

Ag nanoparticles on mesoporous carbon support as cathode catalyst for anion exchange membrane fuel cell

Linge, Jonas Mart; Erikson, Heiki; Mooste, Marek; Piirsoo, Helle-Mai; **Kaljuvee, Tiit**; Kikas, Arvo; Aruväli, Jaan; Kisand, Vambola; Tamm, Aile; Kannan, Arunachala Mada; Tammeveski, Kaido International Journal of Hydrogen Energy 2023 / p. 11058-11070 <https://doi.org/10.1016/j.ijhydene.2022.12.138> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bifunctional multi-metallic nitrogen-doped nanocarbon catalysts derived from 5-methylresorcinol

Kisand, Kaarel; Sarapuu, Ave; Kikas, Arvo; Kisand, Vambola; Rähn, Mihkel; Treshchalov, Alexey; Käärik, Maike; Piirsoo, Helle-Mai; Aruväli, Jaan; **Paiste, Päärn** Electrochemistry communications 2021 / art. 106932 <https://doi.org/10.1016/j.elecom.2021.106932> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bifunctional platinum-free mixed metal oxygen electrocatalysts based on naturally abundant peat

Teppor, Patrick; Jäger, Rutha; Härmas, Meelis; Aruväli, Jaan; **Volobujeva, Olga**; Koppel, Mirjam; Lust, Enn ECS Meeting Abstracts 2022 / p. 29-37 : ill <https://doi.org/10.1149/10807.0029ecst> [Journal metrics at Scopus](#) [Article at Scopus](#)

Bimetallic metal-organic-framework-derived porous cobalt manganese oxide bifunctional oxygen electrocatalyst

Yusibova, Gulnara; Assafrei, Jürgen-Martin; **Ping, Kefeng**; Aruväli, Jaan; Paiste, Päärn; Käärik, M.; Leis, J.; Piirsoo, Helle-Mai; Tamm, Aile; **Starkov, Pavel** Journal of electroanalytical chemistry 2023 / art. 117161, 10 p.: ill <https://doi.org/10.1016/j.jelechem.2023.117161> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Carbon aerogel platinum-praseodymium oxide nanocatalyst for methanol oxidation in 0.5 M sulfuric acid : (digital presentation)

Priis, Alise-Valentine; Nerut, Jaak; Kasuk, Heili; **Koel, Mihkel**; Sepp, Silver; Valk, Peeter; Aruväli, Jaan; Koppel, Miriam; **Mikli, Valdek**; **Volobujeva, Olga**; Lust, Enn ECS transactions 2022 / art. 79 <https://doi.org/10.1149/10807.0079ecst> [Journal metrics at Scopus](#) [Article at Scopus](#)

Comparison of benzimidazolediol-derived iron triad M–N–C nanomaterials as trifunctional catalysts in alkaline and acidic media : [manuscript]

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Fused hybrid linkers for metal–organic framework-derived bifunctional oxygen electrocatalysts

Ping, Kefeng; Braschinsky, Alan; **Alam, Mahboob**; **Bhadoria, Rohit**; **Mikli, Valdek**; **Mere, Arvo**; Aruväli, Jaan; Paiste, Päärn; Vlassov, Sergei; Kook, Mati; Rähn, Mihkel; Sammelselg, Väino; Tammeveski, Kaido; Kongi, Nadežda; **Starkov, Pavel** ACS Applied Energy Materials 2020 / p. 152–157 : ill <https://doi.org/10.1021/acsaem.9b02039> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hydrogen post-treatment enhances the electrochemical activity of Pt-CeO₂/C catalysts

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Investigation of oxygen reduction on platinum nanoparticles deposited onto peat-derived carbon carrier

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Iron and cobalt containing electrospun carbon nanofibre-based cathode catalysts for anion exchange membrane fuel cell

Sokka, Andri; Mooste, Marek; Käärik, Maike; **Gudkova, Viktoria**; Kozlova, Jekaterina; Kikas, Arvo; Kisand, Vambola; Treshchalov, Alexey; Tamm, Aile; Paiste, Päärn; Aruväli, Jaan; Leis, Jaan; **Krumme, Andres**; Holdcroft, Steven; Cavaliere, Sara; Jaouen, Frederic; Tammeveski, Kaido International Journal of Hydrogen Energy 2021 / p. 31275-31287 <https://doi.org/10.1016/j.ijhydene.2021.07.025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Iron triad-based bimetallic M–N–C nanomaterials as highly active bifunctional oxygen electrocatalysts

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Iron, cobalt, and nickel phthalocyanines tri-doped electrospun carbon nanofibre-based catalyst for rechargeable zinc-air battery air electrode

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Mechanosynthesis of a bifunctional FeNi-N-C oxygen electrocatalyst via facile mixed-phase templating and preheating-pyrolysis

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Multi-purpose heterogeneous catalyst material from an amorphous cobalt metal-organic framework

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Optimisation of the ethylene glycol reduction method for the synthesis of platinum-ceria-carbon materials as catalysts for the methanol oxidation reaction

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Optimizing post-treatment strategies for enhanced oxygen reduction/evolution activity in Co–N–C electrocatalyst

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Peat as a carbon source for non-platinum group metal oxygen electrocatalysts and AEMFC cathodes

Teppor, Patrick; Jäger, Rutha; Paalo, Maarja; Adamson, Anu; Härmä, Meelis; **Volobujeva, Olga**; Aruväli, Jaan; Palm, Rasmus; Lust, Enn International Journal of Hydrogen Energy 2022 / p. 16908 - 16920 <https://doi.org/10.1016/j.ijhydene.2022.03.199> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Peat-derived carbon-based non-platinum group metal type catalyst for oxygen reduction and evolution reactions

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Platinum-free oxygen electrocatalysts and alkaline fuel cell cathodes fabricated from peat

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Transition-metal- and nitrogen-doped carbide-derived carbon/carbon nanotube composites as cathode catalysts for anion-exchange membrane fuel cells

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Unlocking the porosity of Fe–N–C catalysts using hydroxyapatite as a hard template en route to eco-friendly high-performance AEMFCs

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The utilization of platinum catalysts deposited on carbon support synthesized from coffee grounds in a polymer electrolyte membrane fuel cell

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