Ramit Mehr

List of Publications by Year
in descending order

96 papers	3,191 citations	159585 30 h-index	175258 52 g-index
101 all docs	101 docs citations	101 times ranked	4451 citing authors

#	Article	IF	Citations
1	Diversity, cellular origin and autoreactivity of antibody-secreting cell population expansions in acute systemic lupus erythematosus. Nature Immunology, 2015, 16, 755-765.	14.5	434
2	CD1d Endosomal Trafficking Is Independently Regulated by an Intrinsic CD1d-Encoded Tyrosine Motif and by the Invariant Chain. Immunity, 2001, 15, 897-908.	14.3	192
3	Diversification of memory B cells drives the continuous adaptation of secretory antibodies to gut microbiota. Nature Immunology, 2015, 16, 880-888.	14.5	192
4	Classification of human natural killer cells based on migration behavior and cytotoxic response. Blood, 2013, 121, 1326-1334.	1.4	146
5	Natural killer cell education in mice with single or multiple major histocompatibility complex class I molecules. Journal of Experimental Medicine, 2005, 201, 1145-1155.	8.5	133
6	IgTreeÂ©: Creating Immunoglobulin variable region gene lineage trees. Journal of Immunological Methods, 2008, 338, 67-74.	1.4	113
7	Age- and tissue-specific differences in human germinal center B cell selection revealed by analysis of IgVH gene hypermutation and lineage trees. European Journal of Immunology, 2002, 32, 1947.	2.9	91
8	Re-utilization of germinal centers in multiple Peyer's patches results in highly synchronized, oligoclonal, and affinity-matured gut IgA responses. Mucosal Immunology, 2013, 6, 122-135.	6.0	84
9	Long-lived antigen-induced IgM plasma cells demonstrate somatic mutations and contribute to long-term protection. Nature Communications, 2016, 7, 11826.	12.8	84
10	Limited clonal relatedness between gut IgA plasma cells and memory B cells after oral immunization. Nature Communications, 2016, 7, 12698.	12.8	73
11	Aging affects Bâ€cell antigen receptor repertoire diversity in primary and secondary lymphoid tissues. European Journal of Immunology, 2016, 46, 480-492.	2.9	59
12	Evidence for large diversity in the human transcriptome created by Alu RNA editing. Nucleic Acids Research, 2009, 37, 6905-6915.	14.5	58
13	Models for antigen receptor gene rearrangement: CDR3 length. Immunology and Cell Biology, 2007, 85, 323-332.	2.3	52
14	The Dynamics of Germinal Centre Selection as Measured by Graph-Theoretical Analysis of Mutational Lineage Trees. Autoimmunity, 2002, 9, 233-243.	0.6	47
15	Effects of age on antibody affinity maturation. Biochemical Society Transactions, 2003, 31, 447-448.	3.4	47
16	Somatic hypermutation and antigen-driven selection of B cells are altered in autoimmune diseases. Journal of Autoimmunity, 2010, 35, 325-335.	6.5	46
17	Modeling positive and negative selection and differentiation processes in the thymus. Journal of Theoretical Biology, 1995, 175, 103-126.	1.7	45
18	Ectopic GC in the thymus of myasthenia gravis patients show characteristics of normal GC. European Journal of Immunology, 2010, 40, 1150-1161.	2.9	43

