

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; Trikkel, 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](#)

Aqueous mineral carbonation of ultramafic material : a pre-requisite to integrate into mineral extraction and tailings management operation
Veetil, Sanoop Kumar Puthiya; Hitch, Michael William Environmental science and pollution research 2021 / p. 29096–29109 : ill <https://doi.org/10.1007/s11356-021-12481-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Carbon prices for meeting the Paris agreement and their impact on key metals
Tost, Michael; Hitch, Michael William; Lutter, Stephan; Feiel, Susanne; Moser, Peter The extractive industries and society 2020 / p. 593-599 <https://doi.org/10.1016/j.exis.2020.01.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Carbonation of steel slag and gypsum for building materials and associated reaction mechanisms
Wang, Xue; Ni, Wen; Li, Jiajie; Zhang, Siqi; Hitch, Michael William; Pascual, Rodrigo Cement and Concrete Research 2019 / art. 105893, 12 p. : ill <https://doi.org/10.1016/j.cemconres.2019.105893> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Coal slurry pipelines : a coal transportation method in Kalimantan, Indonesia
Jati, Humaira A.; Monei, Nthati Lilian; Barakos, George; Tost, Michael; Hitch, Michael William International journal of mining, reclamation and environment 2021 / p. 638-655 <https://doi.org/10.1080/17480930.2021.1949857> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Correlation between COVID-19 cases and gold price fluctuation
Gautam, Roshan; Kim, Yoochan; Topal, Erkan; Hitch, Michael William International journal of mining, reclamation and environment 2022 / p. 574-586 <https://doi.org/10.1080/17480930.2022.2077542>

Determining the embedding parameters governing long-term dynamics of copper prices
Cortez, Carlos A. Tapia; Hitch, Michael William; Sammut, Claude Chaos, solitons and fractals 2018 / p. 186-197 : ill <http://dx.doi.org/10.1016/j.chaos.2018.03.032>

Development of a smart computational tool for the evaluation of co- and by-products in mining projects using Chovdar gold ore deposit in Azerbaijan as a case study
Mammadli, Anvar; Barokos, George; Islam, Md Ariful; Mischo, Helmut; Hitch, Michael William Mining 2022 / p. 487-510 : ill <https://doi.org/10.3390/mining2030026>

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](#)

Ecosystem services costs of metal mining and pressures on biomes
Tost, Michael; Murguia, Diego; Hitch, Michael William; Lutter, Stephan; Luckeneder, Sebastian; Feiel, Susanne; Moser, Peter Extractive industries and society 2020 / p. 79-86 : ill <https://doi.org/10.1016/j.exis.2019.11.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti tulevik ja säästlik mineraalikasutus
Hitch, Michael William Sirp 2019 / lk. 32-34 : fot https://www.ester.ee/record=b1072938*est <https://sirp.ee/s1-artiklid/c21-teadus/eesti-tulevik-ja-saastlik-mineraalikasutus/>

Eesti tulevik ja säästlik mineraalikasutus
Hitch, Michael William Mente et Manu 2019 / lk. 4-9 : fot https://www.ester.ee/record=b1242496*est https://www.tu.ee/public/m/mente-et-manu/MM_04_2019/mobile/index.html https://artiklid.elnet.ee/record=b2878198*est

Effect of calcium to silicon ratio on the microstructure of hydrated calcium silicate gels prepared under medium alkalinity
Ba, Haojing; Li, Jiajie; Ni, Wen; Li, Ying; Ju, Yongjian; Zhao, Ben; Wen, Guoping; Hitch, Michael William Construction and building materials 2023 / art. 131240, 11 p.: ill <https://doi.org/10.1016/j.conbuildmat.2023.131240>

