

Frode Seland

List of Publications by Year in descending order

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81
papers

1,950
citations

257450

24
h-index

265206

42
g-index

82
all docs

82
docs citations

82
times ranked

2134
citing authors

#	ARTICLE	IF	CITATIONS
1	Ta-ITO Coated Titanium Bipolar Plates for Proton Exchange Membrane Water Electrolyzers. Journal of the Electrochemical Society, 2022, 169, 034504.	2.9	6
2	Frequency controlled agglomeration of Pt-nanoparticles in sonochemical synthesis. Ultrasonics Sonochemistry, 2022, 85, 105991.	8.2	11
3	Ternary NiCoFe nanosheets for oxygen evolution in anion exchange membrane water electrolysis. International Journal of Hydrogen Energy, 2022, 47, 23483-23497.	7.1	13
4	Two routes for sonochemical synthesis of platinum nanoparticles with narrow size distribution. Materials Advances, 2021, 2, 1962-1971.	5.4	23
5	NiCu mixed metal oxide catalyst for alkaline hydrogen evolution in anion exchange membrane water electrolysis. Electrochimica Acta, 2021, 371, 137837.	5.2	60
6	Tuning Ni ²⁺ /MoO ₄ ²⁻ Catalyst-Ionomer and Electrolyte Interaction for Water Electrolyzers with Anion Exchange Membranes. ACS Applied Energy Materials, 2021, 4, 3327-3340.	5.1	27
7	On the electrocatalytic symbiotic synergism between Pt, Ni and Al in plasma vapour deposited Pt _x Ni _y Al _z thin metal films for water electrolysis. Journal of Power Sources, 2021, 494, 229344.	7.8	5
8	Ionomer content optimization in nickel-iron-based anodes with and without ceria for anion exchange membrane water electrolysis. Journal of Power Sources, 2021, 514, 230563.	7.8	28
9	The influence of graphitization on the thermal conductivity of catalyst layers and temperature gradients in proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2020, 45, 1335-1342.	7.1	9
10	Measuring the thermal conductivity of membrane and porous transport layer in proton and anion exchange membrane water electrolyzers for temperature distribution modeling. International Journal of Hydrogen Energy, 2020, 45, 1236-1254.	7.1	23
11	Ni/NiO nanosheets for alkaline hydrogen evolution reaction: In situ electrochemical-Raman study. Electrochimica Acta, 2020, 361, 137040.	5.2	148
12	Effect of anion exchange ionomer content on electrode performance in AEM water electrolysis. International Journal of Hydrogen Energy, 2020, 45, 28272-28284.	7.1	70
13	A micro fuel cell for abiotic catalysis of glucose. Journal of Power Sources, 2020, 478, 229032.	7.8	8
14	Synthesis of CO-tolerant Ni-Pt Rhombic Dodecahedra Bimetallic Electrocatalytic Nanoparticles. ChemNanoMat, 2020, 6, 1220-1228.	2.8	4
15	An <i>in situ</i> XAS study of high surface-area IrO ₂ produced by the polymeric precursor synthesis. Physical Chemistry Chemical Physics, 2020, 22, 18868-18881.	2.8	10
16	Electrodialytic Energy Storage System: Permselectivity, Stack Measurements and Life-Cycle Analysis. Energies, 2020, 13, 1247.	3.1	10
17	Thermal Gradients with Sintered Solid State Electrolytes in Lithium-Ion Batteries. Energies, 2020, 13, 253.	3.1	12
18	The Path to Active and Stable Anion Exchange Membrane Water Electrolyzer. ECS Meeting Abstracts, 2020, MA2020-01, 1589-1589.	0.0	0

