

Chris Cantwell

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3567747/publications.pdf>

Version: 2024-02-01

41
papers

1,502
citations

430874

18
h-index

395702

33
g-index

43
all docs

43
docs citations

43
times ranked

1487
citing authors

#	ARTICLE	IF	CITATIONS
1	Leading-edge vortex dynamics on plunging airfoils and wings. <i>Journal of Fluid Mechanics</i> , 2022, 940, .	3.4	10
2	Resilience and fault tolerance in high-performance computing for numerical weather and climate prediction. <i>International Journal of High Performance Computing Applications</i> , 2021, 35, 285-311.	3.7	7
3	A spectral/ hp element method for thermal convection. <i>International Journal for Numerical Methods in Fluids</i> , 2021, 93, 2380-2395.	1.6	3
4	Approximating the Solution of Surface Wave Propagation Using Deep Neural Networks. <i>Proceedings of the International Neural Networks Society</i> , 2020, , 246-256.	0.6	10
5	Nektar++: Enhancing the capability and application of high-fidelity spectral/ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e862" altimg="si5.svg" \rangle \langle \text{mml:mrow} \langle \text{mml:mi} \text{h} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ element methods. <i>Computer Physics Communications</i> . 2020. 249. 107110.	7.5	82
6	Left Atrial Enhancement Correlates With Myocardial Conduction Velocity in Patients With Persistent Atrial Fibrillation. <i>Frontiers in Physiology</i> , 2020, 11, 570203.	2.8	6
7	Anatomical Distribution of Ectopy-Triggering Plexuses in Patients With Atrial Fibrillation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2020, 13, e008715.	4.8	5
8	Development of a pro-arrhythmic ex vivo intact human and porcine model: cardiac electrophysiological changes associated with cellular uncoupling. <i>Pflugers Archiv European Journal of Physiology</i> , 2020, 472, 1435-1446.	2.8	5
9	Reducing complexity and unidentifiability when modelling human atrial cells. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190339.	3.4	7
10	An audit of uncertainty in multi-scale cardiac electrophysiology models. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190335.	3.4	25
11	Considering discrepancy when calibrating a mechanistic electrophysiology model. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190349.	3.4	46
12	A Minimally Intrusive Low-Memory Approach to Resilience for Existing Transient Solvers. <i>Journal of Scientific Computing</i> , 2019, 78, 565-581.	2.3	6
13	On weak Dirichlet boundary conditions for elliptic problems in the continuous Galerkin method. <i>Journal of Computational Physics</i> , 2019, 394, 732-744.	3.8	1
14	Voltage during atrial fibrillation is superior to voltage during sinus rhythm in localizing areas of delayed enhancement on magnetic resonance imaging: An assessment of the posterior left atrium in patients with persistent atrial fibrillation. <i>Heart Rhythm</i> , 2019, 16, 1357-1367.	0.7	40
15	Rethinking multiscale cardiac electrophysiology with machine learning and predictive modelling. <i>Computers in Biology and Medicine</i> , 2019, 104, 339-351.	7.0	40
16	Spectral/hp element methods: Recent developments, applications, and perspectives. <i>Journal of Hydrodynamics</i> , 2018, 30, 1-22.	3.2	74
17	Determinants of new wavefront locations in cholinergic atrial fibrillation. <i>Europace</i> , 2018, 20, iii3-iii15.	1.7	27
18	A novel approach to mapping the atrial ganglionated plexus network by generating a distribution probability atlas. <i>Journal of Cardiovascular Electrophysiology</i> , 2018, 29, 1624-1634.	1.7	22

#	ARTICLE	IF	CITATIONS
19	Analytical approaches for myocardial fibrillation signals. Computers in Biology and Medicine, 2018, 102, 315-326.	7.0	17
20	Concurrent micro- to macro-cardiac electrophysiology in myocyte cultures and human heart slices. Scientific Reports, 2018, 8, 6947.	3.3	20
21	Characterisation of re-entrant circuit (or rotational activity) in vitro using the HL1-6 myocyte cell line. Journal of Molecular and Cellular Cardiology, 2018, 119, 155-164.	1.9	15
22	Spatial Resolution Requirements for Accurate Identification of Drivers of Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2017, 10, e004899.	4.8	120
23	Rotor Tracking Using Phase of Electrograms Recorded During Atrial Fibrillation. Annals of Biomedical Engineering, 2017, 45, 910-923.	2.5	34
24	Optimising the performance of the spectral/ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si10.gif" display="inline" overflow="scroll" \rangle \langle \text{mml:mi} \rangle \text{h} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ element method with collective linear algebra operations. Computer Methods in Applied Mechanics and Engineering, 2016, 310, 628-645.	6.6	18
25	An adaptable parallel algorithm for the direct numerical simulation of incompressible turbulent flows using a Fourier spectral/ hp element method and MPI virtual topologies. Computer Physics Communications, 2016, 206, 17-25.	7.5	13
26	Automated fiducial point selection for reducing registration error in the co-localisation of left atrium electroanatomic and imaging data. , 2015, 2015, 1989-92.		6
27	Techniques for automated local activation time annotation and conduction velocity estimation in cardiac mapping. Computers in Biology and Medicine, 2015, 65, 229-242.	7.0	142
28	Influence of left atrial geometry on rotor core trajectories in a model of atrial fibrillation. , 2015, , .		2
29	TemPSS: A Service Providing Software Parameter Templates and Profiles for Scientific HPC. , 2015, , .		1
30	A technique for visualising three-dimensional left atrial cardiac activation data in two dimensions with minimal distance distortion. , 2015, 2015, 7296-9.		8
31	Ensuring an Effective User Experience When Managing and Running Scientific HPC Software. , 2015, , .		1
32	Spectral/hp element methods for plane Newtonian extrudate swell. Computers and Fluids, 2015, 116, 105-117.	2.5	5
33	Nektar++: An open-source spectral/ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si20.gif" display="inline" overflow="scroll" \rangle \langle \text{mml:mi} \rangle \text{h} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ element framework. Computer Physics Communications. 2015. 192. 205-219.	7.5	399
34	A software platform for the comparative analysis of electroanatomic and imaging data including conduction velocity mapping. , 2014, 2014, 1591-4.		14
35	An automated algorithm for determining conduction velocity, wavefront direction and origin of focal cardiac arrhythmias using a multipolar catheter. , 2014, 2014, 1583-6.		20
36	High-order spectral/hp element discretisation for reaction-diffusion problems on surfaces: Application to cardiac electrophysiology. Journal of Computational Physics, 2014, 257, 813-829.	3.8	36

#	ARTICLE	IF	CITATIONS
37	Finite element assembly strategies on multi-core and many-core architectures. International Journal for Numerical Methods in Fluids, 2013, 71, 80-97.	1.6	85
38	Nekkloud: A software environment for high-order finite element analysis on clusters and clouds. , 2013, , .		5
39	From h to p efficiently: Strategy selection for operator evaluation on hexahedral and tetrahedral elements. Computers and Fluids, 2011, 43, 23-28.	2.5	75
40	From h to p Efficiently: Selecting the Optimal Spectral/hpDiscretisation in Three Dimensions. Mathematical Modelling of Natural Phenomena, 2011, 6, 84-96.	2.4	34
41	Computational study of subcritical response in flow past a circular cylinder. Physical Review E, 2010, 82, 026315.	2.1	15