

Alternatiivenergeetika väljavaateid : [kokkuvõtted R.Vilu, M.Koeli, Ü.Kase, V.Varese, ... jt. konverentsiettekannetest]

Annuk, Andres; **Vilu, Raivo; Koel, Mihkel; Kask, Ülo; Vares, Villu** Maamajandus 2002 / 12, lk. 16-17

https://artiklid.elnet.ee/record=b1038666*est

Alternative solvents in oil shale studies

Koel, Mihkel International Symposium "Oil shale 100 years" : Estonia, Sept. 20-23, 2016 : [abstracts] 2016 / p. 40-41

Analysis of bioactive ingredients in the brown alga *Fucus vesiculosus* by capillary electrophoresis and neutron activation analysis

Truus, Kalle; **Vaher, Merike; Koel, Mihkel; Mähar, Andres; Taure, Imants** Analytical and bioanalytical chemistry 2004 / 5/6, p. 849-852 : ill

Analysis of trace amounts of metal ions using silica-based chelating resins : a green analytical method

Sharma, Rakesh Kumar; Mittal, Sachin; **Koel, Mihkel** Critical reviews in analytical chemistry 2003 / 3, p. 183-197

<https://www.tandfonline.com/doi/abs/10.1080/713609163>

Analytical applications of ionic liquids

2016 http://www.ester.ee/record=b4620895*est

Analytical quality by design concept in environmental analysis

Jurjeva, Jelena; **Koel, Mihkel** Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 22 ; oral 12

https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts_pub3.pdf

Analytical Quality by Design in Environmental Analysis = Analüütilise disainiruumi kontseptsiooni rakendamine saasteainete pinnases määramise meetodi väljatöötamisel

Jurjeva, Jelena 2025 https://www.ester.ee/record=b5758848*est <https://digikogu.taltech.ee/et/Item/365bb698-bf6e-4768-8d60-31737d61ce10>
<https://doi.org/10.23658/taltech.65/2025>

Application of 1-alkyl-3-methylimidazolium based ionic liquids in non-aqueous capillary electrophoresis

Vaher, Merike; Koel, Mihkel; Kaljurand, Mihkel 15th International Symposium on Microscale Separations and Analysis HPCE, April 13-18, 2002, Stockholm : abstracts 2002 / p. 127

Application of 1-alkyl-3-methylimidazolium-based ionic liquids in non-aqueous capillary electrophoresis

Vaher, Merike; Koel, Mihkel; Kaljurand, Mihkel Journal of chromatography A 2002 / p. 27-32 : ill

Application of metal-doped organic aerogels for photodegradation of antibiotics in water

Bolobajev, Juri; Kask, Maarja; Koel, Mihkel Chemical industry digest 2019 / p. 92-95 <http://chemindigest.com/chemical-industry-digest-june-2019/>

Application of metal-doped organic aerogels for photodegradation of trimethoprim in water

Kask, Maarja; Koel, Mihkel; Bolobajev, Juri Aerogels processing, modeling and environmental-driven applications : book of abstracts. 2019 / p. 28

Application of the concept of design space in method development for the determination of contaminants in soil

Jurjeva, Jelena; Koel, Mihkel Proceedings of the Estonian Academy of Sciences 2025 / p. 71-81

<https://doi.org/10.3176/proc.2025.1.07>

Application of the principles of green chemistry in analytical chemistry

Koel, Mihkel; Kaljurand, Mihkel Pure and applied chemistry 2006 / 11, p. 1993-2002

Atomic layer deposition of high-k dielectrics on carbon nanoparticles

Tamm, Aile; **Koel, Mihkel; Peikola, Anna-Liisa** Thin solid films 2013 / p. 16-20 : ill <https://doi.org/10.1016/j.tsf.2012.09.071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Benign design in analytical chemistry

Kaljurand, Mihkel; Koel, Mihkel Critical reviews in analytical chemistry 2012 / p. 192-195

<https://www.tandfonline.com/doi/pdf/10.1080/10408347.2011.645378>

Capillary electrophoresis on alkylimidazolium salts = Alküülimidasooliumi soolad kapillaarelektroforeesis

Borissova, Maria 2007 http://www.ester.ee/record=b2315954*est

Capillary electrophoresis versus HPLC analysis method used for analyzing sugars and sugar derivatives in ionic liquid media obtained from lignocellulosic biomass

Hyvärinen, S.; Mikkola, J.-P.; Murzin, D. Yu.; **Vaher, Merike; Kaljurand, Mihkel; Koel, Mihkel** Book of abstracts : COST Action CM0903: Utilization of Biomass for Sustainable Fuels and Chemicals (UBIOCHEM) : Thessaloniki, Greece, 1-3 Nov 2012 2012 / p. 16

Capillary electrophoretic analysis of neutral carbohydrates using ionic liquids as background electrolytes
Vaheer, Merike; Koel, Mihkel; Kazarjan, Jana; Kaljurand, Mihkel Electrophoresis 2011 / 9, p. 1068-1073 : ill

Capillary electrophoretic monitoring of hydrothermal pre-treatment and enzymatic hydrolysis of willow : comparison with HPLC and NMR
Vaheer, Merike; Helmja, Kati; Käsper, Andres; Kurašin, Mihail; Väljamae, Priit; Kudrjašova, Marina; Koel, Mihkel; Kaljurand, Mihkel Catalysis today 2012 / p. 34-41 : ill

