# Russell Wallis

List of Publications by Year
in descending order



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|---|---|---|---|
| 74 papers | 4,858 citations | 66234 42 h-index | 91712 69 g-index |
| 76 all docs | 76 docs citations | 76 times ranked | 5612 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Site-Directed Conjugation of â€œClickedâ€•Glycopolymers To Form Glycoprotein Mimics:â€‰ Binding to Mammalian Lectin and Induction of Immunological Function. Journal of the American Chemical Society, 2007, 129, 15156-15163. | 6.6 | 281 |
| 2 | Simultaneous Activation of Complement and Coagulation by MBL-Associated Serine Protease 2. PLoS ONE, 2007, 2, e623. | 1.1 | 220 |
| 3 | Sequenceâ€Controlled Multiâ€Block Glycopolymers to Inhibit DCâ€SIGNâ€gp120 Binding. Angewandte Chemie - International Edition, 2013, 52, 4435-4439. | 7.2 | 218 |
| 4 | High-Affinity Glycopolymer Binding to Human DC-SIGN and Disruption of DC-SIGN Interactions with HIV Envelope Glycoprotein. Journal of the American Chemical Society, 2010, 132, 15130-15132. | 6.6 | 180 |
| 5 | Targeting of mannan-binding lectin-associated serine protease-2 confers protection from myocardial and gastrointestinal ischemia/reperfusion injury. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7523-7528. | 3.3 | 174 |
| 6 | The Hemopexin and O-Glycosylated Domains Tune Gelatinase B/MMP-9 Bioavailability via Inhibition and Binding to Cargo Receptors. Journal of Biological Chemistry, 2006, 281, 18626-18637. | 1.6 | 163 |
| 7 | Protein-Protein Interactions in Colicin E9 DNase-Immunity Protein Complexes. 1. Diffusion-Controlled Association and Femtomolar Binding for the Cognate Complex. Biochemistry, 1995, 34, 13743-13750. | 1.2 | 149 |
| 8 | The Lectin Pathway of Complement Activation Is a Critical Component of the Innate Immune Response to Pneumococcal Infection. PLoS Pathogens, 2012, 8, e1002793. | 2.1 | 144 |
| 9 | Dendritic Cell Lectin-Targeting Sentinel-like Unimolecular Glycoconjugates To Release an Anti-HIV Drug. Journal of the American Chemical Society, 2014, 136, 4325-4332. | 6.6 | 137 |
| 10 | Paths reunited: Initiation of the classical and lectin pathways of complement activation. Immunobiology, 2010, 215, 1-11. | 0.8 | 135 |
| 11 | Two Mechanisms for Mannose-binding Protein Modulation of the Activity of Its Associated Serine Proteases. Journal of Biological Chemistry, 2004, 279, 26058-26065. | 1.6 | 113 |
| 12 | Characterization and Membrane Assembly of the TatA Component of the Escherichia coli Twin-Arginine Protein Transport System. Biochemistry, 2002, 41, 13690-13697. | 1.2 | 108 |
| 13 | Interactions between mannose-binding lectin and MASPs during complement activation by the lectin pathway. Immunobiology, 2007, 212, 289-299. | 0.8 | 106 |
| 14 | Molecular Determinants of Oligomer Formation and Complement Fixation in Mannose-binding Proteins. Journal of Biological Chemistry, 1999, 274, 3580-3589. | 1.6 | 102 |
| 15 | Rationale for targeting complement in COVIDâ€19. EMBO Molecular Medicine, 2020, 12, e12642. | 3.3 | 101 |
| 16 | Crystal structure of the CUB1-EGF-CUB2 region of mannose-binding protein associated serine protease-2. EMBO Journal, 2003, 22, 2348-2359. | 3.5 | 100 |
| 17 | Interaction of Mannose-binding Protein with Associated Serine Proteases. Journal of Biological Chemistry, 2000, 275, 30962-30969. | 1.6 | 97 |
