

Antibacterial and antiviral effects of Ag, Cu and Zn metals, respective nanoparticles and filter materials thereof against coronavirus SARS-CoV-2 and influenza A virus

Kubo, Anna-Liisa; Rausalu, Kai; Savest, Natalja; Žusinaite, Eva; **Vasiliev, Grigory; Viirsalu, Mihkel; Plamus, Tiia; Krumme, Andres**; Merits, Andres; Bondarenko, Olesja Pharmaceutics 2022 / art. 2549 : 19 p. : ill <https://doi.org/10.3390/pharmaceutics14122549> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biodegradable polyurethane/graphene oxide scaffolds for soft tissue engineering : in vivo behavior assessment

Ivanoska-Dacikj, Aleksandra; Bogoeva-Gaceva, Gordana; **Krumme, Andres; Tarasova, Elvira**; Scalera, Chiara; Stojkovski, Velimir; Gjorgoski, Icko; Ristoski, Tpe International Journal of Polymeric Materials and Polymeric Biomaterials 2020 / p. 1101 - 1111 <https://doi.org/10.1080/00914037.2019.1655754> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

1-butyl-3-methylimidazolium chloride assisted electrospinning of SAN/MWCNTs conductive reinforced composite membranes

Gudkova, Viktoria; Krumme, Andres; Märtson, Triin; Rikko, M.; Tarasova, Elvira; Savest, Natalja; Viirsalu, Mihkel Journal of electrostatics 2015 / p. 11-16 : ill <https://doi.org/10.1016/j.elstat.2015.09.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Directly electrospun electrodes for electrical double-layer capacitors from carbide-derived carbon

Malmberg, Siret; Arulepp, Mati; **Savest, Natalja; Tarasova, Elvira; Vassiljeva, Viktoria; Krasnou, Illia; Käärik, Maike; Mikli, Valdek; Krumme, Andres** Journal of electrostatics 2020 / art. 103396, 7 p. : ill <https://doi.org/10.1016/j.elstat.2019.103396> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of electrode type on electrospun membrane morphology using low-concentration PVA solutions

Zelca, Zane; **Krumme, Andres**; Kukle, Silvija; **Viirsalu, Mihkel**; Vilcena, Laimdota Membranes 2022 / art. 609 <https://doi.org/10.3390/membranes12060609> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of ionic liquids on the conductivity of electrospun polyacrylonitrile membranes

Savest, Natalja; Plamus, Tiia; Tarasova, Elvira; Viirsalu, Mihkel; Krasnou, Illia; Gudkova, Viktoria; Küppar, Kadi-Anne; Krumme, Andres Journal of electrostatics 2016 / p. 63-68 : ill <https://doi.org/10.1016/j.elstat.2016.07.006> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of ionic liquids on the mechanical properties of electrospun polyacrylonitrile membranes

Plamus, Tiia; Savest, Natalja; Viirsalu, Mihkel; Harz, Patrick; **Tarasova, Elvira; Krasnou, Illia; Vassiljeva, Viktoria; Kallavus, Urve; Krumme, Andres** Polymer testing 2018 / p. 335-343 : ill <https://doi.org/10.1016/j.polymertesting.2018.09.003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrochemical evaluation of directly electrospun carbide-derived carbon-based electrodes in different nonaqueous electrolytes for energy storage applications

Malmberg, Siret; Arulepp, Mati; **Tarasova, Elvira; Vassiljeva, Viktoria; Krasnou, Illia; Krumme, Andres** C – journal of carbon research 2020 / art. 59, 16 p. : ill <https://doi.org/10.3390/c6040059>

Electrospinning of chitosan biopolymer and polyethylene oxide blends

Varnaite-Žuravliova, Sandra; **Savest, Natalja**; Baltušnikaitė-Guzaitienė, Julija; Abraitienė, Aušra; **Krumme, Andres** Autex research journal 2020 / p. 426-440 : ill <https://doi.org/10.2478/aut-2019-0031> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrospinning polyvinyl alcohol reinforced with chitin: The effect of the degree of acetylation

