

A new correlation tool: chemostratigraphy based on the sanidine composition of bentonites - recent achievements and future perspectives

Kiipli, Tarmo; Kallaste, Toivo The Seventh Baltic Stratigraphical Conference : 17-18 May 2008, Tallinn, Estonia : abstracts & field guide 2008 / p. 34

Al₂O₃/TiO₂ ratio of the clay fraction of Late Ordovician–Silurian carbonate rocks as an indicator of paleoclimate of the Fennoscandian Shield

Kiipli, Enli; Kiipli, Tarmo; Kallaste, Toivo; Siir, Sven Palaeogeography, palaeoclimatology, palaeoecology 2012 / p. 312-320 : ill <https://www.sciencedirect.com/science/article/pii/S0031018212005494>

Areal variations in the composition of the Kinnekulle altered volcanic ash bed (Caradoc) - relations to sedimentary facies

Kiipli, Tarmo; Kallaste, Toivo; Kiipli, Enli 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. 55-56 : ill https://www.academia.edu/498310/Areal_variations_in_the_composition_of_the_Kinnekulle_altered_volcanic_ash_bed_Caradoc_relations_to_sedimentary_facies

Aspects of the dolomitization of the Mõhküla beds (Silurian, Estonia)

Teedumäe, Aada; Kallaste, Toivo; **Kiipli, Tarmo** Proceedings of the Estonian Academy of Sciences. Geology 2001 / 3, p. 190-205: ill https://artiklid.elnet.ee/record=b1007910*est

Authigenic silicate formation from volcanic ash in the Kinnekulle bed (Ordovician, Baltic region)

Kiipli, Tarmo; Hints, Olle; Kallaste, Toivo; Kiipli, Enli Euroclay 1999 : Conference of the European Clay Association : Sept. 5.-9.1999, Krakow, Poland : abstracts 1999 / p. 100

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

Characteristics of volcanism

Kiipli, Tarmo; Kallaste, Toivo Estonian geological sections / Geological Survey of Estonia 2002 / p. 17-21 : ill

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 / p. 12651 - 12664 <https://doi.org/10.1007/s10973-024-13655-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chemical weathering east and west of the emerging Caledonides in the Silurian – Early Devonian, with implications for climate

Kiipli, Enli; Kiipli, Tarmo; Kallaste, Toivo; Märss, Tiiu Canadian journal of earth sciences 2016 / p. 774-780 : ill <https://doi.org/10.1139/cjes-2015-0156> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chlorine analysis with XRF to determine salinity of pore water in the Baltic Sea sediments

Pajusaar, Siim; Kallaste, Toivo; Kiipli, Tarmo Geoanalysis 2018 : 10th International Conference on the Analysis of Geological and Environmental Materials : 8-13 July, Sydney, Australia 8-13 : Abstracts 2018 / p. 55 <http://ccfs.mq.edu.au/Geoanalysis2018/img/Geoanalysis%202018Program%20&%20Abs.pdf>

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

Comparative study of dolomites of different genesis (Raikküla Formation, Silurian; Estonia)

Teedumäe, Aada; Kallaste, Toivo; **Kiipli, Tarmo** Proceedings of the Estonian Academy of Sciences. Geology 2003 / 2, p. 113-127 : ill

Composition and properties of the iron hydroxides-cemented lenses in Estonian sandstone of Middle Devonian Age

Šogenova, Alla; Kleesment, Anne-Liis; Hirt, Ann; Pirrus, Enn-Aavo; Kallaste, Toivo; Šogenov, Kazbulat; Vaher, Rein Studia geophysica et geodaetica 2009 / 1, p. 111-131

Conodont bioapatite resembles vertebrate enamel by XRD properties

Nemliher, Jüri; Kallaste, Toivo Estonian journal of earth sciences 2012 / p. 191-192 https://artiklid.elnet.ee/record=b2533907*est

Correlation of Silurian bentonites based on the immobile elements in the East Baltic and Scandinavia

Kiipli, Tarmo; Kallaste, Toivo; Kiipli, Eero; Radzevičius, Sigitas GFF 2013 / p. 152-161 : ill

<https://doi.org/10.1080/11035897.2013.783104> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Correlation of Telychian sections from shallow to deep sea facies in Estonia and Latvia based on the sanidine composition of bentonites

Kiipli, Tarmo; Kallaste, Toivo Proceedings of the Estonian Academy of Sciences. Geology 2002 / 3, p. 143-156 : ill

