

## **Activation of 11R-lipoxygenase is fully Ca<sup>2+</sup>-dependent and controlled by the phospholipid composition of the target membrane**

Järving, Reet; Lõokene, Aivar; Kurg, Reet; Siimon, Liina; Järving, Ivar; Samel, Nigulas Biochemistry 2012 / p. 3310-3320 : ill  
<https://pubs.acs.org/doi/10.1021/bi201690z>

## **Alleenoksiidi süntaas-lipoksügenaas liitvalgu rada on üldlevinud korallides**

Löhelaid, Helike; Järving, Reet; Järving, Ivar; Samel, Nigulas XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 84-85

## **Allene oxide synthase-lipoxygenase pathway in coral stress response = Alleenoksiidi süntaas-lipoksügenaasi rada korallide stressivastuses**

Löhelaid, Helike 2015 <https://digi.lib.ttu.ee/i/?1870> [https://www.esther.ee/record=b4446782\\*est](https://www.esther.ee/record=b4446782*est)

## **Arachidonic acid metabolism in marine invertebrates**

Löhelaid, Helike; Teder, Tarvi; Samel, Nigulas Invertebrate survival journal - ISJ 2018 / p. 110  
<http://www.isj.unimo.it/index.php/ISJ/article/view/82>

## **Biokeemilistest alusuuringutest litsentsimüügini : litsentsileping tehnoloogilise teabe siirdeks TTÜ ja USA biotehnoloogiafirma vahel allakirjutamisel**

Samel, Nigulas Äripäev 2003 / 23. dets., Kliendileht Tehnoloogia, lk. 2 : fot., portr

## **Bioorgaaniline keemia Tallinna Tehnikaülikooli keemiainstituudis**

Samel, Nigulas Teadusmõte Eestis : täppisteadused : [artiklikogumik] 2006 / lk. 193-197 : ill [https://www.esther.ee/record=b2230239\\*est](https://www.esther.ee/record=b2230239*est)

## **Biosynthesis of prostaglandins in invertebrates : National Prize 2002**

Samel, Nigulas Annual review : 2001 / Institute of Chemistry at Tallinn Technical University 2002 / p. [7-8]

## **Calorimetric approach for comparison of Angiopoietin-like protein 4 with other pancreatic lipase inhibitors**

Villo, Ly; Risti, Robert; Reimund, Mart; Kukk, Kaia; Samel, Nigulas; Lõokene, Aivar Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids 2020 / art. 158553, 12 p. : ill <https://doi.org/10.1016/j.bbalip.2019.158553> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

## **Calorimetry as a tool for mechanistic studies of lipolytic enzymes under in vivo like conditions = Kalorimeetria rakendamine lipolüütliste ensüümide mehhanismide uurimiseks**

Risti, Robert 2023 <https://doi.org/10.23658/taltech.19/2023> <https://digikogu.taltech.ee/et/item/40f4a8ba-7a1a-4612-a455-00b1cc0d62d7>  
[https://www.esther.ee/record=b5560479\\*est](https://www.esther.ee/record=b5560479*est)

## **A catalase-related hemoprotein in coral is specialized for synthesis of short-chain aldehydes : discovery of P450-type hydroperoxide lyase activity in a catalase**

Teder, Tarvi; Löhelaid, Helike; Boeglin, William E.; Calcutt, Wade M.; Brash, Alan R.; Samel, Nigulas Journal of biological chemistry 2015 / p. 19823-19832 : ill <https://doi.org/10.1074/jbc.M115.660282> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

## **Characterization of two cyclooxygenase genes in the coral *Gersemia fruticosa***

Järving, Reet; Järving, Ivar; Kurg, Reet; Varvas, Külliki; Valmsen, Karin; Brash, Alan R.; Samel, Nigulas 2nd Joint Symposium on "Plant Oxylipins" : June 12-14, 2003, Göttingen, Germany (invited lecture) 2003 / ? p

