P Anton Van Der Merwe

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2347885/publications.pdf

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49 papers 5,009 citations

32 h-index 197818 49 g-index

66 all docs 66
docs citations

66 times ranked

4989 citing authors

#	Article	IF	CITATIONS
1	The kinetic-segregation model: TCR triggering and beyond. Nature Immunology, 2006, 7, 803-809.	14.5	470
2	MOLECULARINTERACTIONSMEDIATINGT CELLANTIGENRECOGNITION. Annual Review of Immunology, 2003, 21, 659-684.	21.8	454
3	Mechanisms for T cell receptor triggering. Nature Reviews Immunology, 2011, 11, 47-55.	22.7	388
4	Survival of FimH-expressing enterobacteria in macrophages relies on glycolipid traffic. Nature, 1997, 389, 636-639.	27.8	287
5	Effects of common mutations in the SARS-CoV-2 Spike RBD and its ligand, the human ACE2 receptor on binding affinity and kinetics. ELife, 2021, 10, .	6.0	267
6	Cytoskeletal polarization and redistribution of cell-surface molecules during T cell antigen recognition. Seminars in Immunology, 2000, 12, 5-21.	5 . 6	264
7	Structural and kinetic basis for heightened immunogenicity of T cell vaccines. Journal of Experimental Medicine, 2005, 201, 1243-1255.	8.5	248
8	Dependence of T Cell Antigen Recognition on T Cell Receptor-Peptide MHC Confinement Time. Immunity, 2010, 32, 163-174.	14.3	214
9	The nature of molecular recognition by T cells. Nature Immunology, 2003, 4, 217-224.	14.5	203
10	$CD8\hat{l}^2$ Endows CD8 with Efficient Coreceptor Function by Coupling T Cell Receptor/CD3 to Raft-associated CD8/p56lck Complexes. Journal of Experimental Medicine, 2001, 194, 1485-1495.	8.5	189
11	Integrins Form an Expanding Diffusional Barrier that Coordinates Phagocytosis. Cell, 2016, 164, 128-140.	28.9	163
12	Phenotypic models of T cell activation. Nature Reviews Immunology, 2014, 14, 619-629.	22.7	135
13	Dependence of T Cell Antigen Recognition on the Dimensions of an Accessory Receptor–Ligand Complex. Journal of Experimental Medicine, 1999, 190, 31-42.	8.5	109
14	Mutant Prolactin Receptor and Familial Hyperprolactinemia. New England Journal of Medicine, 2013, 369, 2012-2020.	27.0	106
15	Formation and function of the immunological synapse. Current Opinion in Immunology, 2002, 14, 293-298.	5 . 5	100
16	Analysis of cell-adhesion molecule interactions using surface plasmon resonance. Current Opinion in Immunology, 1996, 8, 257-261.	5 . 5	97
17	The large ectodomains of CD45 and CD148 regulate their segregation from and inhibition of ligated T-cell receptor. Blood, 2013, 121, 4295-4302.	1.4	93
18	Architecture of a minimal signaling pathway explains the T-cell response to a 1 million-fold variation in antigen affinity and dose. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6630-E6638.	7.1	79