Correlation of Telychian (Silurian) altered volcanic ash beds in Estonia, Sweden and Norway

Kiipli, Tarmo; Männik, Peep; Batchelor, Richard A.; Kiipli, Enli; Kallaste, Toivo; Perens, H. Norwegian journal of geology 2001 / 3, p. 179-193

Correlation of Telychian (Silurian) metabentonites in Estonia

Kiipli, Tarmo; Männik, Peep; Batchelor, Richard A.; Kiipli, Enli; Kallaste, Toivo; Perens, H. The Fourth Baltic Stratigraphical Conference : Problems and Methods of Modern Regional Stratigraphy : A joint BSA and IGCP 406 meeting : Jurmala, Latvia, Sept.-Oct. 1999 : abstracts 1999 / p. 45-46 <https://kirjandus.geoloogia.info/en/reference/14139>

Correlation of upper Llandovery bentonites in the Baltic region

Kiipli, Tarmo; Kallaste, Toivo; Kiipli, Enli; Mikli, Valdek; Kāgu, Maris The Fifth Baltic Stratigraphical Conference "Basin Stratigraphy - Modern Methods and Problems" : September 22-27, 2002, Vilnius, Lithuania : extended abstracts 2002 / p. 80-83

Correlation of upper Llandovery-lower Wenlock bentonites in the När (Gotland, Sweden) and Ventspils (Latvia) drill cores: role of volcanic ash clouds and shelf sea currents in determining areal distribution of bentonite

Kiipli, Tarmo; Kallaste, Toivo; Nestor, Viiv-Kai Estonian journal of earth sciences 2012 / p. 295-306 : ill

https://www.researchgate.net/publication/259465427_Correlation_of_upper_Llandovery-lower_Wenlock_bentonites_in_the_När_Gotland_Sweden_and_Ventspils_Latvia_drill_cores_Role_of_volcanic_ash_clouds_and_shelf_sea_currents_in_determining_areal_distribution

Corroded hydrothermal quartz in Ordovician altered volcanic ash beds of the Baltoscandian Region

Kiipli, Tarmo; Kallaste, Toivo; Kleesment, Anne-Liis; Nielsen, Arne T. Estonian journal of earth sciences 2009 / 4, p. 268-272 : ill
https://artiklid.elnet.ee/record=b1944231*est

Dissolution of rare earth elements from phosphate ore in hydrochloric acid

Hacıoğlu-Erlenheim, Gizem; Tõnsuaadu, Kaia; Urtson, Kristjan; Kallaste, Toivo; Triikkel, Andres XIV International Mineral Processing and Recycling Conference : proceedings 2021 / p. 166-171 : ill
https://imprc.tfbor.bg.ac.rs/download/IMPRC_2021_Proceedings.pdf

Distribution of phosphorus in the Middle and Upper Ordovician Baltoscandian carbonate palaeobasin

Kiipli, Enli; Kiipli, Tarmo; Kallaste, Toivo; Ainsaar, Leho Estonian journal of earth sciences 2010 / 4, p. 247-255
https://artiklid.elnet.ee/record=b2183573*est

Dolomites of the Muhu Formation (Silurian) in mainland Estonia : aspects of dolomitization, properties, and prospects of utilization

Teedumäe, Aada; Kiipli, Tarmo; Kallaste, Toivo Proceedings of the Estonian Academy of Sciences. Geology 1999 / 4, p. 213-227 : ill

Dolomitization and sedimentary cyclicity of the Ordovician, Silurian, and Devonian rocks in South Estonia

Teedumäe, Aada; Šogenova, Alla; Kallaste, Toivo Proceedings of the Estonian Academy of Sciences. Geology 2006 / 1, p. 67-87 : ill

Early diagenetic chalcopyrite occurrences in Telychian marine red beds of West Estonia and West Latvia

Kiipli, Enli; Kiipli, Tarmo; Kallaste, Toivo Proceedings of the Estonian Academy of Sciences. Geology 2000 / 4, p. 294-307 : ill
https://artiklid.elnet.ee/record=b1005824*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](#)

Elements distribution between solid and liquid phases in hydrochloric acid treatment of phosphate ore

Hacıoğlu-Erlenheim, Gizem; Tõnsuaadu, Kaia; Urtson, Kristjan; Kallaste, Toivo; Triikkel, Andres GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 54 https://fmdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

