Allkirjastati roheasfaldi rakendusuuringute leping
Reinla, Siim Viimsi Teataja 2024 / Lk. 3 https://dea.digar.ee/article/viimsiteataja/2024/03/08/4.3

Aqueous photocatalytic oxidation of lignin : the influence of mineral admixtures
Portjanskaja, Elina; **Preis, Sergei** International journal of photoenergy 2007 / [7] p

Aqueous photocatalytic oxidation of lignin : the influence of mineral admixtures
Portjanskaja, Elina; **Preis, Sergei**; **Kallas, Juha** Solar Chemistry and Photocatalysis : Environmental Applications 2006 (SPEA) : Spain, Las Palmas, November 2006 2006 / ? p

Aqueous photocatalytic oxidation of lignin and humic acids with supported TiO2
Portjanskaja, Elina; **Preis, Sergei**; **Kallas, Juha** International journal of photoenergy 2006 / [7] p

Aqueous photocatalytic oxidation of lignin and humic substances with supported TiO2
Portjanskaja, Elina; **Preis, Sergei**; **Kallas, Juha** 6th European Meeting Environmental Chemistry : December 6-10, 2005, Belgrade, Serbia and Montenegro 2005 / p. 145

Carbon materials obtained from self-binding sugar cane bagasse and deciduous wood residues plastics
Zandersons, J.; Gravitis, J.; Zhurinsh, A.; Kokorevics, A.; **Kallavus, Urve**; Suzuki, C.K. Biomass and bioenergy 2004 / 4, p. 345-360 : ill https://www.fem.unicamp.br/~liqcqits/publications/paper_files/BiomBioe2004v26-4p345-360_Zandersons.pdf

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, Tran T.**; **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

Chemicals and lignin from black liqour by a wet oxidation process
Melin, Johan Kristian; Mudassar, Hassan Raja; Hurme, Markku; Koskinen, Jukka; **Kallas, Juha** SustainChem2011 : International Conference on Materials and Technologies for Green Chemistry jointly with Workshop of COST Action CM0903 (UBIOCHEM-II) : September 5-9, 2011, Tallinn, Estonia : abstract book and program 2011 / p. 154

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

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

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 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

Efficient lignin fractionation from Scots pine (Pinus sylvestris) using ammonium-based protic ionic liquid : process optimization and characterization of recovered lignin
Khan, Sharib; Rauber, Daniel; Shanmugam, Sabarathinam; Kay, Christopher W. M.; **Konist, Alar**; Kikas, Timo Polymers 2022 / art. 4637, 13 p. : ill https://doi.org/10.3390/polym14214637 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Enhanced bioremediation of pulp effluents through improved enzymatic treatment strategies : a greener approach

Dixit, Mandeep; Gupta, Guddu Kumar; **Usmani, Zeba**; Sharma, Minaxi; Shukla, Pratyoosh Renewable and Sustainable Energy Reviews 2021 / Art. 111664 https://doi.org/10.1016/j.rser.2021.111664 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

Estonia's transport authority testing out bioasphalt on national road
Kenk, Olev news.err.ee 2024 Estonia's transport authority testing out bioasphalt on national road

Fibenol katsetab ligniini sobivust bituumeni asendajana
Kontson, Karli; Peebo, Karl Teejuht : maal, vees ja õhus : Transpordiameti digiajakiri 2022 / lk. 93-98 : fot https://transpordiamet.ee/digiajakiri/nr4#Teejuht https://www.ester.ee/record=b5495900*est

Genome description of Phlebia radiata 79 with comparative genomics analysis on lignocellulose decomposition machinery of phlebioid fungi
Mäkinen, Mari; Kuuskeri, Jaana; Laine, Pia; **Smolander, Olli-Pekka** BMC genomics 2019 / art. 430, 22 p. : ill https://doi.org/10.1186/s12864-019-5817-8 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Greener protocol for chloromethylation of lignin and its diverse applications
Mohan, Mahendra Kothottil; **Karpichev, Yevgen** 2024 MRS Spring Meeting & Exhibit : abstract book 2024 / 1 p https://www.mrs.org/docs/default-source/meetings-events/spring-meetings/2024/2024-mrs-spring-meeting-abstract-program-3-28-2024.pdf?sfvrsn=d2ef1b09_10