## **Chimeric allene oxide synthase- lipoxygenase fusion proteins**

Löhelaid, Helike; Samel, Nigulas 14th International PhD Symposium: "Overcoming Chaos- Networks in Life Sciences" 24-28.10.2012, Heidelberg, Germany 2012

## **Chimeric allene oxide synthase-lipoxygenase fusion proteins**

Löhelaid, Helike; Järving, Reet; Järving, Ivar; Samel, Nigulas FEBS Journal 2010 / S1, p. 251

## **Cloning, expression and characterization of cyclooxygenase gene from amphipods**

Hansen, K.; Kurg, Reet; Varvas, Külliki; Valmsen, Karin; Järving, Ivar; Järving, Reet; Samel, Nigulas FEBS journal 2008 / Suppl. 1, p. 403

## **Comparison of antiaggregatory effects of PGI<sub>2</sub>, PGI<sub>3</sub> and iloprost on human and rabbit platelets**

Kobzar, Gennadi; Mardla, Vilja; Järving, Ivar; Samel, Nigulas Cellular physiology and biochemistry 2001 / 5, p. 279-284  
<https://pubmed.ncbi.nlm.nih.gov/11684817/>

## **Comparison of platelet aggregation in venous and arterial blood**

Kobzar, Gennadi; Mardla, Vilja; Rätsep, Indrek; Samel, Nigulas Journal of thrombosis and haemostasis 2003 / Supplement 1, abstracts from XIX International ISTH Congress : July 12-18, 2003, p. CD077

**A conserved π-cation and an electrostatic bridge are essential for 11R-lipoxygenase catalysis and structural stability**  
**Eek, Priit; Piht, Mari-Ann; Rätsep, Margus; Freiberg, Arvi; Järving, Ivar; Samel, Nigulas** Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids 2015 / p. 1377-1382 : ill <https://doi.org/10.1016/j.bbalip.2015.07.007> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Control of prostaglandin stereochemistry at the 15-carbon by cyclooxygenases-1 and -2. A critical role for serine 530 and valine 349**

Schneider, Claus; Boeglin, William E.; Prusakiewicz, J.J.; Rowlinson, S.W.; Marnett, L.J.; **Samel, Nigulas**; Brash, Alan R. Journal of biological chemistry 2002 / p. 478-485

**COX inhibiitorite nimesuliidi, paratsetamooli ja metamisooli toime aspiriiniresistentsete koronaarhaigete trombotsüütidele enne ja pärast aortokoronaarset šunteeerimist**

**Mardla, Vilja; Rätsep, Indrek; Kobzar, Gennadi; Samel, Nigulas** Eesti Arst 2010 / 7/8, lk. 470-476 : ill <https://eestiarst.ee/cox-inhibiitorite-nimesuliidi-paratsetamooli-ja-metamisooli-toime-aspiriiniresistentsete-koronaarhaigete-trombotsuutidele彭ne-ja-parast-aortokoronaarset-sunteerimist/> [https://artiklid.elnet.ee/record=b2155144\\*est](https://artiklid.elnet.ee/record=b2155144*est)

**A critical role of non-active site residues on cyclooxygenase helices 5 and 6 in the control of prostaglandin stereochemistry at carbon 15**

**Valmsen, Karin; Boeglin, William E.; Järving, Reet; Järving, Ivar; Varvas, Külliki; Brash, Alan R.; Samel, Nigulas** The journal of biological chemistry 2007 / 38, p. 28157-28163 <https://www.sciencedirect.com/science/article/pii/S0021925820587127>

**Differences in the substrate binding between highly identical catalase-related fatty acid hydroperoxide-metabolizing enzymes [Online resource]**

**Teder, Tarvi; Löhelaid, Helike; Samel, Nigulas** XVth International Conference of the Lithuanian Biochemical Society : the programme and abstract book : Dubingiai, June 26-29, 2018 2018 / p. 67-68 <https://www.docdroid.net/tVouRrC/abstract-book.pdf>

**Direct evidence of the cyclooxygenase pathway of prostaglandin synthesis in arthropods : genetic and biochemical characterization of two crustacean cyclooxygenases**

