

Alternative technologies for oil shale liquefaction and upgrading

Luik, Hans International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 44-45 http://www.ester.ee/record=b4775098*est

Applicability of static supercritical carbon dioxide extraction in biogeochemical characterization of oil shales

Luik, Hans; Luik, Lea; Palu, Vilja; Šarajeva, Galina; Gregor, Andre American journal of analytical chemistry 2014 / p. 173-180 : ill

Catalytic hydrogenation of thermobitumen

Krasulina, Julia; Bitjukov, Mihhail; Vink, Natalia; Gregor, Andre; Luik, Lea; Luik, Hans International oil shale symposium : Tallinn, Estonia, June 10-13, 2013 2013 / p. 56-57

Catalytic thermal liquefaction of oil shale in tetralin

Johannes, Ille; Tiikma, Laine; Luik, Hans; Tamvelius, Hindrek; Krasulina, Julia ISRN Chemical Engineering 2012 / Article ID 617363, [11] p. <https://www.hindawi.com/journals/isrn/2012/617363/>

Cleaner liquefaction of oil shale - is it feasible?

Luik, Hans; Luik, Lea International Symposium "Oil shale 100 years" : Estonia, Sept. 20-23, 2016 : [abstracts] 2016 / p. 41-42

Co-conversion of Salix biomass and oil shale in the medium of supercritical water

Luik, Hans; Palu, Vilja; Tamvelius, Hindrek; Luik, Lea; Sokolova, Julia 16th European Biomass Conference & Exhibition : from Research to Industry and Markets : proceedings of the International Conference held in Valencia, Spain, 2-6 June 2008 2008 / p. 2007-2009

Comparative hydroliquefaction of pine Pinus sylvestris wood and bark [Electronic resource]

Luik, Hans; Luik, Lea; Vink, Natalia; Kozõreva, Jekaterina; Sokolova, Julia 15th European Biomass Conference & Exhibition : from Research to Market Deployment : Florence, Italy 2007 / p. 1951-1954 [CD-ROM] <https://www.etis.ee/Portal/Publications/Display/4b3b9aa0-26f4-4ddd-81f7-6d0e5095e579>

Comparative thermochemical conversion processing of biomass and fossil fuel [Electronic resource]

Luik, Hans; Luik, Lea; Veski, Rein 14th European Biomass Conference : proceedings 2006 / p. 727-730 [CD-ROM]

Conversion of pine Pinus sylvestris cones with supercritical water

Luik, Lea; Luik, Hans; Tamvelius, Hindrek; Palu, Vilja; Kruusement, Kristjan 17th European Biomass Conference & Exhibition from Research to Industry and Markets : proceedings of the International Conference held in Hamburg, Germany, 29 June - 3 July 2009 2009 / p. 1941-1944

Conversion of the Estonian fossil and renewable feedstocks in the medium of supercritical water

Luik, Lea; Luik, Hans; Palu, Vilja; Kruusement, Kristjan; Tamvelius, Hindrek Advances in Analytical and Applied Pyrolysis 2006-2008 : book of abstracts of the communications presented to the 18th International Symposium on Analytical and Applied Pyrolysis : Lanzarote, Canary Islands, May 18-23, 2008 2008 / p. 247 <https://www.sciencedirect.com/science/article/pii/S0165237008001253>

Conversion of the Estonian fossil and renewable feedstocks in the medium of supercritical water

Luik, Lea; Luik, Hans; Palu, Vilja; Kruusement, Kristjan; Tamvelius, Hindrek Journal of analytical and applied pyrolysis 2009 / 1/2, p. 492-496 : ill <https://www.sciencedirect.com/science/article/pii/S0165237008001253>

Conversion of willow biomass at varied thermochemical conditions [Electronic resource]

Luik, Hans; Luik, Lea; Tamvelius, Hindrek 14th European Biomass Conference : proceedings 2006 / p. 940-942 [CD-ROM]

Co-processing of biomass and heavy shale oil using catalytical hydrocracking method

Luik, Hans; Luik, Lea; Johannes, Ille; Tiikma, Laine; Sokolova, Julia 17th European Biomass Conference & Exhibition from Research to Industry and Markets : proceedings of the International Conference held in Hamburg, Germany, 29 June - 3 July 2009 / p. 1082-1084

Co-processing of oil shale with some other energy sources

Luik, Hans; Bojesen-Koefoed, Jorgen; Luik, Lea; Palu, Vilja; Sokolova, Julia; Tamvelius, Hindrek; Tiikma, Laine International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 71-72 http://www.ester.ee/record=b4775098*est

