Sol Efroni

List of Publications by Year
in descending order

76 papers	**3,371** citations	186265 **28** h-index	155660 **55** g-index
85 all docs	**85** docs citations	**85** times ranked	**6268** citing authors

#	Article	IF	Citations
1	Distribution equality as an optimal epidemic mitigation strategy. Scientific Reports, 2022, 12, .	3.3	2
2	CDR3 and V genes show distinct reconstitution patterns in T cell repertoire post-allogeneic bone marrow transplantation. Immunogenetics, 2021, 73, 163-173.	2.4	6
3	Breast cancer is marked by specific, Public T-cell receptor CDR3 regions shared by mice and humans. PLoS Computational Biology, 2021, 17, e1008486.	3.2	11
4	A TÂcell repertoire timestamp is at the core of responsiveness to CTLA-4 blockade. IScience, 2021, 24, 102100.	4.1	8
5	Age-related loss of gene-to-gene transcriptional coordination among single cells. Nature Metabolism, 2020, 2, 1305-1315.	11.9	27
6	T cell repertoire sequencing as a cancer's liquid biopsyâ€"can we decode what the immune system is coding?. Current Opinion in Systems Biology, 2020, 24, 135-141.	2.6	4
7	Predicting and affecting response to cancer therapy based on pathway-level biomarkers. Nature Communications, 2020, 11, 3296.	12.8	55
8	A single nucleotide variant of human PARP1 determines response to PARP inhibitors. Npj Precision Oncology, 2020, 4, 10.	5.4	3
9	Immune Computation and COVID-19 Mortality: A Rationale for IVIg. Critical Reviews in Immunology, 2020, 40, 195-203.	0.5	1
10	Abstract B39: The T-cell repertoire as a biomarker for response to anti PD-1 immunotherapy. , 2020, , .		0
11	A modeling algorithm for exploring the architecture and construction of bird nests. Scientific Reports, 2019, 9, 14772.	3.3	6
12	Digitizable therapeutics for decentralized mitigation of global pandemics. Scientific Reports, 2019, 9, 14345.	3.3	7
13	Comparing Transcriptome Profiles of Neurons Interfacing Adjacent Cells and Nanopatterned Substrates Reveals Fundamental Neuronal Interactions. Nano Letters, 2019, 19, 1451-1459.	9.1	15
14	Astrocyteâ€specific transcriptome analysis using the ALDH1L1 bacTRAP mouse reveals novel biomarkers of astrogliosis in response to neurotoxicity. Journal of Neurochemistry, 2019, 150, 420-440.	3.9	18
15	Resistance to paclitaxel is associated with a variant of the gene BCL2 in multiple tumor types. Npj Precision Oncology, 2019, 3, 12.	5.4	21
16	Design principles of biologically fabricated avian nests. Scientific Reports, 2019, 9, 4792.	3.3	11
17	The Immune System Computes the State of the Body: Crowd Wisdom, Machine Learning, and Immune Cell Reference Repertoires Help Manage Inflammation. Frontiers in Immunology, 2019, 10, 10.	4.8	120
18	Tamoxifen-resistant breast cancer cells are resistant to DNA-damaging chemotherapy because of upregulated BARD1 and BRCA1. Nature Communications, 2018, 9, 1595.	12.8	89

