

# Avril A B Robertson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7014393/publications.pdf>

Version: 2024-02-01

87  
papers

11,493  
citations

87723

38  
h-index

53109

85  
g-index

92  
all docs

92  
docs citations

92  
times ranked

16443  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interleukin-1 $\beta$ suppression dampens inflammatory leucocyte production and uptake in atherosclerosis. <i>Cardiovascular Research</i> , 2022, 118, 2778-2791.	1.8	47
2	Relationship between type 2 cytokine and inflammasome responses in obesity-associated asthma. <i>Journal of Allergy and Clinical Immunology</i> , 2022, 149, 1270-1280.	1.5	21
3	Aim2 suppresses cigarette smoke-induced neutrophil recruitment, neutrophil caspase-1 activation and anti- $\gamma$ 6-mediated neutrophil depletion. <i>Immunology and Cell Biology</i> , 2022, 100, 235-249.	1.0	7
4	Prevention of the foreign body response to implantable medical devices by inflammasome inhibition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2115857119.	3.3	27
5	<i>Clostridium septicum</i> $\beta$ -toxin activates the NLRP3 inflammasome by engaging GPI-anchored proteins. <i>Science Immunology</i> , 2022, 7, .	5.6	12
6	Modulating Neuroplasticity: Lessons Learned from Antidepressants and Emerging Novel Therapeutics. <i>Current Treatment Options in Psychiatry</i> , 2021, 8, 229-257.	0.7	1
7	NLRP3 Inflammasome Inhibition by MCC950 in Aged Mice Improves Health via Enhanced Autophagy and PPAR $\alpha$ Activity. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2020, 75, 1457-1464.	1.7	33
8	The microglial NLRP3 inflammasome is activated by amyotrophic lateral sclerosis proteins. <i>Glia</i> , 2020, 68, 407-421.	2.5	133
9	NLRP3 inflammasome inhibition with MCC950 improves insulin sensitivity and inflammation in a mouse model of frontotemporal dementia. <i>Neuropharmacology</i> , 2020, 180, 108305.	2.0	19
10	Pharmacological characterisation of small molecule C5aR1 inhibitors in human cells reveals biased activities for signalling and function. <i>Biochemical Pharmacology</i> , 2020, 180, 114156.	2.0	47
11	Metabolic competition between host and pathogen dictates inflammasome responses to fungal infection. <i>PLoS Pathogens</i> , 2020, 16, e1008695.	2.1	28
12	Tissue-resident macrophages actively suppress IL-1 $\beta$ release via a reactive prostanoid/IL-10 pathway. <i>EMBO Journal</i> , 2020, 39, e103454.	3.5	33
13	Targeting NLRP3 and Staphylococcal pore-forming toxin receptors in human-induced pluripotent stem cell-derived macrophages. <i>Journal of Leukocyte Biology</i> , 2020, 108, 967-981.	1.5	19
14	Design, synthesis and evaluation of an NLRP3 inhibitor diazirine photoaffinity probe. <i>Tetrahedron Letters</i> , 2020, 61, 151849.	0.7	7
15	<i>Bacillus cereus</i> non-haemolytic enterotoxin activates the NLRP3 inflammasome. <i>Nature Communications</i> , 2020, 11, 760.	5.8	51
16	Non-canonical Caspase-1 Signaling Drives RIP2-Dependent and TNF $\alpha$ -Mediated Inflammation In Vivo. <i>Cell Reports</i> , 2020, 30, 2501-2511.e5.	2.9	24
17	Caspase-1-dependent inflammasomes mediate photoreceptor cell death in photo-oxidative damage-induced retinal degeneration. <i>Scientific Reports</i> , 2020, 10, 2263.	1.6	28
18	Synthesis and evaluation of NLRP3-inhibitory sulfonylurea [ $^{11}\text{C}$ ]MCC950 in healthy animals. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 127186.	1.0	14

