

Bruno G. Pollet

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206
papers

7,168
citations

42
h-index

77
g-index

226
ext. papers

8,611
ext. citations

6.2
avg, IF

6.73
L-index

#	Paper	IF	Citations
206	Support materials for PEMFC and DMFC electrocatalysts: A review. <i>Journal of Power Sources</i> , 2012 , 208, 96-119	8.9	894
205	High temperature (HT) polymer electrolyte membrane fuel cells (PEMFC) : A review. <i>Journal of Power Sources</i> , 2013 , 231, 264-278	8.9	600
204	Current status of hybrid, battery and fuel cell electric vehicles: From electrochemistry to market prospects. <i>Electrochimica Acta</i> , 2012 , 84, 235-249	6.7	354
203	Metal hydride hydrogen compressors: A review. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 5818-5851	6.7	269
202	Ex-situ characterisation of gas diffusion layers for proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2012 , 218, 393-404	8.9	206
201	Current status of fuel cell based combined heat and power systems for residential sector. <i>Journal of Power Sources</i> , 2015 , 293, 312-328	8.9	157
200	Current status of automotive fuel cells for sustainable transport. <i>Current Opinion in Electrochemistry</i> , 2019 , 16, 90-95	7.2	148
199	The use of ultrasound for the fabrication of fuel cell materials. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 11986-12004	6.7	135
198	Polymer Electrolyte Membrane Fuel Cell (PEMFC) Flow Field Plate: Design, Materials and Characterisation. <i>Fuel Cells</i> , 2010 , 10, 489-509	2.9	117
197	The development and evaluation of ultrasound in the biocidal treatment of water. <i>Ultrasonics Sonochemistry</i> , 1997 , 4, 157-64	8.9	107
196	A novel method for preparing proton exchange membrane fuel cell electrodes by the ultrasonic-spray technique. <i>Journal of Power Sources</i> , 2011 , 196, 8500-8508	8.9	97
195	Sonoelectrochemistry for energy and environmental applications. <i>Ultrasonics Sonochemistry</i> , 2020 , 63, 104960	8.9	95
194	Magnesium-carbon hydrogen storage hybrid materials produced by reactive ball milling in hydrogen. <i>Carbon</i> , 2013 , 57, 146-160	10.4	94
193	Effect of clamping pressure on ohmic resistance and compression of gas diffusion layers for polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2012 , 219, 52-59	8.9	87
192	Metal hydride systems for hydrogen storage and supply for stationary and automotive low temperature PEM fuel cell power modules. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 11491-11497	6.7	80
191	Physical and electrochemical evaluation of ATO supported IrO ₂ catalyst for proton exchange membrane water electrolyser. <i>Journal of Power Sources</i> , 2014 , 269, 451-460	8.9	77
190	The importance of ultrasonic parameters in the preparation of fuel cell catalyst inks. <i>Electrochimica Acta</i> , 2014 , 128, 292-303	6.7	71