Capillary zone electrophoresis on chemically bonded imidazolium based salts
Borissova, Maria; Vaheer, Merike; Koel, Mihkel; Kaljurand, Mihkel Journal of chromatography A 2007 / p. 320-325 : ill

Carbon aerogel based electrode material for EAP actuators
Kaasik, Friedrich; Torop, Janno; Peikolainen, Anna-Liisa; Koel, Mihkel; Aabloo, Alvo Proceedings of SPIE 2011 / p. 79760O-1 - 79760O-8 : ill

Carbon aerogel platinum-praseodymium oxide nanocatalyst for methanol oxidation in 0.5 M sulfuric acid : (digital presentation)
Prits, Alise-Valentine; Nerut, Jaak; Kasuk, Heili; Koel, Mihkel; Sepp, Silver; Valk, Peeter; Aruväli, Jaan; Koppel, Miriam; Mikli, Valdek; Volobujeva, Olga; Lust, Enn ECS transactions 2022 / art. 79 <https://doi.org/10.1149/10807.0079ecst> [Journal metrics at Scopus](#) [Article at Scopus](#)

Carbon aerogel-cellulose films and fibres with electrical conductivity and antibacterial properties against cyanobacteria
Elhi, Fred; Kisand, Veljo; Peikolainen, Anna-Liisa; Koel, Mihkel; Aabloo, Alvo 3rd Seminar on Aerogels : Synthesis-Properties-Applications : 22-23 September 2016, Mines ParisTech - PSL Research University, Sophia Antipolis (France) : proceedings 2016 / p. 180

Carbon aerogels from 5-methylresorcinol-formaldehyde gels = Süsinikaerogeelid 5-metüülresortsinoolist ja formaldehüüdist
Perez-Caballero, Fernando 2008 <https://digi.lib.ttu.ee/i/?284> https://www.ester.ee/record=b2431316*est

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](#)

Cobalt- and iron-containing nitrogen-doped carbon aerogels as non-precious metal catalysts for electrochemical reduction of oxygen
Sarapuu, Ave; Samolberg, Lars; Kreek, Kristiina; Koel, Mihkel; Matisen, Leonard; Tammeveski, Kaido Journal of electroanalytical chemistry 2015 / p. 9-17 : ill <https://doi.org/10.1016/j.jelechem.2015.03.021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cobalt-containing nitrogen-doped carbon aerogels as efficient electrocatalysts for the oxygen reduction reaction
Kreek, Kristiina; Sarapuu, Ave; Samolberg, Lars; Joost, Urmas; Mikli, Valdek; Koel, Mihkel; Tammeveski, Kaido ChemElectroChem 2015 / p. 2079-2088 : ill <https://doi.org/10.1002/celc.201500275> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of the composition of essential oils and supercritical carbon dioxide extracts from the berries and needles of Estonian juniper (Juniperus communis L.)
Orav, Anne; Koel, Mihkel; Kailas, Tiiu; Müürisepp, Aleksander-Mati Procedia chemistry 2010 / p. 161-167

Comparative analysis of the composition of the essential oil from the shoots, leaves and stems the wild Ledum palustre L. from Estonia
Gretšušnikova, Tatjana; Järvan, Kerly; Orav, Anne; Koel, Mihkel Procedia chemistry 2010 / p. 168-173

Comparative analysis of the essential oil and supercritical carbon dioxide extracts of Juniperus communis L.berries and needles from Estonia
Orav, Anne; Koel, Mihkel; Kailas, Tiiu; Müürisepp, Aleksander-Mati NoSSS2009 : 5th Conference on Separation and Related Techniques by Nordic Separation Science Society : 26-29 August, 2009, Tallinn University of Technology, Estonia : abstract book and program 2009 / p. 123

Comparison of carbon aerogel and carbide-derived carbon as electrode materials for non-aqueous supercapacitors with high performance
Laheäär, Ann; Peikolainen, Anna-Liisa; Koel, Mihkel; Jänes, Alar; Lust, Enn The 63rd Annual Meeting of International Society of Electrochemistry : 19.-24.08.2012, Praha 2012 / Abstract #s04-068 <https://link.springer.com/article/10.1007/s10008-012-1660-4>

Comparison of carbon aerogel and carbide-derived carbon as electrode materials for non-aqueous supercapacitors with high performance

Laheäär, Ann; **Peikolainen, Anna-Liisa; Koel, Mihkel**; Jänes, Alar; Lust, Enn Journal of solid state electrochemistry 2012 / p. 2717-2722 : ill <https://link.springer.com/article/10.1007/s10008-012-1660-4>

Comparison of essential oils composition from shoots, leaves and stems of the wild *Ledum palustre* from Estonia

Gretšušnikova, Tatjana; Orav, Anne; Koel, Mihkel; Järvan, Kerly NoSSS2009 : 5th Conference on Separation and Related Techniques by Nordic Separation Science Society : 26-29 August, 2009, Tallinn University of Technology, Estonia : abstract book and program 2009 / p. 90

Comparison of the essential oil composition of *Acorus calamus* obtained by supercritical carbon dioxide extraction and hydrodistillation methods