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19	A Quantitative Theory of Affinity-driven T Cell Repertoire Selection. Journal of Theoretical Biology, 1999, 200, 389-403.	1.7	42
20	Ig gene diversification and selection in follicular lymphoma, diffuse large B cell lymphoma and primary central nervous system lymphoma revealed by lineage tree and mutation analyses. International Immunology, 2010, 22, 875-887.	4.0	38
21	B Cell Development in the Bone Marrow Is Regulated by Homeostatic Feedback Exerted by Mature B Cells. Frontiers in Immunology, 2016, 7, 77.	4.8	38
22	Regulatory feedback pathways in the thymus. Trends in Immunology, 1997, 18, 581-585.	7.5	37
23	Antigen-driven selection in germinal centers as reflected by the shape characteristics of immunoglobulin gene lineage trees: A large-scale simulation study. Journal of Theoretical Biology, 2008, 255, 210-222.	1.7	37
24	Role of the Thymus in Pediatric HIV-1 Infection. Journal of Acquired Immune Deficiency Syndromes, 1998, 18, 95-109.	0.3	36
25	B cell development in aging mice: lessons from mathematical modeling. International Immunology, 2006, 18, 31-39.	4.0	36
26	Natural Killer Cell Inhibitory Receptor Expression in Humans and Mice: A Closer Look. Frontiers in Immunology, 2013, 4, 65.	4.8	34
27	Feedback Regulation of T Cell Development in the Thymus. Journal of Theoretical Biology, 1996, 181, 157-167.	1.7	32
28	Analysis of Mutational Lineage Trees from Sites of Primary and Secondary Ig Gene Diversification in Rabbits and Chickens. Journal of Immunology, 2004, 172, 4790-4796.	0.8	32
29	Frequency and phenotype of B cell subpopulations in young and aged HIV-1 infected patients receiving ART. Retrovirology, 2014, 11, 76.	2.0	32
30	Screening of alternative models for transitional B cell maturation. International Immunology, 2004, 16, 1081-1090.	4.0	31
31	Feedback regulation of T cell development: manifestations in aging. Mechanisms of Ageing and Development, 1996, 91, 195-210.	4.6	30
32	Asynchronous differentiation models explain bone marrow labeling kinetics and predict reflux between the pre- and immature B cell pools. International Immunology, 2003, 15, 301-312.	4.0	30
33	Deriving Quantitative Constraints on T Cell Selection from Data on the Mature T Cell Repertoire. Journal of Immunology, 2000, 164, 121-128.	0.8	29
34	A mathematical model of the effect of aging on bone marrow cells colonizing the thymus. Mechanisms of Ageing and Development, 1993, 67, 159-172.	4.6	28
35	Models and methods for analysis of lymphocyte repertoire generation, development, selection and evolution. Immunology Letters, 2012, 148, 11-22.	2.5	28
36	High Throughput Sequencing Analysis of the Immunoglobulin Heavy Chain Gene from Flow-Sorted B Cell Sub-Populations Define the Dynamics of Follicular Lymphoma Clonal Evolution. PLoS ONE, 2015, 10, e0134833.	2.5	28

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37	Probing Natural Killer Cell Education by Ly49 Receptor Expression Analysis and Computational Modelling in Single MHC Class I Mice. PLoS ONE, 2009, 4, e6046.	2.5	26
38	Blind T-Cell Homeostasis and the CD4/CD8 Ratio in the Thymus and Peripheral Blood. Journal of Acquired Immune Deficiency Syndromes, 1997, 14, 387-398.	0.3	26
39	Natural Killer Cell Tolerance Persists Despite Significant Reduction of Self MHC Class I on Normal Target Cells in Mice. PLoS ONE, 2010, 5, e13174.	2.5	26
40	Developmental interactions of CD4 T cells and thymocytes: age-related differential effects. Mechanisms of Ageing and Development, 1994, 73, 169-178.	4.6	24
41	Immune system learning and memory quantified by graphical analysis of B-lymphocyte phylogenetic trees. BioSystems, 2004, 76, 141-155.	2.0	24
42	Immunoglobulin Gene Repertoire Diversification and Selection in the Stomach Ã¢â‚¬â€œ From Gastritis to Gastric Lymphomas. Frontiers in Immunology, 2014, 5, 264.	4.8	23
43	Reversing B cell aging. Aging, 2011, 3, 438-443.	3.1	23
44	Chronic B Cell Deficiency from Birth Prevents Age-Related Alterations in the B Lineage. Journal of Immunology, 2011, 187, 2140-2147.	0.8	22
45	Designing an A* Algorithm for Calculating Edit Distance between Rooted-Unordered Trees. Journal of Computational Biology, 2006, 13, 1165-1176.	1.6	21
46	Bâ€cell clonal diversification and gutâ€lymph node trafficking in ulcerative colitis revealed using lineage tree analysis. European Journal of Immunology, 2008, 38, 2600-2609.	2.9	21
47	Human NK Cells Differ More in Their KIR2DL1-Dependent Thresholds for HLA-Cw6-Mediated Inhibition than in Their Maximal Killing Capacity. PLoS ONE, 2011, 6, e24927.	2.5	21
48	Lineage tree analysis of immunoglobulin variable-region gene mutations in autoimmune diseases: Chronic activation, normal selection. Cellular Immunology, 2006, 244, 130-136.	3.0	20
49	Colonization of the Thymus by T Cell Progenitors: Models for Cell-Cell Interactions. Journal of Theoretical Biology, 1994, 170, 247-257.	1.7	19
50	Lymphocyte Development in Irradiated Thymuses: Dynamics of Colonization by Progenitor Cells and Regeneration of Resident Cells. Journal of Theoretical Biology, 1995, 177, 181-192.	1.7	19
51	Depletion of B cells rejuvenates the peripheral Bâ€cell compartment but is insufficient to restore immune competence in aging. Aging Cell, 2019, 18, e12959.	6.7	19
52	Novel Analysis of Clonal Diversification in Blood B Cell and Bone Marrow Plasma Cell Clones in Immunoglobulin Light Chain Amyloidosis. Journal of Clinical Immunology, 2007, 27, 69-87.	3.8	18
53	BCR CDR3 length distributions differ between blood and spleen and between old and young patients, and TCR distributions can be used to detect myelodysplastic syndrome. Physical Biology, 2013, 10, 056001.	1.8	17
54	Expression and chromosomal organization of mouse meiotic genes. Molecular Reproduction and Development, 2010, 77, 241-248.	2.0	16

