

A new elasmobranch *Karksiodus mirus* gen. et sp. nov. from the Burtneki Regional Stage, Middle Devonian of Estonia

Ivanov, Alexander; **Märss, Tiiu**; Kleesment, Anne-Liis Estonian journal of earth sciences 2011 / 1, p. 22-30 : ill

https://artiklid.elnet.ee/record=b2284327*est

A unique Late Silurian *Thelodus* squamation from Saaremaa (Estonia) and its ontogenetic development

Märss, Tiiu Estonian journal of earth sciences 2011 / 3, p. 137-146 : ill https://artiklid.elnet.ee/record=b2424660*est

"Agnatha" II : thelodonti

Märss, Tiiu; Turner, Susan; Karatajute-Talimaa, Valentina 2007 https://www.ester.ee/record=b2403830*est

Anatomy of the Silurian thelodont *Phlebolepis elegans* Pander

Wilson, Mark V.H.; **Märss, Tiiu** Estonian journal of earth sciences 2012 / p. 261-276 : ill https://artiklid.elnet.ee/record=b2552040*est

A bio- and chemostratigraphic search for the Mid-Ludfordian Carbon Isotope Excursion interval in the Ludlow of the Ohesaare core, Estonia

Kaljo, Dimitri; Martma, Tõnu; **Märss, Tiiu**; Nestor, Viuu-Kai; Viira, Viive Estonian journal of earth sciences 2022 / p. 44-60 : ill

<https://doi.org/10.3176/earth.2022.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A bio-chemostratigraphical test of the synchronicity of biozones in the upper Silurian of Estonia and Latvia with some implications for practical stratigraphy

Kaljo, Dimitri; Einasto, Rein; Martma, Tõnu; **Märss, Tiiu**; Nestor, Viuu-Kai; Viira, Viive Estonian journal of earth sciences 2015 / p.

267-283 : ill https://artiklid.elnet.ee/record=b2750825*est <https://doi.org/10.3176/earth.2015.33> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biodiversity of the Silurian osteostracans of the East Baltic

Märss, Tiiu; Afanassieva, Olga; Blom, Henning Earth and environmental science transactions of the Royal Society of Edinburgh 2014 / p. 73-148 : ill <https://doi.org/10.1017/S1755691014000218> [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](#)

A comparative SEM study of ossicles in the *Pleuronectiformes* (Teleostei) of the Baltic Sea

Märss, Tiiu; Wilson, Mark; Lees, Janek; Saat, Toomas; Špilev, Heli Proceedings of the Estonian Academy of Sciences 2015 / p.

495-517 : ill <https://doi.org/10.3176/proc.2015.4.05> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A demineralized osteostracan fossil from the Silurian Kalana Lagerstätte of Estonia : revealing its internal anatomy and uncovering a unique type of fossilization

Tinn, Oive; Lang, Liisa; **Märss, Tiiu**; Vahur, Signe; Kirsimäe, Kalle Lethaia 2022 / 13 p. : ill <https://doi.org/10.1111/let.12452> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of cyclic shedding teeth from semi-shedding teeth : the inner dental arcade of the stem osteichthyan *Lophosteus*

Chen, Donglei; Blom, Henning; Sanchez, Sophie; Tafforeau, Paul; **Märss, Tiiu**; Ahlberg, Per E. Royal Society open science 2017 /

art. 161084 : ill <http://dx.doi.org/10.1098/rsos.161084>

Eesti Devoni ja selle mikrofossiilide uurimine uue aastatuhande algul

Kleesment, Anne-Liis; **Märss, Tiiu**; Niit, Moonika Eesti geoloogide neljas ülemaailmne kokkutulek "Eesti geoloogia uue sajandi künnisel" : konverentsi materjalid ja ekskursioonijuhud = The Fourth World Meeting of Estonian Geologists "Estonian Geology in the Beginning of the New Century : conference materials and excursion guide 2003 / lk. 31-33

Eestit tuntakse Siluri kalade ja nende uurija järgi : [intervjuu Tiiu Märssiga]

Märss, Tiiu; Kuk, Toomas Eesti Loodus 2005 / 4, lk. 34-37 : fot https://artiklid.elnet.ee/record=b2346648*est