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>

Estonian geological sections. Bulletin 3, Valga (10) drill core. /Eesti tugiläbilõiked. Bülletään 3, Valga (10) puursüdamik/ (50 lk, trükiarv 500) : [2001. a. lõpetatud töö referaat]

Põldvere, Anne; Kleesment, Anne-Liis; **Nõlvak, Jaak**; Männik, Peep; **Hints, Olle**; Meidla, Tõnu; **Kiipli, Tarmo**; Kallaste, Toivo;

Ainsaar, Leho Eesti Geoloogiakeskuse aastaraamat 2001 2002 / lk. 78-79 https://artiklid.elnet.ee/record=b2287178*est

Estonian geological sections. Bulletin 6. Mehikoorma (421) Drill core / Eesti tugiläbilõiked. Bülletään 6. Mehikoorma (421) puursüdamik/ (67 lk, 1 CD; trükiarv 500) : [2005. a. lõpetatud töö referaat]

Põldvere, Anne; **Hints, Linda**; Kallaste, Toivo; **Kiipli, Tarmo**; Kleesment, Anne-Liis; **Mark-Kurik, Elga**; **Lääts, Jaanika**; **Martma, Tõnu**; **Männik, Peep**; **Nõlvak, Jaak**; **Šogenova, Alla**; **Viira, Viive** Eesti Geoloogiakeskuse aastaraamat 2005 2006 / lk. 70-71

https://artiklid.elnet.ee/record=b2252828*est

Estonian geological sections. Bulletin 9. Männamaa (F-367) drill core / Eesti geoloogilised läbilõiked. Bülletään 9. Männamaa (F-367) puursüdamik / (55 lk, 1 CD, trükiarv 500)

Põldvere, Anne; Aaloe, Aasa; Ainsaar, Leho; **Kallaste, Toivo**; **Kiipli, Tarmo**; **Meidla, Tõnu**; Mens, Kaisa; Niin, Mati; **Nõlvak, Jaak**; Orlova, Kiira; Suuroja, Kalle; **Šogenova, Alla**; **Šogenov, Kazbulat**; Tinn, Oive; Uutela, Anneli; Viira, Viive Eesti Geoloogiakeskuse

aastaraamat 2008 2009 / lk. 71-72 : ill https://www.ester.ee/record=b1223619*est

Estonian geological sections. Bulletin 10. Viki drill core / Eesti geoloogilised läbilõiked. Bülletään 10. Viki puursüdamik / (56 lk, 1 CD, trükiarv 500)

Põldvere, Aivar; Kalberg, Anna-Liisa; **Kallaste, Toivo**; **Kiipli, Tarmo**; Meidla, Tõnu; **Männik, Peep**; **Nestor, Heldur**; **Nestor, Viiu-Kai**; **Nõlvak, Jaak**; Plado, Jüri; Schleifer, Norbert; **Šogenova, Alla**; **Šogenov, Kazbulat**; Tinn, Oive; **Voolma, Margus** Eesti

Geoloogiakeskuse aastaraamat 2010 2011 / lk. 65-66 : ill

Estonian phosphate rock dissolution in hydrochloric acid : optimization of acid dosage and concentration

Tõnsuaadu, Kaia; **Kallas, Juha**; **Kallaste, Toivo**; **Urtson, Kristjan**; **Einard, Marve**; **Martin, Rasmus**; **Kuusik, Rein**; **Trikkel, Andres** Minerals 2023 / art. 578 <https://doi.org/10.3390/min13040578> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Exploring critical element enrichment pathways in black shales : a case study of Türi salu 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-Abstracts-FINAL.pdf>

Feldspars in the terrigenous sedimentary rocks of Estonia according to X-ray structural analysis

Kallaste, Toivo; **Pirrus, Enn-Aavo** Eesti Teaduste Akadeemia Toimetised. Geoloogia 1994 / 1, lk. 38-45: ill

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 Huguette**; **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 discrimination of the Upper Ordovician Kinnekulle Bentonite in the Billegrav-2 drill core section, Bornholm, Denmark

Kiipli, Tarmo; **Kallaste, Toivo**; Nielsen, Arne T.; Schovsbo, Niels H.; **Siir, Sven** Estonian journal of earth sciences 2014 / p. 264-270