Copyrolysis of Estonian oil shale and peat

Sokolova, Julia; Luik, Hans; Palu, Vilja International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 75 http://www.ester.ee/record=b4775098*est

Dealkylation kinetics of alkylresorcinols by shock heating pyrolysis

Luik, Hans; Tiikma, Laine; Johannes, Ille; Kruusement, Kristjan 20th International Symposium on Analytical and Applied Pyrolysis : PYRO 2014 : 19-23 May 2014, Birmingham, UK : conference guide and abstracts 2014 / p. 79

Diktüoneemakilda ekstraktsioon superkriitilise fluidiga

Kruusement, Kristjan; Palu, Vilja; Šarajeva, Galina; Luik, Hans XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / lk. 38

Diktüoneemakilda termokeemiline destruktsioon

Luik, Hans Arutame diktüoneema-argilliidist : foorum : Tallinn, 6. november, 2014 2014 / [14] lk

Effect of different temperature-time combinations in kerogen pyrolysis to thermobitumen and oil

Luik, Lea; Luik, Hans; Šarajeva, Galina 20th International Symposium on Analytical and Applied Pyrolysis : PYRO 2014 : 19-23 May 2014, Birmingham, UK : conference guide and abstracts 2014 / p. 80

Effect of different temperature-time combinations in kerogen pyrolysis to thermobitumen and oil

Šarajeva, Galina; Luik, Lea; Luik, Hans 2014 proceedings of Second International Conference On Advances in Applied Science and Environmental Engineering : 20-21 December, 2014, Kuala Lumpur, Malaysia 2014 / p. 40-47 : ill

Effect of different temperature-time combinations in kerogen pyrolysis to thermobitumen and oil

Šarajeva, Galina; Luik, Lea; Luik, Hans International journal of environmental engineering 2015 / p. 174-181 : ill

<http://seekdl.org/nm.php?id=5785>

Effect of organic matter content and type of mineral matter on the oil yield from oil shales

Johannes, Ille; Luik, Hans; Bojesen-Koefoed, Jorgen; Tiikma, Laine; Vink, Natalia; Luik, Lea Oil shale 2012 / p. 206-221 : ill

https://www.researchgate.net/publication/274439293_Effect_of_organic_matter_content_and_type_of_mineral_matter_on_the_oil_yield_from_oil_shales

Extraction of oil from Jordanian Attarat oil shale

Tiikma, Laine; Johannes, Ille; Luik, Hans; Lepp, Ardi; Šarajeva, Galina Oil shale 2015 / p. 218-239 : ill

<https://doi.org/10.3176/oil.2015.3.03> https://artiklid.elnet.ee/record=b2740510*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fast pyrolysis of Estonian oil shale

Arpiainen, Vesa; Luik, Hans; Luik, Lea; Oasmaa, Anja; Solantausta, Yrjö International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 29-30 http://www.ester.ee/record=b4775098*est

Fixation of chlorine evolved in pyrolysis of PVC waste by Estonian oil shales

Tiikma, Laine; Johannes, Ille; Luik, Hans Journal of analytical and applied pyrolysis 2006 / 2, p. 205-210 : ill

Fundamentals to the maximum upgrading of oil shale

Luik, Hans; Luik, Lea; Šarajeva, Galina; Krasulina, Julia; Johannes, Ille; Kruusement, Kristjan Abstracts book of 34th Oil Shale Symposium : October 13-17, 2014, Colorado School of Mines, Golden, Colorado 2014 / p. 45

Gasification and liquefaction of solid fuels by hydrothermal conversion methods

Kruusement, Kristjan; Luik, Hans; Waldner, Maurice; Vogel, Frederic; Luik, Lea Journal of analytical and applied pyrolysis 2014 / p. 265-273 : ill <https://doi.org/10.1016/j.jaap.2014.04.006> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Liquefaction and gasification of Estonian oil shales in the medium of hot compressed water

Kruusement, Kristjan; Luik, Hans; Luik, Lea; Palu, Vilja; Vink, Natalia; Vogel, Frederic International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 42-43

http://www.ester.ee/record=b4775098*est

Liquefaction of Estonian kukersite oil shale kerogen with selected superheated solvents in static conditions

Luik, Hans; Palu, Vilja; Bitjukov, Mihhail; Luik, Lea; Kruusement, Kristjan; Tamvelius, Hindrek; Pryadka, N. Oil shale 2005 / 1, p. 25-36 : ill https://artiklid.elnet.ee/record=b2342140*est

Low temperature pyrolysis of graptolite argillite (Dictyonema shale) in autoclaves

