A structural-dynamical characterization of human Cox17
Banci, Lucia; Bertini, Ivano; Ciofi-Baffoni, Simone; Janicka, Anna; Martinelli, Manuele; Kozlowski, Henryk; **Palumaa, Peep** Journal of biological chemistry 2008 / 12, p. 7912-7920 : ill https://pubmed.ncbi.nlm.nih.gov/18093982/

Affinity gradients drive copper to cellular destinations
Banci, Lucia; Bertini, Ivano; Ciofi-Baffoni, Simone; Kozyreva, Tatiana; **Zovo, Kairit**; **Palumaa, Peep** Nature 2010 / p. 645-648 : ill https://doi.org/10.1038/nature09018

Affinity of zinc and copper ions for insulin monomers
Gavrilova, Julia; **Tõugu, Vello**; **Palumaa, Peep** Metallomics 2014 / p. 1296-1300 : ill https://doi.org/10.1039/c4mt00059e Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Amino acid profiling in human follicular fluid and plasma of IVF patients
Kirsipuu, Tiina; **Laks, Katrina**; **Velthut, Agne**; **Palumaa, Peep** FEBS journal 2013 / p. 282

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

Application of Differentiated SH-SY5Y Cells for Toxicological Studies of Alzheimer's Amyloid Beta Peptide = Diferentseeritud SH-SY5Y rakkude kasutamine Alzheimeri amüloid beeta peptiidi toksilisuse uurimiseks
Krištal, Jekaterina 2020 https://digikogu.taltech.ee/et/Item/8aef400a-e1ff-4803-a0da-fc2d97c8d451

Assessment of blood contamination in biological fluids using MALDI-TOF MS
Laks, Katrina; **Kirsipuu, Tiina**; **Dmitrijeva, Tuuli**; **Salumets, Andres**; **Palumaa, Peep** The protein journal 2016 / 171-176 https://doi.org/10.1007/s10930-016-9657-y Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Assessment of blood contamination in biological fluids using MALDI-TOF MS
Laks, Katrina; **Kirsipuu, Tiina**; **Dmitrijeva, Tuuli**; Salumets, Andres; **Palumaa, Peep** FEBS journal 2013 / p. 489

Binding of zinc(II) and copper(II) to the full-length Alzheimer's amyloid-[beeta] peptide
Tõugu, Vello; **Karafin, Ann**; **Palumaa, Peep** Journal of neurochemistry 2008 / p. 1249-1259 : ill https://pubmed.ncbi.nlm.nih.gov/18289347/

Bioanorgaaniline keemia - probleemid ja perspektiivid metallotioneiini näitel
Palumaa, Peep XXV Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 25th Estonian Chemistry Days : abstracts of scientific conference 1999 / lk. 126

Biokeemia : lühikursus : õpik kõrgkoolidele
Tymoczko, John L; Berg, Jeremy M; Stryer, Lubert 2016 https://www.ester.ee/record=b4562473*est

Biological redox switches
Palumaa, Peep Antioxidants & redox signaling 2009 / 5, p. 981-983 https://pubmed.ncbi.nlm.nih.gov/19186997/

Brain-specific metallothionein-3 has higher metal-binding capacity than ubiquitous metallothioneins and binds metals noncooperatively
Palumaa, Peep; Eriste, Elo; **Njunkova, Olga**; Pokras, Lesja; Jornvall, H.; Sillard, Rannar Biochemistry 2002 / 19, p.6158-6163 https://pubmed.ncbi.nlm.nih.gov/11994011/

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/acschemneuro.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

Comparison of confirmations of zinc- and cadmium-substituted metallothionein-3 by ESI MS
Palumaa, Peep; Eriste, Elo; **Njunkova, Olga**; Pokras, Lesja; Jörnvall, Hans; Sillard, Rannar The 50th ASMS Conference on Mass Spectrometry and Allied Topics 2002 / ? p

