Thomas Carraro

List of Publications by Year
in descending order

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

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22	877	687363 13	752698 20
papers	citations	h-index	g-index

23	23	23	886
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reconstruction of porous electrodes by FIB/SEM for detailed microstructure modeling. Journal of Power Sources, 2011, 196, 7302-7307.	7.8	154
2	Three-dimensional reconstruction of a composite cathode for lithium-ion cells. Electrochemistry Communications, 2011, 13, 166-168.	4.7	132
3	Quantitative Characterization of LiFePO₄Cathodes Reconstructed by FIB/SEM Tomography. Journal of the Electrochemical Society, 2012, 159, A972-A980.	2.9	110
4	In vitro cell migration quantification method for scratch assays. Journal of the Royal Society Interface, 2019, 16, 20180709.	3.4	76
5	Representative volume element size for accurate solid oxide fuel cell cathode reconstructions from focused ion beam tomography data. Electrochimica Acta, 2012, 82, 268-276.	5.2	75
6	3D finite element model for reconstructed mixed-conducting cathodes: I. Performance quantification. Electrochimica Acta, 2012, 77, 315-323.	5.2	75
7	Reducing error and measurement time in impedance spectroscopy using model based optimal experimental design. Electrochimica Acta, 2011, 56, 5416-5434.	5.2	51
8	3D Electrode Microstructure Reconstruction and Modelling. ECS Transactions, 2009, 25, 1211-1220.	0.5	47
9	Effective interface conditions for the forced infiltration of a viscous fluid into a porous medium using homogenization. Computer Methods in Applied Mechanics and Engineering, 2015, 292, 195-220.	6.6	31
10	3D finite element model for reconstructed mixed-conducting cathodes: II. Parameter sensitivity analysis. Electrochimica Acta, 2012, 77, 309-314.	5.2	28
11	Detailed Microstructure Analysis and 3D Simulations of Porous Electrodes. ECS Transactions, 2011, 35, 2357-2368.	0.5	25
12	Electrode Reconstruction by FIB/SEM and Microstructure Modeling. ECS Transactions, 2010, 28, 81-91.	0.5	14
13	Understanding Deviations between Spatially Resolved and Homogenized Cathode Models of Lithiumâ€ion Batteries. Energy Technology, 2021, 9, 2000881.	3.8	14
14	Effective pressure boundary condition for the filtration through porous medium via homogenization. Nonlinear Analysis: Real World Applications, 2018, 44, 149-172.	1.7	12
15	Effect of Tomography Resolution on Calculation of Microstructural Properties for Lithium Ion Porous Electrodes. ECS Transactions, 2020, 97, 255-266.	0.5	9
16	Coupling vs decoupling approaches for PDE/ODE systems modeling intercellular signaling. Journal of Computational Physics, 2016, 314, 522-537.	3.8	6
17	An Adaptive Newton Algorithm for Optimal Control Problems with Application to Optimal Electrode Design. Journal of Optimization Theory and Applications, 2018, 177, 498-534.	1.5	6
18	Age Structure Can Account for Delayed Logistic Proliferation of Scratch Assays. Bulletin of Mathematical Biology, 2019, 81, 2706-2724.	1.9	5

#	Article	IF	Citations
19	Reviewing the mathematical validity of a fuel cell cathode model. Existence of weak bounded solution. Computers and Mathematics With Applications, 2019, 77, 1425-1436.	2.7	4
20	A Goal-Oriented Error Estimator for a Class of Homogenization Problems. Journal of Scientific Computing, 2017, 71, 1169-1196.	2.3	3
21	Multiple shooting methods for parabolic optimal control problems with control constraints. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 609-610.	0.2	0
22	Parameter Estimation for a Reconstructed SOFC Mixed-Conducting LSCF-Cathode. Contributions in Mathematical and Computational Sciences, 2013, , 267-285.	0.3	0