Effect of substrate properties and phosphorus supply on facilitating the uptake of rare earth elements (REE) in mixed culture cropping systems of Hordeum vulgare, Lupinus albus and Lupinus angustifolius
Monei, Nthati Lilian; Hitch, Michael William; Heim, Juliane; Pourret, Olivier; Heilmeier, Hermann; Wiche, Oliver Environmental science and pollution research 2022 / p. 57172-57189 <https://doi.org/10.1007/s11356-022-19775-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effects of Carbon tax on urban Carbon Emission reduction : evidence in China environmental governance
Zhao, Aiwen; Song, Xiaoqian; Li, Jiajie; Yuan, Qingchun; Pei, Yingshun; Li, Ruilin; Hitch, Michael William International journal of

environmental research and public health 2023 / art. 2289, 19 p. : ill <https://doi.org/10.3390/ijerph20032289>

Environmental, social and governance (ESG) risk, uncertainty, and the mining life cycle

Maybee, Bryan; Lilford, Eric; **Hitch, Michael William** Extractive Industries and Society 2023 / art. 101244
<https://doi.org/10.1016/j.exis.2023.101244>

European mining and the social license to operate

Lesser, Pamela; Gugerell, Katharina; Poelzer, Gregory; **Hitch, Michael William**; Tost, Michael The Extractive industries and society 2020 / art. 787, 8 p <https://doi.org/10.1016/j.exis.2020.07.021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Europe's mining innovation trends and their contribution to the sustainable development goals : Blind spots and strong points

Endl, Andreas; Tost, Michael; **Hitch, Michael William**; Moser, Peter; Feiel, Susanne Resources policy 2021 / art. 101440, 11 p. : tab
<https://doi.org/10.1016/j.resourpol.2019.101440> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluating the potential of Estonia as European REE recycling capital via an environmental social governance risks assessment model

Paat, Andrus; Veetil, Sanoop Kumar Puthiya; Karu, Veiko; Hitch, Michael William The Extractive industries and society 2021 / art. 100767, 8 p <https://doi.org/10.1016/j.exis.2020.07.001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluation of impact of potential extreme rainfall events on mining in Peru

Gonzalez, Francisco R.; Raval, Simit; Taplin, Ros; Timms, Wendy; **Hitch, Michael William** Natural Resources Research 2019 / p. 393–408 : ill <http://dx.doi.org/10.1007/s11053-018-9396-1>

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>

Fuzzy analytical hierarchy process based environmental, social and governance risks assessment for the future phosphorite mining in Estonia

Paat, Andrus; Majak, Jüri; Karu, Veiko; Hitch, Michael William Extractive Industries and Society 2024 / art. 101438
<https://doi.org/10.1016/j.exis.2024.101438> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

How can sustainable public transport be improved? A traffic sign recognition approach using convolutional neural network

Liu, Jingjing; Ge, Hongwei; Li, Jiajie; He, Pengcheng; Hao, Zhangang; **Hitch, Michael William** Energies 2022 / art. 7386, 14 p. : ill
<https://doi.org/10.3390/en15197386>

Important environmental social governance risks in potential phosphorite mining in Estonia

Paat, Andrus; Roosalu, Triin; Karu, Veiko; Hitch, Michael William The Extractive Industries and Society 2021 / art. 100911
<https://doi.org/10.1016/j.exis.2021.100911> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

Integration of sustainability in mining engineering education

Binder, Angela; Langefeld, Oliver; **Hitch, Michael William** Mining Report Glückauf 2018 / p. 435–441 : ill <https://mining-report.de/online-kiosk/mining-report-glueckauf-ausgabe-5-oktober-2018/>

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>

MCDM applied to the evaluation of transitional and post-mining conditions - an innovative perspective developed through the EIT ReviRIS project

Amaro, Sandra Lourenco; Barbosa, Sofia; Ammerer, Gloria; Bruno, Aina; Guimera, Jordi; Orfanoudakis, Ioannis; Ostrega, Anna; Mylona, Evangelia; **Hitch, Michael William; Strydom, Jessica** Materials Proceedings 2021 / art. 22
<https://doi.org/10.3390/materproc2021005022>