Endolymphatic structures in headshields of the osteostracan genus *Tremataspis* (Agnatha) from the Silurian of Estonia

Märss, Tiiu; Wilson, Mark V.H.; Viljus, Mart Estonian journal of earth sciences 2022 / p. 135-156 : ill

<https://doi.org/10.3176/earth.2022.10> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Excursion C: Silurian of Saaremaa Island : [20-22 May 2008]

Männik, Peep; Hints, Olle; Kaljo, Dimitri; Nestor, Heldur; **Märss, Tiiu**; Viira, Viive The Seventh Baltic Stratigraphical Conference : 17-18 May 2008, Tallinn, Estonia : abstracts & field guide 2008 / p. 111-137 : ill

Exploring the three-dimensional vasculature of dermal hard tissues in thyestiid osteostracans using synchrotron

radiation microtomography

Bremer, Oskar; Qu, Qingming; Sanchez, Sophie; **Märss, Tiiu**; Fernandez, Vincent; Blom, Henning *Journal of Vertebrate Paleontology* 2022 / art. e2196318 <https://doi.org/10.1080/02724634.2023.2196318> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Karksilepis parva gen. et sp. nov. (Chondrichthyes) from the Burtneki Regional Stage, Middle Devonian of Estonia

Märss, Tiiu; Kleesment, Anne-Liis; Niit, Moonika *Estonian journal of earth sciences* 2008 / p. 219-230 : ill
https://artiklid.elnet.ee/record=b1076710*est

Keskpaleosoiliste selgroogsete evolutsioon ja levik põhjapoolkera meredes ning nende praktiline väärtus geoloogias : kommentaar Eesti Vabariigiteaduse aastapreemia pälvinud tööde tsüklile

Märss, Tiiu Tallinna Tehnikaülikooli aastaraamat 2005 2006 / lk. 285-289 : ill

Late Silurian tessellated heterostracans from the East Baltic and North Timan

Karatajute-Talimaa, Valentina; **Märss, Tiiu** The Seventh Baltic Stratigraphical Conference : 17-18 May 2008, Tallinn, Estonia : abstracts & field guide 2008 / p. 32

Late Silurian-Early Devonian tessellated heterostracan Oniscolepis Pander, 1856 from the East Baltic and North Timan

Märss, Tiiu; Karatajute-Talimaa, Valentina *Estonian journal of earth sciences* 2009 / 1, p. 43-62 : ill
https://artiklid.elnet.ee/record=b1205601*est

'Natural experiments' reveal patterning logic of the dental development in the most primitive osteichthyan Lophosteus

Chen, Donglei; Blom, Henning; Sanchez, Sophie; Tafforeau, Paul; **Märss, Tiiu**; Ahlberg, Per E. 16th International Symposium on Early and Lower Vertebrates - Honoring Tiiu Märss & Philippe Janvier : conference programme and abstracts : Valencia, Spain, 2022 2022 / p. 21 http://iselv.uv.es/wp-content/uploads/2022/06/Abstract-Book-16ISELV_web.pdf

Neotypes for some upper Silurian acanthodian taxa from the Baltic Sea Region and the Welsh Borderland

Burrow, Carole J.; **Märss, Tiiu** *Estonian journal of earth sciences* 2022 / p. 17-24 <https://doi.org/10.3176/earth.2022.02> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New data on karksiodus (chondrichthyes) from the main devonian field (East European platform)

Ivanov, Alexander; **Märss, Tiiu** *Estonian journal of earth sciences* 2014 / p. 156-165 : ill <https://doi.org/10.3176/earth.2014.14> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New data on the exoskeleton of the osteostracan genus Aestiaspis (Agnatha) from the Silurian of Saaremaa Island (Estonia) and the Severnaya Zemlya Archipelago (Russia)

Afanassieva, Olga; **Märss, Tiiu** *Paleontological Journal* 2014 / p. 74-78 : ill <https://doi.org/10.1134/S003103011401002X> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ohesaare cliff

Märss, Tiiu XI Baltic Stratigraphical Conference : abstracts and field guide 2025 / p. 133-137 : ill
https://www.ester.ee/record=b5696260*est <https://files.geocollections.info/da9b19e5-2105-42be-a34c-2bd0136bdfa2.pdf>