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19	Immunological analysis of phase II glioblastoma dendritic cell vaccine (Audencel) trial: immune system characteristics influence outcome and Audencel up-regulates Th1-related immunovariables. Acta Neuropathologica Communications, 2018, 6, 135.	5.2	37
20	Network Representation of T-Cell Repertoireâ€" A Novel Tool to Analyze Immune Response to Cancer Formation. Frontiers in Immunology, 2018, 9, 2913.	4.8	15
21	Cell studio: A platform for interactive, 3D graphical simulation of immunological processes. APL Bioengineering, 2018, 2, 026107.	6.2	5
22	10.1063/1.5039473.1. , 2018, , .		0
23	Autotaxinâ€"Lysophosphatidic Acid Axis Acts Downstream of Apoprotein B Lipoproteins in Endothelial Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 2058-2067.	2.4	14
24	Experimental Support for the Ecoimmunity Theory: Distinct Phenotypes of Nonlymphocytic Cells in SCID and Wild-Type Mice. Cell Transplantation, 2016, 25, 1575-1588.	2.5	1
25	The linker histone H1.0 generates epigenetic and functional intratumor heterogeneity. Science, 2016, 353, .	12.6	147
26	Reciprocal Regulation between SIRT6 and miR-122 Controls Liver Metabolism and Predicts Hepatocarcinoma Prognosis. Cell Reports, 2016, 14, 234-242.	6.4	73
27	Dendritic Cells in the Context of Human Tumors: Biology and Experimental Tools. International Reviews of Immunology, 2016, 35, 116-135.	3.3	14
28	Quantification of read species behavior within whole genome sequencing of cancer genomes for the stratification and visualization of genomic variation. Nucleic Acids Research, 2016, 44, e81-e81.	14.5	0
29	System-wide Analysis of the T Cell Response. Cell Reports, 2016, 14, 2733-2744.	6.4	67
30	hsa-miR-9 controls the mobility behavior of glioblastoma cells via regulation of MAPK14 signaling elements. Oncotarget, 2016, 7, 23170-23181.	1.8	18
31	De novo transcriptome assembly databases for the central nervous system of the medicinal leech. Scientific Data, 2015, 2, 150015.	5.3	20
32	Fmrp Interacts with Adar and Regulates RNA Editing, Synaptic Density and Locomotor Activity in Zebrafish. PLoS Genetics, 2015, 11, e1005702.	3.5	76
33	Distinct inhibitory effects on mTOR signaling by ethanol and INK128 in diffuse large B-cell lymphoma. Cell Communication and Signaling, 2015, 13, 15.	6.5	20
34	Synaptojanin 2 is a druggable mediator of metastasis and the gene is overexpressed and amplified in breast cancer. Science Signaling, 2015, 8, ra7.	3.6	53
35	MicroRNA regulation of molecular pathways as a generic mechanism and as a core disease phenotype. Oncotarget, 2015, 6, 1594-1604.	1.8	50
36	A novel mitosis-associated lncRNA, MA-linc1, is required for cell cycle progression and sensitizes cancer cells to Paclitaxel. Oncotarget, 2015, 6, 27880-27890.	1.8	43

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37	Heat acclimation memory: do the kinetics of the deacclimated transcriptome predispose to rapid reacclimation and cytoprotection?. Journal of Applied Physiology, 2014, 117, 1262-1277.	2.5	17
38	Spatial regulation dominates gene function in the ganglia chain. Bioinformatics, 2014, 30, 310-316.	4.1	6
39	Shift in GATA3 functions, and GATA3 mutations, control progression and clinical presentation in breast cancer. Breast Cancer Research, 2014, 16, 464.	5.0	40
40	PhenoNet: identification of key networks associated with disease phenotype. Bioinformatics, 2014, 30, 2399-2405.	4.1	17
41	IL-27 acts on DCs to suppress CNS autoimmunity by inducing CD39 expression. Journal of Neuroimmunology, 2014, 275, 88.	2.3	0
42	SENP5 mediates breast cancer invasion via a TGFβRI SUMOylation cascade. Oncotarget, 2014, 5, 1071-1082.	1.8	34
43	IL-27 acts on DCs to suppress the T cell response and autoimmunity by inducing expression of the immunoregulatory molecule CD39. Nature Immunology, 2013, 14, 1054-1063.	14.5	294
44	Altered immune pathway activity under exercise challenge in Gulf War Illness: An exploratory analysis. Brain, Behavior, and Immunity, 2013, 28, 159-169.	4.1	70
45	MicroRNA-Gene Association As a Prognostic Biomarker in Cancer Exposes Disease Mechanisms. PLoS Computational Biology, 2013, 9, e1003351.	3.2	15
46	Classification of lung adenocarcinoma and squamous cell carcinoma samples based on their gene expression profile in the sbv IMPROVER Diagnostic Signature Challenge. Systems Biomedicine (Austin,) Tj ETQq0 0 0.7gBT /Overlock 10 T	0.7	8
47	Introducing *Systems Biomedicine*. Systems Biomedicine (Austin, Tex), 2013, 1, 1-1.	0.7	11
48	hsa-miR-9 and drug control over the P38 network as driving disease outcome in GBM patients. Systems Biomedicine (Austin, Tex), 2013, 1, 76-83.	0.7	0
49	Network as biomarker. Systems Biomedicine (Austin, Tex), 2013, 1, 35-41.	0.7	15
50	Systems analysis utilising pathway interactions identifies sonic hedgehog pathway as a primary biomarker and oncogenic target in hepatocellular carcinoma. IET Systems Biology, 2013, 7, 243-251.	1.5	5
51	RBM38 Is a Direct Transcriptional Target of E2F1 that Limits E2F1-Induced Proliferation. Molecular Cancer Research, 2012, 10, 1169-1177.	3.4	41
52	Rep€Seq: uncovering the immunological repertoire through next€generation sequencing. Immunology, 2012, 135, 183-191.	4.4	252
53	Biomarker robustness reveals the PDGF network as driving disease outcome in ovarian cancer patients in multiple studies. BMC Systems Biology, 2012, 6, 3.	3.0	28
54	Gene expression and network-based analysis reveals a novel role for hsa-miR-9 and drug control over the p38 network in glioblastoma multiforme progression. Genome Medicine, 2011, 3, 77.	8.2	33

