

Aging processes in recycled polyethylene and fly ash blends

Krasnou, Illia; Jayapal, Ramkumar; Köster, Annika; Krumme, Andres Book of abstracts : AERC 2014 : 9th Annual European Rheology Conference, April 8-11, 2014, Karlsruhe, Germany 2014 / p. 179

Air vortex assisted electrospinning unit for nanoyarn production

Viirsalu, Mihkel; Kivirand, Teet; Krumme, Andres; Savest, Natalja Baltic Polymer Symposium 2015 : Sigulda, Latvia, September 16-18 : programme and proceedings 2015 / p. 53

Air vortex electrospinning method for nanofiber yarn production [Online resource]

Viirsalu, Mihkel; Savest, Natalja; Krumme, Andres Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p <http://fmtdk.ut.ee/teesid/>

Andres Krumme: plastimurest vabaks puidust toodetava bioplasti abil

director.ee 2022 [Andres Krumme: plastimurest vabaks puidust toodetava bioplasti abil](#)

Andres Krumme: usk teaduses ja teadus usus

Krumme, Andres <https://trialoog.taltech.ee/andres-krumme-usk-teaduses-ja-teadus-usus/> err.ee 2025

<https://trialoog.taltech.ee/andres-krumme-usk-teaduses-ja-teadus-usus/> <https://www.err.ee/1609667264/andres-krumme-usk-teaduses-ja-teadus-usus>

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>
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Application of particle swarm optimisation to evaluation of polymer cure kinetics models

Tilford, T.; Ferenets, Marju; Morris, J.E.; Krumme, Andres; Pavuluri, S.; Rajaguru, P.R.; Desmulliez, M.P.Y.; Bailey, C. Journal of algorithms & computational technology 2010 / 1, 121-146 : ill
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Behaviour of the very-low-temperature crystallization peak of linear low-density polyethylene

Poltimäe, Triinu; Tarasova, Elvira; Krumme, Andres; Lehtinen, Arja; Viikna, Anti Proceedings of the Estonian Academy of Sciences 2009 / 1, p. 58-62 : ill

Bimodaalse polüetüleen kristallisatsioon : olemus ja uurimismeetodid

Krumme, Andres XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 66

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

Ivanoska-Dacicj, Aleksandra; Bogoeva-Gaceva, Gordana; Krumme, Andres; Tarasova, Elvira; Scalera, Chiara; Stojkovski, Velimir; Gjorgoski, Icko; Ristoski, Trpe 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](#)

Bis-spirocyclic diol monomers and polyurethanes derived from citric acid : synthesis, properties, electrospinnability, and evaluation of chemical recyclability

Liblikas, Ilme; Bonjour, Olivier; Savest, Natalja; Krumme, Andres; Jannasch, Patric; Vares, Lauri Chemical engineering journal 2025 / art. 163525 <https://doi.org/10.1016/j.cej.2025.163525>

1-butyl-3-methylimidazolium chloride assisted coaxial electrospinning of styrene-acrylonitrile copolymer

Kirikal, Kristi; Gudkova, Viktoria; Krumme, Andres; Savest, Natalja; Viirsalu, Mihkel Baltic Polymer Symposium 2015 : Sigulda, Latvia, September 16-18 : programme and proceedings 2015 / p. 148

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

Vassiljeva, Viktoria; Krumme, Andres; Märtsen, Triin; Rikko, M.; Tarasova, Elvira; Savest, Natalja; Viirsalu, Mihkel Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p <http://fmtdk.ut.ee/teesid/>

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

Gudkova, Viktoria; Krumme, Andres; Märtsen, 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](#)

Cellulose dissolution and transesterification in superbase ionic liquid [mTBNH][OAc] with green co-solvents = Tselluloosi lahustamine ja ümberesterdamine superaluselises ioonvedelikus [mTBNH][OAc] koos roheliste kaaslahustitega
Savale, Nutan Bharat 2025 https://www.ester.ee/record=b5734584*est <https://digikogu.taltech.ee/et/Item/85b4caf4-fab7-44a7-96a6-d7f5861795f6> <https://doi.org/10.23658/taltech.13/2025>