| 18 | C1q, the recognition subcomponent of the classical pathway of complement, drives microglial activation. Journal of Neuroscience Research, 2009, 87, 644-652. | 1.3 | 97 |

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|---|---|---|---|
| 19 | Conformational changes in the AAA ATPase p97â€“p47 adaptor complex. EMBO Journal, 2006, 25, 1967-1976. | 3.5 | 95 |
| 20 | Stoichiometry of Complexes between Mannose-binding Protein and Its Associated Serine Proteases. Journal of Biological Chemistry, 2001, 276, 25894-25902. | 1.6 | 94 |
| 21 | Protein-Protein Interactions in Colicin E9 DNase-Immunity Protein Complexes. 2. Cognate and Noncognate Interactions That Span the Millilmolar to Femptomolar Affinity Range. Biochemistry, 1995, 34, 13751-13759. | 1.2 | 93 |
| 22 | Characterization of Microfibrillar-associated Protein 4 (MFAP4) as a Tropoelastin- and Fibrillin-binding Protein Involved in Elastic Fiber Formation. Journal of Biological Chemistry, 2016, 291, 1103-1114. | 1.6 | 87 |
| 23 | Structural basis of the C1q/C1s interaction and its central role in assembly of the C1 complex of complement activation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13916-13920. | 3.3 | 86 |
| 24 | A structural comparison of the colicin immunity proteins Im7 and Im9 gives new insights into the molecular determinants of immunity-protein specificity. Biochemical Journal, 1998, 333, 183-191. | 1.7 | 74 |
| 25 | Localization of the Serine Protease-binding Sites in the Collagen-like Domain of Mannose-binding Protein. Journal of Biological Chemistry, 2004, 279, 14065-14073. | 1.6 | 73 |
| 26 | Specificity in Proteinâ^'Protein Recognition:Â Conserved Im9 Residues Are the Major Determinants of Stability in the Colicin E9 DNaseâ^'Im9 Complexâ€. Biochemistry, 1998, 37, 476-485. | 1.2 | 72 |
| 27 | A novel fold for the factor Hâ€“binding protein BbCRASP-1 of Borrelia burgdorferi. Nature Structural and Molecular Biology, 2005, 12, 276-277. | 3.6 | 72 |
| 28 | High glucose disrupts oligosaccharide recognition function via competitive inhibition: A potential mechanism for immune dysregulation in diabetes mellitus. Immunobiology, 2011, 216, 126-131. | 0.8 | 67 |
| 29 | Structure, dynamics and interactions of p47, a major adaptor of the AAA ATPase, p97. EMBO Journal, 2004, 23, 1463-1473. | 3.5 | 65 |
| 30 | Structural and Functional Aspects of Complement Activation by Mannose-binding Protein. Immunobiology, 2002, 205, 433-445. | 0.8 | 62 |
| 31 | Enzymological characterization of the nuclease domain from the bacterial toxin colicin E9 from Escherichia coli. Biochemical Journal, 1998, 334, 387-392. | 1.7 | 61 |
| 32 | Analogous Interactions in Initiating Complexes of the Classical and Lectin Pathways of Complement. Journal of Immunology, 2009, 182, 7708-7717. | 0.4 | 59 |
| 33 | Asymmetry adjacent to the collagen-like domain in rat liver mannose-binding protein. Biochemical Journal, 1997, 325, 391-400. | 1.7 | 58 |
| 34 | In vivo and in vitro characterization of overproduced colicin E9 immunity protein. FEBS Journal, 1992, 207, 687-695. | 0.2 | 57 |
| 35 | Structural Basis of Mannan-Binding Lectin Recognition by Its Associated Serine Protease MASP-1: Implications for Complement Activation. Structure, 2011, 19, 1635-1643. | 1.6 | 55 |
