sized electrodes for PEM electrolysis and PEM fuel cells 2018 , 15, 1423-1432		12
225	The investment costs of electrolysis [A comparison of cost studies from the past 30 years. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 1209-1223	6.7	202
224	Impact of reference values used for surface free energy determination: An uncertainty analysis. <i>International Journal of Adhesion and Adhesives</i> , 2018 , 82, 1-7	3.4	13
223	Power-to-Gas: Electrolyzers as an alternative to network expansion [An example from a distribution system operator. <i>Applied Energy</i> , 2018 , 210, 182-197	10.7	62
222	Mechanical characterization and durability of sintered porous transport layers for polymer electrolyte membrane electrolysis. <i>Journal of Power Sources</i> , 2018 , 374, 84-91	8.9	13

221	Control techniques and the modeling of electrical power flow across transmission networks. <i>Renewable and Sustainable Energy Reviews</i> , 2018 , 82, 3452-3467	16.2	12
220	Layer Formation from Polymer Carbon-Black Dispersions. <i>Coatings</i> , 2018 , 8, 450	2.9	5
219	Markteintrittsstrategie für Power-to-Liquid-Kraftstoffe – Techno-Ökonomische Analyse eines Stand-Alone-Systems. <i>Chemie-Ingenieur-Technik</i> , 2018 , 90, 1144-1144	0.8	
218	Emergency power supply from photovoltaic battery systems in private households in case of a blackout – A scenario analysis. <i>Energy Procedia</i> , 2018 , 155, 165-178	2.3	4
217	Comparison of light-duty transportation fuels produced from renewable hydrogen and green carbon dioxide. <i>Applied Energy</i> , 2018 , 231, 757-767	10.7	52
216	Performance enhancement of PEM electrolyzers through iridium-coated titanium porous transport layers. <i>Electrochemistry Communications</i> , 2018 , 97, 96-99	5.1	55
215	Water-gas shift reactor for fuel cell systems: Stable operation for 5000 hours. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 19222-19230	6.7	8
214	Design and experimental validation of an HT-PEFC stack with metallic BPP. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 18488-18497	6.7	8
213	Spatio-temporal optimization of a future energy system for power-to-hydrogen applications in Germany. <i>Energy</i> , 2018 , 158, 1130-1149	7.9	87
212	An option for stranded renewables: electrolytic-hydrogen in future energy systems. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 1500-1515	5.8	16
211	Reduction of methanol crossover in a flowing electrolyte-direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 21530-21545	6.7	24
210	Long-term power-to-gas potential from wind and solar power: A country analysis for Italy. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 13389-13406	6.7	74
209	Highly integrated catalytic burner with laser-additive manufactured manifolds. <i>Reaction Chemistry and Engineering</i> , 2017 , 2, 437-445	4.9	3
208	Advances in autothermal reformer design. <i>Applied Energy</i> , 2017 , 198, 88-98	10.7	25
207	A diesel fuel processor for fuel-cell-based auxiliary power unit applications. <i>Journal of Power Sources</i> , 2017 , 355, 44-52	8.9	21
206	Energy Storage as Part of a Secure Energy Supply. <i>ChemBioEng Reviews</i> , 2017 , 4, 144-210	5.2	29
205	Seasonal storage and alternative carriers: A flexible hydrogen supply chain model. <i>Applied Energy</i> , 2017 , 200, 290-302	10.7	231
204	Power-to-fuel as a key to sustainable transport systems – An analysis of diesel fuels produced from CO ₂ and renewable electricity. <i>Fuel</i> , 2017 , 205, 198-221	7.1	97

203	Setup and experimental validation of a 5kW HT-PEFC stack. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 11596-11604	6.7	7
202	Re-energizing energy supply: Electrolytically-produced hydrogen as a flexible energy storage medium and fuel for road transport. <i>Journal of Power Sources</i> , 2017 , 342, 320-326	8.9	19
201	Polymer electrolyte membrane water electrolysis: Restraining degradation in the presence of fluctuating power. <i>Journal of Power Sources</i> , 2017 , 342, 38-47	8.9	76
200	Linking the Power and Transport Sectors Part 2: Modelling a Sector Coupling Scenario for Germany. <i>Energies</i> , 2017 , 10, 957	3.1	77
199	Hydrogen production from bio-fuels using precious metal catalysts. <i>E3S Web of Conferences</i> , 2017 , 23, 03002	0.5	
198	On the mobility of carbon-supported platinum nanoparticles towards unveiling cathode degradation in water electrolysis. <i>Journal of Power Sources</i> , 2017 , 365, 53-60	8.9	26
197	A Review of Post-combustion CO ₂ Capture Technologies from Coal-fired Power Plants. <i>Energy Procedia</i> , 2017 , 114, 650-665	2.3	228
196	Investigation of the Cooling System of a Membrane-based Post-combustion Process. <i>Energy Procedia</i> , 2017 , 114, 666-685	2.3	1
195	On the interfacial charge transfer between solid and liquid Li electrolytes. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 26596-26605	3.6	21
194	Solid Oxide Electrolyzer Stack with 20,000 h of Operation. <i>ECS Transactions</i> , 2017 , 78, 2885-2893	1	8
193	Development and Test of a Solid Oxide Fuel Cell Subsystem with a Low Temperature Anode Off-Gas Recirculation. <i>ECS Transactions</i> , 2017 , 78, 2489-2495	1	8
192	An On-Demand Safety Gas Generator for Solid Oxide Fuel Cell and Electrolyzer Systems. <i>Fuel Cells</i> , 2017 , 17, 882-889	2.9	2
191	Study of Cathode Catalyst Layer Parameters for HT-PEMFC Using Electrochemical Impedance Spectroscopy. <i>ECS Transactions</i> , 2017 , 80, 27-36	1	5
190	Fault-tolerant model predictive control of a direct methanol-fuel cell system with actuator faults. <i>Control Engineering Practice</i> , 2017 , 66, 99-115	3.9	11
189	Spray formation of middle distillates for autothermal reforming. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 16946-16960	6.7	9
188	Early power to gas applications: Reducing wind farm forecast errors and providing secondary control reserve. <i>Applied Energy</i> , 2017 , 192, 551-562	10.7	45
187	A Top-Down Spatially Resolved Electrical Load Model. <i>Energies</i> , 2017 , 10, 361	3.1	17
186	Power-to-Steel: Reducing CO ₂ through the Integration of Renewable Energy and Hydrogen into the German Steel Industry. <i>Energies</i> , 2017 , 10, 451	3.1	103

185	Linking the Power and Transport Sectors Part 1: The Principle of Sector Coupling. <i>Energies</i> , 2017 , 10, 956	3.1	105
184	Kosten der Wasserstoffbereitstellung in Versorgungssystemen auf Basis erneuerbarer Energien 2017 , 245-261		1
183	Extending the lifetime of direct methanol fuel cell systems to more than 20,000h by applying ion exchange resins. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 15325-15334	6.7	10
182	Fuels for APU Applications 2016 , 183-196		
181	Application Requirements/Targets for Fuel Cell APUs 2016 , 197-201		1
180	Reforming Technologies for APUs 2016 , 208-224		
179	High Temperature Polymer Electrolyte Fuel Cells 2016 , 235-247		1
178	SOFC Cell, Stack and System Level 2016 , 304-320		
177	Fuel Cell Forklift Systems 2016 , 321-333		1
176	Power-to-Gas 2016 , 357-368		
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