#	ARTICLE	IF	CITATIONS
19	NLRP3 inflammasome as prognostic factor and therapeutic target in primary progressive multiple sclerosis patients. <i>Brain</i> , 2020, 143, 1414-1430.	3.7	92
20	Targeting the NLRP3 Inflammasome With Inhibitor MCC950 Prevents Aortic Aneurysms and Dissections in Mice. <i>Journal of the American Heart Association</i> , 2020, 9, e014044.	1.6	64
21	Compromised <scp>NLRP</scp>3 and <scp>AIM</scp>2 inflammasome function in autoimmune <scp>NZB</scp>/W F1 mouse macrophages. <i>Immunology and Cell Biology</i> , 2019, 97, 17-28.	1.0	8
22	Double-Stranded RNA Is a Novel Molecular Target in Osteomyelitis Pathogenesis. <i>American Journal of Pathology</i> , 2019, 189, 2077-2089.	1.9	23
23	Inflammasome-Independent Role for NLRP3 in Controlling Innate Antihelminth Immunity and Tissue Repair in the Lung. <i>Journal of Immunology</i> , 2019, 203, 2724-2734.	0.4	20
24	MCC950 directly targets the NLRP3 ATP-hydrolysis motif for inflammasome inhibition. <i>Nature Chemical Biology</i> , 2019, 15, 556-559.	3.9	561
25	Lack of protein prenylation promotes NLRP3 inflammasome assembly in human monocytes. <i>Journal of Allergy and Clinical Immunology</i> , 2019, 143, 2315-2317.e3.	1.5	15
26	Pharmacological inhibition of the NLRP3 inflammasome reduces blood pressure, renal damage, and dysfunction in salt-sensitive hypertension. <i>Cardiovascular Research</i> , 2019, 115, 776-787.	1.8	165
27	A multicomponent toxin from <i>Bacillus cereus</i> incites inflammation and shapes host outcome via the NLRP3 inflammasome. <i>Nature Microbiology</i> , 2019, 4, 362-374.	5.9	78
28	Quantitation of Purines from Pigeon Guano and Implications for <i>Cryptococcus neoformans</i> Survival During Infection. <i>Mycopathologia</i> , 2019, 184, 273-281.	1.3	6
29	Evidence against a role for NLRP3-driven islet inflammation in db/db mice. <i>Molecular Metabolism</i> , 2018, 10, 66-73.	3.0	32
30	Fishing for Drug Targets: A Focus on Diazirine Photoaffinity Probe Synthesis. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 6945-6963.	2.9	113
31	The NLRP3 Inflammasome Suppresses Protective Immunity to Gastrointestinal Helminth Infection. <i>Cell Reports</i> , 2018, 23, 1085-1098.	2.9	48
32	Multiple inflammasomes may regulate the interleukin-1-driven inflammation in protracted bacterial bronchitis. <i>ERJ Open Research</i> , 2018, 4, 00130-2017.	1.1	14
33	Synthesis of deuterium-labelled analogues of NLRP3 inflammasome inhibitor MCC950. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 793-795.	1.0	7
34	An optimized whole blood assay measuring expression and activity of NLRP3, NLRC4 and AIM2 inflammasomes. <i>Clinical Immunology</i> , 2018, 191, 100-109.	1.4	13
35	Antimicrobial Octapeptin C4 Analogues Active against <i>Cryptococcus</i> Species. <i>Antimicrobial Agents and Chemotherapy</i> , 2018, 62, .	1.4	5
36	Characterisation of small molecule ligands 4CMTB and 2CTAP as modulators of human FFA2 receptor signalling. <i>Scientific Reports</i> , 2018, 8, 17819.	1.6	6

#	ARTICLE	IF	CITATIONS
37	Chick Embryo: A Preclinical Model for Understanding Ischemia-Reperfusion Mechanism. <i>Frontiers in Pharmacology</i> , 2018, 9, 1034.	1.6	11
38	The Small Molecule NLRP3 Inflammasome Inhibitor MCC950 Does Not Alter Wound Healing in Obese Mice. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3289.	1.8	8
39	Inflammasome inhibition prevents $\alpha$ -synuclein pathology and dopaminergic neurodegeneration in mice. <i>Science Translational Medicine</i> , 2018, 10, .	5.8	493
40	Antifungal benzo[b]thiophene 1,1-dioxide IMPDH inhibitors exhibit pan-assay interference (PAINS) profiles. <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 5408-5419.	1.4	15
41	Inhibiting Inflammasomes with Small Molecules. <i>Experientia Supplementum (2012)</i> , 2018, 108, 343-400.	0.5	2
42	MCC950, a specific small molecule inhibitor of NLRP3 inflammasome attenuates colonic inflammation in spontaneous colitis mice. <i>Scientific Reports</i> , 2018, 8, 8618.	1.6	208
43	The selective NLRP3-inflammasome inhibitor MCC950 reduces infarct size and preserves cardiac function in a pig model of myocardial infarction. <i>European Heart Journal</i> , 2017, 38, ehw247.	1.0	222
44	Clonal hematopoiesis associated with TET2 deficiency accelerates atherosclerosis development in mice. <i>Science</i> , 2017, 355, 842-847.	6.0	999
45	Small-Molecule Inhibitors of the SOX18 Transcription Factor. <i>Cell Chemical Biology</i> , 2017, 24, 346-359.	2.5	42
46	GMP Synthase Is Required for Virulence Factor Production and Infection by <i>Cryptococcus neoformans</i> . <i>Journal of Biological Chemistry</i> , 2017, 292, 3049-3059.	1.6	19
47	Inflammasomes in the lung. <i>Molecular Immunology</i> , 2017, 86, 44-55.	1.0	126
48	NLRP3 inflammasome blockade reduces liver inflammation and fibrosis in experimental NASH in mice. <i>Journal of Hepatology</i> , 2017, 66, 1037-1046.	1.8	738
49	Role for NLRP3 Inflammasome-mediated, IL-1 $\beta$ -Dependent Responses in Severe, Steroid-Resistant Asthma. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2017, 196, 283-297.	2.5	304
50	Myeloid-derived miR-223 regulates intestinal inflammation via repression of the NLRP3 inflammasome. <i>Journal of Experimental Medicine</i> , 2017, 214, 1737-1752.	4.2	289
51	<i>Cryptococcus neoformans</i> ADS lyase is an enzyme essential for virulence whose crystal structure reveals features exploitable in antifungal drug design. <i>Journal of Biological Chemistry</i> , 2017, 292, 11829-11839.	1.6	15
52	Inhibiting the NLRP3 inflammasome with MCC950 promotes non-phlogistic clearance of amyloid- $\beta^2$ and cognitive function in APP/PS1 mice. <i>Brain, Behavior, and Immunity</i> , 2017, 61, 306-316.	2.0	371
53	PB1-F2 Peptide Derived from Avian Influenza A Virus H7N9 Induces Inflammation via Activation of the NLRP3 Inflammasome. <i>Journal of Biological Chemistry</i> , 2017, 292, 826-836.	1.6	70
54	Specific inhibition of NLRP3 in chikungunya disease reveals a role for inflammasomes in alphavirus-induced inflammation. <i>Nature Microbiology</i> , 2017, 2, 1435-1445.	5.9	77

#	ARTICLE	IF	CITATIONS
55	Sulfonylureas as Concomitant Insulin Secretagogues and NLRP3 Inflammasome Inhibitors. <i>ChemMedChem</i> , 2017, 12, 1449-1457.	1.6	42
56	NLRP3-inflammasome inhibition prevents high fat and high sugar diets-induced heart damage through autophagy induction. <i>Oncotarget</i> , 2017, 8, 99740-99756.	0.8	53
57	Pressor response to angiotensin II is enhanced in aged mice and associated with inflammation, vasoconstriction and oxidative stress. <i>Aging</i> , 2017, 9, 1595-1606.	1.4	49
58	Pharmacological targeting of the transcription factor SOX18 delays breast cancer in mice. <i>ELife</i> , 2017, 6, .	2.8	50
59	Lipocalin-2 induces NLRP3 inflammasome activation via HMGB1 induced TLR4 signaling in heart tissue of mice under pressure overload challenge. <i>American Journal of Translational Research (discontinued)</i> , 2017, 9, 2723-2735.	0.0	21
60	The Endoplasmic Reticulum-Mitochondrion Tether ERMES Orchestrates Fungal Immune Evasion, Illuminating Inflammasome Responses to Hyphal Signals. <i>MSphere</i> , 2016, 1, .	1.3	39
61	The NLRP3 inflammasome functions as a driver of the myelodysplastic syndrome phenotype. <i>Blood</i> , 2016, 128, 2960-2975.	0.6	271
62	Human Monocytes Engage an Alternative Inflammasome Pathway. <i>Immunity</i> , 2016, 44, 833-846.	6.6	619
63	K + Efflux-Independent NLRP3 Inflammasome Activation by Small Molecules Targeting Mitochondria. <i>Immunity</i> , 2016, 45, 761-773.	6.6	364
64	Identification, Synthesis, and Biological Evaluation of the Major Human Metabolite of NLRP3 Inflammasome Inhibitor MCC950. <i>ACS Medicinal Chemistry Letters</i> , 2016, 7, 1034-1038.	1.3	32
65	Inflammasome activity is essential for one kidney/deoxycorticosterone acetate/salt-induced hypertension in mice. <i>British Journal of Pharmacology</i> , 2016, 173, 752-765.	2.7	143
66	Disruption of de Novo Adenosine Triphosphate (ATP) Biosynthesis Abolishes Virulence in <i>Cryptococcus neoformans</i> . <i>ACS Infectious Diseases</i> , 2016, 2, 651-663.	1.8	16
67	Reassessing the role of the NLRP3 inflammasome during pathogenic influenza A virus infection via temporal inhibition. <i>Scientific Reports</i> , 2016, 6, 27912.	1.6	150
68	IL-1 $\beta$ is an innate immune sensor of microbial proteolysis. <i>Science Immunology</i> , 2016, 1, .	5.6	115
69	T helper 1 immunity requires complement-driven NLRP3 inflammasome activity in CD4 <sup>+</sup> T cells. <i>Science</i> , 2016, 352, aad1210.	6.0	395
70	Strain- and host species-specific inflammasome activation, IL-1 $\beta$ release, and cell death in macrophages infected with uropathogenic <i>Escherichia coli</i> . <i>Mucosal Immunology</i> , 2016, 9, 124-136.	2.7	74
71	NLRP3 inflammasome activation downstream of cytoplasmic LPS recognition by both caspase-4 and caspase-5. <i>European Journal of Immunology</i> , 2015, 45, 2918-2926.	1.6	283
72	THU0027...The Effect of Novel Compound Mcc950 on the Nlrp3 Inflammasome in the RA Joint. <i>Annals of the Rheumatic Diseases</i> , 2015, 74, 202.2-202.	0.5	2

#	ARTICLE	IF	CITATIONS
73	An optimized whole blood assay measuring expression and activity of NLRP3-, NLRC4 and AIM2-inflammasomes. <i>Pediatric Rheumatology</i> , 2015, 13, .	0.9	0
74	A small-molecule inhibitor of the NLRP3 inflammasome for the treatment of inflammatory diseases. <i>Nature Medicine</i> , 2015, 21, 248-255.	15.2	1,967
75	A6.18â€¦Novel compound cytokine release inhibitory drug 3 (CRID3) inhibits the NLRP3 inflammasome in rheumatoid arthritis. <i>Annals of the Rheumatic Diseases</i> , 2015, 74, A62.2-A63.	0.5	0
76	Cytokine release inhibitor drug, CRID3, inhibits the NLRP3 inflammasome in glia. <i>Journal of Neuroimmunology</i> , 2014, 275, 147.	1.1	0
77	Natural product and natural product derived drugs in clinical trials. <i>Natural Product Reports</i> , 2014, 31, 1612-1661.	5.2	471
78	Interleukin-10 regulates the inflammasome-driven augmentation of inflammatory arthritis and joint destruction. <i>Arthritis Research and Therapy</i> , 2014, 16, 419.	1.6	86
79	Efficient synthesis of anacardic acid analogues and their antibacterial activities. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 1667-1670.	1.0	23
80	Paclitaxel and CYC3, an aurora kinase A inhibitor, synergise in pancreatic cancer cells but not bone marrow precursor cells. <i>British Journal of Cancer</i> , 2012, 107, 1692-1701.	2.9	32
81	The Cytokine Release Inhibitory Drug CRID3 Targets ASC Oligomerisation in the NLRP3 and AIM2 Inflammasomes. <i>PLoS ONE</i> , 2011, 6, e29539.	1.1	117
82	The synthesis of isotopically labelled glucosinolates for analysis and metabolic studies. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2007, 50, 260-263.	0.5	6
83	The synthesis of glucosinolates deuterium labelled in the glucose fragment. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2006, 49, 1201-1211.	0.5	9
84	The Bohlmannâ€™Rahtz route to functionalised pyridine scaffolds and their use in library synthesis. <i>Tetrahedron Letters</i> , 2003, 44, 1627-1629.	0.7	35
85	High-performance liquid chromatographic separation of natural and synthetic desulphoglucosinolates and their chemical validation by UV, NMR and chemical ionisation-MS methods. <i>Phytochemical Analysis</i> , 2001, 12, 226-242.	1.2	142
86	Evaluation of liquid chromatography-atmospheric pressure chemical ionisation-mass spectrometry for the identification and quantification of desulphoglucosinolates. <i>Phytochemical Analysis</i> , 2000, 11, 216-225.	1.2	32
87	Synthesis of deuterium labelled desulfoglucosinolates as internal standards for LC-MS analysis. <i>Tetrahedron</i> , 1999, 55, 13269-13284.	1.0	21