

Luke A J O'Neill

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4470465/publications.pdf>

Version: 2024-02-01

138
papers

28,832
citations

25034

57
h-index

14208

128
g-index

143
all docs

143
docs citations

143
times ranked

39025
citing authors

#	ARTICLE	IF	CITATIONS
1	Relationship between type 2 cytokine and inflammasome responses in obesity-associated asthma. <i>Journal of Allergy and Clinical Immunology</i> , 2022, 149, 1270-1280.	2.9	21
2	Nrf2 activation reprograms macrophage intermediary metabolism and suppresses the type I interferon response. <i>IScience</i> , 2022, 25, 103827.	4.1	51
3	Itaconate and itaconate derivatives target JAK1 to suppress alternative activation of macrophages. <i>Cell Metabolism</i> , 2022, 34, 487-501.e8.	16.2	107
4	Immunothrombosis and the molecular control of tissue factor by pyroptosis: prospects for new anticoagulants. <i>Biochemical Journal</i> , 2022, 479, 731-750.	3.7	9
5	Creating ATP via creatine kinase B for NLRP3 activation. <i>Nature Immunology</i> , 2022, 23, 653-655.	14.5	0
6	Innate immune signaling and immunothrombosis: New insights and therapeutic opportunities. <i>European Journal of Immunology</i> , 2022, 52, 1024-1034.	2.9	12
7	The itaconate family of immunomodulators grows. <i>Nature Metabolism</i> , 2022, 4, 499-500.	11.9	4
8	Trained immunity, tolerance, priming and differentiation: distinct immunological processes. <i>Nature Immunology</i> , 2021, 22, 2-6.	14.5	274
9	Bridging the gap – a new role for STAT3 in TLR4-mediated metabolic reprogramming. <i>Immunology and Cell Biology</i> , 2021, 99, 122-125.	2.3	3
10	Ironing Out Vaccine Efficacy. <i>Med</i> , 2021, 2, 113-114.	4.4	1
11	Glutathione transferase Omega 1 confers protection against azoxymethane-induced colorectal tumour formation. <i>Carcinogenesis</i> , 2021, 42, 853-863.	2.8	4
12	Targeting mitochondria to beat HIV-1. <i>Nature Immunology</i> , 2021, 22, 398-399.	14.5	5
13	SARS-CoV-2 targets MAVS for immune evasion. <i>Nature Cell Biology</i> , 2021, 23, 682-683.	10.3	15
14	Targeting immunometabolism to treat COVID-19. <i>Immunotherapy Advances</i> , 2021, 1, ltab013.	3.0	29
15	Immune-mediated inflammation across disease boundaries: breaking down research silos. <i>Nature Immunology</i> , 2021, 22, 1344-1348.	14.5	15
16	4-Octyl-Itaconate and Dimethyl Fumarate Inhibit COX2 Expression and Prostaglandin Production in Macrophages. <i>Journal of Immunology</i> , 2021, 207, 2561-2569.	0.8	14
17	Metabolic regulation of RA macrophages is distinct from RA fibroblasts and blockade of glycolysis alleviates inflammatory phenotype in both cell types. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 7693-7707.	5.4	25
18	ACLY Nuclear Translocation in Human Macrophages Drives Proinflammatory Gene Expression by NF- κ B Acetylation. <i>Cells</i> , 2021, 10, 2962.	4.1	24

#	ARTICLE	IF	CITATIONS
19	The role of the electron transport chain in immunity. <i>FASEB Journal</i> , 2021, 35, e21974.	0.5	49
20	Influenza A virus causes maternal and fetal pathology via innate and adaptive vascular inflammation in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 24964-24973.	7.1	34
21	Role for Retinoic Acid-Related Orphan Receptor Alpha (ROR α) Expressing Macrophages in Diet-Induced Obesity. <i>Frontiers in Immunology</i> , 2020, 11, 1966.	4.8	12
22	The Immunomodulatory Metabolite Itaconate Modifies NLRP3 and Inhibits Inflammasome Activation. <i>Cell Metabolism</i> , 2020, 32, 468-478.e7.	16.2	283
23	The Role of HIF in Immunity and Inflammation. <i>Cell Metabolism</i> , 2020, 32, 524-536.	16.2	304
24	BCG-induced trained immunity: can it offer protection against COVID-19?. <i>Nature Reviews Immunology</i> , 2020, 20, 335-337.	22.7	384
25	<i>Pseudomonas</i> Persists by Feeding off Itaconate. <i>Cell Metabolism</i> , 2020, 31, 1045-1047.	16.2	2
26	How should we talk about metabolism?. <i>Nature Immunology</i> , 2020, 21, 713-715.	14.5	13
27	Targeting immunometabolism as an anti-inflammatory strategy. <i>Cell Research</i> , 2020, 30, 300-314.	12.0	285
28	Caspase-11 promotes allergic airway inflammation. <i>Nature Communications</i> , 2020, 11, 1055.	12.8	52
29	Krebs Cycle Reborn in Macrophage Immunometabolism. <i>Annual Review of Immunology</i> , 2020, 38, 289-313.	21.8	244
30	Cytokine-like Roles for Metabolites in Immunity. <i>Molecular Cell</i> , 2020, 78, 814-823.	9.7	119
31	A Vision for Cytokine Biology with 20/20 Clarity. <i>Function</i> , 2020, 2, zqaa042.	2.3	1
32	Glutathione Transferase Omega-1 Regulates NLRP3 Inflammasome Activation through NEK7 Deglutathionylation. <i>Cell Reports</i> , 2019, 29, 151-161.e5.	6.4	58
33	Itaconate: the poster child of metabolic reprogramming in macrophage function. <i>Nature Reviews Immunology</i> , 2019, 19, 273-281.	22.7	359
34	The Immunomodulatory Potential of the Metabolite Itaconate. <i>Trends in Immunology</i> , 2019, 40, 687-698.	6.8	138
35	Spontaneous atopic dermatitis in mice with a defective skin barrier is independent of ILC2 and mediated by IL-1 β . <i>Allergy: European Journal of Allergy and Clinical Immunology</i> , 2019, 74, 1920-1933.	5.7	51
36	Targeting macrophage immunometabolism to prevent atherosclerosis. <i>Nature Metabolism</i> , 2019, 1, 1173-1174.	11.9	3

