

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](#)

Antimicrobial activity of commercial photocatalytic SaniTise™ Window glass

Kisand, Vambola; Visnapuu, Meeri; **Rosenberg, Merilin**; Danilian, Dmytro; Vlassov, Sergei; Kook, Mati; Lange, Sven; Pärna, Rainer; Ivask, Angela Catalysts 2022 / art. 197 <https://doi.org/10.3390/catal12020197> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Antiviral efficacy of cerium oxide nanoparticles

Nefedova, Alexandra; Rausalu, Kai; Zusinaite, Eva; Vanetsev, Alexander; **Rosenberg, Merilin**; Koppel, Kairi; Lilla, Stevin; Visnapuu, Meeri; Smits, Krisjanis; Kisand, Vambola Scientific reports 2022 / art. 18746, 16 p. : ill <https://doi.org/10.1038/s41598-022-23465-6> [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 oxygen electrocatalyst based on Fe, Co, and nitrogen co-doped graphene-coated alumina nanofibers for Zn-air battery air electrode

Mooste, Marek; Ahmed, Zubair; Kapitulskis, Pavels; **Ivanov, Roman**; Treshchalov, Alexey; Piirsoo, Helle-Mai; Kikas, Arvo; Kisand, Vambola; Kukli, Kaupo; **Hussainova, Irina**; Tammeveski, Kaido Applied Surface Science 2024 / art. 160024 <https://doi.org/10.1016/j.apsusc.2024.160024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Dissolution of silver nanowires and nanospheres dictates their toxicity to escherichia coli

Visnapuu, Meeri; Joost, Urmas; **Juganson, Katre**; Künnis-Beres, Kai; Kahru, Anne; Kisand, Vambola; Ivask, Angela BioMed Research International 2013 / art. 819252 <https://doi.org/10.1155/2013/819252> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrospun carbon nanofibre-based catalysts prepared with Co and Fe phthalocyanine for oxygen reduction in acidic medium

Muuli, Kaur; Mooste, Marek; Akula, Srinu; **Gudkova, Viktoria**; Otsus, Markus; Kikas, Arvo; Aruväli, Jaan; Treshchalov, Alexey; Kisand, Vambola; **Krumme, Andres** ChemElectroChem 2023 / art. e202300131, 12 p. : ill <https://doi.org/10.1002/celec.202300131> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrospun polyacrylonitrile-derived Co and Fe containing nanofibre catalysts for oxygen reduction reaction at the alkaline membrane fuel cell cathode

Mooste, Marek; Kibena-Pöldsepp, Elo; **Vassiljeva, Viktoria**; Kikas, Arvo; Käärik, Maike; Kozlova, Jekaterina; Kisand, Vambola; Külaviir, Marian; Cavaliere, S.; Leis, Jaan; **Krumme, Andres**; Sammelselg, Väino; Holdcroft, Steven; Tammeveski, Kaido ChemCatChem 2020 / p. 4568–4581 : ill <https://doi.org/10.1002/cctc.202000658> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 and cobalt phthalocyanine embedded electrospun carbon nanofiber-based catalysts for anion exchange membrane fuel cell cathode

Muuli, Kaur; Sokka, Andri; Mooste, Marek; Lilloja, Jaana; **Gudkova, Viktoria**; Käärik, Maike; Otsus, Markus; Kikas, Arvo; Kisand, Vambola; Tamm, Aile; Leis, Jaan; **Krumme, Andres** Journal of Catalysis 2023 / p. 117-130 <https://doi.org/10.1016/j.jcat.2023.04.008> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Muuli, Kaur; Rohit Kumar; Mooste, Marek; **Gudkova, Viktoria**; Treshchalov, Alexey; Piirsoo, Helle-Mai; Kikas, Arvo; Aruväli, Jaan; Kisand, Vambola; Tamm, Aile; **Krumme, Andres**; Moni, Prabu; Wilhelm, Michaela; Tammeveski, Kaido Materials 2023 / art. 4626 <https://doi.org/10.3390/ma16134626> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Kosimov, Akmal; Yusibova, Gulnara; Wojsiat, Ivan Tito; Aruväli, Jaan; Käärik, Maike; Leis, Jaan; Paaver, Peeter; Vlassov, Sergei; Kikas, Arvo; Kisand, Vambola; Piirsoo, Helle-Mai; Kukli, Kaupo; Heinmaa, Ivo; **Kaljuvee, Tiit**; Kongi, Nadezda Journal of Materials

Microbial interactions with inanimate solid surfaces : a methodological approach = Mikroobide interaktsioonid tahkete eluta pindadega : metoodiline käsitus

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

Ping, Kefeng; Alam, Mahboob; Kahnert, Sean Ray; Bhadoria, Rohit; Mere, Arvo; Mikli, Valdek; Käärik, Maike; Aruväli, Jaan; Paiste, Päärn; Kikas, Arvo; Kisand, Vambola; Järving, Ivar; Leis, Jaan; Kongi, Nadežda; Starkov, Pavel Materials advances 2021 / p. 4009-4015 <https://doi.org/10.1039/D1MA00414J> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Yusibova, Gulnara; Ping, Kefeng; Käärik, Maike; Leis, Jaan; Aruväli, Jaan; Šmits, Krišjānis; Käämbre, Tanel; Kisand, Vambola; **Karpichev, Yevgen**; Tammeveski, Kaiko; Kongi, Nadežda International Journal of Hydrogen Energy 2024 / p. 398-406
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Photocatalytic and antibacterial activity of nano zinc oxide/silver composite nanoparticle covered surfaces [Online resource]

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Photocatalytic antibacterial activity of nano-TiO₂ (anatase)-based thin films : effects on Escherichia coli cells and fatty acids

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Pinching of alkoxide jets - a route for preparing nanometre level sharp oxide fibres

Tätte, Tanel; Paalo, Madis; Kisand, Vambola; Reedo, Valter; **Kartušinski, Aleksander**; Saal, K.; Mäeorg, U.; Lõhmus, Ants; Kink, I. Nanotechnology 2007 / 12, p. 125301 [5 p.] : ill <https://iopscience.iop.org/article/10.1088/0957-4484/18/12/125301/meta>

Preparation and characterization of photocatalytically active antibacterial surfaces covered with acrylic matrix embedded nano-ZnO and nano-ZnO/Ag

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Surface carboxylation or PEGylation decreases CuO nanoparticles' cytotoxicity to human cells in vitro without compromising their antibacterial properties

Kubo, Anna-Liisa; **Vasiliev, Grigory**; Vija, Heiki; Krištāl, Jekaterina; **Tõugu, Vello**; Visnapuu, Meeri; Kisand, Vambola; **Kahru, Anne**; Bondarenko, Olesja Archives of toxicology 2020 / p. 1561-1573 : ill <https://doi.org/10.1007/s00204-020-02720-7>

Transition metal-containing nitrogen-doped nanocarbon catalysts derived from 5-methylresorcinol for anion exchange membrane fuel cell application

Kisand, Kaarel; Sarapuu, Ave; Danilian, Dmytro; Kikas, Arvo; Kisand, Vambola; Rähn, Mihkel; Treshchalov, Alexey; Käärik, Maike; Merisalu, Maido; **Paiste, Päärn** Journal of colloid and interface science 2021 / p. 263-274 <https://doi.org/10.1016/j.jcis.2020.09.114> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

UVA-induced antimicrobial activity of ZnO/Ag nanocomposite covered surfaces

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