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 engineering 2022 / art. 104123 <https://doi.org/10.1016/j.jobe.2022.104123>

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>

Metal mining's environmental pressures: a review and updated estimates on CO2 emissions, water use, and land requirements

Hitch, Michael William; Tost, Michael; Bayer, Benjamin Sustainability 2018 / art. 2881 ; 14 p. : tab <https://doi.org/10.3390/su10082881>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Miners and mendicants : a cautionary tale

Lytle, Murray; **Hitch, Michael William** The Extractive industries and society 2019 / p. 498-503 : tab
<https://doi.org/10.1016/j.exis.2019.02.005> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mixed cultures, a sustainable way to accelerate phytomining of rare earth elements, is there a future here?

Monei, Nthathi Lilian; Wiche, Oliver; **Hitch, Michael William**; Heilmeier, Hermann EGU General Assembly 2021 2021 / art. EGU21-13690 <https://doi.org/10.5194/egusphere-egu21-13690>

Multi-criteria decision analysis for evaluating transitional and post-mining options - an innovative perspective from the EIT ReviRIS Project

Amaro, Sandra Lourenco; Barbosa, Sofia; Ammerer, Gloria; Bruno, Aina; Guimera, Jordi; Orfanoudakis, Ioannis; Ostrega, Anna; Mylona, Evangelia; Strydom, Jessica; **Hitch, Michael William** Sustainability 2022 / art. 2292, 13 p. : ill
<https://doi.org/10.3390/su14042292> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Orthogonal test design for the optimization of preparation of steel slag-based carbonated building materials with ultramafic tailings as fine aggregates

Li, Jiajie; Wang, Chengzhou; Ni, Wen; Zhu, Sitao; Mao, Shilong; Jiang, Fuxing; Zeng, Hui; Sun, Xikui; Huang, Bingxiang; **Hitch, Michael William** Minerals 2022 / art. 246, 19 p. : ill <https://doi.org/10.3390/min12020246>

Phytomining of rare earth elements : dynamics of rhizosphere processes and element interactions in the soil = Haruldaste muldmetallide fütokaevandamine : risosfääri protsesside ja geokeemiliste protsesside dünaamika pinnases

Monei, Nthathi Lilian 2023 <https://doi.org/10.23658/taltech.65/2023> <https://digikogu.taltech.ee/et/Item/ae5a3629-d857-411e-86d5-9778767e7f64> https://www.ester.ee/record=b5567493*est

Professor Hitch: mulle meeldib, kui õpilaste silmad löövad loengus särama : [intervjuu]

Hitch, Michael William Director. Inseneeria 2019 / lk. 64-69 : fot http://www.ester.ee/record=b2336521*est
<https://director.ee/2019/05/02/professor-hitch-mulle-meeldib-kui-opilaste-silmad-loovad-loengus-sarama/?v=a57b8491d1d8>

Recent developments and challenges of aqueous mineral carbonation : a review

Veetil, Sanoop Kumar Puthiya; **Hitch, Michael William** International journal of environmental science and technology 2020 / p. 4359-4380 <https://doi.org/10.1007/s13762-020-02776-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reducing mining footprint by matching haul fleet demand and route-oriented tire types

Pascual, Rodrigo; Roman, M.; **Hitch, Michael William** Journal of cleaner production 2019 / p. 645-651
<https://doi.org/10.1016/j.jclepro.2019.04.069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Relationships between essential and non-essential elements in plants with different nutritional strategies and silicon absorption capacities : [manuscript]

Monei, Nthathi Lilian; Benyr, V.; Heilmeier, Hermann; **Hitch, Michael William**; Wiche, Oliver The international journal of environment & health 2023

Responsible sourcing for energy transitions : discussing academic narratives of responsible sourcing through the lens of natural resources justice

Kügerl, Marie-Theres; **Hitch, Michael William**; Gugerell, Katharina Journal of environmental management 2023 / p. 116711, 15 p. : ill
<https://doi.org/10.1016/j.jenvman.2022.116711>