189	Metal hydride hydrogen storage and supply systems for electric forklift with low-temperature proton exchange membrane fuel cell power module. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 13831-13842	6.7	68
188	Sonochemical and sonoelectrochemical production of hydrogen. <i>Ultrasonics Sonochemistry</i> , 2019 , 51, 533-555	8.9	64
187	Investigation of supported IrO ₂ as electrocatalyst for the oxygen evolution reaction in proton exchange membrane water electrolyser. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 1905-1913	6.7	63
186	Optimization of gas diffusion electrode for polybenzimidazole-based high temperature proton exchange membrane fuel cell: Evaluation of polymer binders in catalyst layer. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 11370-11378	6.7	61
185	Development of PVD coatings for PEMFC metallic bipolar plates. <i>Thin Solid Films</i> , 2013 , 528, 199-204	2.2	59
184	Characterization and activity test of commercial Ni/Al ₂ O ₃ , Cu/ZnO/Al ₂ O ₃ and prepared Ni-Cu/Al ₂ O ₃ catalysts for hydrogen production from methane and methanol fuels. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 1664-1675	6.7	58
183	Sonoelectrochemical (20 kHz) production of platinum nanoparticles from aqueous solutions. <i>Electrochimica Acta</i> , 2009 , 54, 7201-7206	6.7	56
182	Thermal conductivity and temperature profiles of the micro porous layers used for the polymer electrolyte membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 8437-8447	6.7	53
181	Transport Limited Currents Close to an Ultrasonic Horn. <i>Journal of the Electrochemical Society</i> , 2007 , 154, E131	3.9	52
180	Low platinum loading for high temperature proton exchange membrane fuel cell developed by ultrasonic spray coating technique. <i>Journal of Power Sources</i> , 2014 , 267, 155-159	8.9	51
179	Engineered porous Ni ₂ P-nanoparticle/Ni ₂ P-nanosheet arrays via the Kirkendall effect and Ostwald ripening towards efficient overall water splitting. <i>Nano Research</i> , 2020 , 13, 2098-2105	10	50
178	Let's Not Ignore the Ultrasonic Effects on the Preparation of Fuel Cell Materials. <i>Electrocatalysis</i> , 2014 , 5, 330-343	2.7	50
177	Proton exchange membrane fuel cell degradation and testing: review. <i>Journal of the Energy Institute</i> , 2012 , 85, 188-200	5.7	50
176	A Co ₃ W ₃ C promoted Pd catalyst exhibiting competitive performance over Pt/C catalysts towards the oxygen reduction reaction. <i>Chemical Communications</i> , 2014 , 50, 566-8	5.8	49
175	Recent developments in the sonoelectrochemical synthesis of nanomaterials. <i>Ultrasonics Sonochemistry</i> , 2019 , 59, 104711	8.9	48
174	Nafion [®] -stabilised Pt/C electrocatalysts with efficient catalyst layer ionomer distribution for proton exchange membrane fuel cells. <i>RSC Advances</i> , 2012 , 2, 8368	3.7	47
173	Membrane electrode assembly with enhanced platinum utilization for high temperature proton exchange membrane fuel cell prepared by catalyst coating membrane method. <i>Journal of Power Sources</i> , 2014 , 266, 107-113	8.9	46
172	The effect of materials on proton exchange membrane fuel cell electrode performance. <i>Journal of Power Sources</i> , 2011 , 196, 9013-9017	8.9	46