Šarajeva, Galina; Tiikma, Laine; Luik, Hans; Johannes, Ille International journal of engineering research and applications 2015 / p. 16-22 : ill http://www.ijera.com/papers/Vol5_issue11/Part%20-%201/D511011622.pdf

Low-temperature pyrolysis and co-pyrolysis of Göynük oil shale and terebinth berries (Turkey) in an autoclave

Yanik, J.; Secim, P.; Karakaya, S.; Tiikma, Laine; Luik, Hans; Krasulina, Julia; Raik, Peep; Palu, Vilja Oil shale 2011 / p. 469-486 : ill https://artiklid.elnet.ee/record=b2463385*est

Mathematic models for kinetics of batchwise hydrogenation of shale oil

Johannes, Ille; Luik, Hans; Kruusement, Kristjan Fuel processing technology 2006 / 8, p. 711-716 : ill

Parallels between slow pyrolysis of Estonian oil shale and forest biomass residues

Luik, Hans; Luik, Lea; Tiikma, Laine; Vink, Natalia Journal of analytical and applied pyrolysis 2007 / 1/2, p. 205-209

Parallels between slow pyrolysis of Estonian oil shale and forest biomass residues

Luik, Hans; Luik, Lea; Tiikma, Laine; Vink, Natalia 17th International Symposium on Analytical and Applied Pyrolysis : Budapest, Hungary, May 21-26, 2006 : book of abstracts 2006 / p. 158

Peat semicoking and hydrocracking

Luik, Hans; Palu, Vilja; Luik, Lea; Sokolova, Julia Advances in Analytical and Applied Pyrolysis 2006-2008 : book of abstracts of the communications presented to the 18th International Symposium on Analytical and Applied Pyrolysis : Lanzarote, Canary Islands, May 18-23, 2008 2008 / p. 248 <https://www.sciencedirect.com/science/article/pii/S0165237008001241>

Peat semicoking and hydrocracking

Luik, Hans; Palu, Vilja; Luik, Lea; Sokolova, Julia; Bojesen-Koefoed, Jorgen Journal of analytical and applied pyrolysis 2009 / 1/2, p. 497-501 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0165237008001241>

Puukoor kui võimalik keemiatööstuse toore vedelkütuste ja kemikaalide saamiseks

Veski, Rein; Palu, Vilja; Joa, Kelly; Kruusement, Kristjan; Luik, Hans Taastuvate energiaallikate uurimine ja kasutamine : kuuenda konverentsi kogumik : [11. nov. 2004, Tartu] 2005 / lk. 119-131 : ill

Põlevkivi: mitte pelgalt põlev kivi, vaid Eesti nafta

Luik, Hans Äripäev 2006 / 9. mai, lk. 23 <https://www.aripaev.ee/uudised/2006/05/08/polevkivi-mitte-pelgalt-polev-kivi-vaid-eesti-nafta>

Pyrolysis and supercritical water conversion of pine Pinus sylvestris ingredients

Luik, Hans; Luik, Lea; Palu, Vilja; Tamvelius, Hindrek 21st European Biomass Conference and Exhibition 2013 / p. 914-917

Rapid characterisation and investigation of oil shales by thermal desorption-pyrolysis-GC/MS using multi-functional pyrolyzer

Watanabe, Chuichi; Luik, Hans; Yuzawa, Tetsuro International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 59-60 http://www.ester.ee/record=b4775098*est

Stepwise supercritical carbon dioxide extraction of Estonian oil shales in batch autoclave in temperature region 40-150 °C

Luik, Hans; Palu, Vilja; Luik, Lea; Šarajeva, Galina Organic Geochemistry : Trends for the 21st Century : book of abstracts of the communications presented to the 26th International Meeting on Organic Geochemistry, Costa Adeje, Tenerife - Spain, September 15-20, 2013. Vol. 2 2013 / p. 205-206

Study of the organic liquid obtained from supercritical water conversion of Estonian dictyonema and kukersite oil shale by PY-GC/MS

Chiavari, Giuseppe; Fabbri, Daniele; Finessi, Emanuela; Luik, Hans; Luik, Lea; Montalbani, Simona; Prati, Silva International Oil Shale Symposium : Tallinn, Estonia, June 8-11, 2009 : future energy solutions : come and share your vision! 2009 / p. 67 http://www.ester.ee/record=b4775098*est