The role of intercultural differences and challenges faced in communicating rehabilitation of mine sites' integration from Europe to Africa

Rodolaki, Chrysanthi; Barakos, George; **Hitch, Michael William** Extractive Industries and Society 2023 / art. 101362
<https://doi.org/10.1016/j.exis.2023.101362>

Selective removal of selenium by phytoremediation from post mining coal wastes : practicality and implications : [abstrac]

Monei, Nthati Lilian; Veetil, Sanoop Kumar Puthiya; Hitch, Michael William; Gao, Jeffrey Geophysical research abstracts 2020 / EGU2020-16117, 1 p <https://doi.org/10.5194/egusphere-egu2020-16117>

Selective removal of selenium by phytoremediation from post/mining coal wastes : practicality and implications

Monei, Nthati Lilian; Veetil, Sanoop Kumar Puthiya; Gao, Jeffrey; **Hitch, Michael William** International journal of mining, reclamation and environment 2021 / p. 69-77 : ill <https://doi.org/10.1080/17480930.2020.1801118> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Social licence : power imbalances and levels of consciousness – two case studies

Hitch, Michael William; Lytle, Murray; Tost, Michael International journal of mining, reclamation and environment 2020 / p. 238-246 <https://doi.org/10.1080/17480930.2018.1530582> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study on dynamic disaster mechanisms of thick hard roof induced by hydraulic fracturing in surface vertical well

Shang, X; Zhu, Sitao; Jiang, Fuxing; Liu, Jinhai; Li, Jiajie; **Hitch, Michael William;** Liu, Hongliang; Tang, Shibin; Zhu, Chun Minerals 2022 / art. 1537, 22 p. : ill <https://doi.org/10.3390/min12121537>

The effect of mineral composition on direct aqueous carbonation of ultramafic mine waste rock for CO2 sequestration, a case study of Turnagain ultramafic complex in British Columbia, Canada

Li, Jiajie; Jacobs, Anthony D.; **Hitch, Michael William** International journal of mining, reclamation and environment 2022 / p. 267-286 <https://doi.org/10.1080/17480930.2022.2041340>

The license to mine : making resource wealth work for those who need it most

Hagan, Andrew J.; Tost, Michael; Inderwildi, Oliver R.; **Hitch, Michael William;** Moser, Peter Resources policy 2021 / art. 101418 <https://doi.org/10.1016/j.resourpol.2019.101418> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The long uphill journey of Australia's rare earth element industry : challenges and opportunities

Barakos, George; Dyer, Laurence; **Hitch, Michael William** International journal of mining, reclamation and environment 2022 / p. 651-670 <https://doi.org/10.1080/17480930.2022.2127248> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The state of environmental sustainability considerations in mining

Tost, Michael; **Hitch, Michael William;** Chandurkar, Vighnesh; Moser, Peter; Feiel, Susanne Journal of cleaner production 2018 / p. 969-977 : ill <http://dx.doi.org/10.1016/j.jclepro.2018.02.051>

Uued inimesed TalTechis

Lukas, Mati; Joala, Epp; Scheler, Ott; Jõulu, Janno; Smolander, Olli-Pekka; Hitch, Michael William; Prashanth, Konda Gokuldoss; Masso, Anu; Sinisalu, Algi Mente et Manu 2018 / lk. 42-47 : portr http://www.ester.ee/record=b1242496*est
<http://dea.digar.ee/publication/AKmenteetmanu> <https://taltech.ee/avalehekulg/?id=10641&category=128006#newsTabsMenu>
https://artiklid.elnet.ee/record=b2866975*est

Virtuous natural resource development : the evolution and adaptation of social licence in the mining sector

Hitch, Michael William; Barakos, George The Extractive industries and society 2021 / art. 100902 <https://doi.org/10.1016/j.exis.2021.100902>