: ill https://artiklid.elnet.ee/record=b2705908*est <https://doi.org/10.3176/earth.2014.29> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Geochemical evolution of caledonian volcanism recorded in the sedimentary rocks of the Eastern Baltic region

Kiipli, Tarmo; **Soesoo, Alvar**; **Kallaste, Toivo** Geological Society, London, Special Publications 2014 / p. 177-192

<https://doi.org/10.1144/SP390.5> [Journal metrics at Scopus](#) [Article at Scopus](#) [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](#)

Geochemistry and correlation of volcanic ash beds from the Rootsiküla Stage (Wenlock-Ludlow) in the eastern Baltic

Kiipli, Tarmo; **Einasto, Rein**; **Kallaste, Toivo**; **Nestor, Viiu-Kai**; **Perens, Helle**; **Siir, Sven** Estonian journal of earth sciences 2011 /

4, p. 207-219 : ill https://artiklid.elnet.ee/record=b2455468*est

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

Hematite and goethite in Telychian marine red beds of the East Baltic
Kiipli, Enli; **Kiipli, Tarmo;** Kallaste, Toivo GFF 2000 / p. 281-286

Hinnangu andmine merekeskkonna ökosüsteemipõhiseks korraldamiseks Soome lahe merepõhja ja setete näitel : (SedGoF) : projekti aruanne
Suuroja, Sten; **Heinsalu, Atko; Alliksaar, Tiit; Lips, Urmas; Pajusaar, Siim; Liiv, Merlin; Buschmann, Fred; Erm, Ants; Kiipli, Tarmo; Kallaste, Toivo** 2016 https://www.kik.ee/sites/default/files/uuringud/aruanne_sedgof_30.06.2016_0.pdf

Hoovused ja settevivimid Ordoviitsiumi ja Vara-Siluri Balti basseinis
Kiipli, Enli; **Kallaste, Toivo; Kiipli, Tarmo** Teadusmõtte Eestis (VI). Elu- ja maateadused : [artiklikogumik] 2011 / lk. 145-149 : ill

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](#)

Impact of the carbonate substitution on HAP crystal lattice
Niitsoo, Jaanika; Kallaste, Toivo; Mikli, Valdek; Nemliher, Jüri; Tõnsuaadu, Kaia The Third International Conference on the Valorization of Phosphates and Phosphorus Compounds : COVA Phos 3 : Marrakech, Morocco, March 18th-20th, 2009 : abstracts 2009 / p. 189-192 : ill

Impact of the carbonate substitution on HAP crystal lattice
Niitsoo, Jaanika; Kallaste, Toivo; Mikli, Valdek; Nemliher, Jüri; Tõnsuaadu, Kaia Researchers' Network on Phosphates : The Third International Conference on the Valorization of Phosphates and Phosphorus Compounds : COVAPHOS III : Marrakech, Morocco, March 18th-20th, 2009 : proceedings 2009 / p. 22-26

Impact-induced and diagenetic changes in minerals in the sandy ejecta of the Kärda crater, NW Estonia
Kleesment, Anne-Liis; Konsa, Mare; Puura, Väino; Karhu, Juha; Preeden, Ulla; **Kallaste, Toivo** Proceedings of the Estonian Academy of Sciences. Geology 2006 / 3, p. 189-212 : ill

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](#)

Kaltsiidi soonekesed Kallavere kihistu liivakivides Pakri poolsaarel
Sõstra, Ülo; Kallaste, Toivo XVII aprillikonverentsi "Unustatud maavarad" teesid : [3. aprill 2009, Tallinn] 2009 / lk. 33-34 : ill
https://www.ester.ee/record=b2522366*est

Low-temperature transition of bioaragonite of Tapes decussatus linnaeus (mollusca: bivalvia) [Electronic resource]
Tõnsuaadu, Kaia; Nemliher, Jüri; Kallaste, Toivo 14th International Congress on Thermal Analysis and Calorimetry . VI Brazilian Congress on Thermal Analysis and Calorimetry : September 14-18, 2008, Sao Pedro, Brazil 2008 / p. C03 [CD-ROM]
<https://kirjandus.geoloogia.info/reference/30350>

Mean grain size fluctuations of the siliciclastic component in the Aizpute-41 core : implication for end-Ordovician glaciation
Kiipli, Enli; **Siir, Sven; Kallaste, Toivo; Kiipli, Tarmo** Estonian journal of earth sciences 2014 / p. 257-263 : ill
https://artiklid.elnet.ee/record=b2705898*est <https://doi.org/10.3176/earth.2014.28> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Metabentonitide korreleerimisest keemiliste tunnuste alusel
Kiipli, Tarmo; Kallaste, Toivo; Kiipli, Enli; Männik, Peep Bülletään / Eesti Geoloogia Selts 1999 / lk. 18

