

### **The absence of active creatine kinase system influences cardiac calcium handling**

Laasmaa, Martin; Branovets, Jelena; Karro, Niina; Birkedal Nielsen, Rikke; Vendelin, Marko Biophysical journal 2019 / Poster 484 ; p. 96a <https://doi.org/10.1016/j.bpj.2018.11.558>

### **ADP protects cardiac mitochondria under severe oxidative stress**

Sokolova, Niina; Pan, Shi; Provazza, Sarah; Beutner, Gisela; Vendelin, Marko; Birkedal, Rikke; Sheu, Shey-Shing PLoS ONE 2013 / art. e83214 <https://doi.org/10.1371/journal.pone.0083214> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Albumin affects the stability, oligomerization and ligand interactions of lipoprotein lipase**

Risti, Robert; Gunn, Kathryn H.; Hiis-Hommuk, Kristofer; Seeba, Natjan-Naatan; Villo, Ly; Vendelin, Marko; Neher, Saskia B.; Lõokene, Aivar Atherosclerosis 2022 / p. 68 <https://doi.org/10.1016/j.atherosclerosis.2022.06.428>

### **Albumin and heparin together or separately - different outcome on lipoprotein lipase oligomerization and stability**

Risti, Robert; Gunn, K.; Villo, Ly; Hiis-Hommuk, Kristofer; Seeba, Natjan-Naatan; Karimi, Hamed; Vendelin, Marko; Neher, Saskia B.; Lõokene, Aivar FEBS Open Bio 2023 / p. 223 <https://doi.org/10.1002/2211-5463.13646>

### **Altered calcium handling in cardiomyocytes from arginine-glycine amidinotransferase-knockout mice is rescued by creatine**

Laasmaa, Martin; Branovets, Jelena; Barsunova, Karina; Karro, Niina; Lygate, Craig A.; Birkedal Nielsen, Rikke; Vendelin, Marko American journal of physiology-heart and circulatory physiology 2020 / p. H805-H825 <https://doi.org/10.1152/ajpheart.00300.2020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Analysis of molecular movement reveals latticelike obstructions to diffusion in heart muscle cells**

Illaste, Ardo; Laasmaa, Martin; Peterson, Pearu; Vendelin, Marko Biophysical journal 2012 / p. 739-748 : ill <https://www.sciencedirect.com/science/article/pii/S0006349512000859>

### **Analysis of molecular movements in cardiac myocytes = Molekulaarse te liikumiste analüüs südame lihaskiududes**

Illaste, Ardo 2012 <https://digi.lib.ttu.ee/i/?648>

### **Bidirectionality and compartmentation of metabolic fluxes are revealed in the dynamics of isotopomer networks**

Schryer, David; Peterson, Pearu; Paalme, Toomas; Vendelin, Marko International journal of molecular sciences 2009 / 4, p. 1697-1718 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2680642/>

### **Biofüüsikud loodavad südamerakkude segadusse ajamisega haigusi ennetada**

Alvela, Ain novaator.err.ee 2023 [Biofüüsikud loodavad südamerakkude segadusse ajamisega haigusi ennetada](#)

### **Cardiac expression and location of hexokinase changes in a mouse model of pure creatine deficiency**

Branovets, Jelena; Karro, Niina; Barsunova, Karina; Laasmaa, Martin; Lygate, Craig A.; Vendelin, Marko; Birkedal Nielsen, Rikke American journal of physiology-heart and circulatory physiology 2021 / p. H613-H629 <https://doi.org/10.1152/ajpheart.00188.2020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cardiac mechanoenergetics in silico**

Vendelin, Marko 2001 [http://www.eester.ee/record=b1556271\\*est](http://www.eester.ee/record=b1556271*est)

### **Cardiac muscle regulatory units are predicted to interact stronger than neighboring cross-bridges**

Kalda, Mari; Vendelin, Marko Scientific reports 2020 / art. 5530, 13 p. : ill <https://doi.org/10.1038/s41598-020-62452-7> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cardiac muscle regulatory units are predicted to interact stronger than neighboring cross-bridges**

Kalda, Mari; Vendelin, Marko Biophysical journal 2018 / p. 549a <https://doi.org/10.1016/j.bpj.2017.11.2998>

### **Cardiomyocytes from female compared to male mice have larger ryanodine receptor clusters and higher calcium spark frequency**

