Juan C Del Alamo

List of Publications by Year
in descending order

72 papers	5,279 citations	117625 34 h-index	95266 68 g-index
80 all docs	80 docs citations	80 times ranked	5495 citing authors

#	Article	IF	Citations
1	Biomechanical interactions of Schistosoma mansoni eggs with vascular endothelial cells facilitate egg extravasation. PLoS Pathogens, 2022, 18, e1010309.	4.7	3
2	<scp>Nonâ€Newtonian</scp> blood rheology impacts left atrial stasis in <scp>patientâ€specific</scp> simulations. International Journal for Numerical Methods in Biomedical Engineering, 2022, 38, e3597.	2.1	19
3	Assessment of Blood Flow Transport in the Left Ventricle Using Ultrasound. Validation Against 4-D Flow Cardiac Magnetic Resonance. Ultrasound in Medicine and Biology, 2022, 48, 1822-1832.	1.5	4
4	Demonstration of Patient-Specific Simulations to Assess Left Atrial Appendage Thrombogenesis Risk. Frontiers in Physiology, 2021, 12, 596596.	2.8	51
5	Elucidating the Biomechanics of Leukocyte Transendothelial Migration by Quantitative Imaging. Frontiers in Cell and Developmental Biology, 2021, 9, 635263.	3.7	17
6	The interplay between matrix deformation and the coordination of turning events governs directed neutrophil migration in 3D matrices. Science Advances, 2021, 7, .	10.3	10
7	Intraventricular Flow Patterns in Patients Treated with Left Ventricular Assist Devices. ASAIO Journal, 2021, 67, 74-83.	1.6	14
8	Blood Stasis Imaging Predicts Cerebral Microembolism during Acute Myocardial Infarction. Journal of the American Society of Echocardiography, 2020, 33, 389-398.	2.8	18
9	How Computation Is Helping Unravel the Dynamics of Morphogenesis. Frontiers in Physics, 2020, 8, .	2.1	11
10	MicroMotility: State of the art, recent accomplishments and perspectives on the mathematical modeling of bio-motility at microscopic scales. Mathematics in Engineering, 2020, 2, 230-252.	0.9	3
11	Symmetry breaking transition towards directional locomotion inPhysarummicroplasmodia. Journal Physics D: Applied Physics, 2019, 52, 494004.	2.8	7
12	Age-Dependence of Flow Homeostasis in the Left Ventricle. Frontiers in Physiology, 2019, 10, 485.	2.8	13
13	Three-Dimensional Monolayer Stress Microscopy. Biophysical Journal, 2019, 117, 111-128.	0.5	30
14	MiR-145 mediates cell morphology-regulated mesenchymal stem cell differentiation to smooth muscle cells. Biomaterials, 2019, 204, 59-69.	11.4	32
15	Quantifying the mechanics of locomotion of the schistosome pathogen with respect to changes in its physical environment. Journal of the Royal Society Interface, 2019, 16, 20180675.	3.4	13
16	Mitral Valve Prosthesis Design Affects Hemodynamic Stasis and Shear In The Dilated Left Ventricle. Annals of Biomedical Engineering, 2019, 47, 1265-1280.	2.5	16
17	miR-486 is modulated by stretch and increases ventricular growth. JCI Insight, 2019, 4, .	5.0	26
18	Three-dimensional forces exerted by leukocytes and vascular endothelial cells dynamically facilitate diapedesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 133-138.	7.1	42