171	Sono-electrodeposition (20 and 850kHz) of copper in aqueous and deep eutectic solvents. <i>Electrochimica Acta</i> , 2008 , 53, 4248-4256	6.7	46
170	Sonoelectrochemical recovery of silver from photographic processing solutions. <i>Ultrasonics Sonochemistry</i> , 2000 , 7, 69-76	8.9	46
169	Study of thermal conductivity of PEM fuel cell catalyst layers. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 9397-9408	6.7	44
168	Nafion-stabilised platinum nanoparticles supported on titanium nitride: An efficient and durable electrocatalyst for phosphoric acid based polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2013 , 109, 365-369	6.7	43
167	The effect of Nafion ionomer loading coated on gas diffusion electrodes with in-situ grown Pt nanowires and their durability in proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 4386-4393	6.7	43
166	The effect of ultrasound upon the oxidation of thiosulphate on stainless steel and platinum electrodes. <i>Ultrasonics Sonochemistry</i> , 2002 , 9, 267-74	8.9	43
165	N-doped porous transition metal-based carbon nanosheet networks as a multifunctional electrocatalyst for rechargeable zinc-air batteries. <i>Chemical Communications</i> , 2019 , 55, 2924-2927	5.8	42
164	The effect of ultrasonic frequency and intensity upon limiting currents at rotating disc and stationary electrodes. <i>Electrochimica Acta</i> , 1996 , 41, 2737-2741	6.7	41
163	CuCo ₂ O ₄ nanoplate film as a low-cost, highly active and durable catalyst towards the hydrolytic dehydrogenation of ammonia borane for hydrogen production. <i>Journal of Power Sources</i> , 2017 , 355, 191-198	8.9	40
162	The Use of Power Ultrasound for the Production of PEMFC and PEMWE Catalysts and Low-Pt Loading and High-Performing Electrodes. <i>Catalysts</i> , 2019 , 9, 246	4	38
161	A novel dual catalyst layer structured gas diffusion electrode for enhanced performance of high temperature proton exchange membrane fuel cell. <i>Journal of Power Sources</i> , 2014 , 246, 63-67	8.9	38
160	Poisoning-tolerant metal hydride materials and their application for hydrogen separation from CO ₂ /CO containing gas mixtures. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9800-9810	6.7	38
159	Multidimensional regulation of Ni ₃ S ₂ @Co(OH) ₂ catalyst with high performance for wind energy electrolytic water. <i>Journal of Power Sources</i> , 2020 , 446, 227348	8.9	38
158	Development of membrane electrode assembly for high temperature proton exchange membrane fuel cell by catalyst coating membrane method. <i>Journal of Power Sources</i> , 2015 , 288, 121-127	8.9	37
157	Performance analysis of cylindrical metal hydride beds with various heat exchange options. <i>Journal of Alloys and Compounds</i> , 2015 , 645, S89-S95	5.7	37
156	Catalyst loading for Pt-nanowire thin film electrodes in PEFCs. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 17892-17898	6.7	37
155	The effect upon limiting currents and potentials of coupling a rotating disc and cylindrical electrode with ultrasound. <i>Electrochimica Acta</i> , 1998 , 43, 449-455	6.7	37
154	Niche applications of metal hydrides and related thermal management issues. <i>Journal of Alloys and Compounds</i> , 2015 , 645, S117-S122	5.7	36

153	Fuel cell-battery hybrid powered light electric vehicle (golf cart): Influence of fuel cell on the driving performance. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 10630-10639	6.7	35
152	Ru/Nb ₂ O ₇ catalyst for the oxygen evolution reaction in proton exchange membrane water electrolyzers. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 8605-8616	6.7	35
151	A new route to control texture of materials: Nanostructured ZnFe ₂ O ₄ photoelectrodes. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 4315-4323	6.7	35
150	The Sono-Hydro-Gen process (Ultrasound induced hydrogen production): Challenges and opportunities. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 14500-14526	6.7	34
149	Highly Efficient and Stable Catalyst Based on Co(OH) ₂ @Ni Electroplated on Cu-Metallized Cotton Textile for Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 29791-29798	9.5	34
148	Thermal conductivity in the three layered regions of micro porous layer coated porous transport layers for the PEM fuel cell. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 16775-16785	6.7	34
147	Current energy landscape in the Republic of South Africa. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 16685-16701	6.7	32
146	Nanofiber NiMoO ₄ /g-CN Composite Electrode Materials for Redox Supercapacitor Applications. <i>Nanomaterials</i> , 2020 , 10,	5.4	32
145	Thermally Driven Metal Hydride Hydrogen Compressor for Medium-Scale Applications. <i>Energy Procedia</i> , 2012 , 29, 347-356	2.3	32
144	Enhanced durability of a Pt/C electrocatalyst derived from Nafion-stabilised colloidal platinum nanoparticles. <i>Electrochemistry Communications</i> , 2010 , 12, 1017-1020	5.1	32
143	Tailoring nanopores within nanoparticles of PtCo networks as catalysts for methanol oxidation reaction. <i>Electrochimica Acta</i> , 2017 , 255, 55-62	6.7	31
142	Flow Field Patterns for Proton Exchange Membrane Fuel Cells. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	31
141	CuO/NiO/Co ₃ O ₄ hybrid nanoplates as highly active catalyst for ammonia borane hydrolysis. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 8168-8176	6.7	31
140	FeN stabilized FeN@Pt core-shell nanostructures for oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 4462-4469	13	31
139	Theoretical studies of Pt-Ti nanoparticles for potential use as PEMFC electrocatalysts. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 3134-9	3.6	31
138	Enhanced performance of polybenzimidazole-based high temperature proton exchange membrane fuel cell with gas diffusion electrodes prepared by automatic catalyst spraying under irradiation technique. <i>Journal of Power Sources</i> , 2013 , 242, 510-519	8.9	30
137	Respective contribution of cavitation and convective flow to local stirring in sonoreactors. <i>Ultrasonics Sonochemistry</i> , 2011 , 18, 881-7	8.9	30
136	A novel method for preparing PEMFC electrodes by the ultrasonic and sonoelectrochemical techniques. <i>Electrochemistry Communications</i> , 2009 , 11, 1445-1448	5.1	29

