Andrew J Beavil

List of Publications by Year
in descending order

54 papers	3,144 citations	172457 29 h-index	182427 51 g-index
56 all docs	56 docs citations	56 times ranked	3215 citing authors

#	Article	IF	Citations
1	Nucleolin acts as the receptor for C1QTNF4 and supports C1QTNF4-mediated innate immunity modulation. Journal of Biological Chemistry, 2021, 296, 100513.	3.4	13
2	Time-Resolved Fluorescence Anisotropy and Molecular Dynamics Analysis of a Novel GFP Homo-FRET Dimer. Biophysical Journal, 2021, 120, 254-269.	0.5	21
3	Reviving lost binding sites: Exploring calciumâ€binding site transitions between human and murine CD23. FEBS Open Bio, 2021, 11, 1827-1840.	2.3	2
4	Engineering the Fab fragment of the anti-IgE omalizumab to prevent Fab crystallization and permit IgE-Fc complex crystallization. Acta Crystallographica Section F, Structural Biology Communications, 2020, 76, 116-129.	0.8	5
5	Structure of a patient-derived antibody in complex with allergen reveals simultaneous conventional and superantigen-like recognition. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8707-E8716.	7.1	29
6	Structural basis for selective inhibition of immunoglobulin E-receptor interactions by an anti-IgE antibody. Scientific Reports, 2018, 8, 11548.	3.3	22
7	Anti-Folate Receptor-Î± IgE but not IgG Recruits Macrophages to Attack Tumors via TNFÎ±/MCP-1 Signaling. Cancer Research, 2017, 77, 1127-1141.	0.9	58
8	Allosteric mechanism of action of the therapeutic anti-IgE antibody omalizumab. Journal of Biological Chemistry, 2017, 292, 9975-9987.	3.4	61
9	IgE binds asymmetrically to its B cell receptor CD23. Scientific Reports, 2017, 7, 45533.	3.3	25
10	IgE Trimers Drive SPE-7 Cytokinergic Activity. Scientific Reports, 2017, 7, 8164.	3.3	13
11	Thermal sensitivity and flexibility of the CÎµ3 domains in immunoglobulin E. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1336-1347.	2.3	10
12	A small-molecule activator of kinesin-1 drives remodeling of the microtubule network. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13738-13743.	7.1	57
13	Functionally Active Fc Mutant Antibodies Recognizing Cancer Antigens Generated Rapidly at High Yields. Frontiers in Immunology, 2017, 8, 1112.	4.8	17
14	A range of CâˆŠ3â€“CâˆŠ4 interdomain angles in IgE Fc accommodate binding to its receptor CD23. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 305-309.	0.8	12
15	Human immunoglobulin E flexes between acutely bent and extended conformations. Nature Structural and Molecular Biology, 2014, 21, 397-404.	8.2	52
16	A tool kit for rapid cloning and expression of recombinant antibodies. Scientific Reports, 2014, 4, 5885.	3.3	85
17	Enantioselective synthesis of (+)-aspercyclide A. Tetrahedron Letters, 2013, 54, 4970-4972.	1.4	10
18	Conformational plasticity at the IgE-binding site of the B-cell receptor CD23. Molecular Immunology, 2013, 56, 693-697.	2.2	16

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19	Ca2+-dependent Structural Changes in the B-cell Receptor CD23 Increase Its Affinity for Human Immunoglobulin E. Journal of Biological Chemistry, 2013, 288, 21667-21677.	3.4	27
20	Structure based drug design of inhibitors of the CD23 and immunoglobulin E interaction. FASEB Journal, 2013, 27, 1015.7.	0.5	0
21	Mapping of the CD23 Binding Site on Immunoglobulin E (IgE) and Allosteric Control of the IgE-FcÏµRI Interaction. Journal of Biological Chemistry, 2012, 287, 31457-31461.	3.4	21
22	Soluble CD23 Controls IgE Synthesis and Homeostasis in Human B Cells. Journal of Immunology, 2012, 188, 3199-3207.	0.8	67
23	Crystal structure of IgE bound to its B-cell receptor CD23 reveals a mechanism of reciprocal allosteric inhibition with high affinity receptor FcÎµRI. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12686-12691.	7.1	82
24	A Fluorescent Biosensor Reveals Conformational Changes in Human Immunoglobulin E Fc. Journal of Biological Chemistry, 2012, 287, 17459-17470.	3.4	49
25	Recombinant IgE antibodies for passive immunotherapy of solid tumours: from concept towards clinical application. Cancer Immunology, Immunotherapy, 2012, 61, 1547-1564.	4.2	55
26	Allergen specificity of IgG4-expressing B cells in patients with grass pollen allergy undergoing immunotherapy. Journal of Allergy and Clinical Immunology, 2012, 130, 663-670.e3.	2.9	77
27	Synthesis and Incorporation into Cyclic Peptides of Tolan Amino Acids and Their Hydrogenated Congeners: Construction of an Array of Aâ€“B-loop Mimetics of the CÎµ3 Domain of Human IgE. Journal of Organic Chemistry, 2012, 77, 3197-3214.	3.2	21
28	Synthesis of the C19 methyl ether of aspercyclide A via germyl-Stille macrocyclisation and ELISA evaluation of both enantiomers following optical resolution. Organic and Biomolecular Chemistry, 2011, 9, 6814.	2.8	10
29	Harnessing engineered antibodies of the IgE class to combat malignancy: initial assessment of FcÉ›Râ€mediated basophil activation by a tumourâ€specific IgE antibody to evaluate the risk of type I hypersensitivity. Clinical and Experimental Allergy, 2011, 41, 1400-1413.	2.9	38
30	Conformational changes in IgE contribute to its uniquely slow dissociation rate from receptor FcÉ›RI. Nature Structural and Molecular Biology, 2011, 18, 571-576.	8.2	105
31	Monitoring the Systemic Human Memory B Cell Compartment of Melanoma Patients for Anti-Tumor IgG Antibodies. PLoS ONE, 2011, 6, e19330.	2.5	72
32	Total synthesis of (Â±)-aspercyclide A and its C19 methyl ether. Chemical Communications, 2010, 46, 1824-1826.	4.1	31
33	Characterisation of an engineered trastuzumab IgE antibody and effector cell mechanisms targeting HER2/neu-positive tumour cells. Cancer Immunology, Immunotherapy, 2009, 58, 915-930.	4.2	117
34	The crystal structure of rabbit IgG-Fc. Biochemical Journal, 2009, 417, 77-83.	3.7	25
35	Attenuation of IgE Affinity for FcÏµRI Radically Reduces the Allergic Response in Vitro and in Vivo. Journal of Biological Chemistry, 2008, 283, 29882-29887.	3.4	11
36	IgE-Antibody-Dependent Immunotherapy of Solid Tumors: Cytotoxic and Phagocytic Mechanisms of Eradication of Ovarian Cancer Cells. Journal of Immunology, 2007, 179, 2832-2843.	0.8	117

