

Amyloid beta 1-42 oligomerization in vitro and characterization with SDS-PAGE, MALDI and ESI MS

Friedemann, Merlin; Tõugu, Vello; Kirsipuu, Tiina; Palumaa, Peep FEBS journal 2013 / p. 140-141

Amyloid-beta PET and CSF in an autopsy-confirmed cohort

Reimand, Juhan; Boon, Baayla D.C.; Collij, Lyduine E.; Teunissen, Charlotte E.; Rozemuller, Annemieke J.M.; Van Berckel, Bart N.M.; Scheltens, Philip; Ossenkoppele, Rik; Bouwman, Femke Annals of clinical and translational neurology 2020 / p. 2150-2160
<https://doi.org/10.1002/acn3.51195> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Association of amyloid-β CSF/PET discordance and tau load 5 years later

Reimand, Juhan; Collij, Lyduine E.; Scheltens, Philip Neurology 2020 / p. e2648-e2657 : ill
<https://doi.org/10.1212/WNL.00000000000010739> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7963352/> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biophysical studies of the amyloid beta-peptide : interactions with metal ions and small molecules

Wärmländer, Sebastian K.T.S.; Tiiman, Ann; Abelein, Axel Chembiochem : a European journal of chemical biology 2013 / p. 1692-1704 : ill <https://doi.org/10.1002/cbic.201300262> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterization of Uranyl (UO₂²⁺) ion binding to Amyloid Beta (Aβ) peptides : effects on Aβ structure and aggregation

Berntsson, Elina; Vosough, Faraz; Noormägi, Andra; Padari, Kärt; Asplund, Fanny; Gielnik, Maciej; Paul, Suman; Jarvet, Jüri; Tõugu, Vello; Palumaa, Peep ACS chemical neuroscience 2023 / p. 2618-2633 : ill <https://doi.org/10.1021/acscchemneuro.3c00130> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chemical modification of met and his residues of amyloid β peptide. Influence of copper ions and effect on fibrillization = Metioniini ja histidiini jääkide keemiline modifitseerimine amüloid-β peptiidis. Vaskioonide mõju ja efekt fibrillisatsioonile

Sardis, Merlin 2021 <https://doi.org/10.23658/taltech.19/2021> https://www.ester.ee/record=b5416905*est
<https://digikogu.taltech.ee/et/Item/acced69c-c690-4cb5-a972-48e1c4ae5c66>

Copper(II) ions and the Alzheimer's amyloid-β peptide : affinity and stoichiometry of binding

Tõugu, Vello; Friedemann, Merlin; Tiiman, Ann; Palumaa, Peep AIP conference proceedings 2014 / p. 109-111

Discordant amyloid-β PET and CSF biomarkers and its clinical consequences

Wilde, Arno de; Reimand, Juhan; Teunissen, Charlotte E.; Zwan, Marissa Alzheimer's Research & Therapy 2019 / art. 78, 13 p. : ill
<https://doi.org/10.1186/s13195-019-0532-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of agitation on the peptide fibrillization: Alzheimer's amyloid- b peptide 1-42 but not amylin and insulin fibrils can grow under quiescent conditions

Tiiman, Ann; Noormägi, Andra; Friedemann, Merlin; Krištal, Jekaterina; Palumaa, Peep; Tõugu, Vello Journal of peptide science 2013 / p. 386-391 : ill <https://doi.org/10.1002/psc.2513> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of methionine-35 oxidation on the aggregation of amyloid-β peptide

Friedemann, Merlin; Helk, Eneken; Tiiman, Ann; Zovo, Kairit; Palumaa, Peep; Tõugu, Vello Biochemistry and biophysics reports 2015 / p. 94-99 : ill <http://dx.doi.org/10.1016/j.bbrep.2015.07.017>

Fibrillization of the mixtures of amyloid beta 1-40 and 1-42

Krištal, Jekaterina; Friedemann, Merlin; Tõugu, Vello; Palumaa, Peep Neurodegenerative diseases 2015 / p. 364
<http://dx.doi.org/10.1159/000381736>

In situ fibrillizing amyloid-beta 1-42 induces neurite degeneration and apoptosis of differentiated SH-SY5Y cells

Krishtal, Jekaterina; Bragina, Olga; Metsla, Kristel; Palumaa, Peep; Tõugu, Vello PLoS ONE 2017 / art. e0186636, 16 p. : ill
<https://doi.org/10.1371/journal.pone.0186636> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In vitro fibrillization of Alzheimer's amyloid-β peptide (1-42)

Tiiman, Ann; Krištal, Jekaterina; Palumaa, Peep; Tõugu, Vello AIP advances 2015 / p. 092401-1 - 092401-12 : ill
<https://doi.org/10.1063/1.4921071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Insulin fibrillization at acidic and physiological pH values is controlled by different molecular mechanisms

