

Advances in the structural biology, mechanism, and physiology of cyclopropane fatty acid modifications of bacterial membranes

Cronan, John E.; **Lukk, Tiit** Microbiology and Molecular Biology Reviews 2022 <https://doi.org/10.1128/membr.00013-22> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Antifungal activity of medicinal mushrooms and optimization of submerged culture conditions for Schizophyllum commune (Agaricomycetes)

Berikashvili, Violeta; Khardziani, Tamar; Kobakhidze, Aza; **Kulp, Maria; Kuhtinskaja, Maria; Lukk, Tiit**; Gargano, Maria; Venturella, Giuseppe; Kachlishvili, Eka; Metreveli, Eva; Elisashvili, Vladimir; Asatiani, Mikheil International journal of medicinal mushrooms 2023 / p. 1-21 <https://doi.org/10.1615/IntJMedMushrooms.2023049836> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Author correction: First crystal structure of an endo-levanase – the BT1760 from a human gut commensal Bacteroides thetaiotaomicron (Scientific Reports, (2019), 9, 1, (8443), 10.1038/s41598-019-44785-0)

Ermits, Karin; **Eek, Priit; Lukk, Tiit**; Visnapuu, Triinu; Alamäe, Tiina Scientific reports 2019 / art. 17512, 1 p. <https://doi.org/10.1038/s41598-019-54274-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biobased natural deep eutectic system as versatile solvents : structure, interaction and advanced applications

Usmani, Zeba; Sharma, Minaxi; Tripathi, Manikant; **Lukk, Tiit; Karpichev, Yevgen**; Gathergood, Nicholas; Singh, Brahma N.; Thakur, Vijay Kumar; Tabatabaei, Meisam; Gupta, Vijai Kumar Science of the total environment 2023 / art. 163002 <https://doi.org/10.1016/j.scitotenv.2023.163002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bioprocessing of waste biomass for sustainable product development and minimizing environmental impact

Usmani, Zeba; Sharma, Minaxi; Awasthi, Abhishek Kumar; Sivakumar, Nallusamy; **Lukk, Tiit** Bioresource technology 2021 / art. 124548, 12 p. : ill <https://doi.org/10.1016/j.biortech.2020.124548> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bioremediation of lindane contaminated soil: Exploring the potential of Actinobacterial strains

Usmani, Zeba; Kulp, Maria; Lukk, Tiit Chemosphere 2021 / art. 130468, 12 p. : ill <https://doi.org/10.1016/j.chemosphere.2021.130468> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biosafe sustainable antimicrobial encapsulation and coatings for targeted treatment and infections prevention: Preparation for another pandemic

Usmani, Zeba; Lukk, Tiit; Mohanachandran, Dileep Kumar Current Research in Green and Sustainable Chemistry 2021 / art. 100074 <https://doi.org/10.1016/j.crgsc.2021.100074> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CERNi esindajad käisid TalTechis : kas Eesti saab liikmeks?

Mente et Manu 2023 / lk. 10 https://www.ester.ee/record=b1242496*est

Characterization of bacterial dye-decolorizing peroxidases = Bakteriaalsete värvi pleegitavate peroksüdaaside iseloomustamine

Pupart, Hegne 2024 https://www.ester.ee/record=b5713840*est <https://digikogu.taltech.ee/et/Item/d40055e9-2600-4e49-8aec-3f561267772e> <https://doi.org/10.23658/taltech.72/2024>

Characterization of organosolv lignins and their application in the preparation of aerogels

Jõul, Piia; Ho, Thi Thuy Tran; Kallavus, Urve; Konist, Alar; Leiman, Kristiina; Salm, Olivia-Stella; Kulp, Maria; Koel, Mihkel; Lukk, Tiit Materials 2022 / art. 2861 <https://doi.org/10.3390/ma15082861> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterization of the ensemble of lignin-remodeling DyP-type Peroxidases from Streptomyces coelicolor A3(2)

