

Ash and flue gas from oil shale oxy-fuel circulating fluidized bed combustion

Loo, Lauri; Konist, Alar; Nešumajev, Dmitri; Pihu, Tõnu; Maaten, Birgit; Siirde, Andres *Energies* 2018 / art. 1218, 12 p. : ill
<https://doi.org/10.3390/en11051218> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Calcium fluor- and hydroxy-apatites modified or not as catalysts for C-C bond formation

Gruselle, Michel; Kanger, Tõnis; Flambard, Alexandrine; Kriis, Kadri; Mikli, Valdek; Maaten, Birgit; Tõnsuaadu, Kaia
International Conference Catalysis in Organic Synthesis ICCOS-2012 : September 15-20, 2012, Moscow, Russia : book of abstracts
2012 / p. 190

Calcium hydroxyapatites as efficient catalysts for the Michael C-C bond formation

Gruselle, Michel; Kanger, Tõnis; Thouvenot, Rene; Flambard, Alexandrine; Kriis, Kadri; Mikli, Valdek; Traksmäa, Rainer; Maaten, Birgit; Tõnsuaadu, Kaia *ACS catalysis* 2011 / p. 1729-1733 : ill

Calcium, Barium and Strontium apatites : a new generation of catalysts in the Biginelli reaction

Ben Moussa, Sana; Lachheb, Jalel; Gruselle, Michel; Maaten, Birgit; Kriis, Kadri; Kanger, Tõnis; Tõnsuaadu, Kaia; Badraoui, Bechir *Tetrahedron* 2017 / p. 6542-6548 : ill <https://doi.org/10.1016/j.tet.2017.09.051>

Calculation of the amount of Estonian oil shale products from combustion in regular and oxy-fuel mode in a CFB boiler

Konist, Alar; Loo, Lauri; Valtsev, Aleksandr; Maaten, Birgit; Siirde, Andres; Nešumajev, Dmitri; Pihu, Tõnu *Oil shale* 2014 / p. 211-224 : ill https://artiklid.elnet.ee/record=b2680497*est

Calculations of activation energy and frequency factors for corn leaf pyrolysis using excel solver: new concept

Al-Ayed, Omar Salim; Amer, Mohammad Waleed; Maaten, Birgit; Ahmed, Muhammad Sajjad *International journal of chemical reactor engineering* 2021 / p. 799-807 <https://doi.org/10.1515/ijcre-2020-0140> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Carbon dioxide emission factors for oxy-fuel CFBC and aqueous carbonation of the Ca-rich oil shale ash

Loo, Lauri; Maaten, Birgit; Konist, Alar; Siirde, Andres; Nešumajev, Dmitri; Pihu, Tõnu *Energy procedia* 2017 / p. 144-149 : ill
<https://doi.org/10.1016/j.egypro.2017.09.034>

Characterization and enhancement of oil shale fly ash from CFB boiler

Pikkor, Heliis; Järvik, Oliver; Lees, Heidi; Konist, Alar; Siirde, Andres; Maaten, Birgit 6th International Conference on Smart and Sustainable Technologies, SpliTech 2021 2021 / p. 1-4 <https://doi.org/10.23919/SpliTech52315.2021.9566470>

Characterization of the pyrolytic water from shale oil industry

Maaten, Birgit; Järvik, Oliver; Loo, Lauri; Konist, Alar; Siirde, Andres *Oil shale* 2018 / p. 365-374 : ill
http://kirj.ee/public/oilshale_pdf/2018/issue_4/OS-2018-4-365-374.pdf <https://doi.org/10.3176/oil.2018.4.06> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of the ecotoxic properties of oil shale industry by-products to those of coal ash

Lees, Heidi; Järvik, Oliver; Konist, Alar; Siirde, Andres; Maaten, Birgit *Oil shale* 2022 / p. 1-19 : tab
<https://doi.org/10.3176/oil.2022.1.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Computational results of the ecotoxic analysis of fly and bottom ash from oil shale power plants and shale oil production facilities

Lees, Heidi; Järvik, Oliver; Konist, Alar; Siirde, Andres; Maaten, Birgit *Chemical engineering transactions* 2020 / p. 967-972
<https://doi.org/10.3303/CET2081162> <https://www.scopus.com/record/display.uri?eid=2-s2.0-85092033034&origin=inward&txGid=0c1c7fc07fcc8f2767255413a47fc58b> [Journal metrics at Scopus](#) [Article at Scopus](#)

Corrosive effects of H₂S and NH₃ on natural gas piping systems manufactured of carbon steel