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55	Simulations of the NK Cell Immune Synapse Reveal that Activation Thresholds Can Be Established by Inhibitory Receptors Acting Locally. Journal of Immunology, 2011, 187, 760-773.	0.8	16
56	Immunoglobulin variable-region gene mutational lineage tree analysis: Application to autoimmune diseases. Autoimmunity Reviews, 2006, 5, 242-251.	5.8	15
57	Automated cleaning and pre-processing of immunoglobulin gene sequences from high-throughput sequencing. Frontiers in Immunology, 2012, 3, 386.	4.8	14
58	Understanding natural killer cell regulation by mathematical approaches. Frontiers in Immunology, 2012, 3, 359.	4.8	14
59	Lyn deficiency affects Bâ€cell maturation as well as survival. European Journal of Immunology, 2012, 42, 511-521.	2.9	14
60	Models for Antigen Receptor Gene Rearrangement. III. Heavy and Light Chain Allelic Exclusion. Journal of Immunology, 2003, 170, 182-193.	0.8	13
61	Quantitative analysis of clonal bone marrow CD19+ B cells: Use of B cell lineage trees to delineate their role in the pathogenesis of light chain amyloidosis. Clinical Immunology, 2006, 120, 106-120.	3.2	13
62	Murine peripheral NKâ€cell populations originate from siteâ€specific immature NK cells more than from BMâ€derived NK cells. European Journal of Immunology, 2016, 46, 1258-1270.	2.9	12
63	The V_H repertoire and clonal diversification of B cells in inflammatory myopathies. European Journal of Immunology, 2014, 44, 585-596.	2.9	11
64	Bone marrow regeneration under cytotoxic drug regimens: behaviour ranging from homeostasis to unpredictability in a model for hemopoietic differentiation. BioSystems, 1992, 26, 231-237.	2.0	10
65	Automated analysis of immunoglobulin genes from high-throughput sequencing: life without a template. Journal of Clinical Bioinformatics, 2013, 3, 15.	1.2	10
66	Fractal geometry of electron orbits in random systems with strong magnetic field. Physical Review B, 1988, 37, 6349-6352.	3.2	9
67	Modelling Trypanosoma congolense parasitaemia patterns during the chronic phase of infection in Nâ€™Dama cattle. Parasite Immunology, 1997, 19, 171-182.	1.5	9
68	MHC-Linked Syngeneic Developmental Preference in Thymic Lobes Colonized with Bone Marrow Cells: A Mathematical model. Autoimmunity, 1998, 5, 303-318.	0.6	8
69	Generation of the Natural Killer Cell Repertoire: The Sequential vs. the Two-step Selection Model. Bulletin of Mathematical Biology, 2003, 65, 199-218.	1.9	8
70	Models for Natural Killer Cell Repertoire Formation. Clinical and Developmental Immunology, 2003, 10, 183-192.	3.3	8
71	Kinetic Modeling Reveals a Common Death Niche for Newly Formed and Mature B Cells. PLoS ONE, 2010, 5, e9497.	2.5	8
72	Computational modeling of human natural killer cell development suggests a selection process regulating coexpression of KIR with CD94/NKG2A. Molecular Immunology, 2005, 42, 397-403.	2.2	7