Comprehensive elucidation of amino acid profile in human follicular fluid and plasma of in vitro fertilization patients
Kirsipuu, Tiina; **Laks, Katrina**; **Velthut-Meikas, Agne**; Levkov, Lev; Salumets, Andres; **Palumaa, Peep** Gynecological endocrinology 2015 / p. 9-17 : ill https://doi.org/10.3109/09513590.2015.1085186 Journal metrics at Scopus Article at Scopus Journal

metrics at WOS Article at WOS

Coordination of zinc ions to the key proteins of neurodegenerative diseases: A[beeta], APP, [alfa]-synuclein and PrP
Tõugu, Vello; **Palumaa, Peep** Coordination chemistry reviews 2012 / p. 2219-2224 : ill
https://www.researchgate.net/publication/236131300_Coordination_of_zinc_ions_to_the_key_proteins_of_neurodegenerative_diseases_Ab_APP_a-synuclein_and_PrP

Copper chaperones. The concept of conformational control in the metabolism of copper
Palumaa, Peep FEBS letters 2013 / p. 1902-1910 : ill Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Copper metabolism in health and disease : focus on copper in adipogenesis and α-lipoic acid in Wilson disease = Vase ainevahetus tervise ja haiguse tingimustes : fookus vasele adipogeneesil ja α-lipoehappele Wilsoni tõve korral
Kabin, Ekaterina 2023 https://doi.org/10.23658/taltech.69/2023 https://digikogu.taltech.ee/et/Item/6b47422f-75fd-4e9a-b16c-8edd3c3e201a https://www.ester.ee/record=b5645433*est

Copper(I)-binding properties of de-coppering drugs for the treatment of Wilson disease. α-Lipoic acid as a potential anti-copper agent
Smirnova, Julia; **Kabin, Ekaterina**; **Järving, Ivar**; **Bragina, Olga**; **Tõugu, Vello**; Plitz, Thomas; **Palumaa, Peep** Scientific reports 2018 / art. 1463, 9 p. : ill https://doi.org/10.1038/s41598-018-19873-2 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Copper(I)-binding properties of de-coppering drugs for treatment of Wilson disease
Smirnova, Julia; **Kabin, Ekaterina**; **Järving, Ivar**; **Tõugu, Vello**; Plitz, T.; **Palumaa, Peep** The FEBS journal 2017 / p. 337 https://doi.org/10.1111/febs.14174

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

Copper(II)-binding equilibria in human blood
Kirsipuu, Tiina; Zadorožnaja, Anna; **Smirnova, Julia**; **Friedemann, Merlin**; Plitz, Thomas; **Tõugu, Vello**; **Palumaa, Peep** Scientific reports 2020 / art. 5686, 10 p. : ill https://doi.org/10.1038/s41598-020-62560-4 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Cox17, a copper chaperone for cytochrome c oxidase : expression, purification and formation of mixed disulphide adducts with thiol reagents
Voronova, Anastassia; **Kazantseva, Jekaterina**; **Tuuling, Marina**; **Sokolova, Niina**; **Sillard, Rannar**; **Palumaa, Peep** Protein expression and purification 2007 / 1, p. 138-144 : ill https://www.sciencedirect.com/science/article/pii/S1046592806003901 https://www.sciencedirect.com/science/article/pii/S1046592806003901

Cu(II) partially protects three histidine residues and the N-terminus of amyloid-β peptide from diethyl pyrocarbonate (DEPC) modification
Friedemann, Merlin; **Tõugu, Vello**; **Palumaa, Peep** FEBS Open Bio 2020 / p. 1072-1081 https://doi.org/10.1002/2211-5463.12857 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Determination of metal-protein complexes and posttranslational modifications by LC-(ESI-TOF)-MS
Sillard, Rannar; Eriste, Elo; **Njunkova, Olga**; Pokras, Lesja; Jörnvall, Hans; Wadensten, Henrik; Renlund, Staffan; **Palumaa, Peep** Proceedings of the 49th ASMS Conference on Mass Spectrometry and Allied Topics : Chicago, Illinois, May 27-31, 2001 2001 / p. 11-12 : ill

Direct competition of ATCUN peptides with human serum albumin for copper(II) ions determined by LC-ICP MS
Noormägi, Andra; **Golubeva, Tatjana**; **Berntsson, Elina**; Wärmländer, Sebastian K.T.S.; **Tõugu, Vello**; **Palumaa, Peep** ACS omega 2023 / p. 33912−33919 https://doi.org/10.1021/acsomega.3c04649 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Eessõna eestikeelsele väljaandele
Palumaa, Peep Biokeemia : lühikursus : õpik kõrgkoolidele 2016 / 1 p https://www.ester.ee/record=b4562473*est

