Martin Meier-Schellersheim

List of Publications by Year
in descending order

45 papers	4,284 citations	236925 25 h-index	233421 45 g-index
45 all docs	45 docs citations	45 times ranked	6053 citing authors

#	Article	IF	Citations
1	Sphingosine-1-phosphate mobilizes osteoclast precursors and regulates bone homeostasis. Nature, 2009, 458, 524-528.	27.8	486
2	CD4 T Cell Depletion Is Linked Directly to Immune Activation in the Pathogenesis of HIV-1 and HIV-2 but Only Indirectly to the Viral Load. Journal of Immunology, 2002, 169, 3400-3406.	0.8	451
3	CD4+ T-cell depletion in HIV infection: Are we closer to understanding the cause?. Nature Medicine, 2002, 8, 319-323.	30.7	410
4	Pathogenesis of HIV infection: what the virus spares is as important as what it destroys. Nature Medicine, 2006, 12, 289-295.	30.7	409
5	Progressive CD4+ centralâ€"memory T cell decline results in CD4+ effectorâ€"memory insufficiency and overt disease in chronic SIV infection. Journal of Experimental Medicine, 2007, 204, 2171-2185.	8.5	257
6	Chemorepulsion by blood S1P regulates osteoclast precursor mobilization and bone remodeling in vivo. Journal of Experimental Medicine, 2010, 207, 2793-2798.	8.5	223
7	<scp>SBML</scp> Level 3: an extensible format for the exchange and reuse of biological models. Molecular Systems Biology, 2020, 16, e9110.	7.2	178
8	Systems Biology in Immunology: A Computational Modeling Perspective. Annual Review of Immunology, 2011, 29, 527-585.	21.8	167
9	Inflammation-induced interstitial migration of effector CD4+ T cells is dependent on integrin Î±V. Nature Immunology, 2013, 14, 949-958.	14.5	162
10	Spontaneous proliferation, a response of naive CD4 T cells determined by the diversity of the memory cell repertoire. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 3874-3879.	7.1	141
11	Tuning sensitivity to IL-4 and IL-13: differential expression of IL-4RÎ±, IL-13RÎ±1, and Î³c regulates relative cytokine sensitivity. Journal of Experimental Medicine, 2008, 205, 2595-2608.	8.5	135
12	Key Role of Local Regulation in Chemosensing Revealed by a New Molecular Interaction-Based Modeling Method. PLoS Computational Biology, 2006, 2, e82.	3.2	119
13	Quantitative Imaging of Single Live Cells Reveals Spatiotemporal Dynamics of Multistep Signaling Events of Chemoattractant Gradient Sensing in Dictyostelium. Molecular Biology of the Cell, 2005, 16, 676-688.	2.1	118
14	Multiscale modeling for biologists. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2009, 1, 4-14.	6.6	102
15	Concomitant regulation of T-cell activation and homeostasis. Nature Reviews Immunology, 2004, 4, 387-395.	22.7	99
16	Distinct NF-Î°B and MAPK Activation Thresholds Uncouple Steady-State Microbe Sensing from Anti-pathogen Inflammatory Responses. Cell Systems, 2016, 2, 378-390.	6.2	97
17	Computational modeling of cellular signaling processes embedded into dynamic spatial contexts. Nature Methods, 2012, 9, 283-289.	19.0	94
18	Redirecting cell-type specific cytokine responses with engineered interleukin-4 superkines. Nature Chemical Biology, 2012, 8, 990-998.	8.0	73