Cellulose esters : sythesis in ionic liquid and characterization

Tarasova, Elvira; Šumigin, Dmitri; Krumme, Andres; Viikna, Anti Baltic Polymer Symposium 2012 : Liepaja, Latvia, September 19-22 : programme and proceedings 2012 / p. 66

Cellulose stearate in melt and plant oil suspension

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Changes in crystallisation kinetics of some high density polyethylenes due to pre-treatment and transcrystallisation of the materials

Krumme, Andres; Lehtinen, Arja Europolymer Congress 2003 : Stockholm, Sweden, June 23-27, 2003 : book of abstracts 2003 / [1] p

Composites of low-density polyethylene and poly(lactic acid) with cellulose and its derivatives = Madaltiheda polüetüleeni ja polü(piimhappe) komposiidid tselluloosi ning selle derivaatidega

Šumigin, Dmitri 2014 https://www.ester.ee/record=b3078663*est

Crystallisation behaviour of bimodal blends of high-density polyethylene

Krumme, Andres COST P12 : Structuring of Polymers : first workshop : October 27-30, 2004, Bacoli - (Naples) - Italy : book of abstracts 2004 / p. 18

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Crystallization behavior of some unimodal and bimodal linear low-density polyethylenes at moderate and high supercooling

Krumme, Andres; Lehtinen, Arja; Adamovsky, Sergey; Schick, Christoph; Roots, Jaan; Viikna, Anti Journal of polymer science. Part B, Polymer physics 2008 / p. 1577-1588 : ill <https://onlinelibrary.wiley.com/doi/full/10.1002/polb.21494>

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Krumme, Andres; Lehtinen, Arja PC2003 : Polymer Crystallization and Structure Formation in Processing - 20 Years of Fundamental and Applied Research in Linz : September 19-20 2003, Linz, Austria : program & abstracts 2003 / [7] p. : ill. [CD-ROM]

Crystallization of multimodal polyethylene at high cooling rates by combined sals and ultrafast calorimetry methods

Krumme, Andres; Märtson, Triin Baltic Polymer Symposium 2006 : September 20-22, 2006 : programme and proceedings 2006 / p. 12

Design of performance characteristics on laser treated denim fabric

Mandre, Nele; Plamus, Tiia; Linder, Angelika; Varjas, Toivo; Majak, Jüri; Krumme, Andres The materials science = Medžiagotyra 2023 / 10 p. : ill <https://doi.org/10.5755/j02.ms.33259> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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Determination of resistance to wear of particulate composite

Aruniit, Aare; Antonov, Maksim; Kers, Jaan; Krumme, Andres Engineering materials & tribology XXII 2014 / p. 188-191 <https://doi.org/10.4028/www.scientific.net/KEM.604.188> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

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Märtson, Triin; Ots, Ando; **Krumme, Andres;** Lõhmus, Ants Polymer testing 2010 / 1, p. 127-131 : ill

Development of electrospun nanostructured electrochemical double-layer capacitor electrodes = Elektrilise kaksikkihi kondensaatori elektrokedratud nanostruktuursete elektroodide arendus

Malmberg, Siret 2021 <https://digikogu.taltech.ee/et/Item/ab0b679b-f1a4-4f69-af49-949f7698e2fc> https://www.ester.ee/record=b5451440*est <https://doi.org/10.23658/taltech.39/2021>

Development of Functional Composite Cu(II)-Polyoxometalate/PLA with Antimicrobial Properties

Duvanov, Ella; Krasnou, Illia; **Krumme, Andres;** Mikli, Valdek; Rozantsev, Georgiy M.; Radio, Serhii V.; Karpichev, Yevgen Molecules 2022 / art. 2510 <https://doi.org/10.3390/molecules27082510> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of methodology and equipment for studying crystallization behaviour of novel PE materials at high supercooling

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Differential scanning calorimetry of blends of highly branched linear low density polyethylene with high density and moderate branched linear low density polyethylene