**Varvas, Külliki; Kurg, Reet; Hansen, Kristella; Järving, Reet; Järving, Ivar; Valmsen, Karin; Löhelaid, Helike; Samel, Nigulas** Insect biochemistry and molecular biology 2009 / 12, p. 851-860 <https://www.sciencedirect.com/science/article/pii/S0965174809001490>

**Distinct characteristics of the substrate binding between highly homologous catalase-related allene oxide synthase and hydroperoxide lyase**

**Teder, Tarvi; Samel, Nigulas; Löhelaid, Helike** Archives of biochemistry and biophysics 2019 / art. 108126, 10 p. : ill <https://doi.org/10.1016/j.abb.2019.108126> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Effect of vitamin B6 vitamers on platelet aggregation**

**Kobzar, Gennadi; Mardla, Vilja; Rätsep, Indrek; Samel, Nigulas** Platelets 2009 / 2, p. 120-124 : ill

**Effects of [alpha]-tocopherol, L-arginine, and quercetin on aggregation of human platelets**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Nutrition research 2005 / p. 569-575 : ill <https://www.sciencedirect.com/science/article/pii/S0271531705001053>

**Eicosanoid diversity of stony corals**

**Löhelaid, Helike; Samel, Nigulas** Marine drugs 2018 / p. 1-14 : ill <https://doi.org/10.3390/md16010010> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Enhanced expression of human prostaglandin H synthase-2 in the yeast Pichia pastoris and removal of the C-terminal tag with bovine carboxypeptidase A**

**Kukk, Kaia; Samel, Nigulas** Journal of biotechnology 2016 / p. 224-231 : ill <https://doi.org/10.1016/j.jbiotec.2016.06.015> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Enzymatic oxidation of arachidonic acid in the coral Gersemia fruticosa**

**Varvas, Külliki** 1999 [http://www.esther.ee/record=b1273068\\*est](http://www.esther.ee/record=b1273068*est)

**Expression of human prostaglandin H synthases in the yeast Pichia pastoris = Inimese prostaglandiin H süntaaside ekspressoerimine pärmis Pichia pastoris**

**Kukk, Kaia** 2016 [http://www.esther.ee/record=b4621165\\*est](http://www.esther.ee/record=b4621165*est)

**Generality of marine allene oxide synthesis by the allene oxide synthase-lipoxygenase fusion protein pathway**

**Löhelaid, Helike; Järving, Reet; Samel, Nigulas** FEBS journal 2008 / Suppl. 1, p. 413

**Glucose activates NOX signaling pathway in platelets**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Primary care diabetes 2016 / p. e5 <http://dx.doi.org/10.1016/j.pcd.2016.08.017>

## **Glucose impairs aspirin inhibition in platelets through a NAD(P)H oxidase signaling pathway**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Prostaglandins & other lipid mediators 2017 / p. 33-40 : ill

<https://doi.org/10.1016/j.prostaglandins.2017.07.004> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

## **Glucose prevents inhibition of platelets caused by NOS activation**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** 1st EUPLAN Platelet Conference : Maastricht The Netherlands, September 19-21th 2012 / p. 108

## **Glükoosi pidurdav toime trombotsüütide aggregatsiooni inhibeerimisele COXi inhibiitorite ja L-arginiiniga in vitro**

**Mardla, Vilja; Rooks, Ebe; Kobzar, Gennadi; Samel, Nigulas** Eesti Arst 2014 / lk. 263-267 : ill

[https://artiklid.elnet.ee/record=b2671441\\*est](https://artiklid.elnet.ee/record=b2671441*est)

## **Gly188Arg substitution eliminates substrate inhibition in arachidonate 11R-lipoxygenase**

**Pöldemaa, Kaspar; Lipp, Maarja; Järving, Ivar; Samel, Nigulas; Eek, Priit** Biochemical and biophysical research

communications 2019 / p. 81-85 : ill <https://doi.org/10.1016/j.bbrc.2019.08.132> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