Metabentonites of the Pirgu Stage (Ashgill, Upper Ordovician) of the East Baltic
Kiipli, Enli; Kallaste, Toivo; **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. 53-54 : ill
https://artiklid.elnet.ee/record=b2610225*est

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](#)

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 correlations of Telychian (Silurian) bentonites in Estonia

Kallaste, Toivo; Kiipli, Tarmo Proceedings of the Estonian Academy of Sciences. Geology 2006 / 3, p. 241-251 : ill

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 Huguette; 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](#)

Provenance of heavy minerals in the Quaternary deposits of the Lemme outcrop, Estonia, based on optical microscopy, X-ray diffractometry and scanning electron microscope microanalysis

Järvellil, Johanna-lisebel; Kallaste, Toivo; Kleesment, Anne-Liis; Pajusaar, Siim; Raukas, Anto Estonian journal of earth sciences 2019 / p. 76-87 : ill http://www.kirj.ee/public/Estonian_Journal_of_Earth_Sciences/2019/issue_2/earth-2019-2-76-87.pdf <https://doi.org/10.3176/earth.2019.07> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pyroclastic sanidine in the lower palaeozoic bentonites - a tool for regional geological correlations = Püroklastiline sandiin alam-paleosoikumi bentoniitides - regionaalstratigraafia uus töövahend

Kallaste, Toivo 2014 https://www.ester.ee/record=b3064982*est

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+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>

Silurian bentonites in Lithuania : correlations based on sanidine phenocryst composition and graptolite biozonation - interpretation of volcanic source regions

Kiipli, Tarmo; Radzevičius, Sigitas; Kallaste, Toivo Estonian journal of earth sciences 2014 / p. 18-29 : ill https://artiklid.elnet.ee/record=b2663120*est <https://doi.org/10.3176/earth.2014.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sonda tektoonilise rikke hüdrotermilised mineraalid

Sõstra, Ülo; Kallaste, Toivo Eesti Põlevlodusvarad ja -jäätmed 2008 / lk. 6-9 : ill https://artiklid.elnet.ee/record=b2384017*est

Structural analysis of apatite precipitated in the presence of proline

Tõnsuaadu, Kaia; Kallaste, Toivo; Mikli, Valdek; Mere, Arvo; Nemliher, Jüri 18th International Conference on Phosphorus Chemistry : July 11-15th, 2010, Wrocław, Poland : book of abstracts 2010 / p. 185

Temperature-induced changes in crystal lattice of bioaragonite of *Tapes decussatus* linnaeus (mollusca: Bivalvia)

Nemliher, Jüri; Tõnsuaadu, Kaia; Kallaste, Toivo Journal of thermal analysis and calorimetry 2009 / 1, p. 27-32 : ill https://www.researchgate.net/publication/243958295_Temperature-induced_changes_in_crystal_lattice_of_bioaragonite_of_Tapes_decussatus_Linnaeus_Mollusca_Bivalvia

Temporal evolution, petrography and composition of dolostones in the Upper Devonian Plavinas Regional Stage, southern Estonia and northern Latvia

Kleesment, Anne-Liis; Urston, Kristjan; Kiipli, Tarmo; Martma, Tõnu; Põldvere, Anne; Kallaste, Toivo; Šogenova, Alla; Šogenov, Kazbulat Estonian journal of earth sciences 2013 / p. 139-159 : ill https://artiklid.elnet.ee/record=b2624772*est <https://doi.org/10.3176/earth.2013.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

The Llandovery-Wenlock boundary interval in west-central continental Estonia : an example from the Suigu (S-3) core section

Männik, Peep; Põldvere, Anne; Nestor, Viiv-Kai; Kallaste, Toivo; Kiipli, Tarmo; Martma, Tõnu Estonian journal of earth sciences 2014 / p. 1-17 : ill https://artiklid.elnet.ee/record=b2663118*est <https://doi.org/10.3176/earth.2014.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Thermal behavior of Estonian graptolite-argillite from different deposits

Kaljuvee, Tiit; Tõnsuaadu, Kaia; Einard, Marve; Mikli, Valdek; Kivimäe, Eliise-Koidula; Kallaste, Toivo; Triikkel, Andres

Thermal behaviour of bone apatite of Recent pike (*Esox lucius* L.)

