Simon J Davis

List of Publications by Year
in descending order

86 papers	6,194 citations	117453 34 h-index	74018 75 g-index
88 all docs	88 docs citations	88 times ranked	8255 citing authors

#	Article	IF	Citations
1	ABPP-HT*â€"Deep Meets Fast for Activity-Based Profiling of Deubiquitylating Enzymes Using Advanced DIA Mass Spectrometry Methods. International Journal of Molecular Sciences, 2022, 23, 3263.	1.8	7
2	Soft Polydimethylsiloxane-Supported Lipid Bilayers for Studying T Cell Interactions. Biophysical Journal, 2021, 120, 35-45.	0.2	6
3	The deubiquitylase USP9X controls ribosomal stalling. Journal of Cell Biology, 2021, 220, .	2.3	20
4	The deubiquitinase TRABID stabilizes the K29/K48-specific E3 ubiquitin ligase HECTD1. Journal of Biological Chemistry, 2021, 296, 100246.	1.6	25
5	HLA-Eâ€"restricted, Gag-specific CD8 ⁺ T cells can suppress HIV-1 infection, offering vaccine opportunities. Science Immunology, 2021, 6, .	5.6	35
6	The discriminatory power of the T cell receptor. ELife, 2021, 10, .	2.8	52
7	PD-1 suppresses TCR-CD8 cooperativity during T-cell antigen recognition. Nature Communications, 2021, 12, 2746.	5.8	41
8	The chaperonin CCT8 controls proteostasis essential for T cell maturation, selection, and function. Communications Biology, 2021, 4, 681.	2.0	6
9	Age-dependent changes in protein incorporation into collagen-rich tissues of mice by in vivo pulsed SILAC labelling. ELife, 2021, 10, .	2.8	22
10	Trapping or slowing the diffusion of T cell receptors at close contacts initiates T cell signaling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
11	Single-cell measurements of two-dimensional binding affinity across cell contacts. Biophysical Journal, 2021, 120, 5032-5040.	0.2	2
12	vLUME: 3D virtual reality for single-molecule localization microscopy. Nature Methods, 2020, 17, 1097-1099.	9.0	23
13	Coreceptors and TCR Signaling â€" the Strong and the Weak of It. Frontiers in Cell and Developmental Biology, 2020, 8, 597627.	1.8	31
14	T-Cell Receptor Ligands: Every which Way They Can. Biophysical Journal, 2020, 118, 2867-2869.	0.2	0
15	Effects of a local auxiliary protein on the two-dimensional affinity of a TCR-peptide MHC interaction. Journal of Cell Science, 2020, 133, .	1.2	7
16	The Costs of Close Contacts: Visualizing the Energy Landscape of Cell Contacts at the Nanoscale. Biophysical Journal, 2020, 118, 1261-1269.	0.2	2
17	USP30 sets a trigger threshold for PINK1â€"PARKIN amplification of mitochondrial ubiquitylation. Life Science Alliance, 2020, 3, e202000768.	1.3	72
18	Nitric Oxide Modulates Metabolic Remodeling in Inflammatory Macrophages through TCA Cycle Regulation and Itaconate Accumulation. Cell Reports, 2019, 28, 218-230.e7.	2.9	149

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19	Extracellular vesicle integrins act as a nexus for platelet adhesion in cerebral microvessels. Scientific Reports, 2019, 9, 15847.	1.6	9
20	Detection of Cell Surface Ligands for Human Synovial Î³Î´ T Cells. Journal of Immunology, 2019, 203, 2369-2376.	0.4	4
21	A cell topography-based mechanism for ligand discrimination by the T cell receptor. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14002-14010.	3.3	60
22	Measuring GPCR Stoichiometry Using Types-1, -2, and -3 Bioluminescence Resonance Energy Transfer-Based Assays. Methods in Molecular Biology, 2019, 1947, 183-197.	0.4	0
23	Development of a Sensitive, Scalable Method for Spatial, Cell-Type-Resolved Proteomics of the Human Brain. Journal of Proteome Research, 2019, 18, 1787-1795.	1.8	39
24	Colonic epithelial cell diversity in health and inflammatory bowel disease. Nature, 2019, 567, 49-55.	13.7	486
25	Constraints on GPCR Heterodimerization Revealed by the Type-4 Induced-Association BRET Assay. Biophysical Journal, 2019, 116, 31-41.	0.2	13
26	Capturing resting T cells: the perils of PLL. Nature Immunology, 2018, 19, 203-205.	7.0	62
27	Monomeric TCRs drive T cell antigen recognition. Nature Immunology, 2018, 19, 487-496.	7.0	111
28	A robust mass spectrometry method for rapid profiling of erythrocyte ghost membrane proteomes. Clinical Proteomics, 2018, 15, 14.	1.1	28
29	Single-Molecule Analysis of G Protein-Coupled Receptor Stoichiometry: Approaches and Limitations. Trends in Pharmacological Sciences, 2018, 39, 96-108.	4.0	18
30	LAG-3: a very singular immune checkpoint. Nature Immunology, 2018, 19, 1278-1279.	7.0	36
31	CD45 exclusionâ€" and cross-linkingâ€"based receptor signaling together broaden FcÎµRI reactivity. Science Signaling, 2018, 11, .	1.6	31
32	Dimensions and Interactions of Large T-Cell Surface Proteins. Frontiers in Immunology, 2018, 9, 2215.	2.2	15
33	Tetrahydrobiopterin modulates ubiquitin conjugation to UBC13/UBE2N and proteasome activity by S-nitrosation. Scientific Reports, 2018, 8, 14310.	1.6	5
34	Membrane Ultrastructure and T Cell Activation. Frontiers in Immunology, 2018, 9, 2152.	2.2	42
35	Immune Checkpoints as Therapeutic Targets in Autoimmunity. Frontiers in Immunology, 2018, 9, 2306.	2.2	96
36	Hydrodynamic trapping measures the interaction between membrane-associated molecules. Scientific Reports, 2018, 8, 12479.	1.6	11

