

Centimetre-scale variability of redox-sensitive elements in Tremadocian black shales from the eastern Baltic Palaeobasin
Hints, Rutt; Soesoo, Alvar; Voolma, Margus; Tarros, Siim; Kallaste, Toivo; Hade, Sigrid Estonian journal of earth sciences
2014 / p. 233-239 : ill https://artiklid.elnet.ee/record=b2705856*est <https://doi.org/10.3176/earth.2014.24> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Changes in the thermal behaviour of phosphorite sample from Toolse deposit (Estonia) along the drill-core
Kaljuvee, Tiit; Tõnsuaadu, Kaia; Kallaste, Toivo; Hints, Rutt; Kivimäe, Eliise-Koidula; Petkova, Vilma; Triikkel, Andres 7th
Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC7) : book of abstracts 2023 / p. 69

Characterization and changes in the thermal behavior of the phosphorite sample from Toolse deposit (Estonia) along the drill-core
Kaljuvee, Tiit; Tõnsuaadu, Kaia; Kallaste, Toivo; Graul, Sophie; Hints, Rutt; Kivimäe, Eliise-Koidula; Petkova, Vilma; Triikkel, Andres Journal of thermal analysis and calorimetry 2024 / 14 p <https://doi.org/10.1007/s10973-024-13655-x>

Chloritization of Upper Ordovician Pirgu bentonites - source material or diagenetic environment?
Kirsimäe, Kalle; Hints, Rutt; Kallaste, Toivo; Kiipli, Enli; Kiipli, Tarmo WOGOGOB-2004 : 8th Meeting of the Working Group on the
Ordovician Geology of Baltoscandia : May 13-18, 2004, Tallinn and Tartu, Estonia : conference materials : abstracts and field
guidebook 2004 / p. 57-58 https://artiklid.elnet.ee/record=b2610235*est

Depositional framework of the East Baltic Tremadocian black shale revisited
Hints, Rutt; Hade, Sigrid; Soesoo, Alvar; Voolma, Margus GFF 2014 / p. 464-482 : ill <https://doi.org/10.1080/11035897.2013.866978>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DEXPLORE Horizon EU project: Investigation of CRM potential of Estonian basement
Graul, Sophie Jane Marie-Pascale Huguette; Nirgi, Siim; Soesoo, Alvar; Solano-Acosta, Juan-David; Hints, Rutt; Hands, Tony; HernandezI Moreno, Catalina Lithosphere 2024 2024 / p. 29-32 <https://doi.org/10.13140/RG.2.2.18365.47840>
<https://www.seismo.helsinki.fi/pdf/Lito2024.pdf>

Discovery of the Ordovician Kinnekulle K-bentonite at the Põõsaspea cliff, NW Estonia
Hints, Linda; Männik, Peep; Hints, Olle; Hints, Rutt Estonian journal of earth sciences 2008 / 3, p. 192-195 : ill
https://artiklid.elnet.ee/record=b2385311*est

Early diagenetic transformation stages revealed by micro-analytical studies of shelly phosphorites, Rakvere region
Graul, Sophie Jane Marie-Pascale Huguette; Kallaste, Toivo; Moilanen, Marko; Ndiaye, Mawo; Hints, Rutt Estonian journal of
earth sciences 2023 / p. 34-37 : ill <https://doi.org/10.3176/earth.2023.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti fosforiidi säästlik väärindamine : [RITA MAARE projekti aruanne]
2020 <https://fond egt.ee/fond/egf/9405>

Eesti geoloogilised kollektsioonid : [ka TTÜ Geoloogia Instituudi kogudest]
Hints, Olle; Isakar, Mare; Hints, Rutt Eesti humanitaar- ja loodusteaduslikud kogud : seisund, kasutamine, andmebaasid 2008 / lk.
181-200 : ill

Eesti maapõu peidab tonnide jagu vanaadiumi
Oidermaa, Jaan-Juhan novaator.err.ee 2023 [Eesti maapõu peidab tonnide jagu vanaadiumi](#) [Eesti maapõu peidab tonnide jagu vanaadiumi](#)