## **Identification and characterization of a naturally occurring 11R-lipoxygenase**

**Järving, Reet; Mortimer, Monika; Brash, Alan R.; Samel, Nigulas; Järving, Ivar** Prostaglandins & other lipid mediators 2006 / 1/2, p. 184 [https://www.researchgate.net/publication/278279948\\_Identification\\_and\\_characterization\\_of\\_a\\_naturally\\_occuring\\_11R-lipoxygenase](https://www.researchgate.net/publication/278279948_Identification_and_characterization_of_a_naturally_occuring_11R-lipoxygenase)

## **Identification and characterization of a naturally occurring 11R-lipoxygenase**

**Järving, Reet; Mortimer, Monika; Brash, Alan R.; Samel, Nigulas; Järving, Ivar** 9th International Conference "Eicosanoids & Other Bioactive Lipids in Cancer, Inflammation & Related Diseases 2005 / p. 11-14

## **Identification and characterization of an arachidonate 11R-lipoxygenase**

**Mortimer, Monika; Järving, Reet; Brash, Alan R.; Samel, Nigulas; Järving, Ivar** Archives of biochemistry and biophysics 2006 / 1, p. 147-155 : ill <https://www.sciencedirect.com/science/article/pii/S0003986105004455>

## **Identification of a functional allene oxide synthase-lipoxygenase fusion protein in the soft coral *Gersemia fruticosa* suggests the generality of this pathway in octocorals**

**Löhelaid, Helike; Järving, Reet; Valmsen, Karin; Varvas, Külli; Kreen, Malle; Järving, Ivar; Samel, Nigulas** Biochimica et biophysica acta 2008 / 2, p. 315-321 <https://www.sciencedirect.com/science/article/abs/pii/S030441650700253X>

## **Increase in antiplatelet effects of prostaglandins by α-tocopherol and quercetin**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Proceedings of the Estonian Academy of Sciences. Biology. Ecology 2005 / 2, p. 120-125 [https://artiklid.elnet.ee/record=b2345868\\*est](https://artiklid.elnet.ee/record=b2345868*est)

## **Interaction of glucose with inhibitors of cyclooxygenase in platelets**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Platelets 2010 / 5, p. 407

## **Investigation of 11R-lipoxygenase quaternary structure**

**Eek, Priit; Pöldemaa, Kaspar; Kasvandik, Sergo; Järving, Ivar; Samel, Nigulas** Book of abstracts : 6th European Workshop on Lipid Mediators (6EWLM), Goethe University in Frankfurt am Main, Germany, September 27-30, 2016 2016 / p. 112 [http://workshop-lipid.eu/pictures/Abstract%20book-6EWLM\\_160926.pdf](http://workshop-lipid.eu/pictures/Abstract%20book-6EWLM_160926.pdf)

## **Kaks tsüklooksügenaasi kodeerivat geeni korallist *Gersemia fruticosa***

**Järving, Reet; Järving, Ivar; Samel, Nigulas** XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 35

## **Lactate is a possible mediator of the glucose effect on platelet inhibition**

**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Platelets 2014 / p. 239-245 : ill <https://doi.org/10.3109/09537104.2013.816670> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

## **11R-lipoksiügenaasi kristallstruktuuri mudel**

**Eek, Priit; Järving, Reet; Järving, Ivar; Newcomer, Marcia E.; Samel, Nigulas** XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 18

## **Lipoxygenase-allene oxide synthase pathway in octocoral thermal stress response**

**Löhelaid, Helike; Teder, Tarvi; Samel, Nigulas** Coral reefs 2015 / p. 143-154 : ill <https://doi.org/10.1007/s00338-014-1238-y> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

## **4. osa. Süsivesikud ja lipiidid**

Biokeemia : lühikursus : õpik kõrgkoolidele 2016 / lk. 129-164 : ill

## **N-glycosylation site occupancy in human prostaglandin H synthases expressed in *Pichia pastoris***

**Kukk, Kaia; Kasvandik, Sergio; Samel, Nigulas** SpringerPlus 2014 / p. 1-9 : ill <https://doi.org/10.1186/2193-1801-3-436> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**N-glycosylation site occupancy in prostaglandin H synthases expressed in *Pichia pastoris***