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73	PCR amplification and high throughput sequencing of immunoglobulin heavy chain genes from formalin-fixed paraffin-embedded human biopsies. Experimental and Molecular Pathology, 2013, 94, 182-187.	2.1	7
74	Old questions, new tools: does next-generation sequencing hold the key to unraveling intestinal B-cell responses?. Mucosal Immunology, 2015, 8, 29-37.	6.0	7
75	Maximum likelihood estimator and likelihood ratio test in complex models: an application to BÂlymphocyte development. Bulletin of Mathematical Biology, 2003, 65, 1131-1139.	1.9	6
76	Models for the dynamics and order of immunoglobulin isotype switching. Bulletin of Mathematical Biology, 2005, 67, 15-32.	1.9	5
77	Feedback Loops, Reversals and Nonlinearities in Lymphocyte Development. Bulletin of Mathematical Biology, 2006, 68, 1073-1094.	1.9	4
78	Modeling and analysis of the meta-population dynamics of lymphocyte repertoires. Journal of Computational and Applied Mathematics, 2005, 184, 223-241.	2.0	3
79	Immune System Modeling and Analysis. Frontiers in Immunology, 2014, 5, 644.	4.8	3
80	Editorial: HLA and KIR Diversity and Polymorphisms: Emerging Concepts. Frontiers in Immunology, 2021, 12, 701398.	4.8	3
81	Ibrutinib, Bendamustine, Rituximab Combination for Relapsed and Refractory Aggressive B Cell Lymphoma â€" Interim Analysis of Phase II Clinical Trial. Blood, 2018, 132, 4186-4186.	1.4	3
82	Lineage tree analysis of high throughput immunoglobulin sequencing clarifies B cell maturation pathways. , 2015, , .		2
83	Editorial overviewCurrent opinion in systems biology. Current Opinion in Systems Biology, 2018, 12, iv-vi.	2.6	2
84	Identifying a malignant <scp>B</scp>â€cell lymphoma clone in peripheral blood using immunoglobulin highâ€throughput sequencing and lineage tree analysis. International Journal of Laboratory Hematology, 2022, 44, .	1.3	2
85	Modeling the influence of molecule and cell surface micro-domain distribution on the formation of T cell immunological synapses. , 2007, , .		1
86	Editorial: Integrative Computational Systems Biology Approaches in Immunology and Medicine. Frontiers in Microbiology, 2019, 9, 3338.	3.5	1
87	Modeling B cell repertoire shift. Immunology Letters, 1997, 56, 43.	2.5	0
88	News and EFIS â€" Eur. J. Immunol. 3/2007. European Journal of Immunology, 2007, 37, 585-588.	2.9	0
89	Factors important in evolutionary shaping of immunoglobulin gene loci. Immunome Research, 2010, 6, 13.	0.1	0
90	Immunology in Israel: Society and research. European Journal of Immunology, 2011, 41, 2133-2136.	2.9	0

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91	Immunoglobulin Clonotype and Ontogeny Inference. , 2019, , 972-983.		0
92	THE HUMORAL IMMUNE RESPONSE: COMPLEXITY AND THEORETICAL CHALLENGES. , 2011, , .		0
93	Understanding the Mechanisms of Immune System Aging: Immune System Cell Development and Antibody Repertoires. International Perspectives on Aging, 2014, , 41-53.	0.4	0
94	Temporal Stochasticity Leads to Nondeterministic Chaos in a Model for Blood Cell Production. Institute for Nonlinear Science, 1996, , 419-427.	0.2	0
95	Objective Measures of Pre-Transplant Physiologic Fitness Are Strong Predictors of Very-Short Term Transplantation Related Mortality. Blood, 2016, 128, 2205-2205.	1.4	0
96	PESI--an intelligent system for prediction of enzyme-substrate interactions based on experimental constraints. In Silico Biology, 2002, 2, 495-505.	0.9	0