# Simon J Davis

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3487047/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 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 | Colonic epithelial cell diversity in health and inflammatory bowel disease. Nature, 2019, 567, 49-55. | 13.7 | 486 |
| 2 | The kinetic-segregation model: TCR triggering and beyond. Nature Immunology, 2006, 7, 803-809. | 7.0 | 470 |
| 3 | Crystal structure of the B7-1/CTLA-4 complex that inhibits human immune responses. Nature, 2001, 410, 608-611. | 13.7 | 438 |
| 4 | The structure and ligand interactions of CD2: implications for T-cell function. Trends in Immunology, 1996, 17, 177-187. | 7.5 | 394 |
| 5 | 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 |
| 6 | TNF receptor 1 genetic risk mirrors outcome of anti-TNF therapy in multiple sclerosis. Nature, 2012, 488, 508-511. | 13.7 | 323 |
| 7 | The immunological synapse and CD28-CD80 interactions. Nature Immunology, 2001, 2, 1159-1166. | 7.0 | 276 |
| 8 | Initiation of T cell signaling by CD45 segregation at 'close contacts'. Nature Immunology, 2016, 17, 574-582. | 7.0 | 253 |
| 9 | The nature of molecular recognition by T cells. Nature Immunology, 2003, 4, 217-224. | 7.0 | 203 |
| 10 | Topological Requirements and Signaling Properties of T Cellâ€“activating, Anti-CD28 Antibody Superagonists. Journal of Experimental Medicine, 2003, 197, 955-966. | 4.2 | 175 |
| 11 | Crystal structure of a soluble CD28-Fab complex. Nature Immunology, 2005, 6, 271-279. | 7.0 | 153 |
| 12 | CD2 and the nature of protein interactions mediating cell-cell recognition. Immunological Reviews, 1998, 163, 217-236. | 2.8 | 150 |
| 13 | 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 |
| 14 | Cytoskeletal actin dynamics shape a ramifying actin network underpinning immunological synapse formation. Science Advances, 2017, 3, e1603032. | 4.7 | 143 |
| 15 | 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 |
| 16 | Monomeric TCRs drive T cell antigen recognition. Nature Immunology, 2018, 19, 487-496. | 7.0 | 111 |
| 17 | Immune Checkpoints as Therapeutic Targets in Autoimmunity. Frontiers in Immunology, 2018, 9, 2306. | 2.2 | 96 |
| 18 | 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 |

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|---|---|---|---|
| 19 | 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 |
| 20 | 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 |
| 21 | 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 |
| 22 | USP30 sets a trigger threshold for PINK1â€“PARKIN amplification of mitochondrial ubiquitylation. Life Science Alliance, 2020, 3, e202000768. | 1.3 | 72 |
| 23 | DySCo: Quantitating Associations of Membrane Proteins Using Two-Color Single-Molecule Tracking. Biophysical Journal, 2009, 97, L5-L7. | 0.2 | 63 |
| 24 | Capturing resting T cells: the perils of PLL. Nature Immunology, 2018, 19, 203-205. | 7.0 | 62 |
| 25 | The T Cell Receptor Triggering Apparatus Is Composed of Monovalent or Monomeric Proteins. Journal of Biological Chemistry, 2011, 286, 31993-32001. | 1.6 | 61 |
| 26 | 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 |
| 27 | The discriminatory power of the T cell receptor. ELife, 2021, 10, . | 2.8 | 52 |
| 28 | Glycoprotein VI oligomerization in cell lines and platelets. Journal of Thrombosis and Haemostasis, 2007, 5, 1026-1033. | 1.9 | 51 |
| 29 | 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 |
| 30 | Lck and the nature of the T cell receptor trigger. Trends in Immunology, 2011, 32, 1-5. | 2.9 | 50 |
| 31 | Inflammatory Stroke Extracellular Vesicles Induce Macrophage Activation. Stroke, 2017, 48, 2292-2296. | 1.0 | 49 |
| 32 | Membrane Ultrastructure and T Cell Activation. Frontiers in Immunology, 2018, 9, 2152. | 2.2 | 42 |
| 33 | Three-Dimensional Super-Resolution in Eukaryotic Cells Using the Double-Helix Point Spread Function. Biophysical Journal, 2017, 112, 1444-1454. | 0.2 | 41 |
| 34 | PD-1 suppresses TCR-CD8 cooperativity during T-cell antigen recognition. Nature Communications, 2021, 12, 2746. | 5.8 | 41 |
| 35 | Receptor Quaternary Organization Explains GÂProtein-Coupled Receptor Family Structure. Cell Reports, 2017, 20, 2654-2665. | 2.9 | 40 |
| 36 | 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 |

