

A study of concrete carbonation

Põldme, Meeme; Varandi, Merje; Põldme, Juta Tallinna Tehnikaülikooli Toimetised 1994 / lk. 39-44: ill

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

Accelerated carbonation technology granulation of industrial waste : effects of mixture composition on product properties

Berber, Hakan; Tamm, Kadriann; Leinus, Mari-Liis; Kuusik, Rein, keemik; Tõnsuaadu, Kaia; Paaver, Peeter; Uibu, Mai Waste management & research 2020 / p. 142-155 <https://doi.org/10.1177/0734242X19886646> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Accelerated carbonation treatment of industrial wastes: physicochemical, environmental and economic aspects = Tööstusjäätmete töötlemine kiirendatud karboniseerimismeetodil: füüsikalise-keemilised, keskkonnaalased ja majanduslikud aspektid

Berber, Hakan 2020 <https://digikogu.taltech.ee/et/Item/e6d57289-35ba-46fc-9c05-c9ac6f982bf0>

Aggregate production from burnt oil shale and CO₂ - an Estonian perspective

Berber, Hakan; Tamm, Kadriann; Leinus, Mari-Liis; Kuusik, Rein, keemik; Uibu, Mai Oil Shale 2019 / p. 431-447 : ill <https://doi.org/10.3176/oil.2019.3.05> http://www.kirj.ee/32493/?tpl=1061&c_tpl=1064 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Aqueous carbonation of oil shale wastes from Estonian power production for CO₂ fixation and PCC production

Uibu, Mai; Velts, Olga; Kuusik, Rein, keemik CYSENI 2011 : the 8th Annual International Conference of Young Scientist on Energy Issues, May 26-27, 2011, Kaunas, Lithuania : conference proceedings 2011 / p. 415-424 : ill

Aqueous mineral carbonation of oil shale mine waste (limestone) : a feasibility study to develop a CO₂ capture sorbent

Puthiya Veetil, Sanoop Kumar; Rebane, Kaarel; Yörük, Can Rüstü; Lopp, Margus; Trikket, Andres; Hitch, Michael William Energy 2021 / art. 119895 <https://doi.org/10.1016/j.energy.2021.119895> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Betooni karboneerumine

Põldme, Meeme Ehitame 1995 / nr. 30, okt., lk. 7: ill

Carbon capture and fixation using lime-containing wastes : the influence of aqueous phase composition on Ca dissolution from oil shale ash

Uibu, Mai; Kuusik, Rein, keemik Energy procedia 2013 / p. 5913-5920 : ill <https://doi.org/10.1016/j.egypro.2013.06.517> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Carbon dioxide binding in the heterogeneous systems formed by combustion of oil shale. 1, Carbon dioxide binding at oil shale ash deposits

Kuusik, Rein, keemik; Veskimäe, Helgi; Kaljuvee, Tiit; Parts, O. Oil shale 2001 / p. 109-122 https://www.ester.ee/record=b1072685*est https://artiklid.elnet.ee/record=b1007235*est

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; Trikket, 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 mineralisation : concept for co-utilization of oil shale energetics waste streams in CaCO₃ production

Velts, Olga; Uibu, Mai; Kallas, Juha; Kuusik, Rein, keemik Energy procedia 2013 / p. 5921-5928 : ill <https://www.sciencedirect.com/science/article/pii/S1876610213007613> <https://doi.org/10.1016/j.egypro.2013.06.518> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [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; Trikket, 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>

Cobalt and nitrogen co-doped peat derived carbon based catalysts for oxygen reduction

Jäger, Rutha; Teppor, Patrick; Härk, Eneli; Härmas, Meelis; Adamson, Anu; Paalo, Maarja; Volobujeva, Olga; Kikas, Arvo; Kochovski, Zdravko; Romann, Tavo ECS Transactions 2020 / p. 605-613 : ill <https://doi.org/10.1149/09707.0605ecst> [Journal metrics at Scopus](#) [Article at Scopus](#)

Developments in CO₂ mineral carbonation by oil shale ash

Uibu, Mai; Velts, Olga; Triikkel, Andres; Kallas, Juha; Kuusik, Rein, keemik 2nd International Conference on Accelerated Carbonation for Environmental and Materials Engineering : October 1-3, 2008, Rome, Italy : proceedings 2008 / p. 421-430 : ill

Developments in CO₂ mineral carbonation of oil shale ash

Uibu, Mai; Velts, Olga; Kuusik, Rein, keemik Journal of hazardous materials 2010 / p. 209-214 : ill