Gretšušnikova, Tatjana; Koel, Mihkel; Orav, Anne 9th International Symposium on Supercritical Fluids : Arcachon, France, May 18-20 2009 / p. 301

Complex investigation of composition of the brown alga *Fucus vesiculosus* (The Baltic Sea) by different instrumental methods

Vaher, Merike; Truus, Kalle; **Koel, Mihkel; Pehk, Tõnis**; Taure, Imants; **Viitak, Anu** IMA'03 : 3rd International Conference : Instrumental Methods of Analysis Modern Trends and Applications : 23-27 September 2003, Thessaloniki, Greece : conference proceedings 2003 / p. 238-240 : ill

Composition of the oil and supercritical fluid CO₂ extract of sweet gale (*Myrica gale* L.) fruits

Sokolova, Maia; Orav, Anne; Koel, Mihkel; Kailas, Tiiu; Müürisepp, Aleksander-Mati Journal of essential oil research 2005 / March/April, p. 188-191 : ill <https://www.tandfonline.com/doi/abs/10.1080/10412905.2005.9698871>

Conference on Knowledge-based Materials and Technologies for Sustainable Chemistry : Tallinn, Estonia, 1-5 June 2005

Koel, Mihkel; Hamley, Paul Green chemistry 2005 / 9, p. 632-635 : phot

Deep eutectic solvents as phase change materials for efficient thermal energy storage

Rafique, Nouman; Koel, Mihkel; Järvik, Oliver 7th Edition of the Iberoamerican Meeting on Ionic Liquids 2024 / p. 40
https://media.sci-meet.com/imil2024.events.chemistry.pt/5b2baf78-e9f0-4f60-9f54-9a115d3be118/BookAbstracts_IMIL2024_FINAL_2.pdf

Developments in analytical chemistry initiated from green chemistry

Koel, Mihkel Sustainable Chemistry for the Environment 2024 / art.100078 <https://doi.org/10.1016/j.scenv.2024.100078> [Journal metrics at Scopus](#) [Article at Scopus](#)

Developments in the application of Green Chemistry principles to food analysis : capillary electrophoresis for the analysis of ingredients in food products

Koel, Mihkel; Borissova, Maria; Vaher, Merike; Kaljurand, Mihkel AgroFOOD industry hi-tech 2011 / 5, p. 27-29 : ill

Do we need Green Analytical Chemistry

Koel, Mihkel Green chemistry 2015 / [9] p. : ill <http://dx.doi.org/10.1039/C5GC02156A>

Do we need Green Analytical Chemistry?

Koel, Mihkel Green chemistry 2016 / p. 923-931 : ill <https://doi.org/10.1039/c5gc02156a> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Editorial overview : a closer look on green developments in analytical chemistry: green analytical chemistry is going mainstream

Koel, Mihkel; Kaljurand, Mihkel Current Opinion in Green and Sustainable Chemistry 2021 / Art. 100541
<https://doi.org/10.1016/j.cogsc.2021.100541> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti roheline keemia saadik maailmas

Petrone, Justin Mente et Manu 2016 / lk. [12]-17 : fot https://artiklid.elnet.ee/record=b2797101*est

Electroactive polymer actuators with carbon aerogel electrodes

Palmre, Viljar; Lust, Enn; Jänes, Alar; **Koel, Mihkel; Peikolainen, Anna-Liisa**; Torop, Janno; Johanson, Urmas; Aabloo, Alvo Journal of materials chemistry 2011 / p. 2577-2583 : ill <https://pubs.rsc.org/en/content/articlelanding/2011/jm/c0jm01729a>

Electrocatalysis of oxygen reduction by iron-containing nitrogen-doped carbon aerogels in alkaline solution

Sarapuu, Ave; **Kreek, Kristiina**; Kisand, Kaarel; Kook, Mati; **Uibu, Mai; Koel, Mihkel**; Tammeveski, Kaido Electrochimica acta 2017 / p. 81-88 : ill <https://doi.org/10.1016/j.electacta.2017.01.157> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrochemically driven carbon-based materials as EAPs : fundamentals and device configurations [Online resource]

Torop, Janno; Peikolainen, Anna-Liisa; Aabloo, Alvo; **Koel, Mihkel**; Asaka, Kinji; Baughman, Ray Electromechanically active

polymers : a concise reference 2016 / p. 1-16 http://dx.doi.org/10.1007/978-3-319-31767-0_18-1

Electrophoretic mobilities in nonaqueous capillary electrophoresis

Vaher, Merike; Koel, Mihkel Proceedings of the Estonian Academy of Sciences. Chemistry 2004 / 1, p. 36-45 : ill

Electroreduction of oxygen on cobalt- and iron-containing nitrogen-doped carbon aerogels

Sarapuu, Ave; Samolberg, Lars; **Kreek, Kristiina; Koel, Mihkel**; Joost, Urmas; Tammeveski, Kaido BEC 16 : the 6th Baltic Electrochemistry Conference : Electrochemistry of Functional Interfaces and Materials : 15th-17th June 2016, Helsinki, Finland 2016 / p. 20

Elektromigratsioonilised meetodid bioprotsesside analüüsis : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsüklile

Kaljurand, Mihkel; Koel, Mihkel; Vaher, Merike Tallinna Tehnikaülikooli aastaraamat 2007 2008 / lk. 267-274 : ill

