

#### **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](#)

#### **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](https://artiklid.elnet.ee/record=b2680497*est) <https://doi.org/10.3176/oil.2014.3.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metric 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> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

#### **Characterization of the pyrolytic water from shale oil industry**

Maaten, Birgit; Järvi, 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](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](#)

#### **Co-combustion of coal and oil shale blends in circulating fluidized bed boilers**

Konist, Alar; Pikkor, Heliis; Nešumajev, Dmitri; Loo, Lauri; Järvi, Oliver; Siirde, Andres; Pihu, Tõnu *Oil shale* 2019 / p. 114–127 : ill <https://doi.org/10.3176/oil.2019.2S.03> [http://www.kirj.ee/public/oilshale\\_pdf/2019/issue\\_2S/OS-2019-2S-114-127.pdf](http://www.kirj.ee/public/oilshale_pdf/2019/issue_2S/OS-2019-2S-114-127.pdf) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Combustion of fuel mixtures in oil shale fired CFBC and PC boilers**

Pihu, Tõnu; Konist, Alar; Nešumajev, Dmitri; Loo, Lauri *International IX Oil Shale Conference 2017 "Oil Shale Industry in Circular Economy"* : 15th-16th November 2017, [Jõhvi], Ida-Viru County, Estonia : summary 2017 / p. 24-25  
[http://www.ester.ee/record=b4751282\\*est](http://www.ester.ee/record=b4751282*est)

#### **Combustion of fuel mixtures in oil shale fired CFBC and PC boilers**

Pihu, Tõnu; Konist, Alar; Nešumajev, Dmitri; Loo, Lauri; Veinjärv, Rain *International Symposium "Oil shale 100 years"* : Estonia, Sept. 20-23, 2016 : [abstracts] 2016 / p. 22

#### **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  
<https://doi.org/10.3176/oil.2016.2.05> [https://artiklid.elnet.ee/record=b2778470\\*est](https://artiklid.elnet.ee/record=b2778470*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Experimental analysis of combustion characteristics of Estonian oil shale in regular and oxy-fuel atmospheres = Eesti põlevkivi põlemiskarakteristikute eksperimentaalne analüüs tavalises ja oxy-fuel keskkonnas**

Loo, Lauri 2018 <https://digi.lib.ttu.ee/i/?10575> [https://www.ester.ee/record=b5151046\\*est](https://www.ester.ee/record=b5151046*est)

#### **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  
<https://doi.org/10.1016/j.fuproc.2014.12.051> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Explainability and transparency of classifiers for air-handling unit faults using explainable artificial intelligence (XAI)**

Meas, Molika; Machlev, Ram; Köse, Ahmet; Tepljakov, Aleksei; Loo, Lauri; Levron, Yoash; Petlenkov, Eduard; Belikov, Juri *Sensors* 2022 / art. 6338 : ill <https://doi.org/10.3390/s22176338> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Full-scale tests on the co-firing of peat and oil shale in an oil shale fired circulating fluidized bed boiler**

Pihu, Tõnu; Konist, Alar; Nešumajev, Dmitri; Loo, Lauri; Molodtsov, Artjom; Valtsev, Aleksandr *Oil shale* 2017 / p. 250-262 : ill  
[http://www.ester.ee/record=b1072685\\*est](http://www.ester.ee/record=b1072685*est) <https://doi.org/10.3176/oil.2017.3.04> [https://artiklid.elnet.ee/record=b2824316\\*est](https://artiklid.elnet.ee/record=b2824316*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Influence of oxy-fuel combustion of Ca-rich oil shale fuel on carbonate stability and ash composition**

Konist, Alar; Valtsev, Aleksandr; Loo, Lauri; Pihu, Tõnu; Liira, Martin; Kirsimäe, Kalle *Fuel* 2015 / p. 671-677 : ill  
<https://doi.org/10.1016/j.fuel.2014.09.050> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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 <https://doi.org/10.1016/j.jaap.2017.09.007> [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* : 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** 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; 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 CO<sub>2</sub> 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 <https://doi.org/10.3176/oil.2016.3.04> [https://artiklid.elnet.ee/record=b2798381\\*est](https://artiklid.elnet.ee/record=b2798381*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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 <https://doi.org/10.3176/oil.2017.3.02> [http://www.ester.ee/record=b1072685\\*est](http://www.ester.ee/record=b1072685*est) [https://artiklid.elnet.ee/record=b2824314\\*est](https://artiklid.elnet.ee/record=b2824314*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **PCC production from calcium-rich oxy-fuel CFBC ash**

**Loo, Lauri; Konist, Alar;** Zevenhoven, Ron 30th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS 2017), San Diego, California, USA, 2 - 6 July 2017 2017 / p. 1672-1681 : ill [https://www.etis.ee/File/DownloadPublic/8958054d-0303-4446-be47-7a3374d71625?name=ECOS\\_Loo%20et%20al-final.pdf&type=application%2Fpdf](https://www.etis.ee/File/DownloadPublic/8958054d-0303-4446-be47-7a3374d71625?name=ECOS_Loo%20et%20al-final.pdf&type=application%2Fpdf) <http://toc.proceedings.com/39394webtoc.pdf>

#### **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](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](#)