135	Mesoporous CoS/N-doped Carbon as HER and ORR Bifunctional Electrocatalyst for Water Electrolyzers and Zinc-Air Batteries. <i>ChemCatChem</i> , 2019 , 11, 1026-1032	5.2	29
134	Highly active porous CoB nanoalloy synthesized on liquid-gas interface for hydrolysis of sodium borohydride. <i>International Journal of Hydrogen Energy</i> , 2018 , 43, 17543-17555	6.7	28
133	Sonoelectrochemical one-pot synthesis of Pt - Carbon black nanocomposite PEMFC electrocatalyst. <i>Ultrasonics Sonochemistry</i> , 2017 , 35, 591-597	8.9	27
132	Hierarchical core-shell structured CoNi ₂ S ₄ /Ni ₃ S ₂ @Ni(OH) ₂ nanosheet arrays as electrode for electrochemical energy storage. <i>Journal of Alloys and Compounds</i> , 2019 , 785, 684-691	5.7	26
131	Co ₃ O ₄ /CuMoO ₄ Hybrid Microflowers Composed of Nanorods with Rich Particle Boundaries as a Highly Active Catalyst for Ammonia Borane Hydrolysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 16474-16482	8.3	26
130	Amorphous PtNiP particle networks of different particle sizes for the electro-oxidation of hydrazine. <i>RSC Advances</i> , 2015 , 5, 68655-68661	3.7	25
129	Electrophoresis and stability of nano-colloids: history, theory and experimental examples. <i>Advances in Colloid and Interface Science</i> , 2014 , 211, 77-92	14.3	24
128	Validation of an externally oil-cooled 1kW _{el} HT-PEMFC stack operating at various experimental conditions. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 9847-9855	6.7	24
127	A highly efficient water electrolyser cell assembled by asymmetric array electrodes based on Co, Fe-doped Ni(OH) ₂ nanosheets. <i>Applied Surface Science</i> , 2020 , 528, 146972	6.7	23
126	Application of surface-modified metal hydrides for hydrogen separation from gas mixtures containing carbon dioxide and monoxide. <i>Journal of Alloys and Compounds</i> , 2013 , 580, S382-S385	5.7	23
125	A novel non-linear model-based control strategy to improve PEMFC water management – The flatness-based approach. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 2371-2376	6.7	23
124	Sonoelectrochemical (20 kHz) production of Co ₆₅ Fe ₃₅ alloy nanoparticles from Aotani solutions. <i>Journal of Applied Electrochemistry</i> , 2008 , 38, 395-402	2.6	23
123	Does power ultrasound affect heterogeneous electron transfer kinetics?. <i>Ultrasonics Sonochemistry</i> , 2019 , 52, 6-12	8.9	23
122	Magnesium-based hydrogen storage nanomaterials prepared by high energy reactive ball milling in hydrogen at the presence of mixed titanium-iron oxide. <i>Journal of Alloys and Compounds</i> , 2015 , 645, S454-S459	5.7	22
121	Graphene modified fluorinated cation-exchange membranes for proton exchange membrane water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 10190-10196	6.7	21
120	MnO/N-Doped Mesoporous Carbon as Advanced Oxygen Reduction Reaction Electrocatalyst for Zinc-Air Batteries. <i>Chemistry - A European Journal</i> , 2019 , 25, 2868-2876	4.8	21
119	Distributed hybrid MH-GH ₂ system for hydrogen storage and its supply to LT PEMFC power modules. <i>Journal of Alloys and Compounds</i> , 2015 , 645, S329-S333	5.7	20
118	Optimisation of electrophoretic deposition parameters for gas diffusion electrodes in high temperature polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2013 , 243, 40-47	8.9	20