Pupart, Hegne; Jõul, Piia; Bramanis, Melissa Ingela; Lukk, Tiit Energies 2023 / art. 1557, 15 p. : ill <https://doi.org/10.3390/en16031557> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chloromethylation of lignin as a route to functional material with catalytic properties in cross-coupling and click reactions

Mohan, Mahendra Kothottil; Silenko, Oleg; Krasnou, Illia; Volobujeva, Olga; Kulp, Maria; Ošeka, Maksim; Lukk, Tiit; Karpichev, Yevgen ChemSusChem 2024 / art. e202301588 <https://doi.org/10.1002/cssc.202301588> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chloromethylation of lignin as a route to functional material with catalytic properties in cross-coupling and click reactions : preprint

Mohan, Mahendra Kothottil; Silenko, Oleg; Krasnou, Illia; Volobujeva, Olga; Kulp, Maria; Ošeka, Maksim; Lukk, Tiit; Karpichev, Yevgen ChemRxiv 2023 / 20 p <https://doi.org/10.26434/chemrxiv-2023-w98xc>

Developments in enzyme and microalgae based biotechniques to remediate micropollutants from aqueous systems - a review

Usmani, Zeba; Sharma, Minaxi; Lukk, Tiit; Karpichev, Yevgen Critical reviews in environmental science and technology 2022 / p.

1684-1729 <https://doi.org/10.1080/10643389.2020.1862551> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Dye-decolorizing peroxidase of *Streptomyces coelicolor* (ScDyPB) exists as a dynamic mixture of kinetically different oligomers

Pupart, Hegne; Vastšjonok, Darja; Lukk, Tiit; Väljamäe, Priit ACS Omega 2024 / p. 3866-3876 : ill

<https://doi.org/10.1021/acsomega.3c07963> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Dye-decolorizing peroxidase of *Thermobifida* halotolerance displays complex kinetics with both substrate inhibition and apparent positive cooperativity

Pupart, Hegne; Lukk, Tiit; Väljamäe, Priit Archives of biochemistry and biophysics 2024 / art. 109931, 11 p. : ill

<https://doi.org/10.1016/j.abb.2024.109931> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Dye-decolorizing peroxidases from *Streptomyces coelicolor* show organosolv lignin remodeling activity

Pupart, Hegne; Ojangu, Eve-Ly; Zovo, Kairit; Lukk, Tiit FEBS Open Bio 2021 / p. 63

<https://febs.onlinelibrary.wiley.com/doi/epdf/10.1002/2211-5463.13206> <https://doi.org/10.1002/2211-5463.13206>

Eesti teadlane on kotijooksu maailmameister

Lukk, Tiit Eesti Päevaleht 2023 / Lk. 3 <https://dea.digar.ee/article/eestipaevaleht/2023/04/05/3.5>

Eesti uus plaan paneb ettevõtluspisiku üles leidnud ülikoole kahtlema

Saarmann, Tanel Eesti Päevaleht 2023 [Eesti uus plaan paneb ettevõtluspisiku üles leidnud ülikoole kahtlema](#) [Eesti uus plaan paneb ettevõtluspisiku üles leidnud ülikoole kahtlema](#)

Enzymatic conversion of hydrolysis lignin - a potential biorefinery approach

Khan, Sharib; Puss, Kait Kaarel; Lukk, Tiit; Loog, Mart; Kikas, Timo; Salmar, Siim Energies 2023 / art. 370, 13 p. : ill

<https://doi.org/10.3390/en16010370> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

First crystal structure of a bacterial endo-levanase

Ernits, Karin; Eek, Priit; Lukk, Tiit; Visnapuu, Triinu; Alamäe, Tiina FEBS3+ conference of Latvian, Lithuanian and Estonian Biochemical Societies : abstract book : Riga, Latvia, 17-19 June 2019 2019 / p. 22

First crystal structure of an endo-levanase - the BT1760 from a human gut commensal *Bacteroides thetaiotaomicron*

Ernits, Karin; Eek, Priit; Lukk, Tiit Scientific reports 2019 / art. 8443, 13 p. : ill <https://doi.org/10.1038/s41598-019-44785-0> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Higher AMPK activation in mouse oxidative compared with glycolytic muscle does not correlate with LKB1 or CaMKKb expression