**Kukk, Kaia; Kasvandik, Sergio; Samel, Nigulas** TÜ ja TTÜ doktorikool "Funktionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

**NMR monitoring of lipase-catalyzed reactions of prostaglandins : preliminary estimation of reaction velocities**

**Vallikivi, Imre; Järving, Ivar; Pehk, Tõnis; Samel, Nigulas; Töugu, Vello; Parve, Omar** Journal of molecular catalysis B : enzymatic 2004 / p. 15-19 : ill

**Novel fatty acid dioxygenases from the corals *Plexaura homomalla* and *Gersemia fruticosa***

**Koljak, Reet** 2001 [https://www.esther.ee/record=b1551345\\*est](https://www.esther.ee/record=b1551345*est)

**Novel membrane-associated prostaglandin E synthase-2 from crustacean arthropods**

**Hansen, Kristella; Varvas, Külli; Järving, Ivar; Samel, Nigulas** Comparative biochemistry and physiology. Part B, Biochemistry and molecular biology 2014 / p. 45-52 : ill <https://doi.org/10.1016/j.cbpb.2014.05.004> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Oksüdatsooni stereospetsiifilus arahhidoonhappe C-15 juures tsüklooksügenaasi katalüüs**

**Valmsen, Karin; Järving, Reet; Järving, Ivar; Samel, Nigulas** XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 156

**On the evolutionary origin of cyclooxygenase (COX) isozymes**

**Järving, Reet; Järving, Ivar; Kurg, Reet; Brash, Alan R.; Samel, Nigulas** The journal of biological chemistry 2004 / 14, Issue of April 2, p. 13624-13633 : ill

**Organic and bioorganic chemistry**

**Samel, Nigulas** Research in Estonia : present and future 2011 / p. 329-332

**A PDZ-like domain mediates the dimerization of 11R-lipoxygenase**

**Eek, Priit; Põldemaa, Kaspar; Kasvandik, Sergio; Järving, Ivar; Samel, Nigulas** Biochimica et Biophysica Acta (BBA) - molecular and cell biology of lipids 2017 / p. 1121-1128 : ill <https://doi.org/10.1016/j.bbalip.2017.07.012> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Photosensitized inactivation of tumor cells by porphyrins and chlorins**

**Tšekulajeva, Ludmilla** 2006 <https://digi.lib.ttu.ee/l/?96> [https://www.esther.ee/record=b2146047\\*est](https://www.esther.ee/record=b2146047*est)

**Platelet activity before and after coronary artery bypass grafting**

**Kobzar, Gennadi; Mardla, Vilja; Rätsep, Indrek; Samel, Nigulas** Platelets 2006 / 5, p. 289-291  
<https://pubmed.ncbi.nlm.nih.gov/16928599/>

**Potentiation of antiaggregating effect of prostaglandins by [alfa]-tocopherol and quercetin**

**Mardla, Vilja; Kobzar, Gennadi; Samel, Nigulas** Platelets 2004 / 5, p. 319-324 : ill <https://pubmed.ncbi.nlm.nih.gov/15370103/>

**Prostaglandiinide biosüntees korallides : kommentaar Eesti Vabariigi teaduse aastapreemia pälvitud tööle**

**Samel, Nigulas** Tallinna Tehnikaülikooli aastaraamat 2001 2003 / lk. 184-192 : ill

**Prostaglandiinide biosüntees selgrootutes : Eesti Vabariigi teaduspreemia 2002 : keemia ja molekulaarbioloogia valdkonnas**

Aastaülevaade : 2001 / Tallinna Tehnikaülikool, Keemia Instituut 2002 / lk. [7-8]

**[P]rostaglandiinide süntees korallis *Plexaura homomalla* : tsüklooksügenaaside stereospetsiifilisuse struktuurilised determinandid**