Laasmaa, Martin; Branovets, Jelena; Stolova, Jekaterina; Shen, Xin; Rätsepso, Triinu; Balodis, Mihkel Jaan; Grahv, Cärolin; Hendrikson, Eliise; Louch, William Edward; Birkedal Nielsen, Rikke; Vendelin, Marko Journal of Physiology 2023 / p. 4033-4052 : ill <https://doi.org/10.1113/JP284515> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cellprofiler is a fit tool for droplet digital image analysis**

Bartkova, Simona; Vendelin, Marko; Pata, Pille; Scheler, Ott 23rd International Conference on Miniaturized Systems for Chemistry and Life Sciences (MicroTAS 2019) Basel, Switzerland, 27 – 31 October 2019 2020 / art. 163704, p. 1644-1645 <https://doi.org/10.1101/811869>

### **Combined action of albumin and heparin regulates lipoprotein lipase oligomerization, stability, and ligand interactions**

Risti, Robert; Gunn, Kathryn H.; Hiis-Hommuk, Kristofer; Seeba, Natjan-Naatan; Karimi, Hamed; Villo, Ly; Vendelin, Marko;

Neher, Saskia B.; Lõokene, Aivar PLoS ONE 2023 / art. e0283358, 24 p. : ill <https://doi.org/10.1371/journal.pone.0283358> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Compartmentalization in cardiomyocytes modulates creatine kinase and adenylate kinase activities**

Birkedal, Rikke; Branovets, Jelena; Vendelin, Marko FEBS letters 2024 / p. 2623-2640 <https://doi.org/10.1002/1873-3468.14994> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Compartmentalization in cardiomyocytes modulates kinase activities**

Birkedal, Rikke; Branovets, Jelena; Jaska, Lucia; Shikha, Divya; Bernasconi, Romain; Vendelin, Marko FEBS Open Bio 2024 / p. 34 <https://doi.org/10.1002/2211-5463.13836>

**Compromised creatine kinase energy transfer affects cardiac excitation-contraction coupling**

Branovets, Jelena; Kalda, Mari; Laasmaa, Martin; Stolova, Jekaterina; Shen, Xin; Grahv, Cärolin; Hendrikson, Eliise; Louch, William Edward; Birkedal, Rikke; Vendelin, Marko Acta Physiologica 2022 / p. 594-595 <https://onlinelibrary.wiley.com/doi/epdf/10.1111/apha.13878>

**Compromised creatine kinase energy transfer leads to adaptations in cardiac excitation-contraction coupling that are distinct from changes associated with heart failure : [manuscript]**

Branovets, Jelena; Kalda, Mari; Laasmaa, Martin; Stolova, Jekaterina; Shen, Xin; Balodis, Mihkel Jaan; Grahv, Cärolin; Hendrikson, Eliise; Louch, William Edward; Birkedal Nielsen, Rikke; Vendelin, Marko 2022

**Cross-bridge group ensembles describing cooperativity in thermodynamically consistent way**

Kalda, Mari; Peterson, Pearu; Vendelin, Marko PLoS ONE 2015 / p. 1-26 : ill <https://doi.org/10.1371/journal.pone.0137438> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Cross-bridge group ensembles describing cooperativity in thermodynamically consistent way**

Kalda, Mari; Peterson, Pearu; Vendelin, Marko Biophysical journal 2016 / p. 463a <https://doi.org/10.1016/j.bpj.2015.11.2481>

**Cutting-edge imaging unravels sex-specific structural variations in the heart**

Vendelin, Marko; Marko Vendelin, Laasmaa, Martin Medical Xpress 2024 <https://medicalxpress.com/news/2024-06-edge-imaging-unravels-sex-specific.html> <https://physoc.onlinelibrary.wiley.com/doi/10.1113/JP284515>

**Cutting-edge imaging unravels sex-specific structural variations in the heart**

Vendelin, Marko eurekaalert.org 2024 <https://www.eurekaalert.org/news-releases/1047671> <https://doi.org/10.1113/JP284515>

**Droplet image analysis with user-friendly freeware CellProfiler**

Bartkova, Simona; Vendelin, Marko; Sanka, Immanuel; Pata, Pille; Scheler, Ott Analytical methods 2020 / p. 2287-2294 : ill <https://doi.org/10.1039/D0AY00031K> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Energy-efficiency of cardiomyocyte stimulation with rectangular pulses**