Direct aqueous carbonation on olivine at a CO₂ partial pressure of 6.5 MPa

Li, Jiajie; Jacobs, Anthony D.; **Hitch, Michael William** Energy 2019 / p. 902-910 : ill <https://doi.org/10.1016/j.energy.2019.02.125> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti põlevkivienergeetikas tekkivate tahkjäätmete märgkarboniseerimine SO₂ emissiooni vähendamiseks ning SKK saamiseks

Uibu, Mai; Velts, Olga; Kuusik, Rein, keemik XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 103

Equilibrium calculations in aqueous carbonation of oil shale waste-sulfur compounds

Tamm, Kadriann; Uibu, Mai; Kallaste, Priit; Kuusik, Rein, keemik; Kallas, Juha Proceedings of 2nd World Congress on Petrochemistry and Chemical Engineering : October 27-29, 2014, Embassy Suites Las Vegas, USA 2014 / p. 40

Equilibriums in aqueous carbonation of oil shale waste

Tamm, Kadriann; Uibu, Mai; Kallaste, Priit; Kuusik, Rein, keemik; Kallas, Juha TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p. : ill

Evaluation of potential factors affecting steel slag carbonation

Baras, Amer; Li, Jiajie; Ni, Wen; Hussain, Zahid; **Hitch, Michael William** Processes 2023 / art. 2590 <https://doi.org/10.3390/pr11092590>

Ex-situ and in-situ mineral carbonation : alternative technology to mitigate climate change

Šogenova, Alla; Kuusik, Rein, keemik; McGrail, B. Peter GEO ENeRGY : the newsletter of the ENeRG Network 2012 / p. [2] : ill

A feasibility study of municipal solid waste incineration fly ash utilisation in Estonia

Berber, Hakan; Frey, Ruedi; Voronova, Viktoria; Koroljova, Arina Waste management and research 2017 / p. 904-912 : ill <https://doi.org/10.1177/0734242X17707574> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hygrothermal performance of lime-based thermal insulation mortars: water absorption, hygroscopic sorption, and water vapour permeability

Ruus, Aime; Kaeramaa, Ave-Ly; Kirtsi, Karin; Mihkelsoo, Madis; Kiviste, Mihkel; Raamets, Jane Journal of Physics: Conference Series 2023 / 8 p. : ill <https://doi.org/10.1088/1742-6596/2654/1/012083> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Influence of production on hemp concrete hygrothermal properties : sorption, water vapour permeability and water absorption

Ruus, Aime; Koosapoeg, Tarmo; Pau, Markus; Kalamees, Targo; Põldaru, Mattias Journal of Physics : Conference Series 2021 / art. 012004, 9 p. : ill <https://doi.org/10.1088/1742-6596/2069/1/012004> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Integrated Mineral Carbonation of Ultramafic Mine Deposits - A Review

Li, Jiajie; **Hitch, Michael William**; Power, Ian M.; Pan, Yueyi Minerals 2018 / art. 147, 18 p. : ill <http://dx.doi.org/10.3390/min8040147>

Karboniseerimisprotsessi pidurdumismehhanism süsteemis põlevkivituhk-vesi-CO₂

Uibu, Mai; Kuusik, Rein, keemik XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 175-176

Main physicochemical factors affecting the aqueous carbonation of oil shale ash

Uibu, Mai; Kuusik, Rein, keemik Minerals engineering 2014 / p. 64-70 : ill <https://doi.org/10.1016/j.mineng.2013.10.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Market stakeholder analysis of the practical implementation of carbonation curing on steel slag for urban sustainable governance

Li, Jiajie; Wang, Chenyu; Song, Xiaoqian; Jin, Xin; Zhao, Shaowei; Qi, Zihan; Zeng, Hui; Zhu, Sitao; Jiang, Fuxing; Ni, Wen; **Hitch, Michael William** Energies 2022 / art. 2399, 19 p. : ill <https://doi.org/10.3390/en15072399>

Mechanical activation of magnesium silicates for mineral carbonation, a review

Li, Jiajie; **Hitch, Michael William** Minerals engineering 2018 / p. 69-83 : ill <https://doi.org/10.1016/j.mineng.2018.08.034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mechanical activation of medium basicity steel slag under dry condition for carbonation curing

Li, Jiajie; Ni, Wen; Wang, Xue; Zhu, Sitao; Wei, Xinlei; Jiang, Fuxing; Zeng, Hui; **Hitch, Michael William** Journal of building

Mechanical activation on mine waste material for integrated mineral carbonation process in Turnagain Project: a summary

Li, Jiajie; **Hitch, Michael William**; Zeng, Hui; Jiang, Fuxing; Ni, Wen Managing Mining and Minerals Processing Wastes: Concepts, Design, and Applications 2023 / p. 85-98 <https://doi.org/https://doi.org/10.1016/B978-0-323-91283-9.00005-5>

Mineral carbonation potential (MCP) of mine waste material : derivation of an MCP parameter

