

# Marc Fahrner

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Dose-Dependent Immunomodulatory Effect of Human Stem Cells from Amniotic Membrane: A Comparison with Human Mesenchymal Stem Cells from Adipose Tissue. <i>Tissue Engineering</i> , 2007, 13, 1173-1183.	4.6	367
2	Dynamic Coupling of the Putative Coiled-coil Domain of ORAI1 with STIM1 Mediates ORAI1 Channel Activation. <i>Journal of Biological Chemistry</i> , 2008, 283, 8014-8022.	3.4	366
3	A Cytosolic Homomerization and a Modulatory Domain within STIM1 C Terminus Determine Coupling to ORAI1 Channels. <i>Journal of Biological Chemistry</i> , 2009, 284, 8421-8426.	3.4	289
4	STIM1 couples to ORAI1 via an intramolecular transition into an extended conformation. <i>EMBO Journal</i> , 2011, 30, 1678-1689.	7.8	204
5	STIM1/Orai1 coiled-coil interplay in the regulation of store-operated calcium entry. <i>Nature Communications</i> , 2013, 4, 2963.	12.8	179
6	Molecular Determinants of the Coupling between STIM1 and Orai Channels. <i>Journal of Biological Chemistry</i> , 2009, 284, 21696-21706.	3.4	140
7	2-Aminoethoxydiphenyl Borate Alters Selectivity of Orai3 Channels by Increasing Their Pore Size. <i>Journal of Biological Chemistry</i> , 2008, 283, 20261-20267.	3.4	131
8	A Ca <sup>2+</sup> Release-activated Ca <sup>2+</sup> (CRAC) Modulatory Domain (CMD) within STIM1 Mediates Fast Ca <sup>2+</sup> -dependent Inactivation of ORAI1 Channels. <i>Journal of Biological Chemistry</i> , 2009, 284, 24933-24938.	3.4	115
9	Store-Independent Orai1/3 Channels Activated by Intracrine LeukotrieneC <sub>4</sub> . <i>Circulation Research</i> , 2013, 112, 1013-1025.	4.5	106
10	A Coiled-coil Clamp Controls Both Conformation and Clustering of Stromal Interaction Molecule 1 (STIM1). <i>Journal of Biological Chemistry</i> , 2014, 289, 33231-33244.	3.4	105
11	The Extended Transmembrane Orai1 N-terminal (ETON) Region Combines Binding Interface and Gate for Orai1 Activation by STIM1. <i>Journal of Biological Chemistry</i> , 2013, 288, 29025-29034.	3.4	101
12	Mechanistic view on domains mediating STIM1-Orai coupling. <i>Immunological Reviews</i> , 2009, 231, 99-112.	6.0	97
13	The STIM/Orai coupling machinery. <i>Channels</i> , 2008, 2, 261-268.	2.8	92
14	Resting State Orai1 Diffuses as Homotetramer in the Plasma Membrane of Live Mammalian Cells*. <i>Journal of Biological Chemistry</i> , 2010, 285, 41135-41142.	3.4	92
15	Cholesterol modulates Orai1 channel function. <i>Science Signaling</i> , 2016, 9, ra10.	3.6	80
16	Increased Hydrophobicity at the N Terminus/Membrane Interface Impairs Gating of the Severe Combined Immunodeficiency-related ORAI1 Mutant. <i>Journal of Biological Chemistry</i> , 2009, 284, 15903-15915.	3.4	72
17	Ca <sup>2+</sup> release-activated Ca <sup>2+</sup> (CRAC) current, structure, and function. <i>Cellular and Molecular Life Sciences</i> , 2012, 69, 4163-4176.	5.4	53
18	Mechanisms of STIM1 Activation of Store-Independent Leukotriene C <sub>4</sub> -Regulated Ca <sup>2+</sup> Channels. <i>Molecular and Cellular Biology</i> , 2013, 33, 3715-3723.	2.3	53