Eesti biokeemik hoiatab: koroonaviirus püsib nakkusohtlikuna õhus mitu tundi, pindadel isegi mitu päeva!
Palumaa, Peep Õhtuleht 2020 / Lk. 6 https://tervis.ohtuleht.ee/995397/eesti-biokeemik-hoiatab-koroonaviirus-pusib-nakkusohtlikuna-ohus-mitu-tundi-pindadel-isegi-mitu-paeva https://www.ester.ee/record=b1408161*est

Eesti biokeemik hoiatab: koroonaviirus võib olla inimest nakatavate viiruste seas absoluutne maailmameister! [Võrguteavik]
Palumaa, Peep Õhtuleht 2020 Eesti biokeemik hoiatab: koroonaviirus võib olla inimest nakatavate viiruste seas absoluutne maailmameister!

Eesti biokeemik hoiatab: ohtlik koroonaviirus suudab nõrga tervisega inimesele tekitada korvamatut kahju
Palumaa, Peep Õhtuleht.ee 2020 https://tervis.ohtuleht.ee/996404/eesti-biokeemik-hoiatab-ohtlik-koroonaviirus-suudab-norga-tervisega-inimesele-tekitada-korvamatut-kahju

Eesti biokeemik: iga samm võib olla saatuslik, pandeemia edukas läbimine sõltub tervisekäitumisest
Palumaa, Peep tervis.ohtuleht.ee 2020 / fot https://tervis.ohtuleht.ee/997553/eesti-biokeemik-iga-samm-voib-olla-saatuslik-pandeemia-edukas-labimine-soltub-tervisekaitumisest

Eesti biokeemik: peame end kaitsma surmava viirusedoosi eest kõigi võimalike vahenditega!
Palumaa, Peep Õhtuleht 2020 / Lk. 4-5 : portr https://www.ester.ee/record=b1408161*est

Eesti teadlased aitavad EAS-i raha abil võidelda Alzheimeri tõve vastu : [Peep Palumaa kommentaariga uuringutest ravimi tootmiseks]
Feldmanis, Andris; **Palumaa, Peep** Eesti Päevaleht 2005 / 6. aug., lk. 4 : fot

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

Effect of Zn(II) and Cu(II) ions on aggregation and fibrillation of amyloid-beta(1-42) peptide
Palumaa, Peep; **Karafin, Ann**; **Zovo, Kairit**; Chung, Roger S.; Howells, Claire; West, Adrian K.; **Tõugu, Vello** Sinapsa Neuroscience Conference '09 : Ljubljana, 26-29 September 2009 : abstract book 2009 / p. 34

Effects of Zn2+ ions and environmental conditions on the fibrillization of insulin = Zn2+ ioonide ja keskkonnatingimuste mõju insuliini fibrillisatsioonile
Noormägi, Andra 2018 https://digi.lib.ttu.ee/i/?10378 https://www.ester.ee/record=b5148492*est

Elu alus. Energia ja energeetika
Palumaa, Peep Horisont 2012 / lk. 10-19 : ill https://artiklid.elnet.ee/record=b2467453*est

Erratum to: Assessment of Blood Contamination in Biological Fluids Using MALDI-TOF MS (Protein J, 10.1007/s10930-016-9657-y)
Laks, Katrina; **Kirsipuu, Tiina**; **Dmitrijeva, Tuuli**; Salumets, Andres; **Palumaa, Peep** Protein Journal 2016 / p. 177 - 178 https://doi.org/10.1007/s10930-016-9660-3 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

ESI TOF MS in protein structure analysis
Palumaa, Peep; Eriste, Elo; **Njunkova, Olga**; Pokras, Lesja; Jörnvall, Hans; Sillard, Rannar The 1st International Symposium on Short-chain Dehydrogenases/reductases in Cancer and other Diseases 2002 / ? p

