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	The Biology of IgE and the Basis of Allergic Disease. Annual Review of Immunology, 2003, 21, 579-628.	21.8	576
2	Molecular model of a lattice of signalling proteins involved in bacterial chemotaxis. Nature Cell Biology, 2000, 2, 792-796.	10.3	175
3	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
4	The crystal structure of IgE Fc reveals an asymmetrically bent conformation. Nature Immunology, 2002, 3, 681-686.	14.5	152
5	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
6	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
7	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
8	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
9	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
10	A tool kit for rapid cloning and expression of recombinant antibodies. Scientific Reports, 2014, 4, 5885.	3.3	85
11	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
12	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
13	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
14	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
15	Monitoring the Systemic Human Memory B Cell Compartment of Melanoma Patients for Anti-Tumor IgG Antibodies. PLoS ONE, 2011, 6, e19330.	2.5	72
16	Soluble CD23 Controls IgE Synthesis and Homeostasis in Human B Cells. Journal of Immunology, 2012, 188, 3199-3207.	0.8	67
17	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
18	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

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19	Heterogeneous Glycosylation of Immunoglobulin E Constructs Characterized by Top-Down High-Resolution 2-D Mass Spectrometryâ€. Biochemistry, 2000, 39, 3369-3376.	2.5	62
20	Allosteric mechanism of action of the therapeutic anti-IgE antibody omalizumab. Journal of Biological Chemistry, 2017, 292, 9975-9987.	3.4	61
21	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
22	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
23	Recombinant IgE antibodies for passive immunotherapy of solid tumours: from concept towards clinical application. Cancer Immunology, Immunotherapy, 2012, 61, 1547-1564.	4.2	55
24	Human immunoglobulin E flexes between acutely bent and extended conformations. Nature Structural and Molecular Biology, 2014, 21, 397-404.	8.2	52
25	A Fluorescent Biosensor Reveals Conformational Changes in Human Immunoglobulin E Fc. Journal of Biological Chemistry, 2012, 287, 17459-17470.	3.4	49
26	Harnessing engineered antibodies of the IgE class to combat malignancy: initial assessment of FcÉ›RIâ€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
27	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
28	Total synthesis of (Â±)-aspercyclide A and its C19 methyl ether. Chemical Communications, 2010, 46, 1824-1826.	4.1	31
29	Disulfide Linkage Controls the Affinity and Stoichiometry of IgE Fcï¼3â€“4 Binding to FcïµRI. Journal of Biological Chemistry, 2005, 280, 16808-16814.	3.4	30
30	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
31	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
32	The crystal structure of rabbit IgG-Fc. Biochemical Journal, 2009, 417, 77-83.	3.7	25
33	IgE binds asymmetrically to its B cell receptor CD23. Scientific Reports, 2017, 7, 45533.	3.3	25
34	Structural basis for selective inhibition of immunoglobulin E-receptor interactions by an anti-IgE antibody. Scientific Reports, 2018, 8, 11548.	3.3	22
35	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
36	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

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37	Time-Resolved Fluorescence Anisotropy and Molecular Dynamics Analysis of a Novel GFP Homo-FRET Dimer. Biophysical Journal, 2021, 120, 254-269.	0.5	21
38	Necessity of the stalk region for immunoglobulin E interaction with CD23. Immunology, 2002, 107, 373-381.	4.4	19
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	Functionally Active Fc Mutant Antibodies Recognizing Cancer Antigens Generated Rapidly at High Yields. Frontiers in Immunology, 2017, 8, 1112.	4.8	17
41	Conformational plasticity at the IgE-binding site of the B-cell receptor CD23. Molecular Immunology, 2013, 56, 693-697.	2.2	16
42	IgE Trimers Drive SPE-7 Cytokinergic Activity. Scientific Reports, 2017, 7, 8164.	3.3	13
43	Nucleolin acts as the receptor for C1QTNF4 and supports C1QTNF4-mediated innate immunity modulation. Journal of Biological Chemistry, 2021, 296, 100513.	3.4	13
44	Mutagenesis Within Human FcÎµRIÎ± Differentially Affects Human and Murine IgE Binding. Journal of Immunology, 2002, 168, 1787-1795.	0.8	12
45	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
46	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
47	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
48	Enantioselective synthesis of (+)-aspercyclide A. Tetrahedron Letters, 2013, 54, 4970-4972.	1.4	10
49	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
50	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
51	Reviving lost binding sites: Exploring calciumâ€binding site transitions between human and murine CD23. FEBS Open Bio, 2021, 11, 1827-1840.	2.3	2
52	Immunoglobulinâ€“Fc Receptor Interactions. , 2003, , 45-49.		0
53	IgE Structure, Receptors, and Signaling. , 2006, , 289-308.		0
54	Structure based drug design of inhibitors of the CD23 and immunoglobulin E interaction. FASEB Journal, 2013, 27, 1015.7.	0.5	0