Baoyu Liu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2777124/publications.pdf

Version: 2024-02-01

21 papers	1,943 citations	567281 15 h-index	752698 20 g-index
21 all docs	21 docs citations	21 times ranked	2045 citing authors

#	Article	IF	Citations
1	Accumulation of Dynamic Catch Bonds between TCR and Agonist Peptide-MHC Triggers T Cell Signaling. Cell, 2014, 157, 357-368.	28.9	487
2	The kinetics of two-dimensional TCR and pMHC interactions determine T-cell responsiveness. Nature, 2010, 464, 932-936.	27.8	451
3	T Cell Receptor Signaling Is Limited by Docking Geometry to Peptide-Major Histocompatibility Complex. Immunity, 2011, 35, 681-693.	14.3	229
4	Two-Stage Cooperative T Cell Receptor-Peptide Major Histocompatibility Complex-CD8 Trimolecular Interactions Amplify Antigen Discrimination. Immunity, 2011, 34, 13-23.	14.3	172
5	A TCR mechanotransduction signaling loop induces negative selection in the thymus. Nature Immunology, 2018, 19, 1379-1390.	14.5	112
6	Mechano-regulation of Peptide-MHC Class I Conformations Determines TCR Antigen Recognition. Molecular Cell, 2019, 73, 1015-1027.e7.	9.7	95
7	Dynamic control of Î²1 integrin adhesion by the plexinD1-sema3E axis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 379-384.	7.1	69
8	2<scp>D TCR</scp>â€“p<scp>MHC</scp>â€“<scp>CD</scp>8 kinetics determines <scp>T</scp>â€cell responses in a selfâ€antigenâ€specific <scp>TCR</scp> system. European Journal of Immunology, 2014, 44, 239-250.	2.9	57
9	Molecular Force Spectroscopy on Cells. Annual Review of Physical Chemistry, 2015, 66, 427-451.	10.8	57
10	Fluorescence Biomembrane Force Probe: Concurrent Quantitation of Receptor-ligand Kinetics and Binding-induced Intracellular Signaling on a Single Cell. Journal of Visualized Experiments, 2015, , e52975.	0.3	39
11	The cellular environment regulates in situ kinetics of Tâ€cell receptor interaction with peptide major histocompatibility complex. European Journal of Immunology, 2015, 45, 2099-2110.	2.9	37
12	Dual Biomembrane Force Probe enables single-cell mechanical analysis of signal crosstalk between multiple molecular species. Scientific Reports, 2017, 7, 14185.	3.3	33
13	Mechanobiology of T Cell Activation: To Catch a Bond. Annual Review of Cell and Developmental Biology, 2021, 37, 65-87.	9.4	27
14	2D Kinetic Analysis of TCR and CD8 Coreceptor for LCMV GP33 Epitopes. Frontiers in Immunology, 2018, 9, 2348.	4.8	24
15	Effect of Temperature on Tether Extraction, Surface Protrusion, and Cortical Tension of Human Neutrophils. Biophysical Journal, 2007, 93, 2923-2933.	0.5	19
16	A Hybrid Insulin Epitope Maintains High 2D Affinity for Diabetogenic T Cells in the Periphery. Diabetes, 2020, 69, 381-391.	0.6	12
17	Validation, In-Depth Analysis, and Modification of the Micropipette Aspiration Technique. Cellular and Molecular Bioengineering, 2009, 2, 351-365.	2.1	8
18	Tangential Tether Extraction and Spontaneous Tether Retraction of Human Neutrophils. Biophysical Journal, 2012, 103, 2257-2264.	0.5	6

#	Article	IF	Citations
19	A Critical Insulin TCR Contact Residue Selects High-Affinity and Pathogenic Insulin-Specific T Cells. Diabetes, 2020, 69, 392-400.	0.6	6
20	A direct micropipette-based calibration method for atomic force microscope cantilevers. Review of Scientific Instruments, 2009, 80, 065109.	1.3	3
21	Cellular Membrane Tether (Nanotube) Retraction, Mobility, and Coalescence. Biophysical Journal, 2013, 104, 213a.	0.5	0