Noormägi, Andra; Valmsen, Karin; Tõugu, Vello; Palumaa, Peep The protein journal 2015 / p. 398-403 : ill
<https://doi.org/10.1007/s10930-015-9634-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Interactions of Alzheimer's amyloid-β peptides with Zn(II) and Cu(II) ions = Alzheimeri amüloid-β peptiidide interaktsioonid Zn(II) ja Cu(II)ioonidega

Tiiman, Ann 2012 https://www.ester.ee/record=b2866174*est

Interactions of metal ions with peptides and proteins related to Alzheimer's disease = Metallioonide interaktsioonid

Alzheimeri tõvega seotud peptiidide ja valkudega

Berntsson, Elina 2025 https://www.ester.ee/record=b5720764*est <https://doi.org/10.23658/taltech.5/2025>
<https://digikogu.taltech.ee/et/Item/ccd57cc9-0670-4c08-b9b8-9bc359475486>

Interactions of zinc(II) and copper(II) to the full-length Alzheimer's amyloid-B peptide in vitro

Karafin, Ann; Palumaa, Peep; Tõugu, Vello FEBS journal 2008 / Suppl. 1, p. 222

Interactions of Zn(II) and Cu(II) ions with Alzheimer's amyloid-beta peptide. Metal ion binding, contribution to fibrillization and toxicity

Tõugu, Vello; Tiiman, Ann; Palumaa, Peep Metallomics 2011 / p. 250-261 : ill
<https://academic.oup.com/metallomics/article/3/3/250/6016214>

Interference of low-molecular substances with the thioflavin-T fluorescence assay of amyloid fibrils

Noormägi, Andra; Primar, Kateryna; Tõugu, Vello; Palumaa, Peep Journal of peptide science 2012 / p. 59-64 : ill
<https://pubmed.ncbi.nlm.nih.gov/22083646/>

Medical plants and nutraceuticals for amyloid-β fibrillation inhibition

Witter, Steffi; Witter, Raiker; Vilu, Raivo; Samoson, Ago Journal of Alzheimer's Disease Reports 2018 / p. 239-252 : ill
<http://doi.org/10.3233/ADR-180066>

Metals in ALS TDP-43 pathology

Koski, Lassi; Ronnevi, Cecilia; Berntsson, Elina; Wärmländer, Sebastian K.T.S.; Roos, Per M. International Journal of Molecular Sciences 2021 / Art. nr. 12193 <https://doi.org/10.3390/ijms222212193> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Monitoring of A-beta fibrillization using an improved fluorimetric method

Karafin, Ann; Palumaa, Peep; Tõugu, Vello New Trends in Alzheimer and Parkinson Disorders : ADPD 2009 2009 / p. 255-259
<https://www.etis.ee/Portal/Publications/Display/979eb21d-601b-4aa1-b941-121eff184407>

Monitoring of amyloid-beta fibrillization using an improved fluorimetric method [Electronic resource]

Karafin, Ann; Palumaa, Peep; Tõugu, Vello Neurodegenerative diseases 2009 / S1, Alzheimer's and Parkinson's Diseases : Advances, Concepts and New Challenges, p. 799 [CD-ROM] <https://www.etis.ee/Portal/Publications/Display/979eb21d-601b-4aa1-b941-121eff184407>

Oxidation of Methionine-35 in Alzheimer's amyloid-beta peptide and the aggregation of the oxidized peptide

Friedemann, Merlin; Helk, Eneken; Tiiman, Ann; Zovo, Kairit; Palumaa, Peep; Tõugu, Vello SpringerPlus 2015 / p. 20, P13
<http://dx.doi.org/10.1186/2193-1801-4-S1-P13>

PET and CSF amyloid-β status are differently predicted by patient features: Information from discordant cases

Reimand, Juhan; Wilde, Arno de; Teunissen, Charlotte E.; Zwan, Marissa Alzheimer's Research & Therapy 2019 / art. 100, 16 p. : ill <https://doi.org/10.1186/s13195-019-0561-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Preparation of fibril nuclei of beta-amyloid peptides in reverse micelles

Lin, Yen-Ling; Cheng, Yu-Sheng; Org, Mai-Liis; Oss, Andres; Samoson, Ago Chemical communications 2018 / p. 10459–10462 : ill <https://doi.org/10.1039/C8CC05882B> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Residue-specific binding of Ni(II) ions influences the structure and aggregation of amyloid beta (Aβ) peptides