Latõšov, Eduard; Maaten, Birgit; Lõoris, Mihkel; Volkova, Anna; Soosaar, Sulev *Energy procedia* 2017 / p. 316-323
<https://doi.org/10.1016/j.egypro.2017.08.319>

Cu-modified hydroxy-apatite as catalyst for Glaser-Hay C-C homo-coupling reaction of terminal alkynes

Maaten, Birgit; Moussa, Jamal; Desmarests, Christophe; Gredin, Patrick; Beaunier, Patricia; Kanger, Tõnis; Tõnsuaadu, Kaia; Villemin, Didier; Gruselle, Michel *Journal of molecular catalysis A : chemical* 2014 / p. 112-116 : ill

Decomposition kinetics of American, Chinese and Estonian oil shales kerogen

Maaten, Birgit; Loo, Lauri; Konist, Alar; Nešumajev, Dmitri; Pihu, Tõnu; Külaots, Indrek *Oil shale* 2016 / p. 167-183 : ill
<http://dx.doi.org/10.3176/oil.2016.2.05>

Determination of the total sulphur content of oil shale by using different analytical methods

Maaten, Birgit; Pikkor, Heliis; Konist, Alar; Siirde, Andres *Oil shale* 2018 / p. 144-153 : ill <https://doi.org/10.3176/oil.2018.2.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of steam activation on oil shale semi-coke surface properties

Pikkor, Heliis; Konist, Alar; Maaten, Birgit; Järvik, Oliver; Lees, Heidi International Multidisciplinary Conference on Computer and Energy Science (SpliTech) 2021 / 5 p <https://doi.org/10.23919/SpliTech52315.2021.9566397>

Energy industry waste as a thermochemical energy storage resource

Maaten, Birgit; Konist, Alar; Siirde, Andres 5th Central and Eastern European Conference on Thermal Analysis and Calorimetry & 14th Mediterranean Conference on Calorimetry and Thermal Analysis , 27-30 August 2019, Roma, Italy: CEEC-TAC5 & Medicta2019 : book of abstracts 2019 / p. 81 <http://www.ceec-tac.org/download.php?f=../download/BoA%20CEEC-TAC5%20Medicta2019.pdf>

Experimental analysis of the combustion characteristics of Estonian oil shale in air and oxy-fuel atmospheres

Loo, Lauri; Maaten, Birgit; Siirde, Andres; Pihu, Tõnu; Konist, Alar Fuel processing technology 2015 / p. 317-324 : ill <http://dx.doi.org/10.1016/j.fuproc.2014.12.051>

Experimental investigation of the high-speed combustion of different oil shales

Maaten, Birgit; Konist, Alar; Siirde, Andres 12th European Symposium on Thermal Analysis and Calorimetry ESTAC 12 : 27-30 August 2018, Brasov, Romania : book of abstracts 2018 / PS2.030, p. 396 <http://estac12.org/download.php?f=../download/BoA%20ESTAC12.pdf>

Fast pyrolysis as a new approach to the upgrading of oil shale retorting methods

Pikkor, Heliis; Maaten, Birgit; Siirde, Andres International IX Oil Shale Conference 2017 "Oil Shale Industry in Circular Economy" : 15th-16th November 2017, [Jõhvi], Ida-Viru County, Estonia : summary 2017 / p. 23 http://www.ester.ee/record=b4751282*est

Ferritic chromium steel as binder metal for WC cemented carbides

Tarraste, Marek; Kübarsepp, Jakob; Juhani, Kristjan; Mere, Arvo; Kolnes, Märt; Viljus, Mart; Maaten, Birgit International journal of refractory metals and hard materials 2018 / p. 183-191 : ill <https://doi.org/10.1016/j.jrmhm.2018.02.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fire protection provided by clay and lime plasters

Liblik, Johanna; Küppers, Judith; Maaten, Birgit; Just, Alar Wood Material Science & Engineering 2021 / p. 290-298 <https://doi.org/10.1080/17480272.2020.1714726> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fire protection provided by clay and lime plasters : [conference paper]

Liblik, Johanna; Küppers, Judith; Maaten, Birgit; Just, Alar Proceedings of the I Forum Wood Building Baltic, 2019 : [27.02-1.03.2019, Tallinn] 2019 / p. 84-85 : ill https://www.ester.ee/record=b5197207*est