On the erroneous identification of a turiniid thelodont in the Middle/Upper Devonian boundary beds of the Middle Urals

Märss, Tiiu; Ivanov, Alexander *Acta Geologica Polonica* 2018 / p. 455 <https://geojournals.pgi.gov.pl/agp/article/view/26057> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Palaeoenvironmental signatures revealed from rare earth element (REE) compositions of vertebrate microremains of the Vesiku Bone Bed (Homerian, Wenlock), Saaremaa Island, Estonia

Fadel, Alexandre; Žigaitė, Živilė; Blom, Henning; Pérez-Huerta, Alberto; Jeffries, Teresa; **Märss, Tiiu**; Ahlberg, Per Erik *Estonian Journal of Earth Sciences* 2015 / p. 36 - 41 <https://doi.org/10.3176/earth.2015.07> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Rare earth elements (REEs) in vertebrate microremains from the upper Pridoli Ohesaare beds of Saaremaa Island, Estonia : geochemical clues to palaeoenvironment

Žigaitė, Živilė; Fadel, Alexandre; **Märss, Tiiu** *Estonian journal of earth sciences* 2015 / p. 115-120 : ill
https://artiklid.elnet.ee/record=b2715987*est <https://doi.org/10.3176/earth.2015.21> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Revision of Silurian vertebrate biozones and their correlation with the conodont succession

Märss, Tiiu; Männik, Peep *Estonian journal of earth sciences* 2013 / p. 181-204 : ill https://artiklid.elnet.ee/record=b2651564*est
<https://doi.org/10.3176/earth.2013.15> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Revision of thelodonts, acanthodians, conodonts, and the depositional environments in the Burgen outlier (Ludlow, Silurian) of Gotland, Sweden

Jarochowska, Emilia; Bremer, Oskar; Yü, Alexandra; **Märss, Tiiu**; Blom, Henning; Mörs, Thomas; Vajda, Vivi *GFF* 2021 / p. 168-189

: ill <https://doi.org/10.1080/11035897.2021.1907441> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Saaremaa pangad

Märss, Tiiu; Soesoo, Alvar; Nestor, Heldur 2006 https://www.ester.ee/record=b2238100*est

Saarenmaan kalliotörmad

2007 https://www.ester.ee/record=b2270667*est

Siluri selgroogsed - ühe rühma arengulugu

Märss, Tiiu Teadusmõte Eestis (VI). Elu- ja maateadused : [artiklikogumik] 2011 / lk. 117-124 : ill

Silurian cliffs on Saaremaa Island

2007 https://www.ester.ee/record=b2303172*est

Silurian cyathaspidid heterostracans of Northern Eurasia

Märss, Tiiu Estonian journal of earth sciences 2019 / p. 113–146 : ill <https://doi.org/10.3176/earth.2019.11>
https://www.ester.ee/record=b2246661*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Silurian cyathaspidid heterostracans of the Baltica and Kara terranes

Märss, Tiiu 14th International Symposium on Early and Lower Vertebrates : Checiny, Poland, 3-8.07.2017 : conference abstracts and field-trip guidebook 2017 / p. 59

Silurian vertebrate remains from the Oslo Region, Norway, and their implications for regional biostratigraphy

Bremer, Oskar; Turner, Susan; **Märss, Tiiu**; Blom, Henning Norwegian Journal of Geology 2019 / p. 129 - 155 : ill
<https://doi.org/10.17850/njg99-1-07> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Species-specific morphology of the endolymphatic openings in the headshields of the osteostracan genus Tremataspis (Agnatha), from the Silurian of Estonia

Märss, Tiiu; Wilson, Mark V.H.; **Viljus, Mart** 16th International Symposium on Early and Lower Vertebrates - Honoring Tiiu Märss & Philippe Janvier : Conference programme and abstracts : Valencia, Spain, 2022 2022 / p. 6 http://iselv.uv.es/wp-content/uploads/2022/06/Abstract-Book-16ISELV_web.pdf

A strange case of two fishes : enigmatic disappearance of bone tissue or an originally unossified osteostracan

Tinn, Oive; Lang, Liisa; **Märss, Tiiu**; Kirsimäe, Kalle The Fossil Week : abstract book : 5th International Palaeontological Congress: IPC5 2018 : Paris, 9th-13th July, 2018 2018 / p. 858 https://ipc5.sciencesconf.org/data/IPC5_Abstract_Book.pdf