117	Platinum sonoelectrodeposition on glassy carbon and gas diffusion layer electrodes. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 6248-6258	6.7	20
116	Electrochemical study of silver thiosulphate reduction in the absence and presence of ultrasound. <i>Ultrasonics Sonochemistry</i> , 2005 , 12, 7-11	8.9	20
115	Ex-Situ Electrochemical Characterization of IrO ₂ Synthesized by a Modified Adams Fusion Method for the Oxygen Evolution Reaction. <i>Catalysts</i> , 2019 , 9, 318	4	19
114	Achieving highly practical capacitance of MnO by using chain-like CoB alloy as support. <i>Nanoscale</i> , 2018 , 10, 7813-7820	7.7	19
113	Hydrogen South Africa (HySA) Systems Competence Centre: Mission, objectives, technological achievements and breakthroughs. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 3577-3596	6.7	19
112	Enhanced Cycleability of Amorphous MnO ₂ by Covering on MnO ₂ Needles in an Electrochemical Capacitor. <i>Materials</i> , 2017 , 10,	3.5	19
111	Electronic Properties of Pt _x Ir _{1-x} Nanoalloys and the Effect on Reactivity for Use in PEMFCs. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 15241-15250	3.8	19
110	How do dissolved gases affect the sonochemical process of hydrogen production? An overview of thermodynamic and mechanistic effects - On the "hot spot theory". <i>Ultrasonics Sonochemistry</i> , 2021 , 72, 105422	8.9	19
109	Regrowth in ship's ballast water tanks: Think again!. <i>Marine Pollution Bulletin</i> , 2016 , 109, 46-48	6.7	19
108	A Short Introduction to Sonoelectrochemistry. <i>Electrochemical Society Interface</i> , 2018 , 27, 41-42	3.6	19
107	Effect of Platinum Distribution in Dual Catalyst Layer Structured Gas Diffusion Electrode on the Performance of High Temperature PEMFC. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F506-F512	3.9	18
106	Ultra-high surface area and mesoporous N-doped carbon derived from sheep bones with high electrocatalytic performance toward the oxygen reduction reaction. <i>Journal of Solid State Electrochemistry</i> , 2017 , 21, 2947-2954	2.6	17
105	Hydrogen fuel cell hybrid vehicles (HFCHV) for Birmingham campus. <i>Journal of Power Sources</i> , 2011 , 196, 325-330	8.9	17
104	The effect of ultrasonic frequency and intensity upon electrode kinetic parameters for the Ag(S ₂ O ₃) ₂ ³⁻ /Ag redox couple. <i>Journal of Applied Electrochemistry</i> , 1999 , 29, 1359-1366	2.6	17
103	From Bad Electrochemical Practices to an Environmental and Waste Reducing Approach for the Generation of Active Hydrogen Evolving Electrodes. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 17383-17392	16.4	16
102	Review on management, mechanisms and modelling of thermal processes in PEMFC 2016 , 1, 1-20		16
101	Introduction to Ultrasound, Sonochemistry and Sonoelectrochemistry. <i>Springer Briefs in Molecular Science</i> , 2019 ,	0.6	14
100	Three-dimensional hierarchical walnut kernel shape conducting polymer as water soluble binder for lithium-ion battery. <i>Electrochimica Acta</i> , 2018 , 269, 571-579	6.7	14