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37	Activated Ezrin Promotes Cell Migration through Recruitment of the GEF Dbl to Lipid Rafts and Preferential Downstream Activation of Cdc42. Molecular Biology of the Cell, 2007, 18, 2935-2948.	2.1	87
38	Role of IgE receptors in IgE antibody-dependent cytotoxicity and phagocytosis of ovarian tumor cells by human monocytic cells. Cancer Immunology, Immunotherapy, 2007, 57, 247-263.	4.2	65
39	Analysis of the interaction between RGD-expressing adenovirus type 5 fiber knob domains and Î±vÎ²3 integrin reveals distinct binding profiles and intracellular trafficking. Journal of General Virology, 2006, 87, 2497-2505.	2.9	19
40	IgE Structure, Receptors, and Signaling. , 2006, , 289-308.		0
41	Disulfide Linkage Controls the Affinity and Stoichiometry of IgE FcÏµ3â€“4 Binding to FcÏµRI. Journal of Biological Chemistry, 2005, 280, 16808-16814.	3.4	30
42	The Biology of IgE and the Basis of Allergic Disease. Annual Review of Immunology, 2003, 21, 579-628.	21.8	576
43	Immunoglobulinâ€“Fc Receptor Interactions. , 2003, , 45-49.		0
44	Mutagenesis Within Human FcÎµRIÎ± Differentially Affects Human and Murine IgE Binding. Journal of Immunology, 2002, 168, 1787-1795.	0.8	12
45	Necessity of the stalk region for immunoglobulin E interaction with CD23. Immunology, 2002, 107, 373-381.	4.4	19
46	The crystal structure of IgE Fc reveals an asymmetrically bent conformation. Nature Immunology, 2002, 3, 681-686.	14.5	152
47	The structure of the IgE Cepsilon2 domain and its role in stabilizing the complex with its high-affinity receptor FcepsilonRIalpha. Nature Structural Biology, 2001, 8, 437-441.	9.7	73
48	Molecular model of a lattice of signalling proteins involved in bacterial chemotaxis. Nature Cell Biology, 2000, 2, 792-796.	10.3	175
49	Identification of Contact Residues and Definition of the CAR-Binding Site of Adenovirus Type 5 Fiber Protein. Journal of Virology, 2000, 74, 2804-2813.	3.4	162
50	Heterogeneous Glycosylation of Immunoglobulin E Constructs Characterized by Top-Down High-Resolution 2-D Mass Spectrometryâ€. Biochemistry, 2000, 39, 3369-3376.	2.5	62
51	Mutations in the DG Loop of Adenovirus Type 5 Fiber Knob Protein Abolish High-Affinity Binding to Its Cellular Receptor CAR. Journal of Virology, 1999, 73, 9508-9514.	3.4	103
52	Interaction of the Low-Affinity Receptor CD23/FcÎµRII Lectin Domain with the FcÎµ3â^'4 Fragment of Human Immunoglobulin Eâ€. Biochemistry, 1997, 36, 2112-2122.	2.5	62
53	Hydrodynamic studies of a complex between the Fc fragment of human IgE and a soluble fragment of the Fc epsilon RI alpha chain.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 1841-1845.	7.1	34
54	Bent Domain Structure of Recombinant Human IgE-Fc in Solution by X-ray and Neutron Scattering in Conjunction with an Automated Curve Fitting Procedure. Biochemistry, 1995, 34, 14449-14461.	2.5	77