

Advanced sensing materials based on molecularly imprinted polymers towards developing point-of-care diagnostics devices

Kidakova, Anna; Reut, Jekaterina; Boroznjak, Roman; Öpik, Andres; Söritski, Vitali Proceedings of the Estonian Academy of Sciences 2019 / p. 158–167 : ill <https://doi.org/10.3176/proc.2019.2.07> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Advances in detection of antibiotic pollutants in aqueous media using molecular imprinting technique - a review

Ayankojo, Akinrinade George; Reut, Jekaterina; Nguyen, Vu Bao Chau; Boroznjak, Roman; Söritski, Vitali Biosensors 2022 / art. 441 <https://doi.org/10.3390/bios12070441> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Akadeemik selgitab: mis juhtub autotööstusega, kui kogu maailm valmistub rohepöördeks?

Kübarsepp, Jakob digi.geenius.ee 2023 [Akadeemik selgitab: mis juhtub autotööstusega, kui kogu maailm valmistub rohepöördeks?](#)

An advanced finite element model of IPMC

Pugal, Deivid; Kasemägi, Heiki; Kruusmaa, Maarja; Aabloo, Alvo Electroactive Polymer Actuators and Devices (EAPAD) 2008 2008 / p. 692711

Challenges and perspectives in control of ionic polymer-metal composite (IPMC) actuators : a survey

Aabloo, Alvo; Belikov, Juri; Kaparin, Vadim; Kotta, Ülle IEEE Access 2021 / art. 9133056, p. 121059-121073 <https://doi.org/10.1109/ACCESS.2020.3007020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Classification of polymeric materials by evolving factor analysis and PCA of thermochromatograms

Elomaa, M.; Lochmüller, Charles H.; Kudrjašova, Marina; Kaljurand, Mihkel Termochimica acta 2000 / 1/2, p. 137-144

Comparative study of the VARTM, VAP and MTI vacuum infusion processes

Aruniit, Aare; Herranen, Henrik; Miller, Kristen Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 71-76 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.71>

The computational approach for rational monomer selection in molecularly imprinted polymer synthesis [Online resource]

Boroznjak, Roman; Lomaka, Andre; Söritski, Vitali; Reut, Jekaterina Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p. : ill <http://fntdk.ut.ee/teesid/>

Determination of resistance to wear of particulate composite

Aruniit, Aare; Antonov, Maksim; Kers, Jaan; Krumme, Andres Engineering materials & tribology XXII 2014 / p. 188-191

Development of sustainable polypropylene based composites = Polüpropeeni baasil jätkusuutlike komposiitide arendus

Hussain, Abrar 2023 <https://doi.org/10.23658/taltech.64/2023> <https://digikogu.taltech.ee/et/Item/ffead123-ec1c-4d27-baa6-ed82c6d527cc> https://www.ester.ee/record=b5645373*est https://www.ester.ee/record=b5645373*est

Dynamical variation of the impedance of IPMC

Kruusamäe, Karl; Punning, Andres; Kruusmaa, Maarja; Aabloo, Alvo Proceedings of SPIE 2009 / Electroactive Polymer Actuators and Devices (EAPAD) 2009, p. 72870V-1 - 72870V-9 : ill https://www.researchgate.net/publication/236115865_Dynamical_variation_of_the_impedances_of_IPMC

Effect of basalt reinforcement type and content on the abrasive wear behaviour of polymer composites

Antonov, Maksim; Kers, Jaan; Liibert, Laura; Shuliak, Volodymyr; Smirnov, Anton; Bartolome, Jose F. Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 181-188 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.181>

Effect of hemp fibre length on the properties of polypropylene composites

Alao, Percy Festus; Kallakas, Heikko; Poltimäe, Triinu; Kers, Jaan Agronomy research 2019 / p. 1517–1531 : ill <https://doi.org/10.15159/AR.19.146> [Journal metrics at Scopus](#) [Article at Scopus](#)

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](#)

Efficient barrier properties of mechanically enhanced agro-extracted cellulosic biocomposites

Qasim, Umair; Fatima, R.; Usman, M. Materials today chemistry 2020 / art. 100378, 8 p. : ill <https://doi.org/10.1016/j.mtchem.2020.100378>