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|---|---|---|---|
| 37 | 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 |
| 38 | Effects of Nâ€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 |
| 39 | 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 |
| 40 | LAG-3: a very singular immune checkpoint. Nature Immunology, 2018, 19, 1278-1279. | 7.0 | 36 |
| 41 | HLA-Eâ€“restricted, Gag-specific CD8 <sup>+</sup> T cells can suppress HIV-1 infection, offering vaccine opportunities. Science Immunology, 2021, 6, . | 5.6 | 35 |
| 42 | What Controls T Cell Receptor Phosphorylation?. Cell, 2010, 142, 668-669. | 13.5 | 33 |
| 43 | 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 |
| 44 | 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 |
| 45 | CD45 exclusionâ€“ and cross-linkingâ€“based receptor signaling together broaden FcÎµRI reactivity. Science Signaling, 2018, 11, . | 1.6 | 31 |
| 46 | Single-Molecule Light-Sheet Imaging of Suspended T Cells. Biophysical Journal, 2018, 114, 2200-2211. | 0.2 | 31 |
| 47 | Coreceptors and TCR Signaling â€“ the Strong and the Weak of It. Frontiers in Cell and Developmental Biology, 2020, 8, 597627. | 1.8 | 31 |
| 48 | Referenced Single-Molecule Measurements Differentiate between GPCR Oligomerization States. Biophysical Journal, 2015, 109, 1798-1806. | 0.2 | 29 |
| 49 | A robust mass spectrometry method for rapid profiling of erythrocyte ghost membrane proteomes. Clinical Proteomics, 2018, 15, 14. | 1.1 | 28 |
| 50 | 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 |
| 51 | Reconstitution of immune cell interactions in free-standing membranes. Journal of Cell Science, 2018, 132, . | 1.2 | 25 |
| 52 | The deubiquitinase TRABID stabilizes the K29/K48-specific E3 ubiquitin ligase HECTD1. Journal of Biological Chemistry, 2021, 296, 100246. | 1.6 | 25 |
| 53 | CD2F-10: a new member of the CD2 subset of the immunoglobulin superfamily. Immunogenetics, 2001, 53, 599-602. | 1.2 | 24 |
| 54 | vLUME: 3D virtual reality for single-molecule localization microscopy. Nature Methods, 2020, 17, 1097-1099. | 9.0 | 23 |