Krumme, Andres; Mendez, James D. Polymers 2024 / art. 1955 <https://doi.org/10.3390/polym16141955> [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 conductive mats from PANi-ionic liquid blends

Savest, Natalja; Plamus, Tiia; Kütt, Kertu; **Kallavus, Urve; Viirsalu, Mihkel; Tarasova, Elvira; Vassiljeva, Viktoria; Krasnou, Illia; Krumme, Andres** Journal of electrostatics 2018 / p. 40-44 <https://doi.org/10.1016/j.elstat.2018.09.007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrospun fibrous materials with propolis extracts for edible food packagings

Zelca, Zane; Merijs-Meri, Remo; **Krumme, Andres**; Bernava, Aina Molecules 2023 / art. 5497 <https://doi.org/10.3390/molecules28145497> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrospun triboelectric textiles utilizing cellulose acetate

Edberg, Jesper; **Savest, Natalja; Krasnou, Illia**; Mulla, Mohammad Yusuf; **Krumme, Andres**; Hakansson, Karl; Dobryden, Illia
Advanced sustainable systems 2025 / art. e00173 <https://doi.org/10.1002/adss.202500173>

A finite element method for determining the mechanical properties of electrospun nanofibrous mats

Sanchaniya, Jaymin Vrajilal; Lasenko, Inga; Gobins, Valters; Kobeissi, Alaa; **Goljandin, Dmitri** Polymers 2024 / art. 852
<https://doi.org/10.3390/polym16060852> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Formation of uniform PVDF fibers under ultrasound exposure in presence of anionic surfactant

Tarasova, Elvira; Tamberg, K.-G.; Viirsalu, Mihkel; Savest, Natalja; Gudkova, Viktoria; Krasnou, Illia; Krumme, Andres
Journal of electrostatics 2015 / p. 39-47 : ill <https://doi.org/10.1016/j.elstat.2015.05.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of 1-butyl-3-methylimidazolium chloride on the electrospinning of cellulose acetate nanofibers

Javed, Kashif; Krumme, Andres; Krasnou, Illia; Mikli, Valdek; Viirsalu, Mihkel; Plamus, Tiia; Vassiljeva, Viktoria; Tarasova, Elvira; Savest, Natalja; Mendez, James D. Journal of macromolecular science, part A : pure and applied chemistry 2018 / p. 142-147 : ill <https://doi.org/10.1080/10601325.2017.1387861> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of preparation process on morphology and conductivity of carbon black-based electrospun nanofibers

Tarasova, Elvira; Byzova, Arina; Savest, Natalja; Viirsalu, Mihkel; Gudkova, Viktoria; Märtson, Triin; Krumme, Andres
Fullerenes, nanotubes and carbon nanostructures 2015 / p. 695-700 : ill <https://doi.org/10.1080/1536383X.2014.974090> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Intermolecular interaction of thermoresponsive poly(2-isopropyl-2-oxazoline) in solutions and interpolymer complex with fiber-forming polyethylene oxide

Amirova, Alina; Rodchenko, Serafim; Kurlykin, Mikhail; Tenkovtsev, Andrey; **Krasnou, Illia; Krumme, Andres**; Filippov, Alexander
Journal of applied polymer science 2020 / art. 49708, 8 p <https://doi.org/10.1002/app.49708> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of influence of conductivity on the polyaniline fiber mats, produced via electrospinning

Varnaite-Žuravliova, Sandra; **Savest, Natalja**; Abraitienė, Aušra; Baltušnikaitė-Guzaitienė, Julija; **Krumme, Andres** Materials Research Express 2018 / art. 055308 <https://doi.org/10.1088/2053-1591/aac4ea> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The investigation of the production of salt-added polyethylene oxide/chitosan nanofibers