Electrospinning of a polymer membrane reinforced with carbon nanotubes = Süsinik nanotorudega tugevdatud

polümeerse membraani elektroketrus

Vassiljeva, Viktoria 2017 <https://digi.lib.ttu.ee/i/?9129>

Electrospinning of chitosan biopolymer and polyethylene oxide blends

Varnaite-Žuravliova, Sandra; **Savest, Natalja**; Baltušnikaite-Guzaitiene, Julija; Abraitene, 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](#)

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 conductive membranes from Pani-Ionic liquid blends [Online resource]

Plamus, Tiia; **Savest, Natalja**; **Kallavus, Urve**; Krumme, Andres Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7.-8. märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmtdk.ut.ee/teesid-2018/>

Enhanced efficiency of hybrid amorphous silicon solar cells based on single-walled carbon nanotubes and polymer composite thin film

Rajanna, Pramod M.; Gilshteyn, Evgenia P.; Yagafarov, Timur; Alekseeva, Alena A.; Anisimov, Anton S.; Neumüller, Alex; Sergeev, Oleg; **Bereznev, Sergei**; **Maricheva, Jelena**; Nasibulin, Albert Nanotechnology 2018 / 10 p. : ill <https://doi.org/10.1088/1361-6528/aaa647> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Finite element method and its usable applications in wear models design

Sivitski, Alina; Põdra, Priit Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 71-76 : ill

Foreword

Õpik, Andres Proceedings of the Estonian Academy of Sciences 2018 / p. 115-116 http://www.kirj.ee/public/proceedings_pdf/2018/issue_2/proc-2018-2-115-116.pdf [Journal metrics at Scopus](#) [Article at Scopus](#)

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 <http://dx.doi.org/10.1016/j.elstat.2015.05.004>

Friction and wear of fiber reinforced polyimide composites

Zhao, Gai; **Hussainova, Irina**; **Antonov, Maksim**; Wang, Qihua; Wang, Tingmei Wear 2013 / p. 122-129 : ill

Friction and wear of fiber reinforced polyimide composites

Zhao, Gai; **Hussainova, Irina**; **Antonov, Maksim**; Wang, Qihua; Wang, Tingmei; **Veinthal, Renno** 19th International Conference on Wear of Materials : Portland, Oregon, USA, 14-18 April 2013 : conference abstracts 2013 / [p. 92]

Influence of filler proportion on mechanical and physical properties of particulate composite

Aruniit, Aare; **Kers, Jaan**; **Tall, Kaspar** Agronomy research 2011 / p. 23-29 : ill

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 <http://dx.doi.org/10.1080/1536383X.2014.974090>

Isosorbide-based polymers as alternatives to conventional plastics

Matt, Livia; Laanesoo, Siim; Bonjour, Olivier; **Parve, Jaan**; **Parve, Omar**; Pehk, Tõnis; Pham, Thanh Huong; Liblikas, Ilme; Jannasch, Patric; Vares, Lauri Abstract from Baltic Polymer Symposium 2022, Tallinn, Estonia 2022 <https://taltech.ee/en/BPS2022>

A method for producing conductive graphene biopolymer nanofibrous fabrics by exploitation of an ionic liquid dispersant in electrospinning

Javed, Kashif; **Krumme, Andres**; **Viirsalu, Mihkel**; **Krasnou, Illia**; **Plamus, Tiia**; **Vassiljeva, Viktoria**; **Tarasova, Elvira**; **Savest, Natalja**; **Mere, Arvo**; **Mikli, Valdek**; **Danilson, Mati**; **Kaljuvee, Tiit**; Lange, Sven Carbon 2018 / p. 148-156 : ill <https://doi.org/10.1016/j.carbon.2018.08.034> <https://novaator.err.ee/873101/ttu-teadlaste-arendatud-tselluloosikangaga-saab-vajadusel-laadida-telefoni> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modeling constitutive relation for woven polymer-based composites

Majak, Jüri; **Pohlak, Meelis**; **Küttner, Rein**; **Eerne, Martin**; **Herranen, Henrik** NATO Advanced Research Workshop : Textile Composites : May 18-22, 2009, Kiev, Ukraine 2009 / [3] p