Humiinainete ja ligniinide fotokatalüütiline oksüdatsioon veefaasis kinnitatud TiO2-ga
Portjanskaja, Elina; **Preis, Sergei**; **Kallas, Juha** XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 89

Imaveres paigaldati Eesti esimene roheasfalt
tehnika.postimees.ee 2023

Ligniin – puidutööstuse prügist tulevikumaterjaliks
Vaaks, Eveliis Trialoog 2025 https://trialoog.taltech.ee/ligniin-puidutoostuse-prugist-tulevikumaterjaliks/

Ligniini sisaldava asfaltseguga on maailmas kaetud juba kümneid katselõike
Kukebal, Johannes Teejuht : maal, vees ja õhus : Transpordiameti digiajakiri 2022 / lk. 99-103 : fot https://transpordiamet.ee/digiajakiri/nr4#Teejuht https://digikogu.taltech.ee/et/Item/78229d9d-fbbe-46b2-90f2-572ebb288bf1

Lignin ozonation at different pH values of water [Electronic resource]
Kuosa, Markku; **Kallas, Juha** Environmental Applications of Advanced Oxidation Processes : Chania, September 7-9, 2006 : book of abstracts 2006 / [CD-ROM]

Lugeja küsib: miks puit alati tumedamaks läheb? [Võrguväljaanne]
novaator.err.ee 2021 / fot Lugeja küsib: miks puit alati tumedamaks läheb?

Novel softwood lignin esters as advanced filler to PLA for 3D printing
ACS omega 2024 / p. 44559-44567 https://doi.org/10.1021/acsomega.4c06680

Novel treatment method for black liquor and biomass hydrolysate with partial wet oxidation
Muddassar, Hassan Raja; Melin, Kristian; Kuppa, Sarada; Koskinen, Jukka; Hurme, Markku; De Kokkonen, Daniela; **Kallas, Juha** Cellulose chemistry and technology 2015 / p. 347-360 : ill https://www.cellulosechemtechnol.ro/pdf/CCT3-4(2015)/p.347-360.pdf Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Ozonation of lignin aqueous solutions
Kamenev, Inna; **Velts, Olga**; **Viiroja, Andres**; Häkkinen, Antti; **Kallas, Juha** Executive summaries : 5th International Conference. 10th IOA-EA3G Berlin Conference on Oxidation Technologies for Water and Wastewater Treatment : Berlin, Germany, March 30 - April 2, 2009 2009 / p. 39-40/PC223(1-8)

Peep Pitk: läbipaistvus tootmises ja tarneahelates peab saama normiks
Pitk, Peep delfi.ee 2024 Peep Pitk: läbipaistvus tootmises ja tarneahelates peab saama normiks

Photocatalytic oxidation of natural polymers in aqueous solutions = Looduslike polümeeride fotokatalüütiline oksüdatsioon vesilahustes
Portjanskaja, Elina 2009 https://www.ester.ee/record=b2491725*est

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

Processing of lignocellulose in ionic liquids : a cleaner and sustainable approach
Qasim, Umair; Rafiq, Sikander; Jamil, Farrukh; Ahmed, Ashfag; Ali, Touqeer; **Kers, Jaan**; Khurram, M. Shahzad; Hussain, Murid; Inayat, Abrar; Park, Young-Kwon Journal of cleaner production 2021 / art. 129189, 17 p. : ill https://doi.org/10.1016/j.jclepro.2021.129189 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Rapid semi-quantitative determination of aspen lignin in lignocellulosic products
Kallavus, Urve; **Kärner, Kristi**; **Kärner, Kärt**; **Elomaa, Matti Antero** Proceedings of the Estonian Academy of Sciences 2015 / p. 105-112 : ill https://doi.org/10.3176/proc.2015.1S.06 https://artiklid.elnet.ee/record=b2716368*est Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Roheasfalt on leidnud koha ka ülikoolide lõputöödes
jarvateataja.postimees.ee 2023 Roheasfalt on leidnud koha ka ülikoolide lõputöödes

Studies on the structure of the steam explosion and swelling-solvation cellulose and lignin using 13C CP/MAS NMR
Gravitis, Janis; Andersons, Bruno; Teeäär, Raivo; **Kallavus, Urve** Third European Workshop on Lignocellulosics and Pulp (EWLP '94), Stockholm, Sweden, August 28-31, 1994 : extended abstracts 1994 / p. 5-7: ill