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19	Stasis Mapping Using Ultrasound. JACC: Cardiovascular Imaging, 2018, 11, 514-515.	5.3	20
20	Use of human induced pluripotent stem cellâ€“derived cardiomyocytes to assess drug cardiotoxicity. Nature Protocols, 2018, 13, 3018-3041.	12.0	102
21	Clinical assessment of intraventricular blood transport in patients undergoing cardiac resynchronization therapy. Meccanica, 2017, 52, 563-576.	2.0	12
22	High-throughput screening of tyrosine kinase inhibitor cardiotoxicity with human induced pluripotent stem cells. Science Translational Medicine, 2017, 9, .	12.4	297
23	Two-Layer Elastographic 3-D Traction Force Microscopy. Scientific Reports, 2017, 7, 39315.	3.3	23
24	Self-organized mechano-chemical dynamics in amoeboid locomotion ofPhysarumfragments. Journal Physics D: Applied Physics, 2017, 50, 204004.	2.8	26
25	Mechanosensitive Adhesion Explains Stepping Motility in Amoeboid Cells. Biophysical Journal, 2017, 112, 2672-2682.	0.5	19
26	Cooperative cell motility during tandem locomotion of amoeboid cells. Molecular Biology of the Cell, 2016, 27, 1262-1271.	2.1	12
27	Rickettsia Sca4 Reduces Vinculin-Mediated Intercellular Tension to Promote Spread. Cell, 2016, 167, 670-683.e10.	28.9	101
28	Bio- chemical and physical characterizations of mesenchymal stromal cells along the time course of directed differentiation. Scientific Reports, 2016, 6, 31547.	3.3	25
29	High throughput physiological screening of iPSC-derived cardiomyocytes for drug development. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 1717-1727.	4.1	99
30	A clinical method for mapping and quantifying blood stasis in the left ventricle. Journal of Biomechanics, 2016, 49, 2152-2161.	2.1	54
31	Coordination of contractility, adhesion and flow in migratingPhysarumamoebae. Journal of the Royal Society Interface, 2015, 12, 20141359.	3.4	60
32	Three-Dimensional Balance of Cortical Tension and Axial Contractility Enables Fast Amoeboid Migration. Biophysical Journal, 2015, 108, 821-832.	0.5	49
33	The role of elastic restoring forces in right-ventricular filling. Cardiovascular Research, 2015, 107, 45-55.	3.8	15
34	Reply. Journal of the American College of Cardiology, 2015, 65, 2574-2575.	2.8	1
35	The Clinical Assessment of Intraventricular Flows. Annual Review of Fluid Mechanics, 2015, 47, 315-342.	25.0	55
36	Cyclic stretch of embryonic cardiomyocytes increases proliferation, growth, and expression while repressing Tgf-Î² signaling. Journal of Molecular and Cellular Cardiology, 2015, 79, 133-144.	1.9	56

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37	Closure to â€œDiscussion of â€˜Cytoskeletal Mechanics Regulating Amoeboid Cell Locomotionâ€™â€• (Ã¥lvarez-GonzÃ¡lez, B., Bastounis, E., Meili, R., del Alamo, J. C., Firtel, R. A., and Lasheras, J. C., 2014, ASME) Tj ETQq1 1 0.784314 rgBT		
38	GEF-H1 controls focal adhesion signaling that regulates mesenchymal stem cell lineage commitment. Journal of Cell Science, 2014, 127, 4186-200.	2.0	29
39	Cytoskeletal Mechanics Regulating Amoeboid Cell Locomotion. Applied Mechanics Reviews, 2014, 66, .	10.1	11
40	3D Traction Stresses Activate Protease-Dependent Invasion of Cancer Cells. Biophysical Journal, 2014, 107, 2528-2537.	0.5	77
41	Intraventricular vortex properties in nonischemic dilated cardiomyopathy. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H718-H729.	3.2	77
42	Contribution of the Diastolic Vortex Ring to Left Ventricular Filling. Journal of the American College of Cardiology, 2014, 64, 1711-1721.	2.8	102
43	Both contractile axial and lateral traction force dynamics drive amoeboid cell motility. Journal of Cell Biology, 2014, 204, 1045-1061.	5.2	58
44	The Effect of Enterohemorrhagic E. coli Infection on the Cell Mechanics of Host Cells. PLoS ONE, 2014, 9, e112137.	2.5	8
45	In situ mechanotransduction via vinculin regulates stem cell differentiation. Stem Cells, 2013, 31, 2467-2477.	3.2	100
46	Dynamic and reversible surface topography influences cell morphology. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2313-2321.	4.0	47
47	Topology of Blood Transport in the Human Left Ventricle by Novel Processing of Doppler Echocardiography. Annals of Biomedical Engineering, 2013, 41, 2603-2616.	2.5	79
48	Shp2 plays a crucial role in cell structural orientation and force polarity in response to matrix rigidity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2840-2845.	7.1	34
49	Mesenchymal stem cell durotaxis depends on substrate stiffness gradient strength. Biotechnology Journal, 2013, 8, 472-484.	3.5	219
50	Three-Dimensional Quantification of Cellular Traction Forces and Mechanosensing of Thin Substrata by Fourier Traction Force Microscopy. PLoS ONE, 2013, 8, e69850.	2.5	93
51	Roles of cell confluency and fluid shear in 3-dimensional intracellular forces in endothelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11110-11115.	7.1	109
52	Healthy vs Diseased Transport and Mixing in the Human Left Ventricle. , 2012, , .		2
53	Corrections to Taylorâ€™s Approximation fromÂComputed Turbulent Convection Velocities. ERCOFTAC Series, 2011, , 211-218.	0.1	0
54	Turbulence modification by stable stratification in channel flow. Physics of Fluids, 2011, 23, .	4.0	113