99	Enhanced performance and stability of high temperature proton exchange membrane fuel cell by incorporating zirconium hydrogen phosphate in catalyst layer. <i>Journal of Power Sources</i> , 2015 , 278, 718-724	8.9	14
98	Graphene inclusion effect on anion-exchange membranes properties for alkaline water electrolyzers. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 17057-17066	6.7	14
97	Does power ultrasound affect Nafion [®] dispersions?. <i>Ultrasonics Sonochemistry</i> , 2020 , 60, 104758	8.9	14
96	Hydrogen fuel cell hybrid scooter (HFCHS) with plug-in features on Birmingham campus. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 12709-12715	6.7	13
95	Performance Investigation of Membrane Electrode Assemblies for High Temperature Proton Exchange Membrane Fuel Cell. <i>Journal of Power and Energy Engineering</i> , 2013 , 01, 95-100	0.7	13
94	Two routes for sonochemical synthesis of platinum nanoparticles with narrow size distribution. <i>Materials Advances</i> , 2021 , 2, 1962-1971	3.3	13
93	Sonochemical and Sonoelectrochemical Production of Energy Materials. <i>Catalysts</i> , 2021 , 11, 284	4	13
92	Effect of power ultrasound and Fenton reagents on the biomethane potential from steam-exploded birchwood. <i>Ultrasonics Sonochemistry</i> , 2019 , 58, 104675	8.9	12
91	Hydrogen absorption study of high-energy reactive ball milled Mg composites with palladium additives. <i>Journal of Alloys and Compounds</i> , 2013 , 580, S144-S148	5.7	12
90	A novel angular geometry for the sonochemical silver recovery process at cylinder electrodes. <i>Ultrasonics Sonochemistry</i> , 2003 , 10, 217-22	8.9	12
89	Electroless Production of Fertilizer (Struvite) and Hydrogen from Synthetic Agricultural Wastewaters. <i>Journal of the American Chemical Society</i> , 2020 , 142, 18844-18858	16.4	12
88	Hollow core-shell structured CuO@CuS spheres as novel electrode for enzyme free glucose sensing. <i>Materials Science and Engineering C</i> , 2019 , 95, 174-182	8.3	12
87	Measuring the thermal conductivity of membrane and porous transport layer in proton and anion exchange membrane water electrolyzers for temperature distribution modeling. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 1236-1254	6.7	12
86	CsHSO ₄ as proton conductor for high-temperature polymer electrolyte membrane fuel cells. <i>Journal of Applied Electrochemistry</i> , 2014 , 44, 1037-1045	2.6	11
85	Sonoelectrochemistry: Both a Tool for Investigating Mechanisms and for Accelerating Processes. <i>Electrochemical Society Interface</i> , 2018 , 27, 47-51	3.6	11
84	Tuning the extent of porosity and composition of N-doped carbon materials by NaNO ₃ and its effect on electrochemical activity. <i>Materials Research Bulletin</i> , 2018 , 104, 134-142	5.1	10
83	High-Performance and Durable Membrane Electrode Assemblies for High-Temperature Polymer Electrolyte Membrane Fuel Cells. <i>Electrocatalysis</i> , 2014 , 5, 361-371	2.7	10
82	An Introduction to Sonoelectrochemistry 2012 , 21-44		10