High-speed thermogravimetric analysis of the combustion of wood and Ca-rich fuel

Maaten, Birgit; Konist, Alar; Siirde, Andres Journal of thermal analysis and calorimetry 2019 / p. 2807-2811 <https://doi.org/10.1007/s10973-019-08785-6> Teadlased: puidu osakaalu suurendamine fossiilkütustes on üks lahendus [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-speed thermogravimetric analysis of the combustion of wood and Ca-rich fuel

Maaten, Birgit; Konist, Alar; Siirde, Andres 12th European Symposium on Thermal Analysis and Calorimetry ESTAC 12 : 27-30 August 2018, Brasov, Romania : book of abstracts 2018 / OP1.16, p. 72 <http://estac12.org/download.php?f=../download/BoA%20ESTAC12.pdf>

The influence of O₂ and CO₂ on the possible corrosion on steel transmission lines of natural gas

Latõšov, Eduard; Maaten, Birgit; Siirde, Andres; Konist, Alar Energy procedia 2018 / p. 63-70 : ill <https://doi.org/10.1016/j.egypro.2018.07.034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Influence of the end-temperature on the oil shale fast pyrolysis process and its products

Maaten, Birgit; Siirde, Andres; Vahur, Signe; Kirsimäe, Kalle Journal of thermal analysis and calorimetry 2022 / p. 1647-1655 : ill <https://doi.org/10.1007/s10973-022-11567-2>

Investigating the pyrolysis of oil shale using TGA-MS

Maaten, Birgit; Konist, Alar; Siirde, Andres International IX Oil Shale Conference 2017 "Oil Shale Industry in Circular Economy" : 15th-16th November 2017, [Jõhvi], Ida-Viru County, Estonia : summary 2017 / p. 30 : ill http://www.ester.ee/record=b4751282*est

Investigating the pyrolysis of oil shale using TGA-MS [Online resource]

Maaten, Birgit; Konist, Alar; Siirde, Andres Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p. : ill <http://fntdk.ut.ee/teesid/>

Investigation of the evolution of sulphur during the thermal degradation of different oil shales

Maaten, Birgit; Loo, Lauri; Konist, Alar; Pihu, Tõnu; Siirde, Andres Journal of analytical and applied pyrolysis 2017 / p. 405-411 : ill <http://dx.doi.org/10.1016/j.jaap.2017.09.007>

Kliimamuutuste leevendamine läbi CCS JA CCU tehnoloogiate (ClimMit) : lõpparuanne

Siirde, Andres; Järvik, Oliver; Nešumajev, Dmitri; Gušča, Julija; Uibu, Mai; Triikkel, Andres; Pihu, Tõnu; Konist, Alar; Maaten,

Birgit; Liira, Martin; **Hazak, Aaro; Männasoo, Kadri;** Sander, Priit; Kask, Kaia; Poltimäe, Helen; **Yörük, Can Rüstü** 2021

Material properties of clay and lime based plaster for structural design

Liblik, Johanna; Just, Alar; Maaten, Birgit; Sulg, M.; **Pajusaar, Siim** 15th International Interflam Conference : Interflam 2019, 1-3 July, 2019 : Programme 2019 / p. 1813-1824
<http://www.intersciencecomms.co.uk/html/conferences/Interflam/if19/Interflam%202019%20Table%20of%20Contents.pdf>

Material properties of clay and lime plaster for structural fire design

Liblik, Johanna; Küppers, Judith; **Just, Alar; Maaten, Birgit; Pajusaar, Siim** Fire and materials 2021 / p. 355-365 : ill
<https://doi.org/10.1002/fam.2798> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microstructure evolution of TiC cermets with ferritic AISI 430L steel binder

Kolnes, Märt; Mere, Arvo; Kübarsepp, Jakob; Viljus, Mart; Maaten, Birgit; Tarraste, Marek Powder metallurgy 2018 / p. 197-209 : ill <https://doi.org/10.1080/00325899.2018.1447268> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mineral matter effect on the decomposition of Ca-rich oil shale

Maaten, Birgit; Loo, Lauri; Konist, Alar JTACC+V4 : 1st Journal of Thermal Analysis and Calorimetry Conference and 6th V4 (Joint Czech-Hungarian-Polish-Slovakian) Thermoanalytical Conference: Budapest Hungary, June 6-9, 2017 : Book of Abstracts 2017 / p. 100-101 <https://static.akcongress.com/downloads/jtacc/jtacc2017-book-of-abstracts.pdf>