#	Article	IF	Citations
19	Locally controlled inhibitory mechanisms are involved in eukaryotic GPCR-mediated chemosensing. Journal of Cell Biology, 2007, 178, 141-153.	5.2	60
20	Feedback regulation of proliferation vs. differentiation rates explains the dependence of CD4 T-cell expansion on precursor number. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3318-3323.	7.1	44
21	Quantifying cellular interaction dynamics in 3D fluorescence microscopy data. Nature Protocols, 2009, 4, 1305-1311.	12.0	42
22	Coupling Mechanism of a GPCR and a Heterotrimeric G Protein During Chemoattractant Gradient Sensing in <i>Dictyostelium</i>. Science Signaling, 2010, 3, ra71.	3.6	40
23	Migrating Myeloid Cells Sense Temporal Dynamics of Chemoattractant Concentrations. Immunity, 2017, 47, 862-874.e3.	14.3	40
24	A negative-feedback loop maintains optimal chemokine concentrations for directional cell migration. Nature Cell Biology, 2020, 22, 266-273.	10.3	40
25	The Simmune Modeler visual interface for creating signaling networks based on bi-molecular interactions. Bioinformatics, 2013, 29, 1229-1230.	4.1	36
26	Cadherin-Mediated Cell Coupling Coordinates Chemokine Sensing across Collectively Migrating Cells. Current Biology, 2019, 29, 2570-2579.e7.	3.9	33
27	Opposing roles for RhoH GTPase during T-cell migration and activation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10474-10479.	7.1	26
28	Anosmin1 Shuttles Fgf to Facilitate Its Diffusion, Increase Its Local Concentration, and Induce Sensory Organs. Developmental Cell, 2018, 46, 751-766.e12.	7.0	26
29	A hierarchy of affinities between cytokine receptors and the common gamma chain leads to pathway cross-talk. Science Signaling, 2018, 11, .	3.6	25
30	Computational reconstruction of cell and tissue surfaces for modeling and data analysis. Nature Protocols, 2009, 4, 1006-1012.	12.0	18
31	Exact Green's function of the reversible diffusion-influenced reaction for an isolated pair in two dimensions. Journal of Chemical Physics, 2012, 137, 054104.	3.0	18
32	Targeted Proteomics-Driven Computational Modeling of Macrophage S1P Chemosensing. Molecular and Cellular Proteomics, 2015, 14, 2661-2681.	3.8	16
33	Understanding diseases by mouse click: the promise and potential of computational approaches in Systems Biology. Clinical and Experimental Immunology, 2007, 149, 424-429.	2.6	15
34	SBML Level 3 package: Multistate, Multicomponent and Multicompartment Species, Version 1, Release 1. Journal of Integrative Bioinformatics, 2018, 15, .	1.5	14
35	NetworkViewer: visualizing biochemical reaction networks with embedded rendering of molecular interaction rules. BMC Systems Biology, 2014, 8, 70.	3.0	12
36	High Production Rates Sustain <i>In Vivo</i> Levels of PD-1 ^{high} Simian Immunodeficiency Virus-Specific CD8 T Cells in the Face of Rapid Clearance. Journal of Virology, 2013, 87, 9836-9844.	3.4	10

#	Article	IF	Citations
37	Computational Modeling of Signaling Networks for Eukaryotic Chemosensing. Methods in Molecular Biology, 2009, 571, 507-526.	0.9	10
38	Theory of reversible diffusion-influenced reactions with non-Markovian dissociation in two space dimensions. Journal of Chemical Physics, 2013, 138, 104112.	3.0	8
39	Systems biology markup language (SBML) level 3 package: multistate, multicomponent and multicompartment species, version 1, release 2. Journal of Integrative Bioinformatics, 2020, 17, .	1.5	8
40	Mechanistic Models of Cellular Signaling, Cytokine Crosstalk, and Cell-Cell Communication in Immunology. Frontiers in Immunology, 2019, 10, 2268.	4.8	7
41	The area reactivity model of geminate recombination. Journal of Chemical Physics, 2014, 140, 114106.	3.0	6
42	Rate coefficients, binding probabilities, and related quantities for area reactivity models. Journal of Chemical Physics, 2014, 141, 194115.	3.0	3
43	Unified path integral approach to theories of diffusion-influenced reactions. Physical Review E, 2017, 96, 022151.	2.1	2
44	Using Python for Spatially Resolved Modeling with Simmune. Methods in Molecular Biology, 2019, 1945, 161-177.	0.9	2
45	Spaceâ€“time histories approach to fast stochastic simulation of bimolecular reactions. Journal of Chemical Physics, 2021, 154, 164111.	3.0	2