Evaluation of Zn2+- and Cu2+-binding affinities of native Cu,Zn-SOD1 and its G93A mutant by LC-ICP MS
Smirnova, Julia; **Gavrilova, Julia**; **Noormägi, Andra**; **Valmsen, Karin**; **Pupart, Hegne**; Luo, Jinghui; **Tõugu, Vello**; **Palumaa, Peep** Molecules 2022 / art. 3160 https://doi.org/10.3390/molecules27103160 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Evidence for non-isostructural replacement of Zn(2+) with Cd(2+) in the beta-domain of brain-specific metallothionein-3
Palumaa, Peep; **Njunkova, Olga**; Pokras, Lesja; Eriste, Elo; Jornvall, H.; Sillard, Rannar FEBS letters 2002 / 1/3, p. 76-80 : ill https://www.sciencedirect.com/science/article/pii/S0014579302031691

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

Formation of [4Fe-4S] clusters in the mitochondrial iron−sulfur cluster assembly machinery
Brancaccio, Diego; **Zovo, Kairit**; **Palumaa, Peep** Journal of the American Chemical Society 2014 / p. 16240-16250 : ill https://doi.org/10.1021/ja507822j Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Functional characterization of the cellular copper proteome = Rakulise vase proteoomi funtsionaalne iseloomustamine
Zovo, Kairit 2011

Genoomika, proteoomika... ehk kuhu liigub bioloogiateadus?

Palumaa, Peep Tallinna Tehnikaülikooli aastaraamat 2003 2004 / lk. 18-22

A hint for the function of human Sco1 from different structures
Banci, Lucia; Bertini, Ivano; **Palumaa, Peep** Proceedings of the National Academy of Sciences of the United States of America 2006 / 23, p. 8595-8600 https://pubmed.ncbi.nlm.nih.gov/16735468/
https://www.academia.edu/14865179/A_hint_for_the_function_of_human_Sco1_from_different_structures

Human Sco1 functional studies and pathological implications of P174L mutant
Banci, Lucia; Bertini, Ivano; **Palumaa, Peep**; **Sillard, Rannar** Proceedings of the National Academy of Sciences of the United States of America 2007 / 1, p. 15-20
https://www.researchgate.net/publication/6617178_Human_Sco1_functional_studies_and_pathological_implications_of_the_P174L_mutant

Human superoxide dismutase 1 (hSOD1) maturation through interaction with human copper chaperone for SOD1 (hCCS)
Banci, Lucia; Bertini, Ivano; Cantini, Francesca; Kozyreva, Tatiana; Massagni, Chiara; **Palumaa, Peep**; Rubino, Jeffrey; **Zovo, Kairit** Proceedings of the National Academy of Sciences 2012 / p. 13555-13560
https://www.researchgate.net/publication/230624025_Human_superoxide_dismutase_1_hSOD1_maturation_through_interaction_with_human_copper_chaperone_for_SOD1_hCCS

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

Interaction between oligomers of stefin B and amyloid-[beeta] in vitro and in cells
Škerget, Katja; Taler-Verčič, Ajda; **Kumm, Tiina**; **Palumaa, Peep** Journal of biological chemistry 2010 / 5, p. 3201-3210
https://pubmed.ncbi.nlm.nih.gov/19955183/

Interactions of Alzheimer's amyloid-ß peptides with Zn(II) and Cu(II) ions = Alzheimeri amüloid-ß 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/

Investigation of properties and reaction mechanisms of redox-active proteins by ESI MS = Redoks-aktiivsete valkude omaduste ja reaktsioonimehhanismide uurimine ESI-MS abil
Smirnova, Julia 2013 https://www.ester.ee/record=b2965120*est

Kuida elab Eesti teadus?
Palumaa, Peep Sirp 2020 / lk. 36-37 : ill https://www.sirp.ee/s1-artiklid/c21-teadus/kuidas-elab-eesti-teadus/

Label-free high-throughput screening assay for inhibitors of Alzheimer's amyloid-[beeta] peptide aggregation based on MALDI MS
Zovo, Kairit; **Helk, Eneken**; **Karafin, Ann**; **Tõugu, Vello**; **Palumaa, Peep** Analytical chemistry 2010 / p. 8558-8565
https://www.researchgate.net/publication/46392320_Label-Free_High-Throughput_Screening_Assay_for_Inhibitors_of_Alzheimer's_Amyloid-beta_Peptide_Aggregation_Based_on_MALDI_MS