| 36 | Two Faces of CwlM, an Essential PknB Substrate, in Mycobacterium tuberculosis. Cell Reports, 2018, 25, 57-67.e5. | 2.9 | 52 |

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|---|---|---|---|
| 37 | Molecular Interactions between MASP-2, C4, and C2 and Their Activation Fragments Leading to Complement Activation via the Lectin Pathway. Journal of Biological Chemistry, 2007, 282, 7844-7851. | 1.6 | 51 |
| 38 | The Crystal Structure of Pneumolysin at 2.0 Ã... Resolution Reveals the Molecular Packing of the Pre-pore Complex. Scientific Reports, 2015, 5, 13293. | 1.6 | 50 |
| 39 | Tandem overproduction and characterisation of the nuclease domain of colicin E9 and its cognate inhibitor protein Im9. FEBS Journal, 1994, 220, 447-454. | 0.2 | 49 |
| 40 | Molecular basis of sugar recognition by collectin-K1 and the effects of mutations associated with 3MC syndrome. BMC Biology, 2015, 13, 27. | 1.7 | 49 |
| 41 | Structure of the C1râ€“C1s interaction of the C1 complex of complement activation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 768-773. | 3.3 | 49 |
| 42 | Interaction of Mannan Binding Lectin with Î±2 Macroglobulin via Exposed Oligomannose Glycans. Journal of Biological Chemistry, 2006, 281, 6955-6963. | 1.6 | 43 |
| 43 | Lectin pathway effector enzyme mannanâ€binding lectinâ€associated serine proteaseâ€2 can activate native complement C3 in absence of C4 and/or C2. FASEB Journal, 2017, 31, 2210-2219. | 0.2 | 43 |
| 44 | Immune attack on nanoparticles. Nature Nanotechnology, 2011, 6, 80-81. | 15.6 | 42 |
| 45 | Localization and Characterization of the Mannose-Binding Lectin (MBL)-Associated-Serine Protease-2 Binding Site in Rat Ficolin-A: Equivalent Binding Sites within the Collagenous Domains of MBLs and Ficolins. Journal of Immunology, 2007, 179, 455-462. | 0.4 | 37 |
| 46 | The Recognition Unit of FIBCD1 Organizes into a Noncovalently Linked Tetrameric Structure and Uses a Hydrophobic Funnel (S1) for Acetyl Group Recognition. Journal of Biological Chemistry, 2010, 285, 1229-1238. | 1.6 | 37 |
| 47 | Hâ€ficolin binds <scp>A</scp>spergillus fumigatus leading to activation of the lectin complement pathway and modulation of lung epithelial immune responses. Immunology, 2015, 146, 281-291. | 2.0 | 37 |
| 48 | Impaired Secretion of Rat Mannose-Binding Protein Resulting from Mutations in the Collagen-Like Domain. Journal of Immunology, 2000, 165, 1403-1409. | 0.4 | 34 |
| 49 | Structureâ€“function mapping of BbCRASP-1, the key complement factor H and FHL-1 binding protein of Borrelia burgdorferi. International Journal of Medical Microbiology, 2006, 296, 177-184. | 1.5 | 34 |
| 50 | An Aspartate-Specific Solute-Binding Protein Regulates Protein Kinase G Activity To Control Glutamate Metabolism in Mycobacteria. MBio, 2018, 9, . | 1.8 | 32 |
| 51 | Manipulation of cytokine secretion in human dendritic cells using glycopolymers with picomolar affinity for DC-SIGN. Chemical Science, 2017, 8, 6974-6980. | 3.7 | 31 |
| 52 | Molecular analysis of the protein-protein interaction between the E9 immunity protein and colicin E9. FEBS Journal, 1992, 210, 923-930. | 0.2 | 29 |
| 53 | Dominant Effects of Mutations in the Collagenous Domain of Mannose-Binding Protein. Journal of Immunology, 2002, 168, 4553-4558. | 0.4 | 27 |
| 54 | Identification of critical residues in the colicin E9 DNase binding region of the Im9 protein. Biochemical Journal, 1997, 323, 823-831. | 1.7 | 26 |

