

# Thomas Carraro

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2635511/publications.pdf>

Version: 2024-02-01

22  
papers

877  
citations

687363

13  
h-index

752698

20  
g-index

23  
all docs

23  
docs citations

23  
times ranked

886  
citing authors

#	ARTICLE	IF	CITATIONS
1	Understanding Deviations between Spatially Resolved and Homogenized Cathode Models of Lithium-Ion Batteries. <i>Energy Technology</i> , 2021, 9, 2000881.	3.8	14
2	Effect of Tomography Resolution on Calculation of Microstructural Properties for Lithium Ion Porous Electrodes. <i>ECS Transactions</i> , 2020, 97, 255-266.	0.5	9
3	Age Structure Can Account for Delayed Logistic Proliferation of Scratch Assays. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 2706-2724.	1.9	5
4	<i>In vitro</i> cell migration quantification method for scratch assays. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20180709.	3.4	76
5	Reviewing the mathematical validity of a fuel cell cathode model. Existence of weak bounded solution. <i>Computers and Mathematics With Applications</i> , 2019, 77, 1425-1436.	2.7	4
6	An Adaptive Newton Algorithm for Optimal Control Problems with Application to Optimal Electrode Design. <i>Journal of Optimization Theory and Applications</i> , 2018, 177, 498-534.	1.5	6
7	Effective pressure boundary condition for the filtration through porous medium via homogenization. <i>Nonlinear Analysis: Real World Applications</i> , 2018, 44, 149-172.	1.7	12
8	A Goal-Oriented Error Estimator for a Class of Homogenization Problems. <i>Journal of Scientific Computing</i> , 2017, 71, 1169-1196.	2.3	3
9	Coupling vs decoupling approaches for PDE/ODE systems modeling intercellular signaling. <i>Journal of Computational Physics</i> , 2016, 314, 522-537.	3.8	6
10	Multiple shooting methods for parabolic optimal control problems with control constraints. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2015, 15, 609-610.	0.2	0
11	Effective interface conditions for the forced infiltration of a viscous fluid into a porous medium using homogenization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 292, 195-220.	6.6	31
12	Parameter Estimation for a Reconstructed SOFC Mixed-Conducting LSCF-Cathode. <i>Contributions in Mathematical and Computational Sciences</i> , 2013, , 267-285.	0.3	0
13	Quantitative Characterization of $\text{LiFePO}_4$ Cathodes Reconstructed by FIB/SEM Tomography. <i>Journal of the Electrochemical Society</i> , 2012, 159, A972-A980.	2.9	110
14	Representative volume element size for accurate solid oxide fuel cell cathode reconstructions from focused ion beam tomography data. <i>Electrochimica Acta</i> , 2012, 82, 268-276.	5.2	75
15	3D finite element model for reconstructed mixed-conducting cathodes: I. Performance quantification. <i>Electrochimica Acta</i> , 2012, 77, 315-323.	5.2	75
16	3D finite element model for reconstructed mixed-conducting cathodes: II. Parameter sensitivity analysis. <i>Electrochimica Acta</i> , 2012, 77, 309-314.	5.2	28
17	Detailed Microstructure Analysis and 3D Simulations of Porous Electrodes. <i>ECS Transactions</i> , 2011, 35, 2357-2368.	0.5	25
18	Reducing error and measurement time in impedance spectroscopy using model based optimal experimental design. <i>Electrochimica Acta</i> , 2011, 56, 5416-5434.	5.2	51

#	ARTICLE	IF	CITATIONS
19	Three-dimensional reconstruction of a composite cathode for lithium-ion cells. <i>Electrochemistry Communications</i> , 2011, 13, 166-168.	4.7	132
20	Reconstruction of porous electrodes by FIB/SEM for detailed microstructure modeling. <i>Journal of Power Sources</i> , 2011, 196, 7302-7307.	7.8	154
21	Electrode Reconstruction by FIB/SEM and Microstructure Modeling. <i>ECS Transactions</i> , 2010, 28, 81-91.	0.5	14
22	3D Electrode Microstructure Reconstruction and Modelling. <i>ECS Transactions</i> , 2009, 25, 1211-1220.	0.5	47