Large-scale HPCL purification of Calbindin D9k from porcine intestine
Bonetto, V.; Kangur, Liina; **Palumaa, Peep**; Mutt, V.; Jörnvall, Hans; Sillard, Rannar Protein expression and purification 1999 / 3, p. 387-391 https://pubmed.ncbi.nlm.nih.gov/10600456/

Lipoic acid ameliorates consequences of copper overload by upregulating selenoproteins and decreasing redox misbalance : poster presentations
Kabin, Ekaterina; Dong, Yixuan; Summers, Kelly; Yang, Haojun; Dev, Som; Wang, Yu; Devenney, Benjamin; Roy, Shubhrajit; **Palumaa, Peep**; Lutsenko, Svetlana Acta physiologica 2023 / art. e14044 https://doi.org/10.1111/apha.14044

Lisad, sõnastik, ülesannete vastused, indeks
Biokeemia : lühikursus : õpik kõrgkoolidele 2016 / [87] lk. : ill

Mammalian copper chaperone Cox17 exist in two metalloforms linked by oxydative switch
Palumaa, Peep; **Voronova, Anastassia**; **Kangur, Liina**; **Sillard, Rannar**; Meyer-Klauke, W.; Meyer, Thomas; Rompel, Anette The FEBS journal 2005 / Supplement 1, p. 386-387

Maximum entropy reconstruction of joint [phi], [psi]-distribution with a coil-library prior : the backbone conformation of the peptide hormone motilin in aqueous solution from [phi] and [psi]-dependent J-couplings
Massad, Tariq; Jarvet, Jüri; Tanner, Risto; **Tomson, Katrin**; **Smirnova, Julia**; **Palumaa, Peep**; Sugai, Mariko; Kohno, Toshiyuki; **Vanatalu, Kalju**; Damberg, Peter Journal of biomolecular NMR 2007 / 2, p. 107-123
https://www.researchgate.net/publication/6369716_Maximum_entropy_reconstruction_of_joint_phps-distribution_with_a_coil-library_prior_The_backbone_conformation_of_the_peptide_hormone_motilin_in_aqueous_solution_from_ph_and_ps-dependent_J-couplings

Mercury and Alzheimer's disease: Hg(II) ions display specific binding to the amyloid-β peptide and hinder its fibrillization
Wallin, Cecilia; **Friedemann, Merlin**; Sholts, Sabrina B.; **Noormägi, Andra**; Svantesson, Teodor; Järvet, Jüri; Roos, Per M.; **Palumaa, Peep**; Gräslund, Astrid; Wärmländer, Sebastian K.T.S. Biomolecules 2020 / art. 44, 23 p. : ill
https://doi.org/10.3390/biom10010044 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Metabolism of copper and possibilities for its regulation
Palumaa, Peep Proceedings of the Estonian Academy of Sciences 2023 / p. 382-392 https://doi.org/10.3176/proc.2023.4.03 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Metal binding of metallothionein-3 versus metallothionein-2 : lower affinity and higher plasticity
Palumaa, Peep; **Tammiste, Indrek**; Kruusel, Keiu; **Kangur, Liina**; Jörnvall, Hans; **Sillard, Rannar** Biochimica et biophysica acta : proteins and proteomics 2005 / 2, p. 205-211 : ill https://www.sciencedirect.com/science/article/pii/S1570963904003164

Metal binding to brain-specific metallothionein-3 studied by electrospray ionization mass spectrometry
Palumaa, Peep; Eriste, Elo; Kruusel, Keiu; **Kangur, Liina**; Jörnvall, Hans; Sillard, Rannar Cellular and molecular biology 2003 / 5, p. 763-768 https://pubmed.ncbi.nlm.nih.gov/14528913/

Metal-binding mechanism of Cox17, a copper chaperone for cytochrome c oxidase
Palumaa, Peep; **Kangur, Liina**; **Voronova, Anastassia**; **Sillard, Rannar** Biochemical journal 2004 / 1, p. 307-314
https://pubmed.ncbi.nlm.nih.gov/15142040/

Metal-binding properties of unique Cys-deficient mammalian metallothionein - sheep MT-3
Smirnova, Julia; **Zovo, Kairit**; Chung, Roger S.; West, A.K.; **Palumaa, Peep** FEBS journal 2008 / Suppl. 1, p. 230