Jacobs, Anthony; **Hitch, Michael**; Mosallanejad, Sara; Bhatelia, Tejas; Li, Jiajie; Farhang, Faezeh Minerals 2023 / art. 1129 <https://doi.org/10.3390/min13091129>

Oxygen electroreduction on platinum nanoparticles deposited onto D-glucose derived carbon

Taleb, Masoud; Nerut, Jaak; Tooming, Tauno; Thomborg, Thomas; Jänes, Alar; Lust, Enn Journal of the Electrochemical Society 2015 / p. F651 - F660 <https://doi.org/10.1149/2.0231507jes> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Physicochemical factors affecting aqueous carbonation of oil shale ash

Uibu, Mai; Kuusik, Rein, keemik Proceedings of the 4th International Conference on Accelerated Carbonation for Environmental and Materials Engineering : ACEME 2013 : April 9-12, 2013, Leuven, Belgium 2013 / p. 295-304 : ill

Production of magnesium carbonates from serpentinite for long-term storage of CO₂

Teir, Sebastian; **Kuusik, Rein, keemik**; Fogelholm, Carl-Johan; Zevenhoven, Ron International journal of mineral processing 2007 / [15] p <https://www.sciencedirect.com/science/article/pii/S0301751607001780>

Põlevkivi tolmpõletus- ja keevkihttuukade vesisuspensiooni karboniseerimine

Uibu, Mai; Muulmann, Mari-Liis; **Kuusik, Rein, keemik** XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 126

Reduction of CO₂ emissions by carbonation of alkaline wastewater

Uibu, Mai; Velts, Olga; Triikkel, Andres; Kuusik, Rein, keemik Air pollution XVI 2008 / p. 311-320 : ill

Studies of the modified bagasse plastics carbonization and a feasibility to produce carbon construction materials

Zandersons, J.; Kokorevics, A.; Gravitis, J.; **Kallavus, Urve**; Suzuki, C.K. UNU/IAS Working paper 2000 / p. 54

Sulphation and carbonization of oil shale CFBC ashes in heterogeneous systems

Kuusik, Rein, keemik; Uibu, Mai; Toom, M.; Muulmann, Mari-Liis; **Kaljuvee, Tiit; Triikkel, Andres** Oil shale 2005 / 4S, p. 421-434 : ill https://artiklid.elnet.ee/record=b2352615*est

Techno-economic modelling of the Baltic CCUS onshore scenario

Šogenova, Alla; Šogenov, Kazbulat; Uibu, Mai; Kuusik, Rein, keemik; Simmer, Karl Baltic Carbon Forum 2022 / p. 4 <https://doi.org/10.21595/bcf.2022.22841>

The behaviour of Ca-Mg-silicates in direct aqueous carbonation of oil shale ash [Electronic resource]

Uibu, Mai; Kuusik, Rein, keemik Innovation for Sustainable Production 2010. Conference 5. Carbon Capture and Storage (CCS) : [18-21 April, 2010] : proceedings 2010 / p. 75-79 : ill. [CD-ROM]

The CO₂-binding by Ca-Mg-silicates in direct aqueous carbonation of oil shale ash and steel slag

Uibu, Mai; Kuusik, Rein, keemik; Andreas, Lale; Kirsimäe, Kalle Energy procedia 2011 / p. 925-932 : ill https://www.researchgate.net/publication/251711714_The_CO_2_-binding_by_Ca-Mg-silicates_in_direct_aqueous_carbonation_of_oil_shale_ash_and_steel_slag

Transformations in the solid and liquid phase at aqueous carbonization of oil shale ash

Uibu, Mai; Triikkel, Andres; Kuusik, Rein, keemik Ecosystems and sustainable development. VI 2007 / p. 473-482 : ill

Transformations of sulfides during aqueous carbonation of oil shale ash

Tamm, Kadriann; Kuusik, Rein, keemik; Uibu, Mai; Kallas, Juha GHGT-11 Proceedings of the 11th International Conference on Greenhouse Gas Control Technologies, 18-22 November 2012, Kyoto, Japan 2013 / p. 5905-5912 : ill <https://doi.org/10.1016/j.egypro.2013.06.516> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Transformations of sulfur compounds in oil shale ash suspension

Tamm, Kadriann; Kuusik, Rein, keemik; Uibu, Mai; Kallas, Juha Waste management and the environment VI 2012 / p. 25-35 : ill <https://www.witpress.com/elibrary/wit-transactions-on-ecology-and-the-environment/163/23681>

Väävliühendid põlevkivituha märgkarboniseerimisel

Tamm, Kadriann; Uibu, Mai; Kuusik, Rein, keemik; Kallas, Juha XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / lk. 78