The developmental relationship between teeth and dermal odontodes in the most primitive bony fish Lophosteus

Chen, Donglei; Blom, Henning; Sanchez, Sophie; Tafforeau, Paul; **Märss, Tiiu**; Ahlberg, Per E. eLife 2020 / art. e60985, 20 p. : ill
<https://doi.org/10.7554/eLife.60985.sa2>

The earliest osteostracan Kalanaspis delectabilis gen. et sp. nov. from the mid-Aeronian (mid-Llandovery, lower Silurian) of Estonia

Tinn, Oive; **Märss, Tiiu** Journal of vertebrate paleontology 2018 / art. e1425212, 8 p. : ill <https://doi.org/10.1080/02724634.2017.1425212>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The emergence of a complex pore-canal system in the dermal skeleton of Tremataspis (Osteostraci)

Bremer, Oskar; Qu, Qingming; Sanchez, Sophie; **Märss, Tiiu**; Fernandez, Vincent; Blom, Henning Journal of Morphology 2021 / p. 1141-1157 <https://doi.org/10.1002/jmor.21359> [Journal metrics at Scopus](#) [Article at WOS](#) [Journal metrics at WOS](#) [Article at WOS](#)

The histology of osteostracan hard tissue revisited using synchrotron radiation microtomography

Bremer, Oskar; Blom, Henning; Qu, Q.; Sanchez, Sophie; **Märss, Tiiu** 15th International Symposium on Early and Lower Vertebrates, Qujing, Yunnan, China, August 8-13, 2019 : Conference programme and abstracts 2019 / p. 10-11

The interrelationships and evolutionary history of anaspids

Blom, Henning; **Märss, Tiiu** Morphology, phylogeny and paleobiogeography of fossil fishes 2010 / p. 45-56 : ill
<https://kirjandus.geoloogia.info/reference/1577>

The Middle Devonian acanthodian assemblage of the Karksi outcrop in Estonia

Pinakhina, Darya; **Märss, Tiiu** Estonian journal of earth sciences 2018 / p. 96-111 : ill <https://doi.org/10.3176/earth.2018.07>
http://www.ester.ee/record=b2246661*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The morphology and sculpture of ossicles in the Cottidae (Teleostei) of the Baltic Sea

Märss, Tiiu; Lees, Janek; Wilson, Mark V.H.; Saat, Toomas; **Spilev, Heli** Estonian journal of earth sciences 2010 / 3, p. 216-237 : ill
https://artiklid.elnet.ee/record=b2163755*est

The morphology and sculpture of ossicles in the Cyclopteridae and Liparidae (Teleostei) of the Baltic Sea

Märss, Tiiu; Lees, Janek; Wilson, Mark; Saat, Toomas; Špilev, Heli Estonian journal of earth sciences 2010 / p. 263-276 : ill
https://artiklid.elnet.ee/record=b2183599*est

Thelodont Oeselia mosaica gen. et sp. nov. from the Wenlock and Ludlow of the East Baltic

Märss, Tiiu Proceedings of the Estonian Academy of Sciences. Geology 2005 / 3, p. 181-190 : ill
https://artiklid.elnet.ee/record=b2348695*est

Thelodont phylogeny revisited, with inclusion of key scale-based taxa

Wilson, Mark V.H.; **Märss, Tiiu** Estonian journal of earth sciences 2009 / 4, p. 297-310 : ill https://artiklid.elnet.ee/record=b1944242*est

Thelodonts (Agnatha) from the basal beds of the Kuressaare Stage, Ludlow, Upper Silurian of Estonia

Märss, Tiiu Proceedings of the Estonian Academy of Sciences. Geology 2006 / 1, p. 43-66 : ill

Vertebrate remains and conodonts in the upper Silurian Hamra and Sundre formations of Gotland, Sweden

Bremer, Oskar; Jarochowska, Emilia; **Märss, Tiiu** GFF 2020 / p. 52-80 : ill <https://doi.org/10.1080/11035897.2019.1655790> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ühe väljasurnud kala lugu Saaremaalt

Märss, Tiiu Loodusesõber 2011 / 3, lk. 20-23 : ill