Eestis katsetatakse uusi rikastamistehnoloogiaid
Hints, Rutt Arvamus, kultuur : [ajalehe Postimees lisa] 2022 / Lk. 3 <https://dea.digar.ee/article/ak/2022/04/02/2.3>

Ehkki haruldasi muldmetalle otsitakse Lääne-Virumaalt, on neid tunduvalt enam Maardu fosforiidis
Tohver, Andres virumaateataja.postimees.ee 2023 [Ehkki haruldasi muldmetalle otsitakse Lääne-Virumaalt, on neid tunduvalt enam Maardu fosforiidis](#)

Ekspert: meil tuleks ressursikasutuse strateegia geopoliitika tõttu üle vaadata
Hints, Rutt toostusuudised.ee 2025 <https://www.toostusuudised.ee/uudised/2025/03/31/ekspert-meil-tuleks-ressursikasutuse-strateegia-geopoliitika-tottu-ule-vaadata>

The enrichment process of vanadium in lower ordovician vanadiferous black shales from Estonia : investigating critical metal resources in Europe
Ndiaye, Mawo; Graul, Sophie; Kallaste, Toivo; Hints, Rutt Goldschmidt 2023 Abstract 2023 / 1 p.
<https://doi.org/10.7185/gold2023.14076>

Exploring critical element enrichment pathways in black shales : a case study of Türisalu formation in Estonia
Ndiaye, Mawo; Kallaste, Toivo; Graul, Sophie Jane Marie-Pascale Huguette; Hints, Rutt 4th European Mineralogical
Conference. Dublin, Ireland : programme and abstracts 2024 <https://www.minersoc.org/wp-content/uploads/2024/09/EMC-Programme-and->

Fine clay shuttle as a key mechanism for V hyper-enrichment in shallow water Tremadocian black shale from Baltica Ndiaye, Mawo; Pajusaar, Siim; Liiv, Merlin; Graul, Sophie Jane Marie-Pascale Huguet; Kallaste, Toivo; Hints, Rutt
Chemical geology 2023 / art. 121583 <https://doi.org/10.1016/j.chemgeo.2023.121583> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

Geochemical heterogeneity of Estonian graptolite argillite

Voolma, Margus; Soesoo, Alvar; Hade, Sigrid; Hints, Rutt; Kallaste, Toivo Oil shale 2013 / p. 377-401 : ill
https://artiklid.elnet.ee/record=b2633538*est <https://doi.org/10.3176/oil.2013.3.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Geochemical reconstruction of the provenance, tectonic setting and paleoweathering of lower Paleozoic black shales from Northern Europe

Ofili, Sylvester; Soesoo, Alvar; Panova, Elena G.; Hints, Rutt; Hade, Sigrid; Ainsaar, Leho Minerals 2022 / art. 602
<https://doi.org/10.3390/min12050602> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Geochemistry of Late Ordovician (Sandbian) volcanism at the south-western margin of the Baltica Plate - using Nb, Zr and Ti for tectono-magmatic interpretation of bentonites

Kiipli, Tarmo; Hints, Rutt; Kallaste, Toivo; Nielsen, Arne T.; Pajusaar, Siim; Schovsbo, Niels H. 10th Baltic Stratigraphic Conference : Checiny, 12-14 September 2017 : abstracts and field guide 2017 / p. 43-44 : ill
http://geo.uw.edu.pl/tl_files/publikacje/10th_Baltic_Stratigraphic_Conference_Abstracts_and_Field_Guide.pdf

Geochemistry, provenance, and tectonic setting of Paleoproterozoic metasedimentary and metavolcanic units of the Estonian Alutaguse region, eastern Fennoscandia

Solano-Acosta, Juan David; Soesoo, Alvar; Hints, Rutt Estonian journal of earth sciences 2025 / p. 61-82
<https://doi.org/10.3176/earth.2025.05>