Bernasconi, Romain; Soodla, Kārol; Sirp, Alex; Zovo, Kairit; Kuhtinskaja, Maria; Lukk, Tiit; Vendelin, Marko; Birkedal, Rikke

American journal of physiology - Endocrinology and metabolism 2025 / p. E21-E33 <https://doi.org/10.1152/ajpendo.00261.2024>

Industrial doctorate students to solve challenges facing Eesti Energia

news.err.ee 2023 [Industrial doctorate students to solve challenges facing Eesti Energia](#)

Jarek Kurnitski : teadus peab toetama läbimurret kodude ja töökohtade täisrenoveerimisel

Kurnitski, Jarek; Aav, Riina rohe.geenius.ee 2024 [Jarek Kurnitski: teadus peab toetama läbimurret kodude ja töökohtade täisrenoveerimisel](#)

Koalitsioonilepe näeb ette rohkem tasulist kõrgharidust. Mida tähendab see tudengitele?

Palgi, Greete Päevaleht epl.delfi.ee 2023 / Lk. 7 [Koalitsioonilepe näeb ette rohkem tasulist kõrgharidust. Mida tähendab see tudengitele?](#)

Kolm Eesti ülikooli ja rida ettevõtteid loovad täiesti uusi puidupõhiseid materjale

Kartau, Mari maaleht.delfi.ee 2023 [Kolm Eesti ülikooli ja rida ettevõtteid loovad täiesti uusi puidupõhiseid materjale](#) [Kolm Eesti ülikooli ja rida ettevõtteid loovad täiesti uusi puidupõhiseid materjale](#)

Lignocellulosic biorefineries : the current state of challenges and strategies for efficient commercialization

Usmani, Zeba; Sharma, Minaxi; Awasthi, Abhishek Kumar; Lukk, Tiit; Tuohy, Maria G.; Gong, Liang; Nguyen-Tri, Phuong; Goddard, Alan D.; Bill, Roslyn M.; Nayak, S. Chandra; Gupta, Vijai Kumar Renewable and sustainable energy reviews 2021 / art. 111258, 14 p. : ill <https://doi.org/10.1016/j.rser.2021.111258> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Mis tooks igast maailma sadamast vähemalt ühe eestlase koju tagasi? : kojutulnu kõne Eesti Vabariigi 100. sünnipäevaks peetud aktusel

Lukk, Tiit Mente et Manu 2018 / lk. 18-20 : fot <https://www.ttu.ee/ttu-uudised/ajaleht-mente-et-manu/mente-et-manu/>

http://www.ester.ee/record=b1242496*est https://artiklid.elnet.ee/record=b2836024*est

Muutus TalTechi rektoraadis : teadusprorektoriks saab Tiit Lukk, Maarja Kruusmaa pühendub uurimistööle

digi.geenius.ee 2023 [Muutus TalTechi rektoraadis : teadusprorektoriks saab Tiit Lukk, Maarja Kruusmaa pühendub uurimistööle](#)

Preparation and characterization of lignin-derived carbon aerogels

Jõul, Piia; Järvik, Oliver; Lees, Heidi; Kallavus, Urve; Koel, Mihkel; Lukk, Tiit Frontiers in chemistry 2023 / art. 1326454
<https://doi.org/10.3389/fchem.2023.1326454> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Puidukeemia - hoogu võttev tuleviku tehnoloogia?

