Axel Loewe’s Publications

1 Peer-reviewed Journal Articles

Forthcoming


2022


1 Equal contributions by several authors are denoted by ‘*’. 


2020

A X E L  L O E W E ’ S P U B L I C A T I O N  L I S T

1 Peer-reviewed Journal Articles


2019


2018


[j11] 2017


[j3] 2014


## 2 Data & Software


## 3 Proceedings

2022

[p87] Nagel, C., Schaufelberger, M., Dössel, O., and **Loewe, A.** “A bi-atrial statistical shape model as a basis to classify left atrial enlargement from simulated and clinical 12-lead ECGs”. In: vol. 13131. 12th Workshop on Statistical Atlases and Computational Modelling of the Heart (STACOM), Lecture Notes in Computer Science 2022. Pp. 38–47. DOI: 10.1007/978-3-030-93722-5_5.


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'S PUBLICATION LIST

3 Proceedings


2021


2020


[p58] Elliott, J., Doessel, O., Loewe, A., Mainardi, L., Corino, V., and F Rodriguez Matas, J. “An In-silico Study Into The Impact of Electrophysiological Variability at the Cellular Level on the Reentry...


2018


4 Abstracts


2020


2019


2017


[a16] Loewe, A., Debatin, S., Lenis, G., and Dössel, O. “Optimal ECG lead systems to maximimze left atrial information content”. In: Biomedizinische Technik / Biomedical Engineering. Vol. 65.
5 Invited Talks

2016


2015


2013


5 Invited Talks

2022

[t13] Loewe, A. “Computermodellierung und maschinelles Lernen in der kardiovaskulären Medizin”.

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6 Patents


7 Public Outreach / Popular Science

See CV for further dissemination and outreach activities.

8 Book Chapters and Monographs


2010 [b1] Loewe, A. “Comparison of cardiac simulation tools regarding the modeling of acute ischemia”. Bachelor Thesis. Karlsruhe Institute of Technology (KIT).
9 Reviewer Activity

9.1 Funding Agencies

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

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, 2022)
- Circulation: Arrhythmia and Electrophysiology (2021)
- Clinical Medicine Insights Cardiology (2019)
- Computers in Biology and Medicine (2018-21)
- Computing in Cardiology Conference (2017-22)
- eLIFE (2021)
- Engineering with Computers (2022)
- Europace (2016-21)
- European Heart Journal (2022)
- Frontiers in Cardiovascular Medicine (2020, 2022)
- Heart Rhythm (2017-19)
- IEEE Transactions on Biomedical Engineering (2016, 2019-21)
- IEEE Transactions on Medical Imaging (2022)
- International Journal of Clinical Cardiology (2017)
- International Journal for Numerical Methods in Biomedical Engineering (2022)
- JACC Clinical Electrophysiology (2021-22)
- Journal of Cardiovascular Electrophysiology (2021-22)
- Journal of Computational Physics (2021)
- Journal of Open Source Software (2021-22)
• Mathematics (2022)
• Medical and Biological Engineering and Computing (2016-17, 2019)
• Medical Image Analysis (2020-21)
• Platform for Advanced Scientific Computing (PASC) Conference (2021)
• Philosophical Transactions of the Royal Society A (2019-20)
• Physiological Reports (2022)
• PLOS Computational Biology (2017, 2019)
• PLOS ONE (2019)
• Simulation: Transactions of the Society for Modeling and Simulation (2018)
• Wellcome Open Research (2022)

9.3 Universities

• Ghent University (2021)
• KIT Department of Mathematics (2022)
• KIT Department of Electrical Engineering and Information Technology (2020-2022)
• Politecnico di Milano (2021)
• Università degli Studi di Milano (2022)
Axel Loewe’s Supervisions

10 Supervised PhD Students


- Nagel, C., expected 2022
- Brenneisen, J., expected 2023
- Barrios Espinosa, C.A., expected 2024
- Martínez Díaz, L.P., expected 2024
- Martínez Antón, C., expected 2024
- Krauß, J., expected 2025
- Steyer, J.F., expected 2025

11 Supervised and Refereed Student Theses