Geochemistry, provenance, and tectonic setting of paleoproterozoic metavolcanic and metasedimentary units of the Alutaguse zone, North Estonia – a comparative study with the south svecofennian zone

Soesoo, Alvar; Hints, Rutt; Solano-Acosta, Juan David EU SuperCluster Lapland Geoconference – October 30–31, 2023, Hotel Santa Claus, Rovaniemi, Finland : Abstract 2023 / p. 205–210 <https://data.taltech.ee/records/6xn1t-1br72>

Geoloog : tuleviku magnetinappust leevendaks vanad mobiiliakud ja fosforiit [Võrguväljaanne]

Hints, Rutt novaator.err.ee 2021 [Geoloog: tuleviku magnetinappust leevendaks vanad mobiiliakud ja fosforiit](#)

Geoloog: fosforiidi kaevandamine on realistlik alles 20 aasta pärast

err.ee 2023 [Geoloog: fosforiidi kaevandamine on realistlik alles 20 aasta pärast](#)

Geophysical and geochemical characterisation of the Märjamaa Rapakivi granite, Estonia

Solano-Acosta, Juan-David; Soesoo, Alvar; Hints, Rutt Lithosphere 2024 2024 / p. 112-114
<https://doi.org/10.13140/RG.2.2.27044.08326> <https://www.seismo.helsinki.fi/pdf/Lito2024.pdf>

Geopoliitiline seis seab ohtu meie vajalikud toormed

Hints, Rutt kestlikkusuudised.ee 2025 <https://www.kestlikkusuudised.ee/arvamus/2025/04/26/geopoliitiline-seis-seab-ohtu-meie-vajalikud-toormed>

Immobile and mobile elements during the transition of volcanic ash to bentonite - an example from the early Palaeozoic sedimentary section of the Baltic Basin

Kiipli, Tarmo; Hints, Rutt; Kallaste, Toivo; Verš, Evelin; Voolma, Margus Sedimentary geology 2017 / p. 148-159 : ill
<https://doi.org/10.1016/j.sedgeo.2016.11.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Insights on the tectonic styles across Estonia using satellite potential fields derived from WGM-2012 gravity data and EMAG2 magnetic data

Solano-Acosta, Juan David; Soesoo, Alvar; Hints, Rutt EGU General Assembly 2022 2022 / EGU22-11398
<https://doi.org/10.5194/egusphere-egu22-11398>

Internal stratification of two thick Ordovician bentonites of Estonia : deciphering primary magmatic, sedimentary, environmental and diagenetic signatures

Siir, Sven; Kallaste, Toivo; Kiipli, Tarmo; Hints, Rutt Estonian journal of earth sciences 2015 / p. 140-158 : ill
https://artiklid.elnet.ee/record=b2727638*est <https://doi.org/10.3176/earth.2015.23> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Is the Estonian Alutaguse Section of Eastern Fennoscandia a continuation of the Southern Svecofennian Finnish Terranes, or is it akin to the Swedish Bergslagen region?

Solano Acosta, Juan David; Soesoo, Alvar; Hints, Rutt; Graul, Sophie Jane Marie-Pascale Huguet Lithosphere 2024 2024 / p. 116-119 <https://www.seismo.helsinki.fi/pdf/Lito2024.pdf> <https://doi.org/10.48726/wmvj1-93777>

Is the Estonian Alutaguse Section of Eastern Fennoscandia a continuation of the Southern Svecofennian Finnish Terranes, or is it akin to the Swedish Bergslagen region?