Gaškov, Ago TööstusEST 2018 / lk. 52-56 : fot http://www.ester.ee/record=b4481084*est https://artiklid.elnet.ee/record=b2867304*est

Saepuruvõie võib jõuda kodukööki

Imeline Teadus 2023 / lk. 20 : fot https://www.ester.ee/record=b2747925*est

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Structural and mechanistic investigations of protein S-glycosyltransferases

Fujinami, Daisuke; Garcia de Gonzalo, Chanthai V.; Biswas, Subhanip; Hao, Yue; Wang, Huan; Garg, Neha; Lukk, Tiit; Nair, Satish K.; Donk, Wilfried A. van der Cell Chemical Biology 2021 / p. 1740-1749 <https://doi.org/10.1016/j.chembiol.2021.06.009>

Substitution of the Methionine Axial Ligand of the T1 copper for the fungal-like Phenylalanine Ligand (M298F) causes local structural perturbations that lead to thermal instability and reduced catalytic efficiency of the small Laccase from Streptomyces coelicolor A3(2)

Zovo, Kairit; Pupart, Hegne; Van Wieren, Arie; Gillilan, Richard E.; Lukk, Tiit ACS omega 2022 / p. 6184-6194
<https://doi.org/10.1021/acsomega.1c06668> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis and antibacterial properties of lignin-based amino and quaternary ammonium surfactants

Kothottil Mohan, Mahendra; Duvanova, Ella; Lukk, Tiit; Karpichev, Yevgen 5th International Caparica Symposium on Nanoparticles, Nanomaterials and Applications 2022 : book of abstracts 2022 / p. 208

Synthesis and antibacterial properties of lignin-based quaternary ammonium and phosphonium salts

Mohan, Mahendra Kothottil; Kaur, Harleen; Duvanova, Ella; Rosenberg, Merilin; Dahlem, Marcos; Ivask, Angela; Raimundo, Jean-Manuel; Lukk, Tiit; Karpichev, Yevgen International Conference EcoBalt 2023 "Chemicals&Environment" 2023 / 2 p.
<https://doi.org/10.3390/proceedings2023092058>

Synthesis and antibacterial properties of novel quaternary ammonium lignins

Mohan, Mahendra Kothottil; Kaur, Harleen; Rosenberg, Merilin; Duvanova, Ella; Lukk, Tiit; Ivask, Angela; Karpichev, Yevgen ACS omega 2024 / p. 39134-39145 : ill <https://doi.org/10.1021/acsomega.4c06000> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tallinna Tehnikaülikool promoveeris 58 doktorit

Elektrala 2023 / lk. 10 <https://dea.digar.ee/article/AKelektrala/2023/10/0/10.2> https://www.ester.ee/record=b1240496*est

TalTechi teadusprorektor Tiit Lukk: vaatan oma otsustes tulevikku

Lukk, Tiit digi.geenius.ee 2023 [TalTechi teadusprorektor Tiit Lukk: vaatan oma otsustes tulevikku](#)

Tehnikaülikool rakendab rohepöörde veduriks sünergia

digi.geenius.ee 2024 [Tehnikaülikool rakendab rohepöörde veduriks sünergia](#)

Tehnikaülikooli uus teadusprorektor Tiit Lukk: soovin näha tõhusamat koostööd Eesti ettevõtetega

Lukk, Tiit postimees.ee 2023 [Tehnikaülikooli uus teadusprorektor Tiit Lukk: soovin näha tõhusamat koostööd Eesti ettevõtetega](#)

Tiit Lukk: vaatan oma otsustes tulevikku

Lukk, Tiit Mente et Manu 2023 / lk. 34-37 : fot https://www.ester.ee/record=b1242496*est

Tudengite enneaegne noppimine koolipingist murrab meie järelkasvu

Lukk, Tiit postimees.ee 2023 [Tudengite enneaegne noppimine koolipingist murrab meie järelkasvu](#)

Utilization of phenolic lignin dimer models for the quantification of monolignols in biomass and in its derived organosolv lignins via thioacidolysis and GC-MS analysis

Ho, Thi Thuy Tran; Salm, Olivia-Stella; Lukk, Tiit; Kulp, Maria Analytical methods 2025 / p. 3283-3289
<https://doi.org/10.1039/D5AY00073D>

Üks küsimus : milline on teie jaoks ideaalne ülikool?

Mente et Manu 2020 / lk. 24-25 , 34-35, 44-45 : portr https://www.ester.ee/record=b1242496*est

Коалиционное соглашение предусматривает платное высшее образование. Что это будет означать для студентов?

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