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37	Reconstitution of immune cell interactions in free-standing membranes. Journal of Cell Science, 2018, 132, .	1.2	25
38	Single-Molecule Light-Sheet Imaging of Suspended T Cells. Biophysical Journal, 2018, 114, 2200-2211.	0.2	31
39	Glycosylation and Lipids Working in Concert Direct CD2 Ectodomain Orientation and Presentation. Journal of Physical Chemistry Letters, 2017, 8, 1060-1066.	2.1	22
40	In situ and in silico kinetic analyses of programmed cell death-1 (PD-1) receptor, programmed cell death ligands, and B7-1 protein interaction network. Journal of Biological Chemistry, 2017, 292, 6799-6809.	1.6	16
41	A Protein Expression Toolkit for Studying Signaling in T Cells. Methods in Molecular Biology, 2017, 1584, 451-472.	0.4	0
42	Expanding Proteome Coverage with CHarge Ordered Parallel Ion aNalysis (CHOPIN) Combined with Broad Specificity Proteolysis. Journal of Proteome Research, 2017, 16, 1288-1299.	1.8	92
43	Three-Dimensional Super-Resolution in Eukaryotic Cells Using the Double-Helix Point Spread Function. Biophysical Journal, 2017, 112, 1444-1454.	0.2	41
44	Cytoskeletal actin dynamics shape a ramifying actin network underpinning immunological synapse formation. Science Advances, 2017, 3, e1603032.	4.7	143
45	Inflammatory Stroke Extracellular Vesicles Induce Macrophage Activation. Stroke, 2017, 48, 2292-2296.	1.0	49
46	Macrophages: micromanagers of antagonistic signaling nanoclusters. Journal of Cell Biology, 2017, 216, 871-873.	2.3	0
47	Receptor Quaternary Organization Explains GÂProtein-Coupled Receptor Family Structure. Cell Reports, 2017, 20, 2654-2665.	2.9	40
48	Phagocytes Get Close to Their Enemies. Developmental Cell, 2016, 36, 131-132.	3.1	1
49	Remarkably low affinity of CD4/peptide-major histocompatibility complex class II protein interactions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5682-5687.	3.3	51
50	Abrogation of collagen-induced arthritis by a peptidyl arginine deiminase inhibitor is associated with modulation of T cell-mediated immune responses. Scientific Reports, 2016, 6, 26430.	1.6	76
51	Initiation of T cell signaling by CD45 segregation at 'close contacts'. Nature Immunology, 2016, 17, 574-582.	7.0	253
52	CalQuo: automated, simultaneous single-cell and population-level quantification of global intracellular Ca2+ responses. Scientific Reports, 2015, 5, 16487.	1.6	10
53	Referenced Single-Molecule Measurements Differentiate between GPCR Oligomerization States. Biophysical Journal, 2015, 109, 1798-1806.	0.2	29
54	Membrane Nanoclustersâ€"Tails of the Unexpected. Cell, 2015, 161, 433-434.	13.5	10