Varnaite-Žuravliova, Sandra; **Savest, Natalja**; Baltušnikaitė-Guzaitienė, Julija; Abraitienė, Aušra; **Krumme, Andres** Materials 2024 / art. 132 <https://doi.org/10.3390/ma17010132> [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, Maie; **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, 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](#)

Novel method for producing electrospun composite nanofibre yarns

Viirsalu, Mihkel; Savest, Natalja; Plamus, Tiia; Vassiljeva, Viktoria; Krumme, Andres Proceedings of the Estonian Academy of Sciences 2018 / p. 169-174 : ill <https://doi.org/10.3176/proc.2018.2.09> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel method to enhance the mechanical properties of polyacrylonitrile nanofiber mats: an experimental and numerical investigation

Sanchaniya, Jaymin Vrajila; Lasenko, Inga; Vijayan, Vishnu; Smogor, Hilary; Gobins, Valters; Kobeissi, Alaa; **Goljandin, Dmitri**
Polymers 2024 / art. 992 <https://doi.org/10.3390/polym16070992> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

One-step carbon nanotubes grafting with styrene-co-acrylonitrile by reactive melt blending for electrospinning of conductive reinforced composite membranes

Vassiljeva, Viktoria; Kirikal, Kristi; Hietala, S.; Kaljuvee, Tiit; Mikli, Valdek; Rähn, Mihkel; **Tarasova, Elvira; Krasnou, Illia; Viirsalu, Mihkel; Savest, Natalja; Plamus, Tiia; Javed, Kashif; Krumme, Andres** Fullerenes, nanotubes and carbon nanostructures 2017 / p. 667-677 : ill <https://doi.org/10.1080/1536383X.2017.1394847> [Journal metrics at Scopus](#) [Article at Scopus](#)

Oxygen reduction on catalysts prepared by pyrolysis of electrospun styrene- acrylonitrile copolymer and multi-walled carbon nanotube composite fibres

Mooste, Marek; KibenaIPöldsepp, Elo; Matisen, Leonard; **Vassiljeva, Viktoria**; **Krumme, Andres** Catalysis letters 2018 / p. 1815–1826 : ill <https://doi.org/10.1007/s10562-018-2392-6> [Journal metrics at scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Polymer nanofiber deposition in lab-on-a-chip devices by electrospinning

Pardy, Tamas; **Jõemaa, Rauno**; Ender, Ferenc; **Rang, Toomas**; Hegedus, Kristof; Balogh-Weiser, Diana 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p. : ill <https://doi.org/10.1109/BEC49624.2020.9277494>

Propolis nanofibers : development and effect against SARS-CoV-2 virus and S. aureus, S. enterica bacteria

Zelca, Zane; **Krumme, Andres**; Kukle, Silvija; **Krasnou, Illia** Materials today chemistry 2023 / art. 101749 <https://doi.org/10.1016/j.mtchem.2023.101749> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A Review on graphene-based electrospun conductive nanofibers, supercapacitors, Anodes, and cathodes for lithium-ion batteries

Javed, Kashif; **Oolo, Marco**; **Savest, Natalja**; **Krumme, Andres** Critical Reviews in Solid State and Materials Sciences 2019 / p. 427-443 : ill <https://doi.org/10.1080/10408436.2018.1492367> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The impact of 1-butyl-3-methylimidazolium chloride on electrospinning process of SAN polymer solutions and electrospun fiber morphology

Gudkova, Viktoria; **Krumme, Andres**; **Märtson, Triin**; **Rikko, M.**; **Tarasova, Elvira**; **Viirsalu, Mihkel** Journal of electrostatics 2014 / p. 433-436 : ill <https://doi.org/10.1016/j.elstat.2014.08.003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Towards controllable electrospinning: a systematic analysis of the effect of input parameters on nanofiber morphology

Mahdian, Mehrab; Stummer, Tamas; Sepsik, Norman; **Ender, Ferenc**; Balogh-Weiser, Diana; **Pardy, Tamas** techrxiv.org 2025 / 86 p <https://doi.org/10.36227/techrxiv.174662365.53016549/v1>