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| 55 | Mannan binding lectin-associated serine protease 1 is induced by hepatitis C virus infection and activates human hepatic stellate cells. Clinical and Experimental Immunology, 2013, 174, 265-273. | 1.1 | 25 |
| 56 | Near-planar Solution Structures of Mannose-binding Lectin Oligomers Provide Insight on Activation of Lectin Pathway of Complement. Journal of Biological Chemistry, 2012, 287, 3930-3945. | 1.6 | 24 |
| 57 | <scp>l</scp> â€Fucose prevention of renal ischaemia/reperfusion injury in Mice. FASEB Journal, 2020, 34, 822-834. | 0.2 | 21 |
| 58 | Synthetic Glycopolypeptides as Potential Inhibitory Agents for Dendritic Cells and HIVâ€1 Trafficking. Macromolecular Rapid Communications, 2013, 34, 1542-1546. | 2.0 | 18 |
| 59 | Sequential Assignments and Identification of Secondary Structure Elements of the Colicin E9 Immunity Protein in Solution by Homonuclear and Heteronuclear NMR. Biochemistry, 1994, 33, 12347-12355. | 1.2 | 17 |
| 60 | Carbohydrate recognition and complement activation by rat ficolinâ€B. European Journal of Immunology, 2011, 41, 214-223. | 1.6 | 17 |
| 61 | Identification of the minimal binding region of a Plasmodium falciparum IgM binding PfEMP1 domain. Molecular and Biochemical Parasitology, 2015, 201, 76-82. | 0.5 | 14 |
| 62 | Opsonizing properties of rat ficolin-A in the defence against Cryptococcus neoformans. Immunobiology, 2013, 218, 477-483. | 0.8 | 12 |
| 63 | Decoupling of Carbohydrate Binding and MASP-2 Autoactivation in Variant Mannose-Binding Lectins Associated with Immunodeficiency. Journal of Immunology, 2005, 175, 6846-6851. | 0.4 | 11 |
| 64 | Flexibility in Mannan-Binding Lectin-Associated Serine Proteases-1 and -2 Provides Insight on Lectin Pathway Activation. Structure, 2017, 25, 364-375. | 1.6 | 10 |
| 65 | Crystal structure of an inulosucrase from Halalkalicoccus jeotgali B3T, a halophilic archaeal strain. FEBS Journal, 2021, 288, 5723-5736. | 2.2 | 8 |
| 66 | Light Scattering By Optically-Trapped Vesicles Affords Unprecedented Temporal Resolution Of Lipid-Raft Dynamics. Scientific Reports, 2017, 7, 8589. | 1.6 | 7 |
| 67 | Formation of pre-pore complexes of pneumolysin is accompanied by a decrease in short-range order of lipid molecules throughout vesicle bilayers. Scientific Reports, 2020, 10, 4585. | 1.6 | 6 |
| 68 | Engineering Novel Complement Activity into a Pulmonary Surfactant Protein. Journal of Biological Chemistry, 2010, 285, 10546-10552. | 1.6 | 5 |
| 69 | Lysyl Hydroxylase 3 Modifies Lysine Residues to Facilitate Oligomerization of Mannan-Binding Lectin. PLoS ONE, 2014, 9, e113498. | 1.1 | 4 |
| 70 | Sequence-Controlled Multi-Block Glycopolymers via Cu(0) Mediated Living Radical Polymerization. ACS Symposium Series, 2014, , 327-348. | 0.5 | 4 |
| 71 | A molecular dynamics study of C1r and C1s dimers. Implications for the structure of the C1 complex. Proteins: Structure, Function and Bioinformatics, 2012, 80, n/a-n/a. | 1.5 | 3 |
| 72 | C-Type Lectins and Collectins. , 0, , 597-611. | | 1 |

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| 73 | Reply to Mortensen et al.: The zymogen form of complement component C1. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3867-E3868. | 3.3 | 1 |
| 74 | Complement in Infections. , 0, , 85-95. | | 0 |