#	ARTICLE	IF	CITATIONS
37	Coupling Krebs cycle metabolites to signalling in immunity and cancer. <i>Nature Metabolism</i> , 2019, 1, 16-33.	11.9	260
38	Macrophages Remember Cheeseburgers and Promote Inflammation via NLRP3. <i>Trends in Molecular Medicine</i> , 2018, 24, 335-337.	6.7	7
39	Metabolic regulation of NLRP3. <i>Immunological Reviews</i> , 2018, 281, 88-98.	6.0	231
40	Loss of MicroRNA-21 Influences the Gut Microbiota, Causing Reduced Susceptibility in a Murine Model of Colitis. <i>Journal of Crohn's and Colitis</i> , 2018, 12, 835-848.	1.3	48
41	Itaconate is an anti-inflammatory metabolite that activates Nrf2 via alkylation of KEAP1. <i>Nature</i> , 2018, 556, 113-117.	27.8	1,115
42	GOTcha: lncRNA-ACOD1 targets metabolism during viral infection. <i>Cell Research</i> , 2018, 28, 137-138.	12.0	15
43	Rocking the world of innate immunity: an interview with Luke O'Neill. <i>DMM Disease Models and Mechanisms</i> , 2018, 11, .	2.4	0
44	Dimethyl fumarate: targeting glycolysis to treat MS. <i>Cell Research</i> , 2018, 28, 613-615.	12.0	22
45	Krebs Cycle Reimagined: The Emerging Roles of Succinate and Itaconate as Signal Transducers. <i>Cell</i> , 2018, 174, 780-784.	28.9	237
46	Circadian clock protein BMAL1 regulates IL-1 β in macrophages via NRF2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8460-E8468.	7.1	230
47	Glutathione and Glutathione Transferase Omega 1 as Key Posttranslational Regulators in Macrophages. <i>Microbiology Spectrum</i> , 2017, 5, .	3.0	22
48	Inflammasomes in the lung. <i>Molecular Immunology</i> , 2017, 86, 44-55.	2.2	126
49	The Hunger Games: Salmonella , Anorexia, and NLRP3. <i>Cell Metabolism</i> , 2017, 25, 225-226.	16.2	3
50	Role for NLRP3 Inflammasome-mediated, IL-1 β -Dependent Responses in Severe, Steroid-Resistant Asthma. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2017, 196, 283-297.	5.6	304
51	Mitochondria are the powerhouses of immunity. <i>Nature Immunology</i> , 2017, 18, 488-498.	14.5	704
52	Myeloid-derived miR-223 regulates intestinal inflammation via repression of the NLRP3 inflammasome. <i>Journal of Experimental Medicine</i> , 2017, 214, 1737-1752.	8.5	289
53	The intracellular chloride channel proteins CLIC1 and CLIC4 induce IL-1 β transcription and activate the NLRP3 inflammasome. <i>Journal of Biological Chemistry</i> , 2017, 292, 12077-12087.	3.4	122
54	The circadian protein BMAL1 in myeloid cells is a negative regulator of allergic asthma. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2017, 312, L855-L860.	2.9	50