Laasmaa, Martin; Lu, Pengfei; Veletic, Mladen; Louch, William Edward; Bergsland, Jacob; Balasingham, Ilango; Vendelin, Marko Scientific reports 2019 / art. 13307, p. 1-9 <https://doi.org/10.1038/s41598-019-49791-w> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Estimation of diffusion restrictions in cardiomyocytes using kinetic measurements = Difusioonitakistuste hindamine kardiomüotsüütides kasutades kineetilisi mõõtmisi**

Sepp, Mervi 2013 [https://www.ester.ee/record=b2987727\\*est](https://www.ester.ee/record=b2987727*est)

**Heterogeneity of diffusion restrictions in cardiomyocytes = Difusioonitakistuste heterogeensus südamelihaskududes**

Jepihhina, Natalja 2017 <https://digi.lib.ttu.ee/i/?8085> [https://www.ester.ee/record=b4681847\\*est](https://www.ester.ee/record=b4681847*est)

**Higher AMPK activation in mouse oxidative compared with glycolytic muscle does not correlate with LKB1 or CaMKKb expression**

Bernasconi, Romain; Soodla, Kārol; Sirp, Alex; Zovo, Kairit; Kuhtinskaja, Maria; Lukk, Tiit; Vendelin, Marko; Birkedal, Rikke American journal of physiology - Endocrinology and metabolism 2025 / p. E21-E33 <https://doi.org/10.1152/ajpendo.00261.2024>

**The influence of alternative energy transfer systems on respiration in creatine-deficient mouse cardiomyocytes**

Branovets, Jelena; Jugai, Svetlana; Vendelin, Marko; Birkedal Nielsen, Rikke Biophysical journal 2016 / p. 474a-475a <https://doi.org/10.1016/j.bpj.2015.11.2538>

**Intracellular compartmentalization shapes energy transfer – differences between adenylate kinase activities in homogenate and permeabilized cardiomyocytes : [manuscript]**

Branovets, Jelena; Vendelin, Marko; Birkedal Nielsen, Rikke 2022

**Intracellular diffusion of adenosine phosphates is locally restricted in cardiac muscle**

**Vendelin, Marko**; Eimre, Margus; Seppet, Evelin; Peet, Nadežda; Andrienko, Tatiana; **Lemba, Maris**; Engelbrecht, Jüri; Seppet, Enn; Saks, Valdur Molecular and cellular biochemistry 2004 / p. 229-241 : ill  
<https://link.springer.com/article/10.1023/B:MCEI.0000009871.04141.64>

#### **IOCBIO Kinetics : an open-source software solution for analysis of data traces**

**Vendelin, Marko**; Laasmaa, Martin; Kalda, Mari; Branovets, Jelena; Karro, Niina; Barsunova, Karina; Birkedal Nielsen, Rikke PLoS computational biology 2020 / art. e1008475 <https://doi.org/10.1371/journal.pcbi.1008475> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **IOCBIO Sparks detection and analysis software**

**Laasmaa, Martin**; Karro, Niina; Birkedal Nielsen, Rikke; **Vendelin, Marko** PeerJ 2019 / art. e6652, 28 p. : ill  
<https://doi.org/10.7717/peerj.6652> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **IOCBIO Sparks detection and analysis software**

**Laasmaa, Martin**; Karro, Niina; Birkedal Nielsen, Rikke; **Vendelin, Marko** Biophysical journal 2019 / art. 1900-Pos ; p. 384a  
<https://doi.org/10.1016/j.bpj.2018.11.2080>

#### **Isotopomeric <sup>13</sup>C labeling of amino acids reveal compartmentation in *Saccharomyces uvarum***

**Schryer, David**; Peterson, Pearu; Paalme, Toomas; **Vendelin, Marko** Biophysical journal 2009 / 3, Supplement 1, p. 308a  
[https://www.researchgate.net/publication/247275298\\_Isotopomeric\\_13C\\_Labeling\\_of\\_Amino\\_Acids\\_Reveal\\_Compartmentation\\_in\\_Saccharomyces\\_uvarum](https://www.researchgate.net/publication/247275298_Isotopomeric_13C_Labeling_of_Amino_Acids_Reveal_Compartmentation_in_Saccharomyces_uvarum)

#### **Kaasaaegne mikroskoopia paljastab südame soopõhised struktuurierisused**

**Vendelin, Marko**; Laasmaa, Martin novaator.err.ee 2024 [Kaasaaegne mikroskoopia paljastab südame soopõhised struktuurierisused](#)