Supercritical extraction of the Estonian kukersite oil shale

Luik, Hans Advances in energy research. Volume 2 2011 / p. 283-298

Supercritical fluid extraction of dictyonema oil shale

Kruusement, Kristjan; Palu, Vilja; Šarajeva, Galina; Luik, Hans International oil shale symposium : Tallinn, Estonia, June 10-13, 2013 2013 / p. 67

Synergy in co-liquefaction of oil shale and willow in supercritical water

Johannes, Ille; Luik, Hans; Palu, Vilja; Kruusement, Kristjan; Gregor, Andre Fuel 2015 / p. 180-187 : ill <https://doi.org/10.1016/j.fuel.2014.12.031> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synergy in co-pyrolysis of oil shale and pine sawdust in autoclaves

Johannes, Ille; Tiikma, Laine; Luik, Hans Journal of analytical and applied pyrolysis 2013 / 341-352 : ill <https://doi.org/10.1016/j.jaap.2013.06.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synergy in hydrous pyrolysis of oil shale and sawdust blends

Johannes, Ille; Tiikma, Laine; Luik, Hans; Gregor, Andre 20th International Symposium on Analytical and Applied Pyrolysis : PYRO 2014 : 19-23 May 2014, Birmingham, UK : conference guide and abstracts 2014 / p. 70

Synergy in the hydrothermal pyrolysis of oil shale/sawdust blends

Tiikma, Laine; Johannes, Ille; Luik, Hans; Gregor, Andre Journal of Analytical and Applied Pyrolysis 2016 / p. 247 - 256 <https://doi.org/10.1016/j.jaap.2015.11.008> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Termobituumeni katalüütiline hüdrogeenimine

Krasulina, Julia; Bitjukov, Mihhail; Vink, Natalia; Gregor, Andre; Luik, Lea; Luik, Hans XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / lk. 35

Thermochemical co-liquefaction of biomass wastes and Estonian oil shale [Electronic resource]

Luik, Lea; Luik, Hans; Bitjukov, Mihhail; Kruusement, Kristjan; Sokolova, Julia; Tamvelius, Hindrek Success & visions for bioenergy. Thermal processing of biomass for bioenergy, biofuels and bioproducts 2007 / [8] p. [CD-ROM]

The possibility of extracting oil shale organic matter during the bitumen generation stage

Fomitšov, Mihhail; **Luik, Hans** Abstracts book of 34th Oil Shale Symposium : October 13-17, 2014, Colorado School of Mines, Golden, Colorado 2014 / p. 54-55

Thermal dissolution of Estonian oil shale

Tiikma, Laine; Johannes, Ille; Luik, Hans; Zaidentsal, Aleksei; Vink, Natalia Advances in Analytical and Applied Pyrolysis 2006-2008 : book of abstracts of the communications presented to the 18th International Symposium on Analytical and Applied Pyrolysis : Lanzarote, Canary Islands, May 18-23, 2008 2008 / p. 265

Thermal dissolution of Estonian oil shale

Tiikma, Laine; Johannes, Ille; Luik, Hans; Zaidentsal, Aleksei; Vink, Natalia Journal of analytical and applied pyrolysis 2009 / 1/2, p. 502-507 : ill

Thermal extraction of oil from a Utah Green River (USA) oil shale in autoclaves

Johannes, Ille; Tiikma, Laine; Luik, Hans; Šarajeva, Galina International journal of engineering and applied sciences (EAAS) 2015 / p. 23-35 : ill [http://eaas-journal.org/survey/userfiles/files/v6i504%20Oil%20Shale%20and%20Renewables%20Research\(1\).pdf](http://eaas-journal.org/survey/userfiles/files/v6i504%20Oil%20Shale%20and%20Renewables%20Research(1).pdf)

Thermochemical Co-liquefaction of Estonian kukersite oil shale with peat and pine bark

Krasulina, Julia; Luik, Hans; Palu, Vilja; Tamvelius, Hindrek Oil shale 2012 / p. 222-236 : ill
https://artiklid.elnet.ee/record=b2527827*est

Thermochemical co-liquefaction of woody biomass and fossil fuel in supercritical water [Electronic resource]

Luik, Lea; Luik, Hans; Vink, Natalia; Kruusement, Kristjan; Veski, Rein 15th European Biomass Conference & Exhibition : from Research to Market Deployment : Florence, Italy 2007 / p. 1955-1959 [CD-ROM]

Thermochemical conversion of woody biomass by using slow pyrolysis and direct hydrogenation methods

Luik, Hans; Luik, Lea; Gregor, Andre WasteEng 2014 : 5th International Conference on Engineering for Waste and Biomass Valorisation, Rio de Janeiro, Brazil, August 25-28, 2014 : proceedings 2014 / p. 1532-1541

