Michael E Birnbaum

List of Publications by Year
in descending order

41 papers	3,455 citations	331259 21 h-index	344852 36 g-index
53 all docs	53 docs citations	53 times ranked	6289 citing authors

#	Article	IF	Citations
1	Deconstructing the Peptide-MHC Specificity of T Cell Recognition. Cell, 2014, 157, 1073-1087.	13.5	483
2	Human LilrB2 Is a Î²-Amyloid Receptor and Its Murine Homolog PirB Regulates Synaptic Plasticity in an Alzheimerâ€™s Model. Science, 2013, 341, 1399-1404.	6.0	335
3	Clonal Deletion Prunes but Does Not Eliminate Self-Specific Î±Î² CD8+ T Lymphocytes. Immunity, 2015, 42, 929-941.	6.6	248
4	Filamentous Bacteriophage Promote Biofilm Assembly and Function. Cell Host and Microbe, 2015, 18, 549-559.	5.1	235
5	T Cell Receptor Signaling Is Limited by Docking Geometry to Peptide-Major Histocompatibility Complex. Immunity, 2011, 35, 681-693.	6.6	229
6	Isolation of a Structural Mechanism for Uncoupling T Cell Receptor Signaling from Peptide-MHC Binding. Cell, 2018, 174, 672-687.e27.	13.5	229
7	Antigen Identification for Orphan T Cell Receptors Expressed on Tumor-Infiltrating Lymphocytes. Cell, 2018, 172, 549-563.e16.	13.5	226
8	Control of Synaptic Connectivity by a Network of Drosophila IgSF Cell Surface Proteins. Cell, 2015, 163, 1770-1782.	13.5	155
9	DNA-Templated Polymerization of Side-Chain-Functionalized Peptide Nucleic Acid Aldehydes. Journal of the American Chemical Society, 2008, 130, 4646-4659.	6.6	149
10	Reversible ON- and OFF-switch chimeric antigen receptors controlled by lenalidomide. Science Translational Medicine, 2021, 13, .	5.8	132
11	Structural interplay between germline interactions and adaptive recognition determines the bandwidth of TCR-peptide-MHC cross-reactivity. Nature Immunology, 2016, 17, 87-94.	7.0	122
12	Molecular Basis for Shared Cytokine Recognition Revealed in the Structure of an Unusually High Affinity Complex between IL-13 and IL-13RÎ±2. Structure, 2010, 18, 332-342.	1.6	121
13	Molecular architecture of the Î±Î² T cell receptorâ€“CD3 complex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17576-17581.	3.3	107
14	Antibody complementarity determining region design using high-capacity machine learning. Bioinformatics, 2020, 36, 2126-2133.	1.8	92
15	An in vitro translation, selection and amplification system for peptide nucleic acids. Nature Chemical Biology, 2010, 6, 148-155.	3.9	85
16	IL-33 Signaling Alters Regulatory T Cell Diversity in Support of Tumor Development. Cell Reports, 2019, 29, 2998-3008.e8.	2.9	53
17	Casting a wider net: Immunosurveillance by nonclassical MHC molecules. PLoS Pathogens, 2019, 15, e1007567.	2.1	49
18	Diversityâ€oriented approaches for interrogating Tâ€cell receptor repertoire, ligand recognition, and function. Immunological Reviews, 2012, 250, 82-101.	2.8	42

#	Article	IF	Citations
19	Longitudinal immunosequencing in healthy people reveals persistent T cell receptors rich in highly public receptors. BMC Immunology, 2019, 20, 19.	0.9	42
20	The Intergenic Recombinant HLA-Bâˆ—46:01 Has a Distinctive Peptidome that Includes KIR2DL3 Ligands. Cell Reports, 2017, 19, 1394-1405.	2.9	40
21	Repertoire-scale determination of class II MHC peptide binding via yeast display improves antigen prediction. Nature Communications, 2020, 11, 4414.	5.8	35
22	Antigen identification and high-throughput interaction mapping by reprogramming viral entry. Nature Methods, 2022, 19, 449-460.	9.0	32
23	Screening for CD19-specific chimaeric antigen receptors with enhanced signalling via a barcoded library of intracellular domains. Nature Biomedical Engineering, 2022, 6, 855-866.	11.6	23
24	Stress-testing the relationship between T cell receptor/peptide-MHC affinity and cross-reactivity using peptide velcro. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7369-E7378.	3.3	21
25	Discovery of surrogate agonists for visceral fat Treg cells that modulate metabolic indices in vivo. ELife, 2020, 9, .	2.8	21
26	A Closer Look at TCR Germline Recognition. Immunity, 2012, 36, 887-888.	6.6	20
27	Rapid assessment of T-cell receptor specificity of the immune repertoire. Nature Computational Science, 2021, 1, 362-373.	3.8	20
28	Altered Binding of Tumor Antigenic Peptides to MHC Class I Affects CD8+ T Cellâ€“Effector Responses. Cancer Immunology Research, 2018, 6, 1524-1536.	1.6	17
29	HLA class-I-peptide stability mediates CD8+ TÂcell immunodominance hierarchies and facilitates HLA-associated immune control of HIV. Cell Reports, 2021, 36, 109378.	2.9	17
30	Vaccination reshapes the virus-specific T cell repertoire in unexposed adults. Immunity, 2021, 54, 1245-1256.e5.	6.6	15
31	A high-throughput yeast display approach to profile pathogen proteomes for MHC-II binding. ELife, 0, 11, .	2.8	12
32	Machine learning optimization of peptides for presentation by class II MHCs. Bioinformatics, 2021, 37, 3160-3167.	1.8	8
33	Interrogating the recognition landscape of a conserved HIV-specific TCR reveals distinct bacterial peptide cross-reactivity. ELife, 2020, 9, .	2.8	6
34	Identification of Highly Cross-Reactive Mimotopes for a Public T Cell Response in Murine Melanoma. Frontiers in Immunology, 0, 13, .	2.2	5
35	Proteome-Scale Screening to Identify High-Expression Signal Peptides with Minimal N-Terminus Biases via Yeast Display. ACS Synthetic Biology, 2022, 11, 2405-2416.	1.9	4
36	A Bayesian framework for high-throughput T cell receptor pairing. Bioinformatics, 2019, 35, 1318-1325.	1.8	3

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37	Yeast Display for the Identification of Peptide-MHC Ligands of Immune Receptors. Methods in Molecular Biology, 2022, 2491, 263-291.	0.4	3
38	Tuning up T-cell receptors. Nature Biotechnology, 2017, 35, 1145-1146.	9.4	1
39	Self-Determination in the T Cell Repertoire. Immunity, 2015, 42, 8-10.	6.6	0
40	Longitudinal Single Cell Profiling of Regulatory T Cells Identifies IL-33 as a Driver of Tumor Immunosuppression. SSRN Electronic Journal, 0, , .	0.4	0
41	Vaccination Reshapes the Virus-Specific T Cell Repertoire in Unexposed Adults. SSRN Electronic Journal, 0, , .	0.4	0