#### **Kahe tuhande kaheksanda aasta teaduspreemia geo- ja bioteaduste alal tööde tsükli "Molekulaarne süsteemne bioenergeetika" eest : [Valdur Saks (kollektiivi juht), Jüri Engelbrecht, Enn Seppet, Marko Vendelin]**

**Saks, Valdur**; Engelbrecht, Jüri; Seppet, Enn; **Vendelin, Marko** Teadusmõtte Kübermeetika Instituudis 2010 / lk. 120-130 : ill  
[https://www.ester.ee/record=b2613199\\*est](https://www.ester.ee/record=b2613199*est)

#### **Kuidas saab südamelihase energiat? CENSi südamelabor. Energia ülekanne südamerakkudes**

**Engelbrecht, Jüri**; **Vendelin, Marko** Keeruka maailma võlu 2015 / lk. 71-74 : ill [https://www.ester.ee/record=b4488344\\*est](https://www.ester.ee/record=b4488344*est)

#### **Marker enzyme activities in hindleg from creatine-deficient AGAT and GAMT KO mice - differences between models, muscles, and sexes**

**Barsunova, Karina**; **Vendelin, Marko**; Birkedal Nielsen, Rikke Scientific reports 2020 / Art. 7956, 9 p  
<https://doi.org/10.1038/s41598-020-64740-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Mechanochemically driven covalent self-assembly of a chiral mono-biotinylated hemicucurbit[8]uril**

**Suut-Tuule, Elina**; Jarg, Tatsiana; Tikker, Priit; Lootus, Ketren-Marlein; Martõnova, Jevgenija; Reitalu, Rauno; Ustrnül, Lukas; Ward, Jas S.; Rjabovs, Vitalijs; Shubin, Kirill; Nallaparaju, Jagadeesh Varma; **Vendelin, Marko**; Preis, Sergei; Öeren, Mario; Rissanen, Kari; Kananovich, Dzmitry; Aav, Riina Cell reports physical science 2024 / art. 102161  
<https://doi.org/10.1016/j.xcrp.2024.102161> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Mechanoenergetics of a single cardiomyocyte = Ühe südameraku mehaanoenergeetika**

**Kalda, Mari** 2015 [https://www.ester.ee/record=b4525654\\*est](https://www.ester.ee/record=b4525654*est)

#### **Metabolic compartmentation in rainbow trout cardiomyocytes : coupling of hexokinase but not creatine kinase to mitochondrial respiration**

**Karro, Niina**; Sepp, Mervi; Jugai, Svetlana; Laasmaa, Martin; **Vendelin, Marko**; Birkedal Nielsen, Rikke Journal of comparative physiology B 2017 / p. 103-116 : ill <https://doi.org/10.1007/s00360-016-1025-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Metabolic flux analysis of compartmentalized systems using dynamic isotopologue modeling = Isotopoloogilise modelleerimise rakendamine heterogeensete bioloogiliste süsteemide ainevahetusvoo analüüsis**

**Schryer, David** 2012 [https://www.ester.ee/record=b2776763\\*est](https://www.ester.ee/record=b2776763*est)

#### **Microstructure described by hierarchical internal variables**

**Engelbrecht, Jüri**; **Vendelin, Marko** Rendiconti del Seminario Matematico (Università e Politecnico di Torino) 2000 / 83-91

#### **Modeling of the coupled enzyme systems : model of mitochondrial creatine kinase (miCK) and adenine nucleotide translocase (ANT) coupling**

**Vendelin, Marko**; Anmann, Tiia; Käämbre, Tuuli; Sikk, Peeter; Saks, Valdur Biophysical Society meeting abstracts : Biophysical journal supplement 2007 / p. 660A

#### **Molecular dynamics simulations of creatine kinase and adenine nucleotide translocase in mitochondrial membrane patch**

**Karo, Jaanus; Peterson, Pearu; Vendelin, Marko** The journal of biological chemistry 2012 / p. 7467-7476 : ill  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3293576/>

**Molekulaarne süsteemne bioenergeetika : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsüklile**  
Saks, Valdur; Engelbrecht, Jüri; Seppet, Enn; Vendelin, Marko Tallinna Tehnikaülikooli aastaraamat 2008 2009 / lk. 291-298 : ill

