

**Accelerated carbonation of Ca-rich fly ashes in non-cement applications = Kaltsiumirikka lendtuha kiirendatud karboniseerimine tsemendivabades rakendustes**

**Usta, Mustafa Cem** 2023 <https://doi.org/10.23658/taltech.63/2023> <https://digikogu.taltech.ee/et/Item/5cd96499-8d75-44fa-9599-6d3eee32b244> [https://www.ester.ee/record=b5645215\\*est](https://www.ester.ee/record=b5645215*est)

**Carbonation and leaching behaviors of cement-free monoliths based on high-sulfur fly ashes with the incorporation of amorphous calcium aluminate**

**Usta, Mustafa Cem; Yörük, Can Rüstü; Uibu, Mai; Traksmaa, Rainer; Hain, Tiina; Gregor, Andre; Triikkel, Andres** ACS omega 2023 / p. 29543–29557 : ill <https://doi.org/10.1021/acsomega.3c03286> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**CO2 curing of Ca-rich fly ashes to produce cement-free building materials**

**Usta, Mustafa Cem; Yörük, Can Rüstü; Uibu, Mai; Hain, Tiina; Gregor, Andre; Triikkel, Andres** Minerals 2022 / art. 513, 24 p. : ill <https://doi.org/10.3390/min12050513> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**CO2 mineralization by burnt oil shale and cement by pass dust effect of operating temperature and pre-treatment**

**Usta, Mustafa Cem; Yörük, Can Rüstü; Uibu, Mai; Kaljuvee, Tiit; Triikkel, Andres** GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 87 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

**CO2 mineralization by burnt oil shale and cement bypass dust : effect of operating temperature and pre-treatment**

**Yörük, Can Rüstü; Uibu, Mai; Usta, Mustafa Cem; Kaljuvee, Tiit; Triikkel, Andres** Journal of thermal analysis and calorimetry 2020 / p. 991–999 : ill <https://doi.org/10.1007/s10973-020-09349-9> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**CO2 mineralization by burnt oil shale and cement bypass dust: effect of operating temperature and pre-treatment**

**Yörük, Can Rüstü; Uibu, Mai; Usta, Mustafa Cem; Kaljuvee, Tiit; Triikkel, Andres** 2nd Journal of Thermal Analysis and Calorimetry Conference, Budapest, June 18–21, 2019 : book of abstracts 2019 / p. 501 <https://jtac-jtacc.akcongress.com/>

**CO2 mineralization in cement sector : Lab scale experiments on burnt oil shale and concrete demolition wastes**

**Uibu, Mai; Usta, Mustafa Cem; Tamm, Kadriann; Žuravljova, Anastassia; Kallas, Juha; Kuusik, Rein, keemik; Triikkel, Andres** enos-project.eu 2018 / 18 p. : ill <http://www.enos-project.eu/highlights/conference/basreccs-enos-workshop/> [http://www.enos-project.eu/media/15321/8-basreccs-enos\\_muibu.pdf](http://www.enos-project.eu/media/15321/8-basreccs-enos_muibu.pdf)

**Correction to: CO2 mineralization by burnt oil shale and cement bypass dust: effect of operating temperature and pre-treatment (Journal of Thermal Analysis and Calorimetry, (2020), 142, 2, (991-999), 10.1007/s10973-020-09349-9)**

**Yörük, Can Rüstü; Uibu, Mai; Usta, Mustafa Cem; Kaljuvee, Tiit; Triikkel, Andres** Journal of Thermal Analysis and Calorimetry 2020 / p. 1001 <https://doi.org/10.1007/s10973-020-09973-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Effect of process parameters on strength and carbonation of engineered building materials by calcium rich alkali wastes**

**Usta, Mustafa Cem; Yörük, Can Rüstü; Gregor, Andre; Hain, Tiina; Uibu, Mai; Triikkel, Andres** GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 40 [https://fntdk.ut.ee/wp-content/uploads/2021/06/GSFMT\\_abstractbook\\_2021.pdf](https://fntdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf)

**Evaluation of new applications of oil shale ashes in building materials**

**Usta, Mustafa Cem; Yörük, Can Rüstü; Hain, Tiina; Paaver, Peeter; Snellings, Ruben; Rozov, Eduard; Gregor, Andre; Kuusik, Rein, keemik; Triikkel, Andres; Uibu, Mai** Minerals 2020 / art. 765, 19 p. : ill <https://doi.org/10.3390/min10090765> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Mineral sequestration of CO2 from Vernasca Ca-looping demo system : scale up to a pilot**

**Usta, Mustafa Cem; Uibu, Mai; Yörük, Can Rüstü; Tamm, Kadriann; Kuusik, Rein; Triikkel, Andres; Gastaldi, Daniela; Canonico, Fulvio** Proceedings of the 15th Greenhouse Gas Control Technologies Conference 15-18 March 2021 2021 / 12 p. : ill <https://ssrn.com/abstract=3812245> <https://doi.org/10.2139/ssrn.3812245>

**Mineral trapping of CO2 for cement industry de-carbonization**

**Uibu, Mai; Usta, Mustafa Cem; Tamm, Kadriann; Žuravljova, Anastassia; Kallas, Juha; Kuusik, Rein, keemik; Triikkel, Andres** 14th Greenhouse Gas Control Technologies Conference Melbourne 21-26 October 2018 (GHGT-14) 2019 / 8 p. : ill <https://ssrn.com/abstract=3365766>

**Mineral trapping of CO2 in oil shale industry**

**Tamm, Kadriann; Uibu, Mai; Žuravljova, Anastassia; Usta, Mustafa Cem; Leier, Ae; Kallas, Juha; Kuusik, Rein, keemik; Triikkel, Andres** <https://www.ttu.ee/asutused/polevkivi-kompetentsikeskus> 2018 / Poster <https://www.ttu.ee/asutused/polevkivi-kompetentsikeskus/konverentsid-ja-koolitused/polevkivikonverentsid/2018-6/posterettekanded/>

**Performance evaluation of flue gas cured calcium rich fly ash-based building blocks : [flash paper presentation]**

**Usta, Mustafa Cem; Adegbile, A. M.; Gregor, Andre; Paaver, Peeter; Hain, Tiina; Yörük, Can Rüstü; Uibu, Mai; Triikkel, Andres** 17th International Conference on Environmental Science and Technology CEST2021, 1-4 September 2021, Athens, Greece

2021 / [flash paper presentation]

**Utilisation of industrial alkaline solid residues to produce cement-free building materials**

**Usta, Mustafa Cem** Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 66 I.  
[Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)