Solano Acosta, Juan David; Soesoo, Alvar; Hints, Rutt; Graul, Sophie Jane Marie-Pascale Huguet EGU General Assembly 2025 2025 / art. EGU25-7212

https://www.researchgate.net/publication/391064063_Is_the_Estonian_Alutaguse_Section_of_Eastern_Fennoscandia_a_continuation_of_the_Southern_Svecofennian_Finnish_Terranes_or_is_it_akin_to_the_Swedish_Bergslagen_region <https://doi.org/10.5194/egusphere-egu25-7212>

25 aastat La Manche'i tunnelit: mida on sellest õppida Tallinna-Helsingi tunneliks? [Võrguväljaanne]

Hints, Rutt novaator.err.ee 2019 / fot [25 aastat La Manche'i tunnelit: mida on sellest õppida Tallinna-Helsingi tunneliks?](#)

Kas Eesti on valmis fosforiiditööstuse taasalustamiseks?

Hints, Rutt Eesti Ekspress 2022 / Lk. 38 [https://dea.digar.ee/publication/eestiekspress "Kas Eesti on valmis fosforiiditööstuse taasalustamiseks?"](https://dea.digar.ee/publication/eestiekspress/Kas_Eesti_on_valmis_fosforiiditööstuse_taalustamiseks?)

Kas Merivälja mõistatus lahendatud? TTÜ teadlased eemaldasid saladusteloori

Kamps, Mari Director. Inseneeria 2017 / lk. 106-110 : fot http://www.ester.ee/record=b1519314*est
https://artiklid.elnet.ee/record=b2828532*est

«Kiuslik» metall võib muuta Eesti energiatööstust

Alvela, Ain postimees.ee 2023 [«Kiuslik» metall võib muuta Eesti energiatööstust](#)

LA-ICP-MS imaging technique application on Estonian sedimentary phosphorites : revealing REE enrichment stages and advanced ore characterisation

Graul, Sophie; Monchal, Vincent; Rateau, Rémi; Joosu, Lauri; Moilanen, Marko; **Ndiaye, Mawo; Hints, Rutt** EGU General Assembly 2024 2024 / EGU24-7319 <https://doi.org/10.5194/egusphere-egu24-7319>

Lõplikud lõppematud maavarad

Hints, Rutt Eesti Teaduste Akadeemia sõnas ja pildis 2021 2022 / lk. 78-80 https://www.ester.ee/record=b5054043*est

Lõplikud lõppematud maavarad / Teaduspärastlõuna XIX. Euroopa tööstuse rohepöörde: kriitilistest maavaradest rohetehnoloogiateni [Võrguväljaanne]

Hints, Rutt Eesti Teaduste Akadeemia : Youtube kanal 2021 / video [Lõplikud lõppematud maavarad](#)

Metal enrichment in lithologically complex black shales : a case study from the Tremadocian of NE Estonia

Hints, Rutt; Pajusaar, Siim; Urtson, Kristjan; Liiv, Merlin; Kallaste, Toivo Estonian journal of earth sciences 2021 / p. 36–50 : ill <https://doi.org/10.3176/earth.2021.04> https://kirj.ee/wp-content/plugins/kirj/pub/earth-1-2021-36-50_20210128130612.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mineral Exploration of the Senegalese Grande Cote heavy minerals placer: QEMSCAN characterisation of Fe-Ti oxides for ore modelling

Kanzari, Aisha; **Graul, Sophie Jane Marie-Pascale Huguet**; Delaporte, Arthur; **Hints, Rutt**; Blancher, Simon Mineral Exploration of the Senegalese Grande Cote heavy minerals placer: QEMSCAN characterisation of Fe-Ti oxides for ore modelling 2024 / 2 p. <https://doi.org/10.5194/egusphere-egu24-19227>

Multiphase Silurian bentonites from western Estonia: possible diagenetic pathways

Hints, Rutt; Kirsimäe, Kalle; Somelar, P.; **Kallaste, Toivo; Kiipli, Tarmo** The Seventh Baltic Stratigraphical Conference : 17-18 May 2008, Tallinn, Estonia : abstracts & field guide 2008 / p. 25

New insights of the crustal structure across Estonia using satellite potential fields derived from WGM-2012 gravity data and EMAG2v3 magnetic data