**Multi-nodal nano-actuator pacemaker for energy-efficient stimulation of cardiomyocytes**  
Lu, Pengfei; Veleatic, Mladen; Laasmaa, Martin; Vendelin, Marko Nano Communication Networks 2019 / art. 100270, 11 p. : ill  
<https://doi.org/10.1016/j.nancom.2019.100270> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Number of open mitochondrial voltage-dependent anion channels and intracellular diffusion coefficient in heart muscle**  
Simson, Päivo; Jepihhina, Natalja; Laasmaa, Martin; Branovets, Jelena; Peterson, Pearu; Birkedal Nielsen, Rikke; Vendelin, Marko Biophysical journal 2016 / p. 475a <https://doi.org/10.1016/j.bpj.2015.11.2540>

**On the complexity of signal propagation in nerve fibres**  
Engelbrecht, Jüri; Peets, Tanel; Tamm, Kert; Laasmaa, Martin; Vendelin, Marko Proceedings of the Estonian Academy of Sciences 2018 / p. 28-38 : ill <https://doi.org/10.3176/proc.2017.4.28> [http://www.ester.ee/record=b2355998\\*est](http://www.ester.ee/record=b2355998*est)  
[https://artiklid.elnet.ee/record=b2835629\\*est](https://artiklid.elnet.ee/record=b2835629*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Ontogeny of cardiomyocytes : ultrastructure optimization to meet the demand for tight communication in excitation–contraction coupling and energy transfer**  
Birkedal Nielsen, Rikke; Laasmaa, Martin; Branovets, Jelena; Vendelin, Marko Philosophical Transactions of the Royal Society B : Biological Sciences 2022 / art. 20210321 <https://doi.org/10.1098/rstb.2021.0321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Optimizing ventricular fibers : uniform strain or stress, but not ATP consumption, leads to high efficiency**  
Vendelin, Marko; Bovendeerd, Peter; Engelbrecht, Jüri; Arts, Theo American journal of physiology - heart and circulatory physiology 2002 / p. H1072-H1081 : ill

**Rat and mouse cardiomyocytes show subtle differences in creatine kinase expression and compartmentalization**  
Branovets, Jelena; Soodla, Kārol; Vendelin, Marko; Birkedal Nielsen, Rikke PLoS ONE 2023 / art. e0294718  
<https://doi.org/10.1371/journal.pone.0294718> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Real-time determination of sarcomere length of a single cardiomyocyte during contraction**  
Peterson, Pearu; Kalda, Mari; Vendelin, Marko American journal of physiology - cell physiology 2013 / p. C519-C531 : ill  
<https://doi.org/10.1152/ajpcell.00032.2012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Respiration of permeabilized cardiomyocytes from mice: no sex differences, but substrate-dependent changes in the apparent ADP-affinity**  
Karro, Niina; Laasmaa, Martin; Vendelin, Marko; Birkedal Nielsen, Rikke Scientific reports 2019 / art. 12592  
<https://doi.org/10.1038/s41598-019-48964-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Restricted ADP movement in cardiomyocytes : cytosolic diffusion obstacles are complemented with a small number of open mitochondrial voltage-dependent anion channels**  
Simson, Päivo; Jepihhina, Natalja; Laasmaa, Martin; Peterson, Pearu; Birkedal Nielsen, Rikke; Vendelin, Marko Journal of molecular and cellular cardiology 2016 / p. 197-203 : ill <https://doi.org/10.1016/j.yjmcc.2016.04.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Revealing aspects of cardiac function from fluorescence and electrophysiological recordings = Südametallituse uuringud fluorestsentsi ja elektrofüsioloogiliste mõõtmiste abil**  
Laasmaa, Martin 2016 [http://www.ester.ee/record=b4632325\\*est](http://www.ester.ee/record=b4632325*est) <https://digikogu.taltech.ee/et/Item/5e9f5bd2-8295-4f7e-8f6d-65d0b8002a74>

**Revealing calcium fluxes by analyzing inhibition dynamics in action potential clamp**  
Laasmaa, Martin; Birkedal Nielsen, Rikke; Vendelin, Marko Journal of molecular and cellular cardiology 2016 / p. 93-108 : ill  
<https://doi.org/10.1016/j.yjmcc.2016.08.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Sensitivity analysis of flux determination in heart by H(2) (18)O-provided labeling using a dynamic isotopologue model of energy transfer pathways**  
Schryer, David; Peterson, Pearu; Illaste, Ardo; Vendelin, Marko PLoS computational biology 2012 / p. e1002795, 1-15 : ill  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC3516558/>