Metallothionein 2A affects the cell respiration by suppressing the expression of mitochondrial protein cytochrome c oxidase subunit II
Bragina, Olga; **Gurjanova, Karina**; **Krištal, Jekaterina**; **Kulp, Maria**; **Karro, Niina**; **Tõugu, Vello**; **Palumaa, Peep** Journal of bioenergetics and biomembranes 2015 / p. 209-216 : ill https://doi.org/10.1007/s10863-015-9609-9 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Metallothionein induces a regenerative reactive astrocyte phenotype via JAK/STAT and RhoA signalling pathways
Leung, Y.; Pankhurst, M.; **Palumaa, Peep**; **Sillard, Rannar** Experimental neurology 2010 / 1, p. 98-106 : ill
https://www.sciencedirect.com/science/article/pii/S0014488609004233

Metallotioneiin-ligand seostumiskonstantide määramine
Kangur, Liina; Toomik, Peeter; **Palumaa, Peep** XXV Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 25th Estonian Chemistry Days : abstracts of scientific conference 1999 / lk. 45-46

Mitochondrial copper(I) transfer from Cox17 to Sco1 is coupled to electron transfer
Banci, Lucia; Bertini, Ivano; Ciofi-Baffoni, Simone; Hadjiloi, Theodoros; Martinelli, Manuele; **Palumaa, Peep** PNAS 2008 / 19, p. 6803-6808 : ill https://pubmed.ncbi.nlm.nih.gov/18458339/

Modulation of redox switches of copper chaperone Cox17 by Xn(II) ions determined by new ESI MS-based approach
Zovo, Kairit; **Palumaa, Peep** Antioxidants & redox signaling 2009 / 5, p. 985-995 https://pubmed.ncbi.nlm.nih.gov/19018666/

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

Nähtamatud käskjalad - hormoonid : [selgitab Peep Palumaa]
Palumaa, Peep; Laanpere, Eha Kodutohter 2003 / 2, lk. 54-56 https://artiklid.elnet.ee/record=b2037360*est

Oligomerization and conformation of amyloidogenic protein human stefin B. Insight from ESI MS
Kumm, Tiina; Taler-Verecic, Ajda; Skerget, Katja; Friedemann, Merlin; Zerovnik, Eva; **Palumaa, Peep** FEBS journal 2010 / Suppl. 1, lk. 258

Organization and assembly of metal-thiolate clusters in epithelium-specific metallothionein-4
Meloni, Gabriele; **Zovo, Kairit**; **Kazantseva, Jekaterina**; **Palumaa, Peep**; Vašak, Milan Journal of biological chemistry 2006 / 21, p. 14588-14595 : ill https://www.researchgate.net/publication/7221929_Organization_and_Assembly_of_Metal-Thiolate_Clusters_in_Epithelium-specific_Metallothionein-4

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

Oxidative switches in functioning of mammalian copper chaperone Cox17
Voronova, Anastassia; Meyer-Klaucke, Wolfram; Meyer, Thomas; Rompel, Anette; Krebs, Bernt; **Kazantseva, Jekaterina**; **Sillard, Rannar**; **Palumaa, Peep** Biochemical journal 2007 / p. 139-148 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2049083/

Peep Palumaa : PRG744 ehk ühe granditaotluse sekeldused ETAg-i hindamisnõukogus [Võrguväljaanne]
Palumaa, Peep novaator.err.ee 2020 / fot Peep Palumaa: PRG744 ehk ühe granditaotluse sekeldused ETAg-i hindamisnõukogus

Porfüriinid ja bilirubiin pärsivad Alzheimeri amüloid beta peptiidi agregatsiooni
Tšekulajeva, Ludmilla; **Ševtšuk, Igor**; **Tšekulajev, Vladimir**; **Palumaa, Peep** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 165-166 https://www.ester.ee/record=b2314480*est

Purification of recombinant human apometallothionein-3 and reconstitution with zinc
Eriste, Elo; Kruusel, Keiu; **Palumaa, Peep**; Jörnvall, Hans; Sillard, Rannar Protein expression and purification 2003 / 1, p. 161-165 : ill https://pubmed.ncbi.nlm.nih.gov/12963354/