Solano-Acosta, Juan David; Soesoo, Alvar; Hints, Rutt Tectonophysics 2023 / art. 229656, 27 p. : ill <https://doi.org/10.1016/j.tecto.2022.229656> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nitrogen and organic carbon isotope record in Tremadocian highly metalliferous black shales from Baltica

Ndiaye, Mawo; Liiv, Merlin; Kallaste, Toivo; Graul, Sophie Jane Marie-Pascale Huguet; **Hints, Rutt** Estonian journal of earth sciences 2023 / p. 78-81 : ill <https://doi.org/10.3176/earth.2023.25> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Purikad palava ilmaga

Imeline Teadus 2020 / lk. 6 : fot https://www.ester.ee/record=b2747925*est

Põhja-Rootsis avastati Euroopa suurim haruldaste muldmetallide leiukoht, mis on võtmetähtsusega rohepöörde jaoks

Laugen, Kristjan delfi.ee 2023 [Põhja-Rootsis avastati Euroopa suurim haruldaste muldmetallide leiukoht, mis on võtmetähtsusega rohepöörde jaoks](#)

REE + Y distribution in tremadocian shelly phosphorites (Toolse, Estonia) : multi-stages enrichment in shallow marine environment during early diagenesis

Graul, Sophie Jane Marie-Pascale Huguette; Hints, Rutt; Pajusaar, Siim; Ndiaye, Mawo Geological Society of America Abstracts with Programs 2022 / 1 p <https://doi.org/10.1130/abs/2022AM-380090>

REE + Y distribution in Tremadocian shelly phosphorites (Toolse, Estonia) : multi-stages enrichment in shallow marine sediments during early diagenesis

Graul, Sophie; Kallaste, Toivo; Pajusaar, Siim; Urston, Kriksjan; Gregor, Andre; Moilanen, Marko; Ndiaye, Mawo; Hints, Rutt Journal of Geochemical Exploration 2023 / art. 107311 <https://doi.org/10.1016/j.gexplo.2023.107311> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

REE potential in sedimentary apatite: Delve deeper with microanalytics

Graul, Sophie; Monchal, Vincent; Rateau, Rémi; Joosu, Lauri; Moilanen, Marko; Ndiaye, Mawo; Hints, Rutt 4th European Mineralogical Conference. Dublin, Ireland : programme and abstracts 2024 / p. 275 : ill <https://www.minersoc.org/wp-content/uploads/2024/09/EMC-Programme-and-Abstracts-FINAL.pdf>

REE+Y distribution in tremadocian shelly phosphorites (Toolse, Estonia): A geochemical and mineralogical investigation for European critical raw material

Hints, Rutt; Graul, Sophie Jane Marie-Pascale Huguette; Kallaste, Toivo; Ndiaye, Mawo; Moilanen, Marko; Monchal, Vincent Goldschmidt 2023 2023 / 1 p. <https://doi.org/10.7185/gold2023.13625>

Rutt Hints : geoloogias on avastamisrõõmu veel palju

Hints, Rutt Mente et Manu 2018 / lk. 14-19 : fot http://www.ester.ee/record=b1242496*est <http://dea.digar.ee/publication/AKmenteetmanu> https://www.ttu.ee/public/m/mente-et-manu/MM_05_2018/mobile/index.html https://artiklid.elnet.ee/record=b2868918*est

Rutt Hints: oleme maailmas, kus ressursse jääb väga palju puudu

Hints, Rutt pollumajandus.ee 2024 [Rutt Hints: oleme maailmas, kus ressursse jääb väga palju puudu](#)

Rutt Hints: ringmajandus – laiem silmaring

Hints, Rutt Trialoog 2025 <https://trialoog.taltech.ee/ringmajandus-laiem-silmaring/>

Rutt Hints: unistus fosforiidist kui Norra naftast on naiivne

Hints, Rutt aripaev.ee 2024 [Rutt Hints: unistus fosforiidist kui Norra naftast on naiivne](#)