Energy savings in analytical chemistry

Koel, Mihkel Handbook of green analytical chemistry 2012 / p. 291-319 : ill

Esinduslik roheline keemia konverents : [1.-5. juunini TTÜs, üks korraldajatest TTÜ]

Koel, Mihkel Mente et Manu 2005 / 16. juuni, lk. 1, 5 : fot https://www.ester.ee/record=b1242496*est

Europarlament püüab edendada rohelist keemiat : [kommentaar ka TTÜ keemiainstituudi teadlaselt Mihkel Koelilt]

Kändler, Tiit; **Koel, Mihkel** Eesti Päevaleht 2006 / 17. nov., lk. 28 <https://epl.delfi.ee/artikkel/51064558/europarlament-puub-edendada-rohelist-keemiat>

Extraction of bioactive compounds from Catharanthus roseus and Vinca minor

Koel, Mihkel; Kuhtinskaja, Maria; Vaher, Merike Separation and purification technology 2020 / art. 117438 ; 5 p. : ill <https://doi.org/10.1016/j.seppur.2020.117438> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extraction of bioactive compounds from Dipsacus fullonum leaves using deep eutectic solvents

Saar-Reismaa, Piret; Koel, Mihkel; Tarto, Riin; Vaher, Merike Journal of chromatography A 2022 / art. 463330 <https://doi.org/10.1016/j.chroma.2022.463330> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extraction of polyphenols from plants with modified supercritical carbon dioxide

Sokolova, Maia; **Vaher, Merike; Koel, Mihkel** Proceedings of the 8th Meeting on Supercritical Fluids. Chemical Reactivity and Material Processing in Supercritical Fluids, 2002, Nice. Tome 2 2002 / p. 885-888

Ferrocene introduced into 5-methylresorcinol-based organic aerogels

Erkhova, Ludmila V.; Presniakov, Igor A.; Afanasov, Michail I.; Lemenovskiy, Dmitry A.; Yu, Haojie; Wang, Li; **Danilson, Mati; Koel, Mihkel** Polymers 2020 / art. 1582 ; 12 p. : ill <https://doi.org/10.3390/polym12071582> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ferrocene-modified resorcinol-formaldehyde aerogels

Panova, L.V.; Lemenovskii, D.A.; Afanasov, M.I.; Krut'ko, D.P.; Popkov, M.A.; Burlutskiy, R.O.; Brusova, M.M.; **Koel, Mihkel**; Bolobajev, Yu; Talanova, V.N. Russian Journal of Physical Chemistry B 2023 / p. 1526-1533 : ill <https://doi.org/10.1134/S1990793123070175> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Future prospects

Koel, Mihkel Ionic liquids in chemical analysis 2008 / p. 397-399

Green analytical chemistry

Koel, Mihkel; Kaljurand, Mihkel 2010 https://www.ester.ee/record=b2634131*est

Green analytical chemistry : setting a strategic direction

Kaljurand, Mihkel; Vaher, Merike; Koel, Mihkel 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. 61

Green analytical separation methods

Kaljurand, Mihkel; Koel, Mihkel Challenges in green analytical chemistry 2011 / p. 168-198 : ill <https://doi.org/10.1039/9781849732963-00168>

Green bioanalytical chemistry

Kaljurand, Mihkel; Koel, Mihkel Bioanalysis 2012 / p. 1271-1274

Green Chemistry and reconsidering simple analytical methods

Jõul, Piia; Kuhtinskaja, Maria; Vaher, Merike; Koel, Mihkel Chimica Oggi = Chemistry today 2017 / p. 32-34 : ill
<http://www.teknoscienze.com/chemistry-today/> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Heteroconjugation-based capillary electrophoretic separation of phenolic compounds in acetonitrile and propylene carbonate

Kuldvee, Ruth; Vaher, Merike; Koel, Mihkel; Kaljurand, Mihkel Electrophoresis 2003 / p. 1627-1634 : ill
https://www.researchgate.net/publication/10747352_Heteroconjugation-Based_Capillary_Electrophoretic_Separation_of_Phenolic_Compounds_in_Acetonitrile_and_Propylene_Carbonate

Identification and characterization of supercritical fluid extracts from herbs

Menaker, Anna; Kravets, Marina; Koel, Mihkel; Orav, Anne Comptes rendus chimie 2004 / p. 629-633 : ill

Imidasoolil põhinevad ioonsed vedelikud kvartskapillaari pinna modifitseerijatena kapillaarelektroforeesis

Borissova, Maria; Koel, Mihkel XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 7

Implementing greening into design in analytical chemistry

Jurjeva, Jelena; Koel, Mihkel Talanta open 2022 / art. 100136, 7 p <https://doi.org/10.1016/j.talo.2022.100136> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Ionic liquids - a survey of recent developments and applications : editorial

Koel, Mihkel; Linert, Wolfgang; Gärtner, Peter Monatshefte für Chemie = Chemical monthly 2007 / 11, p. V-VI

Ionic liquids as background electrolyte additives and coating materials in capillary electrophoresis

Vaher, Merike; Borissova, Maria; Koel, Mihkel; Kaljurand, Mihkel Proceedings of the Estonian Academy of Sciences. Chemistry 2007 / 4, p. 187-198 : ill