Quantitative electrospray ionization mass spectrometry of zinc finger oxidation : the reaction of XPA zinc finger with H2O2
Smirnova, Julia; Zhukova, Liliya; **Palumaa, Peep** Analytical biochemistry 2007 / 2, p. 226-231 : ill

Rakulise vase proteoomi süsteemibioloogia
Palumaa, Peep; **Zovo, Kairit** XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 73 : ill

Ravimatut Wilsoni tõbe aitab kontrolli all hoida looduslik antioksüdant
,
Эстонские ученые обнаружили лечебные свойства у популярного антиоксиданта
Palumaa, Peep novaator.err.ee 2023 Ravimatut Wilsoni tõbe aitab kontrolli all hoida looduslik antioksüdant Эстонские ученые обнаружили лечебные свойства у популярного антиоксиданта

Reaction of the XPA zinc finger with S-nitrosoglutathione
Smirnova, Julia; Zhukova, Liliya; Witkiewicz-Kucharcyk, Aleksandra; Kopera, Edyta; Oledzki, Jacek; Wyslouch-Cieszynska, Aleksandra; **Palumaa, Peep**; Hartwig, Andrea; Bal, Wojciech Chemical research in toxicology 2008 / p. 386-392 : ill https://pubs.acs.org/doi/10.1021/tx700297f

Reactivity of Cd7-metallothionein with Cu(II) ions : evidence for a cooperative formation of Cd3, Cu(I)5-metallothionein
Vaher, Maret; Romero-Isart, Nuria; Vašak, Milan; **Palumaa, Peep** Journal of inorganic biochemistry 2001 / p. 1-6 : ill https://pubmed.ncbi.nlm.nih.gov/11192694/

Redox and metal ion binding properties of human insulin-like growth factor 1 determined by electrospray ionization mass

spectrometry
Smirnova, Julia; **Muhhina, Jekaterina**; **Tõugu, Vello**; **Palumaa, Peep** Biochemistry 2012 / p. 5851-5859 : ill
https://pubs.acs.org/doi/10.1021/bi300494s

Redox properties of Cys2His2 and Cys4 zinc fingers determined by electrospray ionization mass spectrometry
Smirnova, Julia; **Kabin, Ekaterina**; **Tõugu, Vello**; **Palumaa, Peep** FEBS Open Bio 2018 / p. 923 - 931 https://doi.org/10.1002/2211-5463.12422 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Redox-active Cu(II)–Aβ causes substantial changes in axonal integrity in cultured cortical neurons in an oxidative-stress dependent manner
Howells, Claire; **Saar, Katrina**; Eaton, Emma; Ray, Shannon; **Palumaa, Peep** Experimental neurology 2012 / p. 499-506 : ill
https://www.sciencedirect.com/science/article/pii/S0014488612002373

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

Stability and conformation of polycopper-thiolate clusters studied by density functional approach
Ahte, Priit; **Palumaa, Peep**; **Tamm, Toomas** Journal of physical chemistry A 2009 / 32, p. 9157-9164 : ill
https://pubs.acs.org/doi/10.1021/jp8114644

Structural and functional insight into trafficking of copper in the cell
Palumaa, Peep; Banci, Lucia; Bertini, Ivano; Ciofi-Baffoni, Simone; **Zovo, Kairit** Journal of biological inorganic chemistry 2014 / p. S851

Structure and functioning of copper chaperones
Palumaa, Peep FEBS journal 2013 / p. 151

Šveitsi Tudengite Teaduspreemia 2002 välja antud : [TTÜ geenitehnoloogia magistrandile Olga Njunkovale : lühisõnum]
Palumaa, Peep Mente et Manu 2002 / lk. 2 https://www.ester.ee/record=b1242496*est

Šveitsi Tudengite Teaduspreemia võitja selgunud : [TTÜ infotehnika teaduskonna doktorant Jaan Raik : lühisõnum]
Palumaa, Peep Mente et Manu 2001 / lk. 2 https://www.ester.ee/record=b1242496*est

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/

Zn(II) ions co-secreted with insulin suppress inherent amyloidogenic properties of monomeric insulin
Noormägi, Andra; **Gavrilova, Julia**; **Smirnova, Julia**; **Tõugu, Vello**; **Palumaa, Peep** Biochemical journal 2010 / p. 511-518
https://pubmed.ncbi.nlm.nih.gov/20632994/