Poltimäe, Triinu; Tarasova, Elvira; **Krumme, Andres;** Viikna, Anti; Roots, Jaan; Lehtinen, Arja Baltic Polymer Symposium 2010 : Palanga, September 8-11, 2010 : programme and abstracts 2010 / p. 105

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](#)

EDLC durable electrodes and capacitor for high frequency applications

Malmberg, Siret; Tarasova, Elvira; **Vassiljeva, Viktoria;** Krasnou, Illia; Arulepp, Mati; **Krumme, Andres** SPCD 2018 : 3rd Space Passive Components Days International Symposium, Noordwijk, Netherlands, 9-12 October 2018 2018 / 10 p. : ill <https://passive-components.eu/edlc-durable-electrodes-and-capacitor-for-high-frequency-applications/>

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Effect of birch false heartwood on the physical and mechanical properties of wood-plastic composites [Online resource]

Kallakas, Heikko; Martin, Mihkel; Ayansola, Gbenga; **Poltimäe, Triinu;** **Krumme, Andres;** Kers, Jaan 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://fmdtk.ut.ee/teesid-2018/>

Effect of chemical modification of wood flour on the mechanical properties of wood-plastic composites

Kallakas, Heikko; Shamim, M. A.; Olutubo, T.; **Poltimäe, Triinu;** Süld, Tiia-Maaja; **Krumme, Andres;** Kers, Jaan Agronomy research 2015 / p. 639-653 : ill https://agronomy.emu.ee/vol133/13_3_2_B5.pdf [Journal metrics at Scopus](#) [Article at Scopus](#)

Effect of chemical modification of wood flour on the mechanical properties of wood-plastic composites [Electronic resource]

Kallakas, Heikko; Shamim, M. A.; Olutubo, T.; **Poltimäe, Triinu;** Süld, Tiia-Maaja; **Krumme, Andres;** Kers, Jaan 6th International Conference Biosystems Engineering 2015 : 7-8 May 2015, Tartu, Estonia : book of abstracts 2015 / p. 94. [CD-ROM] http://bse.emu.ee/BSE2015_Book%20of%20ABSTRACTS_ISBN.pdf

Effect of different ionic liquids on the conductivity of electrospun polyacrylonitrile membranes

Savest, Natalja; **Krumme, Andres;** Viirsalu, Mihkel; Küppar, Kadi-Anne Baltic Polymer Symposium 2015 : Sigulda, Latvia, September 16-18 : programme and proceedings 2015 / p. 91

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

Zelca, Zane; **Krumme, Andres;** Kukle, Silvi; **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](#)

Effect of fibre content, structural parameters, and laser fading on durability and aesthetic properties of multicomponent denim fabric = Kiulise koostise, struktuuri parameetrite ja laserkulutuse mõju mitmekomponentse teksakanga vastupidavusele ja esteetilistele omadustele

Mandre, Nele 2023 <https://doi.org/10.23658/taltech.30/2023> <https://digikogu.taltech.ee/et/Item/c19f3da7-7f69-4fa9-ab59-057adf1fdd33> https://www.ester.ee/record=b5568904*est

Effect of green co-solvents on properties and synthesis of cellulose esters in superbase ionic liquid

Tarasova, Elvira; Savale, Nutan Bharat; Trifonova, Lada; Krasnou, Illia; Reile, Indrek; Kudrjašova, Marina; Mere, Arvo; Kaljuvee, Tiit; Mikli, Valdek; Sedrik, Rauno; Krumme, Andres Cellulose 2024 / p. 4911-4927 <https://doi.org/10.1007/s10570-024-05920-x> [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](#)

Effect of polypropylene grade on hinge properties

Krumme, Andres Stambiamolekuli junginiu chemija ir technologija = Polymer chemistry and technology 1997 / p. 85-91: ill

Effect of solvent treatment on crystallisation behaviour of high-density polyethylene

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Electrocatalysts for oxygen reduction reaction based on electrospun polyacrylonitrile, styrene-acrylonitrile copolymer and carbon nanotube composite fibres

Mooste, Marek; Kibena-Pöldsepp, Elo; Vassiljeva, Viktoria; Uibu, Mai; Krumme, Andres Journal of materials science 2019 / p. 11618-11634 : ill <https://doi.org/10.1007/s10853-019-03725-z> [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>

Electroconductive fibrous mat prepared by electrospinning of polyacrylamide-g-polyaniline copolymers as electrode material for supercapacitors

Smirnov, Michael; Tarasova, Elvira; Mikli, Valdek; Vassiljeva, Viktoria; Krumme, Andres Journal of materials science 2018 / p. 4859-4873 : ill <https://doi.org/10.1007/s10853-018-03186-w> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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> https://www.ester.ee/record=b4750923*est

Electrospinning of chitosan biopolymer and polyethylene oxide blends

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Electrospinning of nanofibrous composites with cellulose acetate, ionic liquids and graphene oxide =

Tselluloosatsetaadi, ioonsete vedelike ja grafeenoksiidi nanokiuliste komposiitide elektroketrus

Javed, Kashif 2019 <https://digi.lib.ttu.ee/i/?12424>

Electrospinning of polyaniline conductive membranes

Kütt, Kertu; Savest, Natalja; Krumme, Andres; Viirsalu, Mihkel Baltic Polymer Symposium 2015 : Sigulda, Latvia, September 16-18 : programme and proceedings 2015 / p. 88

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>

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

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Electrospun fibrous materials with propolis extracts for edible food packagings

Zelca, Zane; Merijs-Meri, Remo; **Krumme, Andres**; Bernava, Aina Molecules 2023 / art. 5497

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Electrospun materials in triboelectric series

Savest, Natalja; Krasnou, Illia; Krumme, Andres; Dobryden, I.; Hakansson, K.; Edberg, J. Baltic Polymer Symposium, BPS2023 : programme and abstracts 2023 / p. 72 [Baltic Polymer Symposium, BPS2023 : programme and abstracts](#)

Electrospun nanofibrous materials for energy storage and harvesting

Krasnou, Illia; Plamus, Tiia; Vassiljeva, Viktoria; Malmberg, Siret; Tarasova, Elvira; Krumme, Andres Baltic Polymer

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

Mooste, Marek; Kibena-Põldsepp, 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

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Electrospun polystyrene ion exchangers

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Equipment for fast crystallisation process studies

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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](#)

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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](#)

Impact of laser fading on physico-mechanical properties and fibre morphology of multicomponent denim fabrics

Mandre, Nele; Plamus, Tiia; Linder, Angelika; Krumme, Andres; Rohumaa, Anti Proceedings of the Estonian Academy of

Sciences 2023 / p. 145-153 <https://doi.org/10.3176/proc.2023.2.05> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of weft yarn density and core-yarn fibre composition on tensile properties, abrasion resistance and air permeability of denim fabrics

Mandre, Nele; Plamus, Tiia; Krumme, Andres Materials science 2021 / p. 483-491 : ill <https://doi.org/10.5755/j02.ms.27532> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improving the oxygen barrier of polyamide food packaging by using nanoclay

Paara, Tõnis; Lange, Sven; Saal, Kristjan; Lõhmus, Rünno; **Krumme, Andres**; Mändar, Hugo Materials science = Medžiagotyra 2022

/ p. 217-223 <https://doi.org/10.5755/j02.ms.28868> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The influence of accelerated weathering on the mechanical and physical properties of wood-plastic composites

Kallakas, Heikko; Poltimäe, Triinu; Süld, Tiia-Maaja; Kers, Jaan; Krumme, Andres Proceedings of the Estonian Academy of

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The influence of birch (*Betula pendula*) false heartwood on the mechanical properties of wood-plastic composites = Kase (*Betula pendula*) väärlülipuidu mõju puitplastkomposiitide mehaanilistele omadustele

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Influence of birch false heartwood on the physical and mechanical properties of wood-plastic composites

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