Ionic liquids as electrolytes for nonaqueous capillary electrophoresis

Vaher, Merike; Koel, Mihkel; Kaljurand, Mihkel Electrophoresis 2002 / p. 426-430 : ill

Ionic liquids as solvents for making composite materials from cellulose

Elhi, Fred; **Aid, Tiina; Koel, Mihkel** Proceedings of the Estonian Academy of Sciences 2016 / p. 255-266 : ill
<https://doi.org/10.3176/proc.2016.3.09> https://artiklid.elnet.ee/record=b2798397*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ionic liquids as specific additives in separation methods

Koel, Mihkel; Vaher, Merike 20th International Scientific Conference EcoBalt 2016 : Tartu, Estonia, October 9-12 : book of abstracts 2016 / p. 35 http://akki.ut.ee/wp-content/uploads/2015/01/Abstracts_Book_EcoBalt_2016.pdf

Ionic liquids for oil shale treatment

Koel, Mihkel; Hollis, K.; Rubin, J.; Lombardo, T.; Smith, B. Green industrial applications of ionic liquids 2002 / p. 193-208

Ionic liquids for silica modification : assessment by capillary zone electrophoresis

Borissova, Maria; Koel, Mihkel; Kaljurand, Mihkel Ionic liquids. IV, Not just solvents anymore 2007 / p. 35-46 : ill

Ionic liquids in capillary electrophoresis and liquid chromatography

Vaher, Merike; Koel, Mihkel; Kaljurand, Mihkel Chimica Oggi = Chemistry today 2007 / 6, p. 86-88

Ionic liquids in chemical analysis

Koel, Mihkel 2008 https://www.ester.ee/record=b2442928*est

Ionic liquids in chemical analysis

Koel, Mihkel Critical reviews in analytical chemistry 2005 / 3, p. 177-192

Keemia muutub rohelisemaks : [1.-5. juunil 2005 toimuvast rahvusvahelisest konverentsist TTÜs]

Koel, Mihkel Mente et Manu 2005 / 1. juuni, lk. 2 https://www.ester.ee/record=b1242496*est

Keemikud hoiatavad arutu raiskamise eest teadusaparatuuri soetamisel

Imeline Teadus 2019 / lk. 20 : fot https://www.ester.ee/record=b2747925*est

Keemikud: uus ja kallis teadusaparatuur ei ole alati tarvilik, saab ka säästlikumalt [Võrguväljaanne]

novaator.err.ee 2019 / fot [Keemikud: uus ja kallis teadusaparatuur ei ole alati tarvilik, saab ka säästlikumalt](#)

Kes on päikesekeemikud?

Koel, Mihkel Inseneeria 2014 / lk. 44-45 : fot https://artiklid.elnet.ee/record=b2678379*est

Key aspects of industrial fabrication of carbon based ionic capacitive laminates

Kaasik, Friedrich; Jürgens, M.; Lust, Enn; Aabloo, Alvo; Baranova, Inna; Basant, Martin Z.; Hantel, Moritz M.; Johanson, Urmas; Kiefer, Rudolf; **Koel, Mihkel**; Peikolainen, Anna-Liisa Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 33 ; oral 22 https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts_pub3.pdf

Lignotselluloosse biomassi eeltöötus ionsete vedelikega

Aid, Tiina; Koel, Mihkel; Vaher, Merike XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / lk. 11

Low-density organic aerogels from oil shale by-product 5-methylresorcinol

Peikolainen, Anna-Liisa; Perez-Caballero, Fernando; Koel, Mihkel Oil shale 2008 / 3, p. 348-358 : ill
https://www.researchgate.net/publication/250207343_Low-density_organic_aerogels_from_oil_shale_by-product_5-methylresorcinol

Metal-catalyzed degradation of cellulose in ionic liquid media

Aid, Tiina; Koel, Mihkel; Lopp, Margus; Vaher, Merike Inorganics 2018 / art. 78, 11 p. : ill <https://doi.org/10.3390/inorganics6030078>
[Journal metrics at Scopus](#) [Article at Scopus](#)

Metal-doped aerogels based on resorcinol derivatives = Resortsinooli derivaatidel põhinevad metalli sisaldavad aerogeelid

Kreek, Kristiina 2016 http://www.ester.ee/record=b4619897*est

Metal-doped organic aerogels for photocatalytic degradation of trimethoprim

Bolobajev, Juri; Kask, Maarja; Kreek, Kristiina; Kulp, Maria; Koel, Mihkel; Goi, Anna Chemical engineering journal 2019 / p. 120-128 : ill <https://doi.org/10.1016/j.cej.2018.09.127> Tehnikaülikooli teadlaste meetod aitab puhastada reovett antibiootikumijääkidest
<https://keskkonnatehnika.ee/reovee-puhastamine-kasutades-aerogeele/> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Micellar electrophoresis using ionic liquids

Borissova, Maria; Palk, Klairy; Koel, Mihkel Journal of chromatography A 2008 / 1/2, p. 192-195 : ill

Molecular spectroscopy and ionic liquids

Koel, Mihkel Ionic liquids in chemical analysis 2008 / p. 295-306

Monitoring of simultaneous saccharification and fermentation of wheat straw by HPLC and capillary electrophoresis