Nemliher, Jüri; Kallaste, Toivo Proceedings of the Estonian Academy of Sciences. Geology 2005 / 2, p. 112-118 : ill

Trace elements indicating humid climatic events in the Ordovician-early Silurian

Kiipli, Enli; Kiipli, Tarmo; Kallaste, Toivo; Pajusaar, Siim Chemie der Erde = Geochemistry 2017 / p. 625-631 : ill

<https://doi.org/10.1016/j.chemer.2017.05.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Unusual quartz forms in Ordovician bentonites

Kallaste, Toivo; Kiipli, Tarmo; Kleesment, Anne-Liis The Seventh Baltic Stratigraphical Conference : 17-18 May 2008, Tallinn, Estonia : abstracts & field guide 2008 / p. 30

Upper Katian (Ordovician) bentonites in the East Baltic, Scandinavia and Scotland Geochemical correlation and volcanic source interpretation

Kiipli, Tarmo; Dahlqvist, Peter; Kallaste, Toivo; Kiipli, Enli; Nõlvak, Jaak Geological Magazine 2015 / p. 589 - 602

<https://doi.org/10.1017/S001675681400051X> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Upper Ordovician altered volcanic ash beds

Kiipli, Tarmo; Orlova, Kiira; Kallaste, Toivo Männamaa (F-367) drill core 2008 / p. 29-32 : ill

<https://kirjandus.geoloogia.info/en/reference/16607>

Upper Ordovician volcanic ash beds

Kiipli, Tarmo; Kallaste, Toivo; Kiipli, Enli; Orlova, Kiira Estonian geological sections / Geological Survey of Estonia 2006 / p. 15-18 : ill

Upper Silurian stratigraphy of Podolia revisited: Carbon isotopes, bentonites and biostratigraphy

Kaljo, Dimitri; Grytsenko, Volodymyr; Kallaste, Toivo; Kiipli, Tarmo; Martma, Tõnu GFF 2014 / p. 136-141 : ill

<https://doi.org/10.1080/11035897.2013.862850> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Use the immobile trace elements for the correlation of Telychian bentonites on Saaremaa Island, Estonia, and mapping of volcanic ash clouds

Kiipli, Tarmo; Orlova, Kiira; Kiipli, Enli; Kallaste, Toivo Estonian journal of Earth sciences 2008 / 1, p. 39-52 : ill

Wenlock bentonites in Lithuania in the frame of graptolite stratigraphy

Radzevicius, S.; **Kiipli, Tarmo; Kallaste, Toivo**; Motuza, V.; Jeppsson, L The Seventh Baltic Stratigraphical Conference : 17-18 May 2008, Tallinn, Estonia : abstracts & field guide 2008 / p. 56

Volcanic interbeds in the Silurian of the southwestern part of the East European Platform

Kiipli, Tarmo; Tsegelnjuk, Petro D.; Kallaste, Toivo Proceedings of the Estonian Academy of Sciences. Geology 2000 / 3, p. 163-176 : ill https://artiklid.elnet.ee/record=b1004802*est

Volcanogenic interbed

Kiipli, Tarmo; Kallaste, Toivo Estonian geological sections / Geological Survey of Estonia 2001 / p. 16-17

Vulkaanilised kihid Eesti aluspõhjas ja nende kasutamine stratigraafias

Kiipli, Tarmo; Kallaste, Toivo Teadusmõtte Eestis (VI). Elu- ja maateadused : [artiklikogumik] 2011 / lk. 141-144 : ill

X-ray fluorescence analyses of peat, plant and soil samples from geochemical anomaly at Raudna

Kiipli, Tarmo; Kallaste, Toivo; Orlova, Kiira Geoanalysis, Rovaniemi, 2003 2003 / p. 91-92

Следы вулканизма в разрезе силура Эстонии : корреляция слоев, реконструкция исходной магмы и расположения палеовулканов

Kiipli, Tarmo; Kallaste, Toivo Палеовулканология, вулканогенно-осадочный литогенез, гидротермальный метаморфизм и рудообразование докембрия : материалы Первого Всероссийского палеовулканологического симпозиума : 20-25 августа 2001 года, Петрозаводск 2001 / с. 76-77