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55	TCR signaling: the barrier within. Nature Immunology, 2014, 15, 136-137.	7.0	12
56	Type-3 BRET, an Improved Competition-Based Bioluminescence Resonance Energy Transfer Assay. Biophysical Journal, 2014, 106, L41-L43.	0.2	17
57	T Cell Receptors are Structures Capable of Initiating Signaling in the Absence of Large Conformational Rearrangements. Journal of Biological Chemistry, 2012, 287, 13324-13335.	1.6	33
58	TNF receptor 1 genetic risk mirrors outcome of anti-TNF therapy in multiple sclerosis. Nature, 2012, 488, 508-511.	13.7	323
59	Lck and the nature of the T cell receptor trigger. Trends in Immunology, 2011, 32, 1-5.	2.9	50
60	Rigid-body Ligand Recognition Drives Cytotoxic T-lymphocyte Antigen 4 (CTLA-4) Receptor Triggering. Journal of Biological Chemistry, 2011, 286, 6685-6696.	1.6	39
61	The T Cell Receptor Triggering Apparatus Is Composed of Monovalent or Monomeric Proteins. Journal of Biological Chemistry, 2011, 286, 31993-32001.	1.6	61
62	A New Pathway of CD5 Glycoprotein-mediated T Cell Inhibition Dependent on Inhibitory Phosphorylation of Fyn Kinase. Journal of Biological Chemistry, 2011, 286, 30324-30336.	1.6	31
63	What Controls T Cell Receptor Phosphorylation?. Cell, 2010, 142, 668-669.	13.5	33
64	DySCo: Quantitating Associations of Membrane Proteins Using Two-Color Single-Molecule Tracking. Biophysical Journal, 2009, 97, L5-L7.	0.2	63
65	BRET analysis of GPCR oligomerization: newer does not mean better. Nature Methods, 2007, 4, 4-4.	9.0	4
66	Reply to: Experimental challenge to a 'rigorous' BRET analysis of GPCR oligomerization. Nature Methods, 2007, 4, 601-601.	9.0	6
67	Glycoprotein VI oligomerization in cell lines and platelets. Journal of Thrombosis and Haemostasis, 2007, 5, 1026-1033.	1.9	51
68	The kinetic-segregation model: TCR triggering and beyond. Nature Immunology, 2006, 7, 803-809.	7.0	470
69	Crystal structure of a soluble CD28-Fab complex. Nature Immunology, 2005, 6, 271-279.	7.0	153
70	The nature of molecular recognition by T cells. Nature Immunology, 2003, 4, 217-224.	7.0	203
71	Topological Requirements and Signaling Properties of T Cellâ€“activating, Anti-CD28 Antibody Superagonists. Journal of Experimental Medicine, 2003, 197, 955-966.	4.2	175
72	CD2F-10: a new member of the CD2 subset of the immunoglobulin superfamily. Immunogenetics, 2001, 53, 599-602.	1.2	24

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73	The immunological synapse and CD28-CD80 interactions. Nature Immunology, 2001, 2, 1159-1166.	7.0	276
74	Crystal structure of the B7-1/CTLA-4 complex that inhibits human immune responses. Nature, 2001, 410, 608-611.	13.7	438
75	Effects of <i>N</i>â€butyldeoxynojirimycin and the Lec3.2.8.1 mutant phenotype on Nâ€glycan processing in Chinese hamster ovary cells: Application to glycoprotein crystallization. Protein Science, 1999, 8, 1696-1701.	3.1	37
76	Oligosaccharide analysis and molecular modeling of soluble forms of glycoproteins belonging to the Ly-6, scavenger receptor, and immunoglobulin superfamilies expressed in Chinese hamster ovary cells. Glycobiology, 1999, 9, 443-458.	1.3	37
77	CD2 and the nature of protein interactions mediating cell-cell recognition. Immunological Reviews, 1998, 163, 217-236.	2.8	150
78	The structure and ligand interactions of CD2: implications for T-cell function. Trends in Immunology, 1996, 17, 177-187.	7.5	394
79	Estimation of the dissociation constant of the cell adhesion molecules srCD2 and srCD48 using analytical ultracentrifugation. Biochemical Society Transactions, 1995, 23, 435S-435S.	1.6	0
80	Topology of the CD2â€“CD48 cell-adhesion molecule complex: implications for antigen recognition by T cells. Current Biology, 1995, 5, 74-84.	1.8	123
81	Expression cloning of an equine T-lymphocyte glycoprotein CD2 cDNA. Structure-based analysis of conserved sequence elements. FEBS Journal, 1994, 219, 969-976.	0.2	27
82	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.	1.6	73
83	Mimicking ligands. Nature, 1993, 361, 212-212.	13.7	0
84	Analysis of the structure and interactions of CD2. Biochemical Society Transactions, 1993, 21, 952-958.	1.6	16
85	Antibody and HIV-1 gpl20 recognition of CD4 undermines the concept of mimicry between antibodies and receptors. Nature, 1992, 358, 76-79.	13.7	73
86	Crystal structure at 2.8 Ã… resolution of a soluble form of the cell adhesion molecule CD2. Nature, 1992, 360, 232-239.	13.7	330