Vaher, Merike; Käsper, Andres; Erm, Sten; Aid, Tiina; Koel, Mihkel Book of abstracts : COST Action CM0903: Utilization of Biomass for Sustainable Fuels and Chemicals (UBIOCHEM) : Thessaloniki, Greece, 1-3 Nov 2012 2012 / p. 73

Mutual Lewis acid-base interactions of cations and anions in ionic liquids

Holzweber, Markus; **Koel, Mihkel** Chemistry : a European journal 2013 / p. 288-293 : ill <https://doi.org/10.1002/chem.201201978> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nonaqueous CE using contactless conductivity detection and ionic liquids as BGEs in ACN

Borissova, Maria; Gorbatsova, Jelena; Ebber, Arkadi; Kaljurand, Mihkel; Koel, Mihkel; Vaher, Merike Electrophoresis 2007 / p. 3600-3605 : ill <https://pubmed.ncbi.nlm.nih.gov/17893951/>

A novel route of synthesis of sodium hexafluorosilicate two component cluster crystals using BF4- containing ionic liquids

Välbe, Raul; Mäeorg, Uno; Lõhmus, Ants; Reedo, Valter; **Koel, Mihkel; Krumme, Andres**; Kessler, Vadim; Hoop, Andres; Romanov, Alexey Journal of crystal growth 2012 / p. 51-56 : ill <https://www.sciencedirect.com/science/article/pii/S0022024812006069>

Oil shale phenol-derived aerogels as supports for palladium nanoparticles

Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Uibu, Mai; Herbert, M.; Galindo, A.; Montilla, F.; Koel, Mihkel Oil shale 2009 / 1, p. 28-39 : ill https://artiklid.elnet.ee/record=b1141307*est

Orgaanilised aerogeelid 5-metüülresortsinooli baasil

Peikolainen, Anna-Liisa; Koel, Mihkel XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 77

Organic acid catalyzed synthesis of 5-methylresorcinol based organic aerogels in acetonitrile

Peikolainen, Anna-Liisa; Volobujeva, Olga; Aav, Riina; Uibu, Mai; Koel, Mihkel Journal of porous materials 2012 / p. 189-194 : ill
https://www.researchgate.net/publication/228068858_Organic_acid_catalyzed_synthesis_of_5-methylresorcinol_based_organic_aerogels_in_acetonitrile

Organic aerogels as precursors for the preparation of porous carbons

Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Koel, Mihkel; White, R.J.; Budarin, V.; Clark, J.H. Progress in porous media research 2009 / p. 419-459 : ill

Organic aerogels based on 5-methylresorcinol = Orgaanilised aerogeelid 5-metüülresortsinoolist
Peikolainen, Anna-Liisa 2011

Organic and carbon aerogels containing rare-earth metals : their properties and application as catalysts
Kreek, Kristiina; Kriis, Kadri; Maaten, Birgit; Uibu, Mai; Mere, Arvo; Kanger, Tõnis; Koel, Mihkel Journal of non-crystalline solids 2014 / p. 43-48 : ill <https://doi.org/10.1016/j.jnoncrysol.2014.07.021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Overview of program on US-Estonian science and technology cooperation on oil shale research and utilization (strategic importance of oil shale studies for Estonia and USA)
Koel, Mihkel; Bungler, J. Oil shale 2005 / 1, p. 65-79 : ill https://artiklid.elnet.ee/record=b2342174*est

Photocatalytic degradation of trimethoprim enhanced by organic aerogels
Bolobajev, Juri; Kreek, Kristiina; Koel, Mihkel; Goi, Anna 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 110 https://photo-catalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf

[Preface]

Koel, Mihkel EUCHEM2014 : Molten Salts and Ionic Liquids XXV : 6-11 July 2014, Tallinn, Estonia : programme 2014 / p. 1 https://www.ester.ee/record=b4777207*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](#)

Preparation of carbon aerogels from 5-methylresorcinol-formaldehyde gels
Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Uibu, Mai; Kuusik, Rein; keemik; Volobujeva, Olga; Koel, Mihkel Microporous and mesoporous materials 2008 / p. 230-236 : ill

Preparation of fine carbon aerogel powder
Peikolainen, Anna-Liisa; Koel, Mihkel; Aabloo, Alvo The 63rd Annual Meeting of International Society of Electrochemistry : 19.-24.08.2012, Praha 2012 <https://www.etis.ee/Portal/Publications/Display/e5e1ef5d-3700-4ba7-9c20-005efaae8d67>

Preparation of metal-doped carbon aerogels from oil shale processing by-products
Kreek, Kristiina; Kulp, Maria; Uibu, Mai; Mere, Arvo; Koel, Mihkel Oil shale 2014 / p. 185-194 : ill https://artiklid.elnet.ee/record=b2673721*est <https://doi.org/10.3176/oil.2014.2.08> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Preparation of nanostructured carbon materials
Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Koel, Mihkel Proceedings of the Estonian Academy of Sciences 2008 / 1, p. 48-53 : ill

Preparation of organic aerogels
Peikolainen, Anna-Liisa; Koel, Mihkel 10th European Meeting on Supercritical Fluids : Colmar, France, 2005 2005 / ? p

Preparation of the catalyst support from the oil-shale processing by-product
Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Koel, Mihkel; Herbert, M.; Galindo, A.; Montilla, F. The open petroleum engineering journal 2008 / p. 42-46 <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=bb52295bcd2bc43fe5b0478476c6faeeda31843c>

