



**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>

**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](#)

**Rat and mouse cardiomyocytes show subtle differences in creatine kinase expression and compartmentalization**

**Branovets, Jelena; Soodla, Kärol; 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](#)

**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.jmcc.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 = Südametalituse uuringud fluoresentsensi ja elektrofisioloogiliste mõõtmiste abil**

**Laasmaa, Martin** 2016 [http://www.ester.ee/record=b4632325\\*est](http://www.ester.ee/record=b4632325*est) <https://digikoqu.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.jmcc.2016.08.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

**Branovets, Jelena; Sepp, Mervi; Kotlyarova, Svetlana; Jepihhina, 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**

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