Zn(II) ions inhibit fibrillization of monomeric insulin
Noormägi, Andra; **Gavrilova, Julia**; **Smirnova, Julia**; **Tõugu, Vello**; **Palumaa, Peep** FEBS journal 2010 / Suppl. 1, p. 256

"Talendid koju" Eesti moodi : [tippteadlaste/professorite töö tasustamisest]
Palumaa, Peep Õpetajate Leht 2010 / lk. 7 https://artiklid.elnet.ee/record=b2179365*est

Teaduspreemia keemia ja molekulaarbioloogia alal uurimuste tsükli "Tsingi ja vase rakulised funktsioonid ja roll Alzheimeri tõve patoloogias" eest : Peep Palumaa
Palumaa, Peep Eesti Vabariigi teaduspreemiad 2011 2011 / lk. 58-79 : portr., ill

The effects of physiologically important nonmetallic ligands in the reactivity of metallothionein towards 5,5'-dithiobis(2-nitrobenzoic acid) : a new method for the determination of ligand interactions with metallothionein
Kangur, Liina; **Palumaa, Peep** European journal of biochemistry 2001 / p. 4979-4984 : ill https://pubmed.ncbi.nlm.nih.gov/11559367/

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 native copper- and zinc- binding protein metallothionein blocks copper-mediated A[beeta] aggregation and toxicity in rat cortical neurons
Chung, Roger S.; Howells, Claire; **Zovo, Kairit**; **Palumaa, Peep**; **Sillard, Rannar** PLoS ONE 2010 / 8, p. e12030 [11 p.]

https://pmc.ncbi.nlm.nih.gov/articles/PMC2920313/

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

Tsingi ja vase rakulised funktsioonid ja roll Alzheimeri tõve patoloogias : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsüklile
Palumaa, Peep Tallinna Tehnikaülikooli aastaraamat 2011 2012 / lk. 193-214 : ill

TTÜ geenitehnoloogid otsivad ravimit Alzheimeri tõvele
Palumaa, Peep; Helme, Kristi Mente et Manu 2013 / lk. 14-16 : fot

Uudne TTÜ teadlaste analüüs hõlbustab Alzheimeri tõve diagnoosimist [Võrguväljaanne]
Palumaa, Peep novaator.err.ee 2020 / fot Uudne TTÜ teadlaste analüüs hõlbustab Alzheimeri tõve diagnoosimist

Uudsed suunad Alzheimeri tõve ravimiarenduses
Palumaa, Peep Tallinna Tehnikaülikooli aastaraamat 2007 2008 / lk. 113-116

Vaskioonide roll Alzheimeri amüloidse beeta peptiide [p. o. peptiidi] agregatsioonil ja toksilisusel
Tõugu, Vello; **Tiiman, Ann**; **Palumaa, Peep** XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 102

α-lipoic acid ameliorates consequences of copper overload by up-regulating selenoproteins and decreasing redox misbalance
Kabin, Ekaterina; Dong, Yixuan; Roy, Shubhrajit; **Smirnova, Julia**; Smith, Joshua W.; Ralle, Martina; Summers, Kelly; Yang, Haojun; Dev, Som; Wang, Yu; Devenney, Benjamin; Cole, Robert N.; **Palumaa, Peep**; Lutsenko, Svetlana Proceedings of the National Academy of Sciences 2023 / art. e2305961120 https://doi.org/10.1073/pnas.2305961120 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

α-Lipoic acid has the potential to normalize copper metabolism, which is dysregulated in Alzheimer's disease
Metsla, Kristel; **Kirss, Sigrid**; **Laks, Katrina**; **Sildnik, Gertrud**; **Palgi, Mari**; Palumaa, Teele; **Tõugu, Vello**; **Palumaa, Peep** Journal of Alzheimer's Disease 2022 / p. 715-728 https://doi.org/10.3233/JAD-215026 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

α-Lipoic acid: a potential regulator of copper metabolism in Alzheimer's disease
Kirss, Sigrid; Reinapu, Anette; **Kabin, Ekaterina**; **Smirnova, Julia**; **Tõugu, Vello**; **Palumaa, Peep** Frontiers in Molecular Biosciences 2024 / art. 1451536 https://doi.org/10.3389/fmolb.2024.1451536 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS