Iain D C Fraser

List of Publications by Year
in descending order

80 papers	10,424 citations	81743 39 h-index	64668 79 g-index
95 all docs	95 docs citations	95 times ranked	21728 citing authors

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	4.3	4,701
2	Regulation of NMDA Receptors by an Associated Phosphatase-Kinase Signaling Complex. Science, 1999, 285, 93-96.	6.0	483
3	NF-ÎºB Signaling in Macrophages: Dynamics, Crosstalk, and Signal Integration. Frontiers in Immunology, 2019, 10, 705.	2.2	450
4	A single lentiviral vector platform for microRNA-based conditional RNA interference and coordinated transgene expression. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13759-13764.	3.3	306
5	Use of a cAMP BRET Sensor to Characterize a Novel Regulation of cAMP by the Sphingosine 1-Phosphate/G13 Pathway. Journal of Biological Chemistry, 2007, 282, 10576-10584.	1.6	303
6	A novel lipid-anchored A-kinase Anchoring Protein facilitates cAMP-responsive membrane events. EMBO Journal, 1998, 17, 2261-2272.	3.5	256
7	Inflammatory monocytes regulate pathologic responses to commensals during acute gastrointestinal infection. Nature Medicine, 2013, 19, 713-721.	15.2	239
8	Assembly of an A kinase-anchoring proteinâ€"Î² 2 -adrenergic receptor complex facilitates receptor phosphorylation and signaling. Current Biology, 2000, 10, 409-412.	1.8	213
9	Systems Biology in Immunology: A Computational Modeling Perspective. Annual Review of Immunology, 2011, 29, 527-585.	9.5	167
10	Suppression of LPS-Induced TNF-Î± Production in Macrophages by cAMP Is Mediated by PKA-AKAP95-p105. Science Signaling, 2009, 2, ra28.	1.6	165
11	U2AF1 mutations induce oncogenic IRAK4 isoforms and activate innate immune pathways in myeloid malignancies. Nature Cell Biology, 2019, 21, 640-650.	4.6	165
12	Regulation of Membrane Targeting of the G Protein-coupled Receptor Kinase 2 by Protein Kinase A and Its Anchoring Protein AKAP79. Journal of Biological Chemistry, 2001, 276, 15192-15199.	1.6	146
13	Commensal-driven immune zonation of the liver promotes host defence. Nature, 2021, 589, 131-136.	13.7	141
14	Overview of the Alliance for Cellular Signaling. Nature, 2002, 420, 703-706.	13.7	134
15	Immune regulation by glucocorticoids can be linked to cell typeâ€"dependent transcriptional responses. Journal of Experimental Medicine, 2019, 216, 384-406.	4.2	130
16	Anti-Inflammatory Chromatinscape Suggests Alternative Mechanisms of Glucocorticoid Receptor Action. Immunity, 2017, 47, 298-309.e5.	6.6	126
17	Enhanced Functional Genomic Screening Identifies Novel Mediators of Dual Leucine Zipper Kinase-Dependent Injury Signaling in Neurons. Neuron, 2017, 94, 1142-1154.e6.	3.8	118
18	Lipopolysaccharide-induced NF-Î°B nuclear translocation is primarily dependent on MyD88, but TNFÎ± expression requires TRIF and MyD88. Scientific Reports, 2017, 7, 1428.	1.6	114

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19	Switching of the Relative Dominance Between Feedback Mechanisms in Lipopolysaccharide-Induced NF-Î°B Signaling. Science Signaling, 2014, 7, ra6.	1.6	108
20	Multiscale modeling for biologists. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2009, 1, 4-14.	6.6	102
21	In Vitro Motility Analysis of Actin-Tropomyosin Regulation by Troponin and Calcium. Journal of Biological Chemistry, 1995, 270, 7836-7841.	1.6	97
22	Modulation of Ion Channels. Neuron, 1999, 23, 423-426.	3.8	97
23	Distinct NF-Î°B and MAPK Activation Thresholds Uncouple Steady-State Microbe Sensing from Anti-pathogen Inflammatory Responses. Cell Systems, 2016, 2, 378-390.	2.9	97
24	Alternative Splicing Regulates the Subcellular Localization of a-Kinase Anchoring Protein 18 Isoforms. Journal of Cell Biology, 1999, 147, 1481-1492.	2.3	84
25	Navigating the signalling network in mouse cardiac myocytes. Nature, 2002, 420, 712-714.	13.7	81
26	IFIT1 Exerts Opposing Regulatory Effects on the Inflammatory and Interferon Gene Programs in LPS-Activated Human Macrophages. Cell Reports, 2018, 25, 95-106.e6.	2.9	70
27	Comprehensive RNAi-based screening of human and mouse TLR pathways identifies species-specific preferences in signaling protein use. Science Signaling, 2016, 9, ra3.	1.6	66
28	A versatile approach to multiple gene RNA interference using microRNA-based short hairpin RNAs. BMC Molecular Biology, 2007, 8, 98.	3.0	58
29	Navigating the network: signaling cross-talk in hematopoietic cells. Nature Immunology, 2009, 10, 327-331.	7.0	54
30	Analysis of C5a-mediated chemotaxis by lentiviral delivery of small interfering RNA. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 488-493.	3.3	53
31	Regulation of cAMP Responses by the G12/13 Pathway Converges on Adenylyl Cyclase VII. Journal of Biological Chemistry, 2008, 283, 23429-23439.	1.6	52
32	Synergistic Ca2+ Responses by GÎ±i- and GÎ±q-coupled G-protein-coupled Receptors Require a Single PLCÎ² Isoform That Is Sensitive to Both GÎ²Î³ and GÎ±q. Journal of Biological Chemistry, 2011, 286, 942-951.	1.6	52
33	Host gene targets for novel influenza therapies elucidated by highâ€throughput RNA interference screens. FASEB Journal, 2012, 26, 1372-1386.	0.2	52
34	A simple method for automatic tracking of actin filaments in the motility assay. Journal of Muscle Research and Cell Motility, 1996, 17, 497-506.	0.9	51
35	In Vitro Motility Analysis of Smooth Muscle Caldesmon Control of Actin-Tropomyosin Filament Movement. Journal of Biological Chemistry, 1995, 270, 19688-19693.	1.6	48
36	Systematic Investigation of Multi-TLR Sensing Identifies Regulators of Sustained Gene Activation in Macrophages. Cell Systems, 2017, 5, 25-37.e3.	2.9	48

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37	Molecular characterisation and stage-specific expression of proliferating cell nuclear antigen (PCNA) from the malarial parasite,Plasmodium falciparum. Nucleic Acids Research, 1993, 21, 239-243.	6.5	44
38	Dual Roles for Ikaros in Regulation of Macrophage Chromatin State and Inflammatory Gene Expression. Journal of Immunology, 2018, 201, 757-771.	0.4	43
39	Silencing the expression of multiple GÂ-subunits eliminates signaling mediated by all four families of G proteins. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9493-9498.	3.3	42
40	Signaling and Cross-talk by C5a and UDP in Macrophages Selectively Use PLCÎ²3 to Regulate Intracellular Free Calcium. Journal of Biological Chemistry, 2008, 283, 17351-17361.	1.6	41
41	Multi-Omics Strategies Uncover Hostâ€"Pathogen Interactions. ACS Infectious Diseases, 2019, 5, 493-505.	1.8	39
42	Deciphering Signaling Outcomes from a System of Complex Networks. Science Signaling, 2009, 2, ra22.	1.6	36
43	<i>B</i><i>urkholderia cenocepacia</i>â€..J2315 escapes to the cytosol and actively subverts autophagy in human macrophages. Cellular Microbiology, 2014, 16, 378-395.	1.1	35
44	Activator of G-Protein Signaling 3â€"Induced Lysosomal Biogenesis Limits Macrophage Intracellular Bacterial Infection. Journal of Immunology, 2016, 196, 846-856.	0.4	31
45	Identification of cAMP-dependent protein kinase holoenzymes in preantral- and preovulatory-follicle-enriched ovaries, and their association with A-kinase-anchoring proteins. Biochemical Journal, 1999, 344, 613-623.	1.7	29
46	Proteome and Secretome Analysis Reveals Differential Post-transcriptional Regulation of Toll-like Receptor Responses. Molecular and Cellular Proteomics, 2017, 16, S172-S186.	2.5	29
47	Measurement of NF-Îº B Activation in TLR-Activated Macrophages. Methods in Molecular Biology, 2018, 1714, 67-78.	0.4	29
48	Variability in G-Protein-Coupled Signaling Studied with Microfluidic Devices. Biophysical Journal, 2010, 99, 2414-2422.	0.2	27
49	Coordination of cAMP Signaling Events through PKA Anchoring. Advances in Pharmacology, 1999, 47, 175-207.	1.2	26
50	Structureâˆ'Activity Studies of the Regulatory Interaction of the 10 Kilodalton C-Terminal Fragment of Caldesmon with Actin and the Effect of Mutation of Caldesmon Residues 691âˆ'696â€. Biochemistry, 1998, 37, 2314-2326.	1.2	24
51	The Inhibitory Complex of Smooth Muscle Caldesmon with Actin and Tropomyosin Involves Three Interacting Segments of the C-Terminal Domain 4â€. Biochemistry, 1997, 36, 5483-5492.	1.2	23
52	Development of a cell system for siRNA screening of pathogen responses in human and mouse macrophages. Scientific Reports, 2015, 5, 9559.	1.6	21
53	Mass Spectrometry-based Structural Analysis and Systems Immunoproteomics Strategies for Deciphering the Host Response to Endotoxin. Journal of Molecular Biology, 2018, 430, 2641-2660.	2.0	21
54	Identification of cAMP-dependent protein kinase holoenzymes in preantral- and preovulatory-follicle-enriched ovaries, and their association with A-kinase-anchoring proteins. Biochemical Journal, 1999, 344, 613.	1.7	20

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55	Lipid regulation of NLRP3 inflammasome activity through organelle stress. Trends in Immunology, 2021, 42, 807-823.	2.9	19
56	The cAMP Pathway Amplifies Early MyD88-Dependent and Type I Interferon-Independent LPS-Induced Interleukin-10 Expression in Mouse Macrophages. Mediators of Inflammation, 2019, 2019, 1-12.	1.4	17
57	IFN-mediated negative feedback supports bacteria class-specific macrophage inflammatory responses. ELife, 2019, 8, .	2.8	16
58	Characterization of the functional properties of smooth muscle caldesmon domain 4a: evidence for an independent inhibitory actinâ€"tropomyosin binding domain. Biochemical Journal, 1998, 332, 395-401.	1.7	14
59	The Alliance for Cellular Signaling Plasmid Collection. Molecular and Cellular Proteomics, 2007, 6, 413-424.	2.5	14
60	Mapping of contact sites in the caldesmonâ€"calmodulin complex. Biochemical Journal, 1997, 324, 255-262.	1.7	13
61	An interactive web-based application for Comprehensive Analysis of RNAi-screen Data. Nature Communications, 2016, 7, 10578.	5.8	13
62	A genome-wide screen uncovers multiple roles for mitochondrial nucleoside diphosphate kinase D in inflammasome activation. Science Signaling, 2021, 14, .	1.6	13
63	Genome-wide siRNA screen of genes regulating the LPS-induced TNF-Î± response in human macrophages. Scientific Data, 2017, 4, 170007.	2.4	11
64	A Deep Learning Pipeline for Nucleus Segmentation. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 1248-1264.	1.1	11
65	Species-Specific Endotoxin Stimulus Determines Toll-Like Receptor 4- and Caspase 11-Mediated Pathway Activation Characteristics. MSystems, 2021, 6, e0030621.	1.7	11
66	Localization of phospholipid-binding sites of caldesmon. FEBS Letters, 1994, 342, 176-180.	1.3	10
67	The Use of RNA Interference to Analyze Protein Phosphatase Function in Mammalian Cells. , 2007, 365, 261-286.		9
68	Ablation of the Regulatory IE1 Protein of Murine Cytomegalovirus Alters In Vivo Pro-inflammatory TNF-alpha Production during Acute Infection. PLoS Pathogens, 2012, 8, e1002901.	2.1	9
69	3-Aminobenzamide Prevents Concanavalin A-Induced Acute Hepatitis by an Anti-inflammatory and Anti-oxidative Mechanism. Digestive Diseases and Sciences, 2018, 63, 3382-3397.	1.1	9
70	Genome-wide siRNA screen of genes regulating the LPS-induced NF-ÎºB and TNF-Î± responses in mouse macrophages. Scientific Data, 2017, 4, 170008.	2.4	7
71	SIGNAL: A web-based iterative analysis platform integrating pathway and network approaches optimizes hit selection from genome-scale assays. Cell Systems, 2021, 12, 338-352.e5.	2.9	7
72	A small sustained increase in NOD1 abundance promotes ligand-independent inflammatory and oncogene transcriptional responses. Science Signaling, 2020, 13, .	1.6	6

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73	Type I IFNs facilitate innate immune control of the opportunistic bacteria Burkholderia cenocepacia in the macrophage cytosol. PLoS Pathogens, 2021, 17, e1009395.	2.1	6
74	Assay Development for Image-Based Quantification of Intracellular Bacterial Replication and Analysis of the Innate Immune Response to Infection. Assay and Drug Development Technologies, 2015, 13, 515-528.	0.6	5
75	<i>Clostridium difficile</i> toxin B differentially affects GPCR-stimulated Ca2+ responses in macrophages: independent roles for Rho and PLA2. Journal of Leukocyte Biology, 2010, 87, 1041-1057.	1.5	3
76	Single-tube genotyping for small insertion/deletion mutations: simultaneous identification of wild type, mutant and heterozygous alleles. Biology Methods and Protocols, 2020, 5, bpaa007.	1.0	3
77	Age influences susceptibility of brain capillary endothelial cells to La Crosse virus infection and cell death. Journal of Neuroinflammation, 2021, 18, 125.	3.1	3
78	Lentivirus-mediated Conditional Gene Expression. Bio-protocol, 2021, 11, e4205.	0.2	1
79	Investigating the role of protein Oâ€fucosyltransferase 1 in Tollâ€like receptor signaling (1004.6). FASEB Journal, 2014, 28, 1004.6.	0.2	0
80	Targeted Proteomicsâ€Driven Computational Modeling of Macrophage Microbial Sensing Pathways. FASEB Journal, 2018, 32, .	0.2	0