81	Transport reaction through ion-exchange membranes: modelling of ligand transport by a complexing counter-ion and experiments with ammine and polyborate ions. <i>Desalination</i> , 1988 , 68, 131-148	10.3	10
80	Integrating Ni nanoparticles into MoN nanosheets form Schottky heterojunctions to boost its electrochemical performance for water electrolysis. <i>Journal of Alloys and Compounds</i> , 2021 , 867, 158983	5.7	10
79	PtSn/C as a Possible Methanol-Tolerant Cathode Catalyst for DMFC. <i>Electrocatalysis</i> , 2013 , 4, 144-153	2.7	9
78	Control of nanoparticle aggregation in PEMFCs using surfactants. <i>International Journal of Low-Carbon Technologies</i> , 2012 , 7, 38-43	2.8	9
77	Bulk power transmission at sea: Life cycle cost comparison of electricity and hydrogen as energy vectors. <i>Applied Energy</i> , 2021 , 288, 116625	10.7	9
76	Ultrasonically Surface-Activated Nickel Foam as a Highly Efficient Monolith Electrode for the Catalytic Oxidation of Methanol to Formate. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 30603-30613	9.5	9
75	Toward high performance of zinc-air battery using hydrophobic carbon foam-based diffusion electrode. <i>Journal of Industrial and Engineering Chemistry</i> , 2019 , 71, 284-292	6.3	9
74	Does power ultrasound (26 kHz) affect the hydrogen evolution reaction (HER) on Pt polycrystalline electrode in a mild acidic electrolyte?. <i>Ultrasonics Sonochemistry</i> , 2020 , 69, 105238	8.9	8
73	Fabrication of gas diffusion electrodes via electrophoretic deposition for high temperature polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2014 , 258, 238-245	8.9	8
72	Manufacturing of Hydride-Forming Alloys from Mixed Titanium-Iron Oxide. <i>Advanced Materials Research</i> , 2013 , 746, 14-22	0.5	8
71	Nano-sized Co/Co(OH) ₂ core-shell structure synthesized in molten salt as electrode materials for supercapacitors. <i>Ionics</i> , 2017 , 23, 725-730	2.7	8
70	Hydrogen and Fuel Cells in Transport 2012 , 301-313		8
69	(Invited) Novel Fuel Production Based on Sonochemistry and Sonoelectrochemistry. <i>ECS Transactions</i> , 2019 , 92, 1-16	1	8
68	Seeking minimum entropy production for a tree-like flow-field in a fuel cell. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 6993-7003	3.6	7
67	Electroreduction of oxygen on Nafion [®] -coated thin platinum films in acid media. <i>Journal of Electroanalytical Chemistry</i> , 2019 , 848, 113292	4.1	7
66	Modeling and control of the output current of a Reformed Methanol Fuel Cell system. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 16521-16531	6.7	7
65	V ₂ O ₅ -SiO ₂ hybrid as anode material for aqueous rechargeable lithium batteries. <i>Ionics</i> , 2016 , 22, 1593-1601	6.1	7
64	Hybrid polymer electrolyte membrane fuel cell lithium-ion battery powertrain testing platform hybrid fuel cell electric vehicle emulator. <i>International Journal of Energy Research</i> , 2017 , 41, 1596-1611	4.5	6

63	Fuel-cell (hydrogen) electric hybrid vehicles 2014 , 685-735		6
62	Synthesis and characterisation of a new sulphonated hydrocarbon polymer for application as a solid proton-conducting electrolyte. <i>Solid State Ionics</i> , 2014 , 263, 62-70	3.3	6
61	Assessment of the beneficial combination of electrochemical and ultrasonic activation of compounds originating from biomass. <i>Ultrasonics Sonochemistry</i> , 2020 , 63, 104934	8.9	6
60	The Use of Ultrasound for the Electrochemical Synthesis of Magnesium Ammonium Phosphate Hexahydrate (Struvite). <i>ECS Transactions</i> , 2019 , 92, 47-55	1	6
59	Using Ultrasound to Effectively Homogenise Catalyst Inks: Is This Approach Still Acceptable?. <i>Johnson Matthey Technology Review</i> , 2021 ,	2.5	6
58	The Effects of Cathode Parameters on the Performance of Poly(2,5-Benzimidazole)-Based Polymer Electrolyte Membrane Fuel Cell. <i>Electrocatalysis</i> , 2015 , 6, 155-162	2.7	5
57	Double-structured ultrasonic high frequency reactor using an optimised slant bottom. <i>Ultrasonics Sonochemistry</i> , 2000 , 7, 201-5	8.9	5
56	Thermal Gradients with Sintered Solid State Electrolytes in Lithium-Ion Batteries. <i>Energies</i> , 2020 , 13, 253	3.1	5
55	Short Introduction to Sonoelectrochemistry. <i>Springer Briefs in Molecular Science</i> , 2019 , 21-39	0.6	5
54	Sonochemical dosimetry: A comparative study of Weissler, Fricke and terephthalic acid methods. <i>Ultrasonics Sonochemistry</i> , 2021 , 72, 105413	8.9	5
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