**Simple analysis of gel images with IOCBIO Gel**  
Kütt, Jaak; Margus, Georg; Kask, Lauri; Rätsepso, Triinu; Soodla, Kārol; Bernasconi, Romain; Birkedal, Rikke; Järv, Priit; Laasmaa, Martin; Vendelin, Marko BMC Biology 2023 / art. 225 <https://doi.org/10.1186/s12915-023-01734-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Simple analysis of gel images with IOCBIO gel software**

Jaska, Lucia; Birkedal, Rikke; Laasmaa, Martin; Vendelin, Marko Bio-protocol 2024 / art. e5053, 12 p

<https://doi.org/10.21769/BioProtoc.5053> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Statistical Analysis of Fluorescence Intensity Transients with Bayesian Methods**

Karimi, Hamed; Laasmaa, Martin; Pihlak, Margus; Vendelin, Marko Science Advances 2025

### **Südameasjad**

Lemba, Maris; Kongas, Olav; Vendelin, Marko Noored teaduses 2000 / lk. 62-66 : portr [https://artiklid.elnet.ee/record=b2111022\\*est](https://artiklid.elnet.ee/record=b2111022*est)

### **Südameraku sisestruktuuri uurimine molekulaarse müra abil**

Simson, Päivo; Vendelin, Marko Tallinna Tehnikaülikooli aastaraamat 2013 2014 / lk. 253-256

### **Teaduspreemia geo- ja bioteaduste alal tööde tsükli "Molekulaarne süsteemne bioenergeetika" eest : Valdur Saks (kollektiivi juht), Jüri Engelbrecht, Enn Seppet, Marko Vendelin**

Saks, Valdur; Engelbrecht, Jüri; Seppet, Enn; Vendelin, Marko Eesti Vabariigi teaduspreemiad 2008 2008 / lk. 110-123 : fot., ill

### **The location of energetic compartments affects energetic communication in cardiomyocytes**

Birkedal, Rikke; Laasmaa, Martin; Vendelin, Marko Frontiers in physiology 2014 / art. 376, 9 p.: ill

<https://doi.org/10.3389/fphys.2014.00376> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Tight Coupling of Na<sup>+</sup>/K<sup>+</sup>-ATPase with glycolysis demonstrated in permeabilized rat cardiomyocytes**

Sepp, Mervi; Sokolova, Niina; Jugai, Svetlana; Mandel, Merle; Peterson, Pearu; Vendelin, Marko PLoS ONE 2014 / art.

e99413 <https://doi.org/10.1371/journal.pone.0099413> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Unchanged mitochondrial organization and compartmentation of high-energy phosphates in creatine-deficient GAMT(-/-) mouse hearts**

Branovets, Jelena; Sepp, Mervi; Kotlyarova, Svetlana; Jephthina, Natalja; Sokolova, Niina; Aksentijevic, Dunja; Neubauer, Stefan; Lygate, Craig A.; Vendelin, Marko; Birkedal Nielsen, Rikke American journal of physiology - heart and circulatory

physiology 2013 / p. H506-H520 : ill <https://doi.org/10.1152/ajpheart.00919.2012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Using action potential clamp data to determine the calcium fluxes and contributions in excitation-contraction coupling in vivo in cardiomyocytes**

Laasmaa, Martin; Vendelin, Marko; Birkedal Nielsen, Rikke Biophysical journal 2016 / p. 100a-101a

<http://dx.doi.org/10.1016/j.bpj.2015.11.600>

### **Uued inimesed ja positsioonid**

Tammet, Tanel; Uska, Riina; Laanearu, Janek; Tabri, Kristjan; Vendelin, Marko; Margus, Madis; Kindsigo, Merit; Talpsepp, Tõnn; Tähemaa, Toivo; Laos, Katrin; Liiv, Innar; Rüütmann, Tiia; Sarapuu, Külli; Kikkas, Kaido; Pachel, Karin Mente et Manu

2022 / lk. 40-49 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

### **Современная микроскопия выявила гендерные структурные различия в сердце**

Vendelin, Marko; Laasmaa, Martin nauka.err.ee 2024 [Современная микроскопия выявила гендерные структурные различия в сердце](#)