Mineral matter effect on the decomposition of Ca-rich oil shale

Maaten, Birgit; Loo, Lauri; Konist, Alar JTACC+V4 : 1st Journal of Thermal Analysis and Calorimetry Conference and 6th V4 (Joint Czech-Hungarian-Polish-Slovakian) Thermoanalytical Conference : June 6–9, 2017, Budapest, Hungary : Book of Abstracts 2017 / p. 100-101 : ill <https://static.akcongress.com/downloads/jtacc/jtacc2017-book-of-abstracts.pdf>

Mineral matter effect on the decomposition of Ca-rich oil shale

Maaten, Birgit; Loo, Lauri; Konist, Alar; Siirde, Andres Journal of thermal analysis and calorimetry 2018 / p. 2087–2091 : ill
<https://doi.org/10.1007/s10973-017-6823-1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mineral sequestration of CO₂ by carbonation of Ca-rich oil shale ash in natural conditions

Konist, Alar; Maaten, Birgit; Loo, Lauri; Nešumajev, Dmitri; Pihu, Tõnu Oil shale 2016 / p. 248-259 : ill
<http://dx.doi.org/10.3176/oil.2016.3.04>

Modified calcium apatites as new catalysts in organic synthesis

Tõnsuaadu, Kaia; Gruselle, Michel; Moussa, Jamal; Villemin, Didier; **Maaten, Birgit; Kanger, Tõnis** International Symposium on Inorganic and Environmental Materials 2013 : program and abstracts, October 27-31, 2013, Rennes, France 2013 / p. 277

Oil shale pyrolysis products and the fate of sulfur

Maaten, Birgit; Järvik, Oliver; Pihl, Olga; Konist, Alar; Siirde, Andres Oil shale 2020 / p. 51–69 : tab https://www.kirj.ee/33071/?tpl=1061&c_tpl=1064 <https://doi.org/10.3176/oil.2020.1.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Oxidation of spark plasma sintered ZrC-Mo and ZrC-TiC composites

Yung, Der-Liang; Maaten, Birgit; Antonov, Maksim; Hussainova, Irina International journal of refractory metals and hard materials 2017 / p. 244-251 : ill <https://doi.org/10.1016/j.jrmhm.2017.03.019>

Oxygen influence on Estonian kukersite oil shale devolatilization and char combustion

Loo, Lauri; Maaten, Birgit; Nešumajev, Dmitri; Konist, Alar Oil shale 2017 / p. 219-231 : ill <http://dx.doi.org/10.3176/oil.2017.3.02>
http://www.ester.ee/record=b1072685*est

Potential of solid residues from power plants as thermochemical energy storage materials

Maaten, Birgit; Konist, Alar; Siirde, Andres Journal of thermal analysis and calorimetry 2020 / p. 1799–1805
<https://doi.org/10.1007/s10973-020-09948-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reactivities of American, Chinese and Estonian oil shale semi-cokes and Argonne premium coal chars under oxy-fuel combustion conditions

Culin, Chris; Tente, Kevin; Konist, Alar; Maaten, Birgit; Loo, Lauri Oil shale 2019 / p. 353-369 : ill http://www.kirj.ee/32526/?tpl=1061&c_tpl=1064 <https://doi.org/10.3176/oil.2019.3.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Steam activation of oil shale to enhance the porosity of produced semicoke

Pikkor, Heliis; Lees, Heidi; Konist, Alar; Järvik, Oliver; Maaten, Birgit Energy Sources, Part A : Recovery, Utilization, and Environmental Effects 2022 / p. 9064-9073 <https://doi.org/10.1080/15567036.2022.2128471> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

Surface area of oil shale and its solid pyrolysis products depending on the particle size

Pikkor, Heliis; Maaten, Birgit; Baird, Zachariah Steven; Järvik, Oliver; Konist, Alar; Lees, Heidi Chemical engineering transactions 2020 / p. 961–966 <https://doi.org/0.3303/CET2081161> [Journal metrics at Scopus](#) [Article at Scopus](#)

Surface characterisation of Estonian oil shale semi-coke

Pikkor, Heliis; Lees, Heidi; Maaten, Birgit; Järvik, Oliver; Konist, Alar Chemical engineering transactions 2020 / p. 853-858 : ill <https://doi.org/0.3303/CET2081143> [Journal metrics at Scopus](#) [Article at Scopus](#)

The composition and reactivity of different oil shales and the products formed during thermal treatment = Erinevate põlevkivide koostis ja reaktiivsus ning nende termilisel töötlusel tekkivad produktid

Maaten, Birgit 2018 http://www.ester.ee/record=b4905661*est <https://digi.lib.ttu.ee/i/?9817>