Sustainable formulations from biomass : making lignin processing greener
Karpichev, Yevgen Current chemical problems (CCP-2024) : book of abstracts 2024 / p. 80

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

TalTechi teedelaboris uuritakse keskkonnasõbralikuma asfaldi tootmise võimalusi
Lill, Kristjan ehitusleht.ee 2025 TalTechi teedelaboris uuritakse keskkonnasõbralikuma asfaldi tootmise võimalusi

The cost evaluation of advanced oxidation processes in laboratory and pilot-scale experiments
Kritševskaja, Marina; **Klauson, Deniss**; **Portjanskaja, Elina**; **Preis, Sergei** Ozone : science & engineering 2011 / p. 211-223
https://www.tandfonline.com/doi/full/10.1080/01919512.2011.554141

The influence of titanium dioxide modifications on photocatalytic oxidation of lignin and humic acids
Portjanskaja, Elina; **Stepanova, Kristina**; **Klauson, Deniss**; **Preis, Sergei** Catalysis today 2009 / 1/2, p. 26-30 : ill
https://www.sciencedirect.com/science/article/abs/pii/S0920586109000029

The influence of titanium dioxide modifications on photocatalytic oxidation of lignin and humic acids
Portjanskaja, Elina; **Stepanova, Kristina**; **Klauson, Deniss**; **Preis, Sergei** The 5th European Meeting on Solar Chemistry and Photocatalysis : Environmental Applications (SPEA5) : 04-08 October 2008, Palermo, Italy : book of abstracts 2008 / p. PP3.37

Transpordiamet katsetab Koeru lähistel nn roheasfalti
Kenk, Olev err.ee 2024 Transpordiamet katsetab Koeru lähistel nn roheasfalti

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

Water delignification by advanced oxidation processes : homogeneous and heterogeneous Fenton and H2O2 photo-assisted reactions
Makhotkina, O.; **Preis, Sergei**; Parkhomchuk, E. Applied catalysis B : environmental 2008 / 3/4, p. 821-826 : ill
https://www.sciencedirect.com/science/article/pii/S0926337308002348

Vene naftast bituumeni asendaks osaliselt puidujääk
Kontson, Karli novaator.err.ee 2024 Vene naftast bituumeni asendaks osaliselt puidujääk

Wet oxidation of debarking water : changes in lignin content and biodegradability
Kindsigo, Merit; **Kallas, Juha** Environmental chemistry letters 2009 / 2, p. 121-126

Wet oxidation of recalcitrant lignin water solution : experimental and reaction kinetics [Electronic resource]
Kindsigo, Merit; Hautaniemi, Marjaana; **Kallas, Juha** Environmental Applications of Advanced Oxidation Processes : Chania, September 7-9, 2006 : book of abstracts 2006 / [CD-ROM] https://link.springer.com/article/10.1007/s10311-008-0151-4

Wet oxidation of recalcitrant lignin water solutions : experimental and reaction kinetics
Kindsigo, Merit; Hautaniemi, Marjaana; **Kallas, Juha** Environmental chemistry letters 2009 / 2, p. 155-160
https://link.springer.com/article/10.1007/s10311-008-0151-4

Ülemiste keskuse roheasfalt: esimene eksperiment õnnestus, nüüd tuleb isegi tähtsam katse = «Зеленый асфальт» центра Ülemiste: первый эксперимент удался
goodnews.ee 2023 Ülemiste keskuse roheasfalt: esimene eksperiment õnnestus, nüüd tuleb isegi tähtsam katse «Зеленый асфальт» центра Ulemiste: первый эксперимент удался

Исследование совместимости лигнина с геницеллюлозами в их смесях методом сканирующей электронной микроскопии
Andersons, Bruno; **Kallavus, Urve**; Grāvītis, Jānis Химия древесины 1984 / с. 106-108 : ил https://www.ester.ee/record=b2158897*est

Коалесценция лигнина в результате взрывного автогидролиза
Polmanis, A.; Kulkevica, I.; Grāvītis, Jānis; **Kallavus, Urve** 7-я Всесоюзная конференция по химии и использованию лигнина : тезисы докладов 1987 / с. 41-42 https://www.ester.ee/record=b3798415*est

Связывание серы золой и шлаками венгерских каменных и бурых углей и лигнитов
Remeni, K. Исследование работы парогенераторов электростанций 1987 / с. 17-22