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55	Detecting Cancer Gene Networks Characterized by Recurrent Genomic Alterations in a Population. PLoS ONE, 2011, 6, e14437.	2.5	24
56	The whole-organism heavy chain B cell repertoire from Zebrafish self-organizes into distinct network features. BMC Systems Biology, 2011, 5, 27.	3.0	32
57	The PathOlogist: an automated tool for pathway-centric analysis. BMC Bioinformatics, 2011, 12, 133.	2.6	33
58	Reactive animation: From piecemeal experimentation to reactive biological systems. Autoimmunity, 2011, 44, 271-281.	2.6	6
59	Immune-Induced Evolutionary Selection Focused on a Single Reading Frame in Overlapping Hepatitis B Virus Proteins. Journal of Virology, 2011, 85, 4558-4566.	3.4	34
60	Genetic variations at loci involved in the immune response are risk factors for hepatocellular carcinoma. Hepatology, 2010, 52, 2034-2043.	7.3	124
61	Stem cells do play with dice: A statistical physics view of transcription. Cell Cycle, 2009, 8, 43-48.	2.6	20
62	Concurrency in Biological Modeling: Behavior, Execution and Visualization. Electronic Notes in Theoretical Computer Science, 2008, 194, 119-131.	0.9	9
63	Global Transcription in Pluripotent Embryonic Stem Cells. Cell Stem Cell, 2008, 2, 437-447.	11.1	603
64	Superposition of Transcriptional Behaviors Determines Gene State. PLoS ONE, 2008, 3, e2901.	2.5	14
65	Emergent Dynamics of Thymocyte Development and Lineage Determination. PLoS Computational Biology, 2007, 3, e13.	3.2	64
66	Identification of Key Processes Underlying Cancer Phenotypes Using Biologic Pathway Analysis. PLoS ONE, 2007, 2, e425.	2.5	108
67	Gene expression profile of empirically delineated classes of unexplained chronic fatigue. Pharmacogenomics, 2006, 7, 375-386.	1.3	37
68	17 A theory for complex systems: reactive animation. Studies in Multidisciplinarity, 2005, , 309-324.	0.0	5
69	Reactive animation: realistic modeling of complex dynamic systems. Computer, 2005, 38, 38-47.	1.1	59
70	Emergent Dynamics of Thymocyte Development and Lineage Determination. PLoS Computational Biology, 2005, preprint, e13.	3.2	0
71	The heuristics of biologic theory: the case of self–nonself discrimination. Cellular Immunology, 2003, 223, 87-89.	3.0	14
72	Toward Rigorous Comprehension of Biological Complexity: Modeling, Execution, and Visualization of Thymic T-Cell Maturation. Genome Research, 2003, 13, 2485-2497.	5.5	122

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73	Reactive Animation. Lecture Notes in Computer Science, 2003, , 136-153.	1.3	13
74	Simplicity belies a complex system: a response to the minimal model of immunity of Langman and Cohn. Cellular Immunology, 2002, 216, 23-30.	3.0	24
75	The immune system and other cognitive systems. Complexity, 2001, 6, 14-21.	1.6	18
76	Using cellular automata modeling of the emergence of innovations. Technological Forecasting and Social Change, 2001, 68, 293-308.	11.6	45