Põlevkivi fenoolid toorainena poorsete aerogeelide valmistamiseks = Oil shale phenols as raw materials for porous aerogel preparation
Koel, Mihkel Põlevkivi tulevik - innovatsioon : põlevkivikonverents 2013 2013 / lk. 23-24

Rahvusvaheline keemikute kokkutulek Eestis : ["roheline" keemiaga seotud konverentsist]
Koel, Mihkel Tallinna Tehnikaülikooli aastaraamat 2005 2006 / lk. 372-379

Recent advancements on greening analytical separation
Kaljurand, Mihkel; Koel, Mihkel Critical reviews in analytical chemistry 2011 / p. 2-20 : ill <https://www.tandfonline.com/doi/full/10.1080/10408347.2011.539420>

Roheline analüütiline keemia : [sõnavõtt monograafia "Green analytical chemistry" esitlusel 15. juunil 2010 Akadeemia kohvikus Mustamäel]
Koel, Mihkel Tallinna Tehnikaülikooli aastaraamat 2010 2011 / lk. 290-292

Roheline keemia. Kas uus teadusharu?

Koel, Mihkel; Sheldon, Roger Sirp 2011 / lk. 13 : portr

Room temperature ionic liquids as background electrolyte additives in capillary electrophoretic separations

Vaher, Merike 2002 https://www.ester.ee/record=b1715414*est

Saccharification of lignocellulosic biomasses via ionic liquid pretreatment

Aid, Tiina; Hyvärinen, S.; **Vaher, Merike**; **Koel, Mihkel**; Mikkola, J.-P. Industrial crops and products 2016 / p. 336-341 : ill
<https://doi.org/10.1016/j.indcrop.2016.08.017> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sea buckthorn and its bioactive compounds

Lõugas, Tiina; **Vokk, Raivo**; Keskaik, Lauri; **Koel, Mihkel** Proceedings of the NJF's 22nd congress "Nordic Agriculture in Global Perspective" : July 1-4, 2003, Turku, Finland 2003 / p. 298

Separation of ionic liquids in non-aqueous capillary electrophoresis using contactless conductivity detector

Vaher, Merike; **Gorbatšova, Jelena**; **Koel, Mihkel**; **Kaljurand, Mihkel** HPLC 2007 Symposium : Ghent, Belgium, June 17-21, 2007 : abstract book 2007 / p. 363

Separation of polyphenolic compounds extracted from plant matrices using capillary electrophoresis

Vaher, Merike; **Koel, Mihkel** Journal of chromatography A 2003 / p. 225-230 : ill

Solvatochromic probes within ionic liquids

Koel, Mihkel Proceedings of the Estonian Academy of Sciences. Chemistry 2005 / 1, p. 3-11 : ill

Solvatochromic study on binary solvent mixtures with ionic liquids

Koel, Mihkel Zeitschrift für Naturforschung A 2008 / p. 505-512 : ill
https://web.archive.org/web/20170809160833id_/http://www.znaturforsch.com/s63a/s63a0505.pdf

Specific background electrolytes for nonaqueous capillary electrophoresis

Vaher, Merike; **Koel, Mihkel** Journal of chromatography A 2005 / p. 83-88 : ill

Study of ionic liquids used for silica surface modification by capillary electrophoresis

Borissova, Maria; **Koel, Mihkel** Conference on Knowledge-based Materials and Technologies for Sustainable Chemistry : 1-5 June 2005, Tallinn, Estonia : abstract book 2005 / p. 78

Sugar and sugar derivatives in ionic liquid media obtained from lignocellulosic biomass

Hyvärinen, S.; Mikkola, J.-P.; Murzin, D. Yu.; **Vaher, Merike**; **Kaljurand, Mihkel**; **Koel, Mihkel** UBIOCHEM IV : 4th International Workshop of COST Action CM0903 : 14-16 October, 2013, Valencia, Spain : book of abstracts 2013 / p. 42

Sugars and sugar derivatives in ionic liquid media obtained from lignocellulosic biomass: Comparison of capillary electrophoresis and chromatographic analysis

Hyvärinen, S.; Mikkola, J.-P.; Murzin, D. Yu.; **Vaher, Merike**; **Kaljurand, Mihkel**; **Koel, Mihkel** Catalysis today 2014 / p. 18-24 : ill
<https://doi.org/10.1016/j.cattod.2013.08.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sugars and sugar derivatives in ionic liquids media obtained from lignocellulosic biomass : comparizon of capillary electrophoresis and chromatographic analysis

Hyvärinen, S.; Mikkola, J.-P.; Murzin, D. Yu.; **Vaher, Merike**; **Kaljurand, Mihkel**; **Koel, Mihkel** Catalysis today 2014 / p. 18-24 : ill

Supported ionic liquids for efficient thermal energy storage

Kaljusmaa, Liisa-Maria; **Koel, Mihkel**; **Järvik, Oliver** Euchemil 2024 : Book of Abstracts 2024 / p. 111
<https://euchemil2024.org/book-of-abstracts>

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 http://www.ester.ee/record=b2713869*est

Säästev areng ja keemia

Koel, Mihkel XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 57-58

Süsinikaerogeelid ja nende modifitseerimine ioonsetes vedelikes

Peikolainen, Anna-Liisa; **Lõo, Simo**; **Koel, Mihkel** XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 62

