Axel Loewe’s Publications

1 Peer-reviewed Journal Articles

Forthcoming


2021


1Equal contributions by several authors are denoted by *. 


AXEL LOEWE’S PUBLICATION LIST

1 Peer-reviewed Journal Articles

2019


2018


2016


2 Data & Software


3 Proceedings


4 Abstracts

Forthcoming


2021


2020

[a70] Dössel, O. and Loewe, A. “Bridging the Gap Between Cardiac Modeling and Clinical Applications”. In: Modelling the Cardiac Function - Theory, Numerical Methods, Clinical Applications. 2020.


2019


2018


Loewe, A., Krueger, M. W., Holmqvist, F., Dössel, O., Seemann, G., and Platonov, P. G. “P-wave terminal force is affected by the site of earliest right atrial activation independent from atrial size in silico”. In: International Conference on Electrocardiology. 2016.

2015


2013


5 Invited Talks

2021
Loewe, A. “Computational Cardiac Modeling - Synergies with Machine Learning”. In: Cardiac Electromechanics Research Group (Prof. Niederer / Bishop), King’s College London 2021. London, UK.

Loewe, A. “Predicting potential AFib patterns using computational modeling”. In: Atrial Signals Workshop 2021. Karlsruhe, Germany.

2019

Loewe, A. “The inverse problem of cardiac mechanics - estimation of cardiac active stress from endocardial motion tracking”. In: 6th International Conference on Computational and Mathematical Biomedical Engineering 2019. Sendai City, Japan.

2017
Loewe, A. “Multiscale modeling of cardiac electrophysiology”. In: School of Science and Engineering, Reykjavik University / Háskólinn í Reykjavík 2017. Reykjavik, Iceland.

Loewe, A. “Validation upside down - In-silico models to sound the potential and limitations of diagnostic tools”. In: TRM Forum 2017. Lugano, Switzerland.

2016
Loewe, A. “Multiscale computational cardiology”. In: Computational Physiopathology Unit (Prof. Stefano Severi), University of Bologna 2016. Bologna, Italy.

2015
Loewe, A. “In-silico Assessment of the Dynamic Effects of Amiodarone and Dronedarone on Human Atrial Patho-Electrophysiology”. In: Emerging Mathematical Topics in Biology and Life Sciences 2015. Graz, Austria.

2014
[t1] Loewe, A. “Multiscale in silico modeling of human atrial electrophysiology”. In: Computational Cardiology Lab (Prof. Natalia Trayanova), Johns Hopkins University 2014. Baltimore, USA.

6 Patents


7 Public Outreach / Popular Science


See CV for further dissemination and outreach activities.

8 Book Chapters and Monographs

# 9 Reviewer Activity

## 9.1 Funding Agencies

- Belgian Physical Society (2021)
- British Heart Foundation (2020)
- Czech Academy of Sciences, member of evaluation panel “Engineering and Technology” (2021)
- Deutsche Forschungsgemeinschaft (2021)
- Fondazione Leonardo (2021)
- Medical Research Council, United Kingdom (2018)
- Swiss National Science Foundation (2021)
- Wellcome Trust (2021)

## 9.2 Scientific Journals

- Annals of Biomedical Engineering (2019-20)
- Biomechanics and Modeling in Mechanobiology (2020)
- Biophysical Journal (2019)
- BMC Nephrology (2021)
- Cardiology Research and Practice (2021)
- Cardiovascular Engineering and Technology (2021)
- Cardiovascular Research (2018)
- Circulation: Arrhythmia and Electrophysiology (2021)
- Clinical Medicine Insights Cardiology (2019)
- Computers in Biology and Medicine (2018-21)
- Computing in Cardiology Conference (2017-21)
- eLIFE (2021)
- Europace (2016-21)
- Frontiers in Cardiovascular Medicine (2020)
- Heart Rhythm (2017-19)
- IEEE Transactions on Biomedical Engineering (2016, 2019-21)
- International Journal of Clinical Cardiology (2017)
- JACC Clinical Electrophysiology (2021)
- Journal of Cardiovascular Electrophysiology (2021)
- Journal of Computational Physics (2021)
- Journal of Open Source Software (2021)
- Medical and Biological Engineering and Computing (2016-17, 2019)
- Medical Image Analysis (2020-21)
- Philosophical Transactions of the Royal Society A (2019-20)
- PLOS Computational Biology (2017, 2019)
- PLOS ONE (2019)
9.3 Universities

- *Ghent University* (2021)
- *Politecnico di Milano* (2021)
Axel Loewe’s Supervisions

10 Supervised PhD Students


• Nothstein, M., expected 2021
• Luongo, G., expected 2021
• Azzolin, L., expected 2021
• Nairn, D., expected 2022
• Gerach, T., expected 2022
• Brenneisen, J., expected 2022
• Nagel, C., expected 2023
• Barrios Espinosa, C.A., expected 2024
• Martinez Diaz, L.P., expected 2024

11 Supervised and Refereed Student Theses