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55	An Oscillatory Contractile Pole-Force Component Dominates the Traction Forces Exerted by Migrating Amoeboid Cells. Cellular and Molecular Bioengineering, 2011, 4, 603-615.	2.1	10
56	The SCAR/WAVE complex is necessary for proper regulation of traction stresses during amoeboid motility. Molecular Biology of the Cell, 2011, 22, 3995-4003.	2.1	22
57	Two-Dimensional Intraventricular Flow Mapping by Digital Processing Conventional Color-Doppler Echocardiography Images. IEEE Transactions on Medical Imaging, 2010, 29, 1701-1713.	8.9	177
58	From imaging to prediction: Emerging non-invasive methods in pediatric cardiology. Progress in Pediatric Cardiology, 2010, 30, 81-89.	0.4	25
59	Myosin II Is Essential for the Spatiotemporal Organization of Traction Forces during Cell Motility. Molecular Biology of the Cell, 2010, 21, 405-417.	2.1	81
60	The mechanics of the adhesive locomotion of terrestrial gastropods. Journal of Experimental Biology, 2010, 213, 3920-3933.	1.7	71
61	Recent Advances in the Application of Computational Mechanics to the Diagnosis and Treatment of Cardiovascular Disease. Revista Espanola De Cardiologia (English Ed), 2009, 62, 781-805.	0.6	8
62	Estimation of turbulent convection velocities and corrections to Taylor's approximation. Journal of Fluid Mechanics, 2009, 640, 5-26.	3.4	306
63	Turbulence and Internal Waves in a Stably-Stratified Channel Flow. , 2009, , 217-227.		3
64	Anisotropic rheology and directional mechanotransduction in vascular endothelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15411-15416.	7.1	76
65	Spatio-temporal analysis of eukaryotic cell motility by improved force cytometry. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13343-13348.	7.1	183
66	Vorticity organization in the outer layer of turbulent channels with disturbed walls. Journal of Fluid Mechanics, 2007, 591, 145-154.	3.4	62
67	Self-similar vortex clusters in the turbulent logarithmic region. Journal of Fluid Mechanics, 2006, 561, 329.	3.4	312
68	Linear energy amplification in turbulent channels. Journal of Fluid Mechanics, 2006, 559, 205.	3.4	282
69	THE NEAR-WALL STRUCTURES OF TURBULENT WALL FLOWS. , 2006, , 53-70.		2
70	The large-scale dynamics of near-wall turbulence. Journal of Fluid Mechanics, 2004, 505, 179-199.	3.4	157
71	Scaling of the energy spectra of turbulent channels. Journal of Fluid Mechanics, 2004, 500, 135-144.	3.4	574
72	Spectra of the very large anisotropic scales in turbulent channels. Physics of Fluids, 2003, 15, L41.	4.0	408