#	Article	IF	Citations
19	Nonâ€catalytic tyrosineâ€phosphorylated receptors. Immunological Reviews, 2012, 250, 258-276.	6.0	74
20	The NH2-terminal domain of rat CD2 binds rat CD48 with a low affinity and binding does not require glycosylation of CD2. European Journal of Immunology, 1993, 23, 1373-1377.	2.9	73
21	Antigen Potency and Maximal Efficacy Reveal a Mechanism of Efficient T Cell Activation. Science Signaling, 2011, 4, ra39.	3.6	71
22	Molecular mechanisms involved in T cell receptor triggering. Seminars in Immunology, 2007, 19, 255-261.	5.6	70
23	TCR–pMHC kinetics under force in a cell-free system show no intrinsic catch bond, but a minimal encounter duration before binding. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16943-16948.	7.1	69
24	Kinetics and Mechanics of Two-Dimensional Interactions between T Cell Receptors and Different Activating Ligands. Biophysical Journal, 2012, 102, 248-257.	0.5	68
25	IMMUNOLOGY: The Immunological Synapsea Multitasking System. Science, 2002, 295, 1479-1480.	12.6	65
26	SpyAvidin Hubs Enable Precise and Ultrastable Orthogonal Nanoassembly. Journal of the American Chemical Society, 2014, 136, 12355-12363.	13.7	62
27	An induced rebinding model of antigen discrimination. Trends in Immunology, 2014, 35, 153-158.	6.8	61
28	The discriminatory power of the T cell receptor. ELife, 2021, 10, .	6.0	52
29	Biomarkers of response to PD-1 pathway blockade. British Journal of Cancer, 2022, 126, 1663-1675.	6.4	52
30	Ultrasensitivity in Multisite Phosphorylation of Membrane-Anchored Proteins. Biophysical Journal, 2011, 100, 1189-1197.	0.5	49
31	Production of soluble αβ Tâ€cell receptor heterodimers suitable for biophysical analysis of ligand binding. Protein Science, 1999, 8, 2418-2423.	7.6	46
32	Ca2+ Release from the Endoplasmic Reticulum of NY-ESO-1–Specific T Cells Is Modulated by the Affinity of TCR and by the Use of the CD8 Coreceptor. Journal of Immunology, 2010, 184, 1829-1839.	0.8	36
33	A Subtle Role for Cd2 in T Cell Antigen Recognition. Journal of Experimental Medicine, 1999, 190, 1371-1374.	8.5	31
34	Late Arrival: Recruiting Coreceptors to the T Cell Receptor Complex. Immunity, 2011, 34, 1-3.	14.3	30
35	Homodimerization of the Lymph Vessel Endothelial Receptor LYVE-1 through a Redox-labile Disulfide Is Critical for Hyaluronan Binding in Lymphatic Endothelium. Journal of Biological Chemistry, 2016, 291, 25004-25018.	3.4	28
36	Transgene-encoded human CD2 acts in a dominant negative fashion to modify thymocyte selection signals in mice. European Journal of Immunology, 1996, 26, 2952-2963.	2.9	24

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37	Multisite Phosphorylation Modulates the T Cell Receptor ζ-Chain Potency but not the Switchlike Response. Biophysical Journal, 2016, 110, 1896-1906.	0.5	23
38	The contribution of major histocompatibility complex contacts to the affinity and kinetics of T cell receptor binding. Scientific Reports, 2016, 6, 35326.	3.3	18
39	Leukocyte adhesion: High-speed cells with ABS. Current Biology, 1999, 9, R419-R422.	3.9	14
40	MHC binding affects the dynamics of different T-cell receptors in different ways. PLoS Computational Biology, 2019, 15, e1007338.	3.2	13
41	T lymphocytes need less than 3 min to discriminate between peptide MHCs with similar TCRâ€binding parameters. European Journal of Immunology, 2015, 45, 1635-1642.	2.9	12
42	Costimulation of IL-2 Production through CD28 Is Dependent on the Size of Its Ligand. Journal of Immunology, 2015, 195, 5432-5439.	0.8	12
43	A generic cell surface ligand system for studying cell–cell recognition. PLoS Biology, 2019, 17, e3000549.	5.6	11
44	Modeling costimulation. Nature Immunology, 2000, 1, 194-195.	14.5	10
45	Missense variants in human ACE2 strongly affect binding to SARS-CoV-2 Spike providing a mechanism for ACE2 mediated genetic risk in Covid-19: A case study in affinity predictions of interface variants. PLoS Computational Biology, 2022, 18, e1009922.	3.2	9
46	Why Do Some T Cell Receptor Cytoplasmic Domains Associate with the Plasma Membrane?. Frontiers in Immunology, 2012, 3, 29.	4.8	8
47	pyHVis3D: visualising molecular simulation deduced H-bond networks in 3D: application to T-cell receptor interactions. Bioinformatics, 2018, 34, 1941-1943.	4.1	6
48	Dephosphorylation accelerates the dissociation of ZAP70 from the T cell receptor. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	6
49	CD8 Co-Receptor Enhances T-Cell Activation without Any Effect on Initial Attachment. Cells, 2021, 10, 429.	4.1	1