Alan Garfinkel

List of Publications by Year
in descending order

44 papers	3,289 citations	257450 24 h-index	243625 44 g-index
45 all docs	45 docs citations	45 times ranked	2313 citing authors

#	Article	IF	Citations
1	Circadian and ultradian rhythms in normal mice and in a mouse model of Huntingtonâ€™s disease. Chronobiology International, 2022, 39, 513-524.	2.0	4
2	Teaching Dynamics to Biology Undergraduates: the UCLA Experience. Bulletin of Mathematical Biology, 2022, 84, 43.	1.9	1
3	R-on-T and the initiation of reentry revisited: Integrating old and new concepts. Heart Rhythm, 2022, 19, 1369-1383.	0.7	12
4	A common pathway to cancer: Oncogenic mutations abolish p53 oscillations. Progress in Biophysics and Molecular Biology, 2022, , .	2.9	2
5	Reimagining the Introductory Math Curriculum for Life Sciences Students. CBE Life Sciences Education, 2021, 20, ar62.	2.3	1
6	Redundancy and multifunctionality among spinal locomotor networks. Journal of Neurophysiology, 2020, 124, 1469-1479.	1.8	13
7	Shaping Waves of Bone Morphogenetic Protein Inhibition During Vascular Growth. Circulation Research, 2020, 127, 1288-1305.	4.5	6
8	Model of Left Ventricular Contraction: Validation Criteria and Boundary Conditions. Lecture Notes in Computer Science, 2019, 11504, 294-303.	1.3	6
9	Microstructural Infarct Border Zone Remodeling in the Post-infarct Swine Heart Measured by Diffusion Tensor MRI. Frontiers in Physiology, 2018, 9, 826.	2.8	22
10	Memory-Induced Chaos in Cardiac Excitation. Physical Review Letters, 2017, 118, 138101.	7.8	17
11	Electrophysiology of Heart Failure Using a Rabbit Model: From the Failing Myocyte to Ventricular Fibrillation. PLoS Computational Biology, 2016, 12, e1004968.	3.2	19
12	A Dynamical Threshold for Cardiac Delayed Afterdepolarization-Mediated Triggered Activity. Biophysical Journal, 2016, 111, 2523-2533.	0.5	16
13	Stochastic pacing reveals the propensity to cardiac action potential alternans and uncovers its underlying dynamics. Journal of Physiology, 2016, 594, 2537-2553.	2.9	17
14	Delayed afterdepolarizations generate both triggers and a vulnerable substrate promoting reentry in cardiac tissue. Heart Rhythm, 2015, 12, 2115-2124.	0.7	59
15	Simulation Methods and Validation Criteria for Modeling Cardiac Ventricular Electrophysiology. PLoS ONE, 2014, 9, e114494.	2.5	48
16	Branching patterns emerge in a mathematical model of the dynamics of lung development. Journal of Physiology, 2014, 592, 313-324.	2.9	36
17	Nonlinear and stochastic dynamics in the heart. Physics Reports, 2014, 543, 61-162.	25.6	166
18	Mechanisms of Side Branching and Tip Splitting in a Model of Branching Morphogenesis. PLoS ONE, 2014, 9, e102718.	2.5	16

#	ARTICLE	IF	CITATIONS
19	Patterns of periodic holes created by increased cell motility. Interface Focus, 2012, 2, 457-464.	3.0	15
20	Focal High Cell Density Generates a Gradient of Patterns in Self-Organizing Vascular Mesenchymal Cells. Journal of Vascular Research, 2012, 49, 441-446.	1.4	3
21	Directing tissue morphogenesis via self-assembly of vascular mesenchymal cells. Biomaterials, 2012, 33, 9019-9026.	11.4	39
22	Concise Review: Applying Stem Cell Biology to Vascular Structures. Stem Cells, 2012, 30, 386-391.	3.2	10
23	Left-Right Symmetry Breaking in Tissue Morphogenesis via Cytoskeletal Mechanics. Circulation Research, 2012, 110, 551-559.	4.5	109
24	Multi-scale modeling in biology: How to bridge the gaps between scales?. Progress in Biophysics and Molecular Biology, 2011, 107, 21-31.	2.9	111
25	Systems Biology of Vascular Calcification. Trends in Cardiovascular Medicine, 2009, 19, 118-123.	4.9	10
26	Acceleration of cardiac tissue simulation with graphic processing units. Medical and Biological Engineering and Computing, 2009, 47, 1011-1015.	2.8	54
27	A Rabbit Ventricular Action Potential Model Replicating Cardiac Dynamics at Rapid Heart Rates. Biophysical Journal, 2008, 94, 392-410.	0.5	370
28	Front motion and localized states in an asymmetric bistable activator-inhibitor system with saturation. Physical Review E, 2008, 77, 035204.	2.1	23
29	Matrix GLA Protein, an Inhibitory Morphogen in Pulmonary Vascular Development. Journal of Biological Chemistry, 2007, 282, 30131-30142.	3.4	53
30	Dynamic Origin of Spatially Discordant Alternans in Cardiac Tissue. Biophysical Journal, 2007, 92, 448-460.	0.5	98
31	Inferring the Cellular Origin of Voltage and Calcium Alternans from the Spatial Scales of Phase Reversal during Discordant Alternans. Biophysical Journal, 2007, 92, L33-L35.	0.5	30
32	Eight (or more) kinds of alternans. Journal of Electrocardiology, 2007, 40, S70-S74.	0.9	19
33	From Pulsus to Pulseless. Circulation Research, 2006, 98, 1244-1253.	4.5	386
34	Spatially Discordant Alternans in Cardiac Tissue. Circulation Research, 2006, 99, 520-527.	4.5	146
35	Pattern formation by vascular mesenchymal cells. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9247-9250.	7.1	127
36	A simulation study of the effects of cardiac anatomy in ventricular fibrillation. Journal of Clinical Investigation, 2004, 113, 686-693.	8.2	87

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37	Electrophysiological heterogeneity and stability of reentry in simulated cardiac tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H535-H545.	3.2	79
38	Origins of Spiral Wave Meander and Breakup in a Two-Dimensional Cardiac Tissue Model. Annals of Biomedical Engineering, 2000, 28, 755-771.	2.5	150
39	Alternans and the onset of ventricular fibrillation. Physical Review E, 2000, 62, 4043-4048.	2.1	33
40	Mechanisms of Discordant Alternans and Induction of Reentry in Simulated Cardiac Tissue. Circulation, 2000, 102, 1664-1670.	1.6	355
41	Cardiac electrical restitution properties and stability of reentrant spiral waves: a simulation study. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H269-H283.	3.2	225
42	Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing. Circulation Research, 1999, 84, 1318-1331.	4.5	212
43	Local regulation of the threshold for calcium sparks in rat ventricular myocytes: role of sodium-calcium exchange. Journal of Physiology, 1999, 520, 431-438.	2.9	54
44	Spirals, Chaos, and New Mechanisms of Wave Propagation. PACE - Pacing and Clinical Electrophysiology, 1997, 20, 414-421.	1.2	29