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19	Missense mutation in immunodeficient patients shows the multifunctional roles of coiled-coil domain 3 (CC3) in STIM1 activation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6206-6211.	7.1	52
20	Cooperativeness of Orai Cytosolic Domains Tunes Subtype-specific Gating. Journal of Biological Chemistry, 2011, 286, 8577-8584.	3.4	51
21	A dual mechanism promotes switching of the Stormorken STIM1 R304W mutant into the activated state. Nature Communications, 2018, 9, 825.	12.8	45
22	Molecular Determinants within N Terminus of Orai3 Protein That Control Channel Activation and Gating. Journal of Biological Chemistry, 2011, 286, 31565-31575.	3.4	44
23	Communication between N terminus and loop2 tunes Orai activation. Journal of Biological Chemistry, 2018, 293, 1271-1285.	3.4	44
24	The STIM1/Orai signaling machinery. Channels, 2013, 7, 330-343.	2.8	42
25	Recent progress on STIM1 domains controlling Orai activation. Cell Calcium, 2009, 46, 227-232.	2.4	40
26	Authentic CRAC channel activity requires STIM1 and the conserved portion of the Orai N terminus. Journal of Biological Chemistry, 2018, 293, 1259-1270.	3.4	40
27	Nanopatterned polymer substrates promote endothelial proliferation by initiation of $\beta$ -catenin transcriptional signaling. Acta Biomaterialia, 2012, 8, 2953-2962.	8.3	35
28	EUV micropatterning for biocompatibility control of PET. Applied Physics A: Materials Science and Processing, 2010, 100, 511-516.	2.3	34
29	Sequential activation of STIM1 links $Ca^{2+}$ with luminal domain unfolding. Science Signaling, 2019, 12, .	3.6	32
30	Dynamics of Spreading and Alignment of Cells Cultured In Vitro on a Grooved Polymer Surface. Journal of Nanomaterials, 2011, 2011, 1-10.	2.7	25
31	STIM Proteins: An Ever-Expanding Family. International Journal of Molecular Sciences, 2021, 22, 378.	4.1	25
32	The STIM1: Orai Interaction. Advances in Experimental Medicine and Biology, 2016, 898, 25-46.	1.6	24
33	Calcium Signals during SARS-CoV-2 Infection: Assessing the Potential of Emerging Therapies. Cells, 2022, 11, 253.	4.1	24
34	Mechanism of STIM activation. Current Opinion in Physiology, 2020, 17, 74-79.	1.8	22
35	Interhelical interactions within the STIM1 CC1 domain modulate CRAC channel activation. Nature Chemical Biology, 2021, 17, 196-204.	8.0	22
36	CRAC channel opening is determined by a series of Orai1 gating checkpoints in the transmembrane and cytosolic regions. Journal of Biological Chemistry, 2021, 296, 100224.	3.4	20

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37	Oxidative Stress-Induced STIM2 Cysteine Modifications Suppress Store-Operated Calcium Entry. Cell Reports, 2020, 33, 108292.	6.4	19
38	The STIM-Orai Pathway: The Interactions Between STIM and Orai. Advances in Experimental Medicine and Biology, 2017, 993, 59-81.	1.6	17
39	Detailed Evidence for an Unparalleled Interaction Mode between Calmodulin and Orai Proteins. Angewandte Chemie - International Edition, 2017, 56, 15755-15759.	13.8	12
40	Defects in the STIM1 SOAR1±2 domain affect multiple steps in the CRAC channel activation cascade. Cellular and Molecular Life Sciences, 2021, 78, 6645-6667.	5.4	12
41	Rapid NMR-scale purification of 15N,13C isotope-labeled recombinant human STIM1 coiled coil fragments. Protein Expression and Purification, 2018, 146, 45-50.	1.3	10
42	Transmembrane Domain 3 (TM3) Governs Orai1 and Orai3 Pore Opening in an Isoform-Specific Manner. Frontiers in Cell and Developmental Biology, 2021, 9, 635705.	3.7	10
43	Laser-induced periodic surface structures (LIPSS) on polymer surfaces. , 2012, , .		8
44	Orai1 Boosts SK3 Channel Activation. Cancers, 2021, 13, 6357.	3.7	6
45	Science CommuniCa2+tion Developing Scientific Literacy on Calcium: The Involvement of CRAC Currents in Human Health and Disease. Cells, 2022, 11, 1849.	4.1	3
46	Laser-induced micro- and nanostructures at polymer surfaces for applications in cell biology. , 2011, , .		1
47	The many states of STIM1. ELife, 2021, 10, .	6.0	1
48	Interference In Coiled-coil Mediated Coupling Between Stim1 And Orai Channels. Biophysical Journal, 2009, 96, 115a-116a.	0.5	0
49	Cooperativeness of Orai Cytosolic Domains Tunes Subtype-Specific Gating. Biophysical Journal, 2011, 100, 181a-182a.	0.5	0
50	Cholesterol Regulates Orai1 Function. Biophysical Journal, 2014, 106, 317a.	0.5	0
51	Stim1 Cytosolic Coiled-Coil Interactions in the Resting and Activated State. Biophysical Journal, 2014, 106, 314a.	0.5	0
52	Multiple Evidenz fÅ¼r einen ungewÅ¼hnlichen Wechselwirkungsmodus zwischen Calmodulin und Oraiâ€Proteinen. Angewandte Chemie, 2017, 129, 15962-15967.	2.0	0
53	Resonance assignment of coiled-coil 3 (CC3) domain of human STIM1. Biomolecular NMR Assignments, 2021, 15, 433-439.	0.8	0
54	Commentary to Baraniak etÅal. â€œOrai channel C-terminal peptides are key modulators of STIM-Orai coupling and calcium signal generationâ€published in cell reports 35: 109322.. Cell Calcium, 2021, 98, 102455.	2.4	0