Berntsson, Elina; Vosough, Faraz; Svantesson, Teodor; Pansieri, Jonathan; Iashchishyn, Igor A.; Ostojić, Lucija; Dong, Xiaolin; Paul, Suman; Jarvet, Jüri; Roos, Per M.; Gräslund, Astrid; Wärmländer, Sebastian K.T.S. Scientific Reports 2023 / art. 3341
<https://doi.org/10.1038/s41598-023-29901-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Role of metal ions in amyloidogenic properties of insulin and superoxide dismutase = Metallioonide roll insuliini ja superoksiidi dismutaasi amüloidogeensetes omadustes

Gavrilova, Julia 2022 <https://doi.org/10.23658/taltech.44/2022> <https://digikogu.taltech.ee/et/Item/693de590-2d9f-43d6-989e-ebac0544151d>
https://www.ester.ee/record=b5511706*est

Screening of Nutraceuticals and Plant Extracts for Inhibition of Amyloid-β Fibrillation

Witter, Steffi; Samoson, Ago; Vilu, Raivo; Witter, Raiker Journal of Alzheimer's disease 2020 / p. 1003-1012 : ill
<https://doi.org/10.3233/JAD-190758> https://www.etis.ee/File/DownloadPublic/bf09dd82-f7d2-45eb-8e71-aac7816291c9?name=JAD_73_2020_1003.pdf&type=application%2Fpdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Solid-state NMR backbone chemical shift assignments of α-synuclein amyloid fibrils at fast MAS regime

Toleikis, Zigmantas; Paluch, Piotr; Kuc, Ewelina; Petkus, Jana; Salskis, Darius; Org-Tago, Mai-Liis; Samoson, Ago; Smirnovas, Vytautas; Stanek, Jan; Lends, Alons Biomolecular NMR assignments 2024 / p. 181-186 <https://doi.org/10.1007/s12104-024-10186-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Zn(II) and Cu(II)-induced non-fibrillar aggregates of amyloid-[beta](1-42) peptide are transformed to amyloid fibrils both spontaneously and under the influence of metal chelators

Tõugu, Vello; Karafin, Ann; Zovo, Kairit; Chung, Roger S.; Howells, Claire; West, Adrian; **Palumaa, Peep** Journal of neurochemistry 2009 / 6, p. 1784-1795 : ill <https://pubmed.ncbi.nlm.nih.gov/19619132/>

The missing link in the amyloid cascade of Alzheimer's disease - metal ions

Tiiman, Ann; Palumaa, Peep; Tõugu, Vello Neurochemistry international 2013 / p. 367-378 : ill

<https://doi.org/10.1016/j.neuint.2013.01.023> <https://www.sciencedirect.com/science/article/pii/S0197018613000326> [Journal metrics at Scopus](#)
[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The role of initial oligomers in amyloid fibril formation by human stefin B

Taler-Verčič, Ajda; **Kirsipuu, Tiina; Friedemann, Merlin; Noormägi, Andra; Smirnova, Julia; Palumaa, Peep** International journal of molecular sciences 2013 / p. 18362-18384 : ill <https://doi.org/10.3390/ijms140918362> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

Toxicity of amyloid beta 1-40 and 1-42 on SH-SY5Y cell line

Krištal, Jekaterina; Bragina, Olga; Metsla, Kristel; Palumaa, Peep; Tõugu, Vello SpringerPlus 2015 / p. 21-22, P19
<http://dx.doi.org/10.1186/2193-1801-4-S1-P19>

Toxicity of amyloid-β peptides varies depending on differentiation route of SH-SY5Y cells

Krištal, Jekaterina; Metsla, Kristel; Bragina, Olga; Tõugu, Vello; Palumaa, Peep Journal of Alzheimer's disease 2019 / p. 879-887 <https://doi.org/10.3233/JAD-190705> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Why is amyloid-β PET requested after performing CSF biomarkers?

Reimand, Juhan; Groot, Colin; Teunissen, Charlotte E.; Windhorst, Albert D.; Boellaard, Ronald; Barkhof, Frederike; Nazarenko, Sergei; van der Flier, Wiesje M.; Scheltens, Philip; Ossenkoppele, Rik; Bouwman, Femke Journal of Alzheimer's disease 2020 / p. 559-569 <https://doi.org/10.3233/JAD-190836> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Visual assessment of [18F]flutemetamol PET images can detect early amyloid pathology and grade its extent

Collij, Lyduine E.; Salvado, Gemma; Shekari, Mahnaz; Lopes Alves, Isadora; **Reimand, Juhan;** Wink, Alle Meije; Zwan, Marissa; Ninerola-Baizan, Aida; Perissinotti, Andres; Scheltens, Philip European journal of nuclear medicine and molecular imaging 2021 / p. 2169-2182 <https://doi.org/10.1007/s00259-020-05174-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)