Süsinikaerogeelid kui tugimaterjalid heterogeenses katalüüsis

Perez-Caballero, Fernando; **Koel, Mihkel** XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian

Taastuvate ressursside ja keemia vahekord

Koel, Mihkel Taastuvate energiaallikate uurimine ja kasutamine : kolmanda konverentsi kogumik : [1. november 2001, Tartu] 2002 / lk. 70-77

Teaduspreemia keemia ja molekulaarbioloogia alal teadustööde tsükli "Elektromigratsioonilised meetodid bioprotsesside analüüsis" eest : Mihkel Kaljurand (kollektiivi juht), Mihkel Koel, Merike Vaher

Kaljurand, Mihkel; Koel, Mihkel; Vaher, Merike Eesti Vabariigi teaduspreemiad 2007 2007 / lk. 54-65 : fot., ill

Tehnikaülikooli keemikud leiutasid uue tõhuse adsorbentmaterjali

Horisont 2017 / lk. 7 : fot http://www.ester.ee/record=b1072243*est https://artiklid.elnet.ee/record=b2819537*est

Tehnikaülikooli teadlane üllitas maailmatasemel kogumiku : [intervjuu kogumiku "Ionic liquids in chemical analysis" koostaja Mihkel Koel'iga]

Koel, Mihkel; Ummelas, Mart Mente et Manu 2008 / 21. nov., lk. 1, 3 : fot., ill https://artiklid.elnet.ee/record=b2385889*est

The chemometric approach to identification of residual oil contamination at former primitive asphalt pavement plants

Jurjeva, Jelena; Koel, Mihkel Oil shale 2019 / p. 410-430 : ill http://www.kirj.ee/32501/?tpl=1061&c_tpl=1064

<https://doi.org/10.3176/oil.2019.3.04> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

The chemometrical and statistical approach to identification of oil compounds in soil

Jurjeva, Jelena; Koel, Mihkel GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 32

<http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

The pretreatment of lignocellulosic biomass with ionic liquids

Aid, Tiina; Hyvärinen, S.; **Koel, Mihkel; Vaher, Merike** UBIOCHEM IV : 4th International Workshop of COST Action CM0903 : 14-16 October, 2013, Valencia, Spain : book of abstracts 2013 / p. 43

The separation of polyphenolic compounds extracted from plant matrices using capillary electrophoresis

Vaher, Merike; Koel, Mihkel The 13th International Symposium on Capillary Electrophoresis Techniques, September 1-4, 2002, Helsinki : abstracts 2002 / p. 75

The study of properties of aerogels derived from oil shale phenols

Pihl, Olga; Koel, Mihkel Abstracts book of 34th Oil Shale Symposium : October 13-17, 2014, Colorado School of Mines, Golden, Colorado 2014 / p. 55

Tööstusjäätmed energiaallikana

Koel, Mihkel; Kuusik, Rein, keemik Taastuvate energiaallikate uurimine ja kasutamine : neljanda konverentsi kogumik = Investigation and usage of renewable energy sources : fourth conference proceedings : Tartu, Estonia, 2003 2003 / lk. 17-24

Tüüritavate omadustega lahustid

Koel, Mihkel Teadusmõtte Eestis : täppisteadused : [artiklikogumik] 2006 / lk. 217-223 : ill https://www.ester.ee/record=b2230239*est

Unikaalne ülipoorne materjal aitab reovett ravimijääkidest puhastada

Horisont 2019 / lk. 4 http://www.ester.ee/record=b1072243*est

Usaldusväärsed mõõtmised keemias

Koel, Mihkel; Kaljurand, Mihkel 2020 https://www.ester.ee/record=b5377677*est https://www.ester.ee/record=b5377678*est
<https://digikogu.taltech.ee/et/Item/ef660aa0-9ad9-42bd-a7ed-ee0dd653f776>

Use of ionic liquids in oil shale processing

Koel, Mihkel Ionic liquids IIIB : fundamentals, progress, challenges, and opportunities : transformations and processes 2005 / p. 72-82

Use of neoteric solvents in biomass treatment

Vaher, Merike; Saar-Reismaa, Piret; Kuhtinskaja, Maria; Koel, Mihkel Proceedings 2023 / art. 39

<https://doi.org/10.3390/proceedings2023092039>

Utilization of capillary electrophoresis technique to analyse sugars in ionic liquid

da Costa Lopes, A. M.; **Aid, Tiina; Vaher, Merike;** Bogel-Lukasik, R.; **Koel, Mihkel** UBIOCHEM IV : 4th International Workshop of COST Action CM0903 : 14-16 October, 2013, Valencia, Spain : book of abstracts 2013 / p. 98

Vedelatest sooladest

Koel, Mihkel Horisont 2009 / 1, lk. 8 : portr https://artiklid.elnet.ee/record=b1068892*est

Võimalik kõne raamatu esitlusel

Koel, Mihkel Tallinna Tehnikaülikooli aastaraamat 2008 2009 / lk. 120-123

Üleilmne roheline keemia? : ettekanne Eesti Keemia Seltsi üldkoosolekul 18. novembril 2004 TTÜ aulas

Koel, Mihkel Tallinna Tehnikaülikooli aastaraamat 2004 2005 / lk. 327-336