Thermochemical conversion of woody biomass by using slow pyrolysis and direct hydrogenation methods

Luik, Hans; Luik, Lea; Gregor, Andre WasteEng 2014 : 5th International Conference on Engineering for Waste and Biomass Valorisation, Rio de Janeiro, Brazil, August 25-28, 2014 : abstracts 2014 / p. 217

Thermochemical destruction of graptolite argillite = Graptoliit-argilliidi termokeemiline destruktioon

Šarajeva, Galina 2016 https://www.ester.ee/record=b4566155*est

Thermochemical liquefaction of reed

Veski, Rein; Palu, Vilja; Luik, Hans; Kruusement, Kristjan Proceedings of the Estonian Academy of Sciences. Chemistry 2005 / 1, p. 45-56 : ill

Thermochemical liquefaction of reed [Electronic resource]

Veski, Rein; Palu, Vilja; Luik, Hans; Kruusement, Kristjan 14th European Biomass Conference : proceedings 2006 / p. 947-949 [CD-ROM] <https://go.gale.com/ps/i.do?id=GALE%7CA198705954&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=14060124&p=AONE&sw=w&userGroupName=anon%7Eec7ac821&aty=open-web-entry>

Transformations of biomass internal oxygen at varied pyrolysis conditions

Luik, Hans; Johannes, Ille; Palu, Vilja; Luik, Lea; Kruusement, Kristjan Journal of analytical and applied pyrolysis 2007 / 1/2, p. 121-127

Transformations of biomass internal oxygen at varied pyrolysis conditions

Luik, Hans; Johannes, Ille; Palu, Vilja; Luik, Lea; Kruusement, Kristjan 17th International Symposium on Analytical and Applied Pyrolysis : Budapest, Hungary, May 21-26, 2006 : book of abstracts 2006 / p. 139

Trends in biomass thermochemical liquefaction : global experience and recent studies in Estonia

Luik, Hans; Palu, Vilja; Luik, Lea; Kruusement, Kristjan; Tamvelius, Hindrek; Veski, Rein; Vetkov, Nikolai; Vink, Natalia; Bitjukov, Mihhail Proceedings of the Estonian Academy of Sciences. Chemistry 2005 / 4, p. 194-229 : ill

Upgrading of Estonian shale oil heavy residuum bituminous fraction by catalytic hydroconversion

Luik, Hans; Luik, Lea; Johannes, Ille; Tiikma, Laine; Vink, Natalia; Palu, Vilja; Bitjukov, Mihhail; Tamvelius, Hindrek; Krasulina, Julia; Kruusement, Kristjan; Nechaev, Igor Fuel processing technology 2014 / p. 115-122 : ill

<https://doi.org/10.1016/j.fuproc.2014.02.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Upgrading of liquid products from Estonian kukersite oil shale by catalytic hydrogenation = Kukersiitpõlevkivi vedelproduktide vääristamine katalüütilise hüdrogeenimise meetodil

Krasulina, Julia 2015 https://www.ester.ee/record=b4471946*est

Upgrading shale oil heavy fractions with biomass via catalytical hydroprocessing [Electronic resource]

Luik, Hans; Luik, Lea; Tiikma, Laine; Vink, Natalia; Kozõreva, Jekaterina Success & visions for bioenergy. Thermal processing of biomass for bioenergy, biofuels and bioproducts 2007 / [7] p. [CD-ROM]

Utilization of solid waste as an additive in shale oil production

Luik, Lea; Tiikma, Laine; Luik, Hans; Vink, Natalia; Bitjukov, Mihhail WasteEng 2014 : 5th International Conference on Engineering for Waste and Biomass Valorisation, Rio de Janeiro, Brazil, August 25-28, 2014 : proceedings 2014 / p. 252-259

Utilization solid waste as an additive in shale oil production

Tiikma, Laine; Luik, Lea; Luik, Hans; Vink, Natalia; Bitjukov, Mihhail WasteEng 2014 : 5th International Conference on Engineering for Waste and Biomass Valorisation, Rio de Janeiro, Brazil, August 25-28, 2014 : abstracts 2014 / p. 53

Water conversion of oil shales and biomass = Põlevkivi ja biomassi vesikonversioon

Kruusement, Kristjan 2007

Õli peitub mujalgi kui põlevkivis : [põlevkivi ja taastuvkütuste teaduslaboratooriumi juhataja Hans Luige arvamused]

Luik, Hans; Aru, Erik Mente et Manu 2013 / lk. 9 : fot https://artiklid.elnet.ee/record=b2601395*est