#	ARTICLE	IF	CITATIONS
19	Ionomer Content Optimization in Ni-Based Anodes for Alkaline Exchange Membrane Water Electrolysis. ECS Meeting Abstracts, 2020, MA2020-01, 1588-1588.	0.0	0
20	Nano-Structured Transition Metal Phosphides As an Efficient Electrocatalysts for Oxygen Evolution Reaction. ECS Meeting Abstracts, 2020, MA2020-01, 1558-1558.	0.0	0
21	Ex-Situ Investigation of Activated Stainless Steel As Oxygen Evolution Reaction Electrode in Alkaline Media. ECS Meeting Abstracts, 2020, MA2020-02, 2415-2415.	0.0	0
22	Sonochemical Catalyst Synthesis for HER and OER. ECS Meeting Abstracts, 2020, MA2020-02, 2414-2414.	0.0	0
23	Measuring In Situ Interfacial Contact Resistance in a Proton Exchange Membrane Fuel Cell. Journal of the Electrochemical Society, 2019, 166, F853-F859.	2.9	12
24	Raney-platinum thin film electrodes for the catalysis of glucose in abiotically catalyzed micro-glucose fuel cells. Journal of Materials Science, 2019, 54, 14143-14156.	3.7	11
25	Understanding reaction mechanisms using dynamic electrochemical impedance spectroscopy: Methanol oxidation on Pt. Electrochimica Acta, 2019, 323, 134764.	5.2	12
26	Heat to H ₂ : Using Waste Heat for Hydrogen Production through Reverse Electrodialysis. Energies, 2019, 12, 3428.	3.1	22
27	The Performance of Nickel and Nickel-Iron Catalysts Evaluated As Anodes in Anion Exchange Membrane Water Electrolysis. Catalysts, 2019, 9, 814.	3.5	57
28	Strategies for the analysis of the elemental metal fraction of Ir and Ru oxides <i>via</i> XRD, XANES, and EXAFS. Physical Chemistry Chemical Physics, 2019, 21, 12217-12230.	2.8	9
29	Optimized Nickel-Cobalt and Nickel-Iron Oxide Catalysts for the Hydrogen Evolution Reaction in Alkaline Water Electrolysis. Journal of the Electrochemical Society, 2019, 166, F519-F533.	2.9	43
30	Systematic Study on TiO ₂ Crystallization via Hydrothermal Synthesis in the Presence of Different Ferrite Nanoparticles as Nucleation Seeds. Journal of Nanoscience and Nanotechnology, 2019, 19, 4994-4999.	0.9	7
31	The Influence of Argon, Air and Hydrogen Gas on Thermal Conductivity of Gas Diffusion Layers and Temperature Gradients in PEMFCS. ECS Transactions, 2019, 92, 223-245.	0.5	6
32	Dynamic electrochemical impedance study of methanol oxidation at Pt at elevated temperatures. Electrochimica Acta, 2019, 295, 139-147.	5.2	31
33	The potential of zero total charge and electrocatalytic properties of Ru@Pt core-shell nanoparticles. Journal of Electroanalytical Chemistry, 2019, 833, 189-197.	3.8	7
34	The Influence of Argon, Air and Hydrogen Gas on Thermal Conductivity of Gas Diffusion Layers and Temperature Gradients in PEMFCS. ECS Meeting Abstracts, 2019, , .	0.0	0
35	Thermal Gradients through Sintered Solid State Electrolytes in Lithium-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
36	Effect of Ni/NiO Heterostructure on Hydrogen Evolution Performance in AEM Water Electrolysis: In-Operando Raman Study. ECS Meeting Abstracts, 2019, , .	0.0	0

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37	Soldering a gas diffusion layer to a stainless steel bipolar plate using metallic tin. International Journal of Hydrogen Energy, 2018, 43, 9006-9014.	7.1	8
38	The oxygen evolution reaction mechanism at Ir Ru ¹ ~O ₂ powders produced by hydrolysis synthesis. Journal of Electroanalytical Chemistry, 2018, 819, 547-561.	3.8	29
39	The Real Area of Nanoporous Catalytic Surfaces of Gold and Palladium in Aqueous Solutions. Journal of the Electrochemical Society, 2018, 165, H219-H228.	2.9	12
40	Highly Active Nickel-Based Catalyst for Hydrogen Evolution in Anion Exchange Membrane Electrolysis. Catalysts, 2018, 8, 614.	3.5	58
41	Bimetallic Nano Electrocatalyst for HER in Alkaline Polymer Electrolysis. ECS Transactions, 2018, 85, 961-979.	0.5	2
42	An Electrochemical Quartz Crystal Microbalance Investigation of Manganese Oxide Deposition and Dissolution in Sulfuric Acid Relevant for Zinc Electrowinning. ECS Transactions, 2018, 85, 103-119.	0.5	2
43	Development of Ni-Based Bimetallic Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Fuel Cells. ECS Meeting Abstracts, 2018, , .	0.0	1
44	Bimetallic Nano Electrocatalyst for HER in Alkaline Polymer Electrolysis. ECS Meeting Abstracts, 2018, , .	0.0	0
45	An Electrochemical Quartz Crystal Microbalance Investigation of Manganese Oxide Deposition and Dissolution in Sulfuric Acid Relevant for Zinc Electrowinning. ECS Meeting Abstracts, 2018, , .	0.0	0
46	Downstream Impedance in Microfluidic Channels. ECS Meeting Abstracts, 2018, , .	0.0	0
47	Understanding Reaction Mechanisms Using Dynamic Electrochemical Impedance Spectroscopy: Methanol and Formic Acid Oxidation. ECS Meeting Abstracts, 2018, , .	0.0	0
48	Soldering a Gas Diffusion Layer Onto Stainless Steel Bipolar Plates Using Tin and Tin Alloys. ECS Meeting Abstracts, 2018, , .	0.0	0
49	Generator-Sensor Impedance at Double Channel Electrodes. Electrochimica Acta, 2017, 229, 452-457.	5.2	6
50	Materials for Proton Exchange Membrane water electrolyzer bipolar plates. International Journal of Hydrogen Energy, 2017, 42, 2713-2723.	7.1	68
51	A microfluidic electrochemical cell with integrated PdH reference electrode for high current experiments. Electrochimica Acta, 2017, 225, 69-77.	5.2	8
52	Electrochemical Behaviour of Industrial IrO ₂ -Ta ₂ O ₅ Anodes for Copper Electrowinning. ECS Transactions, 2017, 75, 23-35.	0.5	0
53	Method for studying high temperature aqueous electrochemical systems: Methanol and glycerol oxidation. Electrochimica Acta, 2016, 222, 1792-1799.	5.2	12
54	Thin film nanoporous electrodes for the selective catalysis of oxygen in abiotically catalysed micro glucose fuel cells. Journal of Materials Science, 2016, 51, 9095-9107.	3.7	6