**Valmsen, Karin; Samel, Nigulas** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 179-180

**Prostaglandin synthesis in marine arthropods and red algae = Prostaglandiinide süntees mere lüljalgsetes ja punavetikates**

**Hansen, Kristella** 2015 [https://www.esther.ee/record=b4442497\\*est](https://www.esther.ee/record=b4442497*est)

**Prostaglandin synthesis in the coral *Plexaura homomalla* : control of prostaglandin stereochemistry at carbon 15 by cyclooxygenases**

**Valmsen, Karin; Samel, Nigulas** 2007 [https://www.esther.ee/record=b2315934\\*est](https://www.esther.ee/record=b2315934*est)

**Purification and characterization of the recombinant human prostaglandin H synthase-2 expressed in Pichia pastoris**  
**Kukk, Kaia; Järving, Reet; Samel, Nigulas** FEBS journal 2012 / p. 555  
<https://www.sciencedirect.com/science/article/pii/S1046592812000940>

**Purification and characterization of the recombinant human prostaglandin H synthase-2 expresssed in Pichia pastoris**  
**Kukk, Kaia; Järving, Reet; Samel, Nigulas** Protein expression and purification 2012 / p. 182-189 : ill  
<https://www.sciencedirect.com/science/article/pii/S1046592812000940#aeo-keywords-id14>

**Rasvhappe dioksügenaasid alamatest organismidest : [ettekanne 14. okt. 2011 Eesti TA korraldatud akadeemik Paul Kogermani 120. sünniaastapäevale ja akadeemik Ülo Lille 80. sünnipäevale pühendatud seminaril "Orgaaniline-bioorgaaniline süntees"]**

**Samel, Nigulas** Tallinna Tehnikaülikooli aastaraamat 2011 2012 / lk. 237-240 : ill

**Rekombinantse ACLE (algal cyclooxygenase like enzyme) ekspressioon, puhastamine ja kvaternaarstrukturi analüüs**  
**Kasvandik, Sergo; Varvas, Külliki; Samel, Nigulas** XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 39

**Sensitivity of platelets to prostaglandins in patients with coronary artery disease**

**Mardla, Vilja; Kobzar, Gennadi; Rätsep, Indrek; Lõhmus, Madis; Järving, Ivar; Samel, Nigulas** Proceedings of the Estonian Academy of Sciences. Biology. Ecology 2001 / 1, p. 33-36

**Short-term exposure of platelets to glucose impairs inhibition of platelet aggregation by cyclooxygenase inhibitors**  
**Kobzar, Gennadi; Mardla, Vilja; Samel, Nigulas** Platelets 2011 / p. 338-344 : ill <https://pubmed.ncbi.nlm.nih.gov/21557683/>

**Structural and catalytic aspects of the catalase-related fatty acid hydroperoxide lyase = Katalaasilaadse hüdroperoksiidlüasi struktuursed ja katalüütilised omadused**

**Teder, Tarvi** 2019 <https://digikogu.taltech.ee/et/item/8a4b253d-68e4-41e5-bcc4-273e9f2fa3d2>

**Structural and catalytic insights into the algal prostaglandin H synthase reveal atypical features of the first non-animal cyclooxygenase**

**Varvas, Külliki; Kasvandik, Sergo; Hansen, Kristella; Järving, Ivar; Morell, Indrek; Samel, Nigulas** Biochimica et biophysica acta : molecular and cell biology of lipids 2013 / p. 863-871 : ill <https://doi.org/10.1016/j.bbapli.2012.11.010> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Structural and functional comparison of 15S- and 15R-specific cyclooxygenases from the coral Plexaura homomalla**  
**Valmsen, Karin; Boeglin, William E.; Järving, Ivar; Schneider, Claus; Varvas, Külliki; Brash, Alan R.; Samel, Nigulas** Eur. J. Biochem. 2004 / p. 3533-3538 : ill <https://febs.onlinelibrary.wiley.com/doi/full/10.1111/j.0014-2956.2004.04289.x>