Svecofennian metamorphic zones in the basement of Estonia

Puura, Väino; Hints, Rutt; Huhma, Hannu; Klein, Vello; Konsa, Mare; Kuldkepp, Reedik; Mänttari, Irmeli; Soesoo, Alvar Proceedings of the Estonian Academy of Sciences. Geology 2004 / 3, p. 190-209 : ill

Sõe- ja teraseliidu uued metallid

Hints, Rutt Postimees 2019 / AK, lk. 2-3 [Rutt Hints: sõe- ja teraseliidu uued metallid](#)

Teadur: geopoliitiline olukord on läinud nii keeruliseks

Hints, Rutt delfi.ee 2025 <https://arileht.delfi.ee/artikkel/120367274/teadur-geopoliitiline-olukord-on-lainud-nii-keeruliseks>

Tectono|magmatic division of the Late Ordovician (Sandbian) volcanism at the south|western margin of Baltica using immobile trace elements : Relations to the plate movements in the lapetus Palaeo|Ocean

Kiipli, Tarmo; Hints, Rutt; Nielsen, Arne T.; Pajusaar, Siim; Schovsbo, Niels H. Geological journal 2020 / p. 5155-5165 : ill <https://doi.org/10.1002/gj.3737> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tehnikaülikool rakendab rohepöörde veduriks sünergia

digi.geenius.ee 2024 [Tehnikaülikool rakendab rohepöörde veduriks sünergia](#)

Tulevikumaavarade jäil

Hints, Rutt Horisont 2020 / lk. 18-22 : fot https://www.ester.ee/record=b1072243*est

Unconventional resources of REE : challenges for exploration and processing, with the example of Estonian phosphorite

Graul, Sophie; Monchal, Vincent; Joosu, Lauri; Hints, Rutt Kliimast, geoloogiast, ringmajandusest ja ajaloost 2024 / lk. 12-14 : ill. https://www.ester.ee/record=b5673955*est <https://kirjandus.geoloogia.info/reference/49111>

Vanaadiumi levik ja esinemisvormid graptoliitargilliidis ning eraldamise tehnoloogiad

Hints, Rutt Kuhu rändab Eesti geoloogia? : aprillikonverentsi teeside kogumik 2023 / lk. 20 https://www.ester.ee/record=b5552673*est

Vanemteadur: rohepööre toob kaasa metallisõltuvuse

Oidermaa, Jaan-Juhan novaator.err.ee 2023 [Vanemteadur: rohepööre toob kaasa metallisõltuvuse](#)

Viis head mõtet GreenEST Summitilt

Oll, Sulev; Soe, Ralf-Martin; Tomberg, Hanno; Hints, Rutt; Kaljundi, Jüri; Orgusaar, Kaisa Mente et Manu 2021 / lk. 28-29 : ill
https://www.ester.ee/record=b1242496*est

Võitlus kliimamuutustega paneb geoloogid proovile

Imeline Teadus 2020 / lk. 20 : fot https://www.ester.ee/record=b2747925*est

X-ray computed tomography of Lower Palaeozoic trace fossils from the carbonate succession of Estonia: preliminary results

Toom, Ursula; Hints, Olle; Hints, Rutt; Kuva, Jukka; Vinn, Olev 6th Workshop on Ichnotaxonomy, September 2–8, 2018
SENCKENBERG am Meer, Wilhelmshaven, Germany : programme & abstracts 2018 / p. 23

Геополитическая ситуация настолько усложнилась, что нам необходим новый подход к экономике замкнутого цикла

Hints, Rutt rus.delfi.ee 2025 <https://rus.delfi.ee/statja/120367229/geopoliticheskaya-situaciya-nastolko-uslozhnilas-cto-nam-neobhodim-novyy-podhod-k-ekonomike-zamknutogo-cikla>

Ученый: геополитика требует нового подхода к экономике замкнутого цикла

Hints, Rutt dv.ee 2025 <https://www.dv.ee/mnenija/2025/03/31/uchenyj-geopolitika-trebuets-novogo-podhoda-k-ekonomike-zamknutogo-cikla>