Molecularly imprinted polymer-based SAW sensor for label-free detection of cerebral dopamine neurotrophic factor

protein

Kidakova, Anna; Boroznjak, Roman; Reut, Jekaterina; Öpik, Andres; Saarma, Mart; Sõritski, Vitali Sensors and actuators B : chemical 2020 / art. 127708, 8 p. : ill <https://doi.org/10.1016/j.snb.2020.127708> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Molecularly imprinted polymers as advanced sensing materials for detection of neurotrophic factor proteins

Reut, Jekaterina; Kidakova, Anna; Boroznjak, Roman; Öpik, Andres; Sõritski, Vitali 6th International Conference on Bio-Sensing Technology, 16-19 June 2019, Kuala Lumpur, Malaysia : program 2019 / P2.64
<https://www.elsevier.com/events/conferences/international-conference-on-bio-sensing-technology>

Molekulaarselt jäljendatud polümeerid: kaasaegsed biomimeetilised sensormaterjalid meditsiiniliseks diagnostikaks ja keskkonnaseireks

Sõritski, Vitali Eesti Vabariigi preemiad 2023 : teadus. F. J. Wiedemanni keeleauhind. Sport. Kultuur. Haridus 2023 / Lk. 92-107
<https://doi.org/10.3176/evp.2023.05> https://www.ester.ee/record=b1226072*est

Monograin membranes as artificial thylakoid membranes [Online resource]

Samiepour, Ali; Kouhiisfahani, Elham; Morawietz, Tobias; Hiesgen, Renate; **Meissner, Dieter** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p. : ill <http://fntdk.ut.ee/teesid/>

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>

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](#)

Particle reinforced polymer composites resistance to three body abrasive wear

Aruniit, Aare; Antonov, Maksim; Kers, Jaan; Krumme, Andres TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Performance of TiO₂:Sm³⁺ based optical sensor embedded in cavitated polymer films

Tikk, Taavi; Lange, Sven; Paara, Tõnis; Eltermann, Marko; **Krumme, Andres** GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 82 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Performance of TiO₂:SM³⁺ based optical sensor embedded in cavitated polymer films

Tikk, Taavi; Lange, Sven; Paara, Tõnis; Eltermann, Marko; **Krumme, Andres** Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 62 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Plastide töötlemine, vormimiseseadmed ja rakised : täienduskursus : 27. märts 2008 - 22. mai 2008 : põhineb projektil "Täiendkoolitus- ja e-õppe süsteemi väljaarendamine materjalitehnoloogidele ja kvaliteediinseneridele polümeer- ja komposiitmaterjalide valdkonnas Põhjamaade ja Euroopa tehnikaülikoolide kogemustest lähtudes"

Siirde, Kaarel [2008] https://www.ester.ee/record=b4652787*est

Plastmassid Eesti NSV masinaehituses

Kanne, Leida Tehnika ja Tootmine 1970 / lk. 630-632 https://www.ester.ee/record=b1073047*est

Polümeeride füüsika, mehaanika ja testimine : täienduskursus : 8. november 2007 - 10. jaanuar 2008

Krumme, Andres [2007] https://www.ester.ee/record=b4652770*est

Polümeermaterjalid

Christjanson, Peep 2006 http://www.ester.ee/record=b2208010*est

Polümeermaterjalid

Christjanson, Peep 2007 http://www.ester.ee/record=b2338912*est

Polümeermaterjalid : täienduskursus : 1. veebruar 2008 - 11. aprill 2008

Christjanson, Peep [2008] https://www.ester.ee/record=b4652778*est

Preparation of fibrous electrospun membranes with activated carbon filler

Krasnou, Illia; Tarasova, Elvira; Malmberg, Siret; Vassiljeva, Viktoria; Krumme, Andres IOP conference series : materials science and engineering 2019 / art. 012022, 5 p. : ill <https://doi.org/10.1088/1757-899X/500/1/012022> [Conference proceedings at](#)

Prospects for use of oil shale fly ash as filler in polymeric compounds

Viikna, Anti; Süld, Tiia-Maaja; Kuusik, Rein, keemik International oil shale symposium : Tallinn, Estonia, June 10-13, 2013 2013 / p. 77

Pultruding of metal powder filled glass fiber reinforced polymer composites

Rummo, Henri; Veinthal, Renno; Aruniit, Aare Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 48-53 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.48>