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| 55 | Glycosylation and Lipids Working in Concert Direct CD2 Ectodomain Orientation and Presentation. Journal of Physical Chemistry Letters, 2017, 8, 1060-1066. | 2.1 | 22 |
| 56 | Age-dependent changes in protein incorporation into collagen-rich tissues of mice by in vivo pulsed SILAC labelling. ELife, 2021, 10, . | 2.8 | 22 |
| 57 | The deubiquitylase USP9X controls ribosomal stalling. Journal of Cell Biology, 2021, 220, . | 2.3 | 20 |
| 58 | Single-Molecule Analysis of G Protein-Coupled Receptor Stoichiometry: Approaches and Limitations. Trends in Pharmacological Sciences, 2018, 39, 96-108. | 4.0 | 18 |
| 59 | Type-3 BRET, an Improved Competition-Based Bioluminescence Resonance Energy Transfer Assay. Biophysical Journal, 2014, 106, L41-L43. | 0.2 | 17 |
| 60 | Analysis of the structure and interactions of CD2. Biochemical Society Transactions, 1993, 21, 952-958. | 1.6 | 16 |
| 61 | 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 |
| 62 | 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 |
| 63 | Dimensions and Interactions of Large T-Cell Surface Proteins. Frontiers in Immunology, 2018, 9, 2215. | 2.2 | 15 |
| 64 | Constraints on GPCR Heterodimerization Revealed by the Type-4 Induced-Association BRET Assay. Biophysical Journal, 2019, 116, 31-41. | 0.2 | 13 |
| 65 | TCR signaling: the barrier within. Nature Immunology, 2014, 15, 136-137. | 7.0 | 12 |
| 66 | Hydrodynamic trapping measures the interaction between membrane-associated molecules. Scientific Reports, 2018, 8, 12479. | 1.6 | 11 |
| 67 | CalQuo: automated, simultaneous single-cell and population-level quantification of global intracellular Ca2+ responses. Scientific Reports, 2015, 5, 16487. | 1.6 | 10 |
| 68 | Membrane Nanoclustersâ€”Tails of the Unexpected. Cell, 2015, 161, 433-434. | 13.5 | 10 |
| 69 | Extracellular vesicle integrins act as a nexus for platelet adhesion in cerebral microvessels. Scientific Reports, 2019, 9, 15847. | 1.6 | 9 |
| 70 | 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 |
| 71 | 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 |
| 72 | Reply to: Experimental challenge to a 'rigorous' BRET analysis of GPCR oligomerization. Nature Methods, 2007, 4, 601-601. | 9.0 | 6 |

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|---|---|---|---|
| 73 | Soft Polydimethylsiloxane-Supported Lipid Bilayers for Studying T Cell Interactions. Biophysical Journal, 2021, 120, 35-45. | 0.2 | 6 |
| 74 | The chaperonin CCT8 controls proteostasis essential for T cell maturation, selection, and function. Communications Biology, 2021, 4, 681. | 2.0 | 6 |
| 75 | Tetrahydrobiopterin modulates ubiquitin conjugation to UBC13/UBE2N and proteasome activity by S-nitrosation. Scientific Reports, 2018, 8, 14310. | 1.6 | 5 |
| 76 | BRET analysis of GPCR oligomerization: newer does not mean better. Nature Methods, 2007, 4, 4-4. | 9.0 | 4 |
| 77 | Detection of Cell Surface Ligands for Human Synovial Î³Î´ T Cells. Journal of Immunology, 2019, 203, 2369-2376. | 0.4 | 4 |
| 78 | The Costs of Close Contacts: Visualizing the Energy Landscape of Cell Contacts at the Nanoscale. Biophysical Journal, 2020, 118, 1261-1269. | 0.2 | 2 |
| 79 | Single-cell measurements of two-dimensional binding affinity across cell contacts. Biophysical Journal, 2021, 120, 5032-5040. | 0.2 | 2 |
| 80 | Phagocytes Get Close to Their Enemies. Developmental Cell, 2016, 36, 131-132. | 3.1 | 1 |
| 81 | Mimicking ligands. Nature, 1993, 361, 212-212. | 13.7 | 0 |
| 82 | 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 |
| 83 | A Protein Expression Toolkit for Studying Signaling in T Cells. Methods in Molecular Biology, 2017, 1584, 451-472. | 0.4 | 0 |
| 84 | Macrophages: micromanagers of antagonistic signaling nanoclusters. Journal of Cell Biology, 2017, 216, 871-873. | 2.3 | 0 |
| 85 | 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 |
| 86 | T-Cell Receptor Ligands: Every which Way They Can. Biophysical Journal, 2020, 118, 2867-2869. | 0.2 | 0 |