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55	Mass-transport impedance at channel electrodes: accurate and approximate solutions. <i>Electrochimica Acta</i> , 2016, 202, 84-89.	5.2	13
56	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.	7.1	38
57	Zirconium hydrogen phosphate as an additive in electrocatalytic layers for the oxygen evolution reaction in PEM water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 9982-9988.	7.1	5
58	A semianalytical method for simulating mass transport at channel electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2015, 745, 72-79.	3.8	7
59	Carbon-polymer composite coatings for PEM fuel cell bipolar plates. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 951-957.	7.1	40
60	Dynamic electrochemical impedance spectroscopy, for electrocatalytic reactions. <i>Electrochimica Acta</i> , 2014, 131, 13-19.	5.2	42
61	Effects of temperature, triazole and hot-pressing on the performance of TiO ₂ photoanode in a solid-state photoelectrochemical cell. <i>Electrochimica Acta</i> , 2014, 115, 66-74.	5.2	10
62	Improved catalytic activity of mixed platinum catalysts supported on various carbon nanomaterials. <i>Journal of Power Sources</i> , 2014, 267, 706-713.	7.8	39
63	Dynamic electrochemical impedance spectroscopy of Pt/C-based membrane-electrode assemblies subjected to cycling protocols. <i>Journal of Power Sources</i> , 2013, 242, 447-454.	7.8	11
64	Effect of heat treatment on the electrocatalytic properties of nano-structured Ru cores with Pt shells. <i>Journal of Electroanalytical Chemistry</i> , 2013, 704, 57-66.	3.8	14
65	Composite Thin Film Iridium- Niobium Oxide Electrocatalysts for the Oxygen Evolution Electrode. <i>ECS Transactions</i> , 2013, 50, 71-84.	0.5	5
66	The effect of pH and halides on the corrosion process of stainless steel bipolar plates for proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 18537-18546.	7.1	41
67	Kinetic study of CO oxidation on clean and oxidized Pt. <i>Electrochimica Acta</i> , 2012, 82, 550-557.	5.2	12
68	Improved electrode systems for reverse electro-dialysis and electro-dialysis. <i>Desalination</i> , 2012, 285, 147-152.	8.2	75
69	Formation and Oxidation Kinetics of Adsorbed CO in Electrocatalytic Reactions on Pt. <i>ECS Meeting Abstracts</i> , 2011, , .	0.0	0
70	High-temperature Electrochemical Characterization of Ru Core Pt Shell Fuel Cell Catalyst. <i>Fuel Cells</i> , 2011, 11, 735-744.	2.4	26
71	CO stripping as an electrochemical tool for characterization of Ru@Pt core-shell catalysts. <i>Journal of Electroanalytical Chemistry</i> , 2011, 655, 140-146.	3.8	116
72	Activating and deactivating mass transport effects in methanol and formic acid oxidation on platinum electrodes. <i>Electrochimica Acta</i> , 2010, 55, 3384-3391.	5.2	18

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73	Increasing and Decreasing Mass Transport Effects in the Oxidation of Small Organic Molecules. ECS Transactions, 2010, 28, 203-210.	0.5	5
74	CO-Stripping at Ru Nanoparticles. ECS Transactions, 2010, 28, 9-17.	0.5	5
75	Assessment of Platinum Dissolution from a Pt/C Fuel Cell Catalyst: An Electrochemical Quartz Crystal Microbalance Study. Journal of the Electrochemical Society, 2010, 157, B621.	2.9	29
76	Impedance study of formic acid oxidation on platinum electrodes. Electrochimica Acta, 2008, 53, 6851-6864.	5.2	55
77	Polymer electrolyte fuel cells based on phosphoric acid doped polybenzimidazole (PBI) membranes. Energy, 2007, 32, 418-422.	8.8	120
78	Impedance study of methanol oxidation on platinum electrodes. Electrochimica Acta, 2006, 51, 3827-3840.	5.2	114
79	Fast methanol oxidation on polycrystalline Pt. Electrochimica Acta, 2006, 52, 773-779.	5.2	18
80	Improving the performance of high-temperature PEM fuel cells based on PBI electrolyte. Journal of Power Sources, 2006, 160, 27-36.	7.8	163
81	Control-oriented modelling and experimental study of the transient response of a high-temperature polymer fuel cell. Journal of Power Sources, 2006, 162, 215-227.	7.8	33