**Structural and functional insights into the reaction specificity of catalase-related hydroperoxide lyase : a shift from lyase activity to allene oxide synthase by site-directed mutagenesis**

**Teder, Tarvi; Löhela, Helike; Samel, Nigulas** PLoS ONE 2017 / art. e0185291, p. 1-18 : ill  
<https://doi.org/10.1371/journal.pone.0185291> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Structural and functional studies of lipoxygenase-hydroperoxide lyase fusion protein in the soft coral Capnella imbricata**  
**Teder, Tarvi; Löhela, Helike; Samel, Nigulas** 57th ICBL : 4-8 September 2016, Chamonix, Mont Blanc, France 2016 / p. 134

**Structure and regulation of arachidonate 11R-lipoxygenase = Arahhidoonhappe 11R-lipoksügenaasi struktuur ja regulatsioon**

**Eek, Priit** 2018 <https://digi.lib.ttu.ee/i/?9953> [https://www.esther.ee/record=b5056537\\*est](https://www.esther.ee/record=b5056537*est)

**Structure of a calcium-dependent 11R-lipoxygenase suggests a mechanism for Ca<sup>2+</sup> regulation**

**Eek, Priit; Järving, Reet; Järving, Ivar; Gilbert, Nathaniel C.; Newcomer, Marcia E.; Samel, Nigulas** The journal of biological chemistry 2012 / p. 22377-22386 : ill <https://pubmed.ncbi.nlm.nih.gov/22573333/>

**Teaduspreemia keemia ja molekulaarbioloogia alal tööde tsükli "Prostaglandiinide biosüntees selgrootutes" eest :**  
**Nigulas Samel (kollektiivi juht), Ivar Järving, Reet Koljak, Karin Valmsen, Külliki Varvas**

**Samel, Nigulas; Järving, Ivar; Koljak, Reet; Valmsen, Karin; Varvas, Külliki** Eesti Vabariigi teaduspreemiad 2002 2002 / lk. 30-40 : portr., ill

**The modelling and kinetic investigation of the lipase-catalysed acetylation of steroisomeric prostaglandins**  
**Vallikivi, Imre; Fransson, Linda; Hult, Karl; Järving, Ivar; Pehk, Tõnis; Samel, Nigulas; Tõugu, Vello; Villo, Ly; Parve, Omar** Journal of molecular catalysis B : enzymatic 2005 / p. 62-69 : ill

**Trombotsüütide aggregatsiooni inhibeerimine B6-vitamiini vitameeridega in vitro koronaarhaigeteil**

**Mardla, Vilja; Rätsep, Indrek; Kobzar, Gennadi; Špitsmeister, Merli; Samel, Nigulas** Eesti Arst 2008 / 12, lk. 923-929 : ill  
[https://artiklid.elnet.ee/record=b1067994\\*est](https://artiklid.elnet.ee/record=b1067994*est)

**Tsüklooksügenaas kirpvähilistest : kloneerimine, ekspressoerimine ja iseloomustamine**

Hansen, K.; Kurg, Reet; **Varvas, Külliki; Järving, Ivar; Järving, Reet; Valmsen, Karin; Samel, Nigulas** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 30-31

**Up-regulated expression of AOS-LOXa and increased eicosanoid synthesis in response to coral wounding**

Löhelaid, Helike; Teder, Tarvi; Töldsepp, Kadri; Ekins, Merrick; **Samel, Nigulas** PLoS ONE 2014 / p. 1-9 : ill

<https://doi.org/10.1371/journal.pone.0089215> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Uus 8-lipoksügenaas korallist Gersemia fruticosa**

Löhelaid, Helike; Mortimer, Monika; Järving, Reet; **Varvas, Külliki; Samel, Nigulas; Järving, Ivar** XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 81-82

**Ülo Lille 70**

**Samel, Nigulas** Proceedings of the Estonian Academy of Sciences. Chemistry 2001 / p. 195-196