A recipe for sustainable building construction

Kouvvara, Asimina; Priavoulou, Christina; Ott, Denise; Scherer, Philipp; Zyl-Bulitta, Verena Helen van Buildings 2023 / p. 2493 <https://doi.org/10.3390/buildings13102493>

Recycling of PA-12 in additive manufacturing and the improvement of its mechanical properties

Mägi, Piret; Krumme, Andres; Pohlak, Meelis Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 9-14 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.9>

Sensormaterjalid molekulaarselt jäljendatud polümeeridest meditsiiniliseks diagnostikaks ja keskkonnaseireks

Õpik, Andres; Sõritski, Vitali; Reut, Jekaterina Teadusmõtte Eestis (X). Tehnikateadused. 3 : [artiklikogumik] 2019 / lk. 227-237 : ill., fot https://www.ester.ee/record=b5208765*est

Solar cells based on polycrystalline copper-indium chalcogenides and conductive polymers

Bereznev, Sergej 2003 http://www.ester.ee/record=b1558007*est

Study of thermal properties of synthetic resins based on oil shale alkylresorcinols

Jurkeviciute, Ana; Grigorieva, Larisa; Tõnsuaadu, Kaia Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / p. 22 [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Sustainable fabrication of polypropylene-postconsumer cotton composite materials : circularity, characterization, mechanical testing, and tribology

Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Viljus, Mart; Krasnou, Illia Materials today sustainability 2023 / art. 100344, 16 p. : ill <https://doi.org/10.1016/j.mtsust.2023.100344>

Synthesis and investigation of thermo-induced gelation of partially cross-linked poly-2-isopropyl-2-oxazoline in aqueous media

Amirova, Alina; Rodchenko, Serafim; Kurlykin, Mikhail; Tenkovtsev, Andrey; Krasnou, Illia; Krumme, Andres; Filippov, Alexander Polymers 2020 / art. 698, 13 p. : ill <https://doi.org/10.3390/polym12030698> [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 <http://dx.doi.org/10.1016/j.elstat.2016.07.006>

Using nano-additives to increase the oxygen barrier of polymers [Online resource]

Paara, Tõnis; Lange, Sven; Krumme, Andres Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fntdk.ut.ee/teesid-2018/>

Valitsus kuulutas välja riiklike teaduspreemiate laureaadiid

postimees.ee 2023 [Valitsus kuulutas välja riiklike teaduspreemiate laureaadiid](#)

Изнашивание металлофторопластовой ленты в условиях вибрации

Lehiste, J.; Nanits, Mats-Maidu XXX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 8-10 апреля 1986 года : тезисы докладов. Том II, Автоматика. Энергетика. Механика. Химия 1986 / с. 101 https://www.ester.ee/record=b1305565*est

Исследование износостойкости подшипниковых материалов на четырехшариковых трибометрах

Ajaots, Mado; Lepre, M. Тезисы докладов XXXI студенческой научно-технической конференции 1980 / с. 85-86 https://www.ester.ee/record=b1319482*est

Наполнители полимерных материалов на основе твердых продуктов сланцепереработки

Fadejeva, Rimma; Joonas, Richard; Tanaskov, M. Тезисы докладов Всесоюзного научно-технического совещания "Состояние и перспективы производства и применения сланцевых наполнителей и вспомогательных веществ для

полимерных материалов", Кохтла-Ярве 27-28 мая 1981 г 1981 / с. ? https://www.ester.ee/record=b2989476*est

Определение относительной износостойкости полимерных материалов на вибрационном трибометре

Tanberg, J.; Nanits, Mats-Maidu XXX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 8-10 апреля 1986 года : тезисы докладов. Том II, Автоматика. Энергетика. Механика. Химия 1986 / с.102 https://www.ester.ee/record=b1305565*est

Определение реологических свойств полимерных материалов в процессе твердения

Süld, Tiia; Kiisler, Karl; Liiv, E. Синтез и применение поликонденсационных клеев. 7 1984 / с. 85-97

Оптимизация производства полимерных материалов для Прибалтийского экономического района : автореферат ... кандидата экономических наук (08.594)

Tenno, Koidu 1969 https://www.ester.ee/record=b1360550*est

Развитие переработки пластмасс и их использование в машиностроении Эстонской ССР

Kanne, Leida Всесоюзное совещание по экономическим проблемам развития химической промышленности и химизации народного хозяйства : тезисы докладов и сообщений 1969