#	ARTICLE	IF	CITATIONS
55	Immunometabolism and the land of milk and honey. <i>Nature Reviews Immunology</i> , 2017, 17, 217-217.	22.7	9
56	The Induction of Pro-IL-1 β by Lipopolysaccharide Requires Endogenous Prostaglandin E2 Production. <i>Journal of Immunology</i> , 2017, 198, 3558-3564.	0.8	85
57	The RNA-binding protein Tristetraprolin (TTP) is a critical negative regulator of the NLRP3 inflammasome. <i>Journal of Biological Chemistry</i> , 2017, 292, 6869-6881.	3.4	53
58	MyD88 is an essential component of retinoic acid-induced differentiation in human pluripotent embryonal carcinoma cells. <i>Cell Death and Differentiation</i> , 2017, 24, 1975-1986.	11.2	5
59	Solution structure of the TLR adaptor MAL/TIRAP reveals an intact BB loop and supports MAL Cys91 glutathionylation for signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E6480-E6489.	7.1	33
60	Loss of the molecular clock in myeloid cells exacerbates T cell-mediated CNS autoimmune disease. <i>Nature Communications</i> , 2017, 8, 1923.	12.8	90
61	Endosomal NOX2 oxidase exacerbates virus pathogenicity and is a target for antiviral therapy. <i>Nature Communications</i> , 2017, 8, 69.	12.8	111
62	A Potent Anti-Inflammatory Response in Bat Macrophages May Be Linked to Extended Longevity and Viral Tolerance. <i>Acta Chiropterologica</i> , 2017, 19, 219-228.	0.6	46
63	GSTO1-1 plays a pro-inflammatory role in models of inflammation, colitis and obesity. <i>Scientific Reports</i> , 2017, 7, 17832.	3.3	47
64	A guide to immunometabolism for immunologists. <i>Nature Reviews Immunology</i> , 2016, 16, 553-565.	22.7	2,100
65	The NLRP3 inflammasome functions as a driver of the myelodysplastic syndrome phenotype. <i>Blood</i> , 2016, 128, 2960-2975.	1.4	271
66	Toll-like receptors and chronic inflammation in rheumatic diseases: new developments. <i>Nature Reviews Rheumatology</i> , 2016, 12, 344-357.	8.0	150
67	A Metabolic Roadblock in Inflammatory Macrophages. <i>Cell Reports</i> , 2016, 17, 625-626.	6.4	33
68	<i>Trypanosoma brucei</i> metabolite indolepyruvate decreases HIF-1 α and glycolysis in macrophages as a mechanism of innate immune evasion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E7778-E7787.	7.1	50
69	Succinate Dehydrogenase Supports Metabolic Repurposing of Mitochondria to Drive Inflammatory Macrophages. <i>Cell</i> , 2016, 167, 457-470.e13.	28.9	1,396
70	T helper 1 immunity requires complement-driven NLRP3 inflammasome activity in CD4 ⁺ T cells. <i>Science</i> , 2016, 352, aad1210.	12.6	395
71	A Common Variant in the Adaptor Mal Regulates Interferon Gamma Signaling. <i>Immunity</i> , 2016, 44, 368-379.	14.3	30
72	Immunometabolism governs dendritic cell and macrophage function. <i>Journal of Experimental Medicine</i> , 2016, 213, 15-23.	8.5	1,206

#	ARTICLE	IF	CITATIONS
73	Circadian control of innate immunity in macrophages by miR-155 targeting <i>Bmal1</i> . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7231-7236.	7.1	244
74	How Low Cholesterol Is Good for Anti-viral Immunity. Cell, 2015, 163, 1572-1574.	28.9	23
75	Pyruvate Kinase M2 Regulates Hif-1 α Activity and IL-1 β Induction and Is a Critical Determinant of the Warburg Effect in LPS-Activated Macrophages. Cell Metabolism, 2015, 21, 65-80.	16.2	887
76	A small-molecule inhibitor of the NLRP3 inflammasome for the treatment of inflammatory diseases. Nature Medicine, 2015, 21, 248-255.	30.7	1,967
77	Metformin Inhibits the Production of Reactive Oxygen Species from NADH:Ubiquinone Oxidoreductase to Limit Induction of Interleukin-1 β (IL-1 β) and Boosts Interleukin-10 (IL-10) in Lipopolysaccharide (LPS)-activated Macrophages. Journal of Biological Chemistry, 2015, 290, 20348-20359.	3.4	252
78	GSTO1-1 modulates metabolism in macrophages activated through the LPS and TLR4 pathway. Journal of Cell Science, 2015, 128, 1982-1990.	2.0	55
79	A Broken Krebs Cycle in Macrophages. Immunity, 2015, 42, 393-394.	14.3	169
80	The Cellular and Molecular Basis of Translational Immunometabolism. Immunity, 2015, 43, 421-434.	14.3	161
81	The MyD88 ⁺ Phenotype Is an Adverse Prognostic Factor in Epithelial Ovarian Cancer. PLoS ONE, 2014, 9, e100816.	2.5	36
82	Metabolic Reprogramming in Macrophage Polarization. Frontiers in Immunology, 2014, 5, 420.	4.8	649
83	Glycolytic reprogramming by TLRs in dendritic cells. Nature Immunology, 2014, 15, 314-315.	14.5	39
84	Circadian Clock Proteins and Immunity. Immunity, 2014, 40, 178-186.	14.3	451
85	Succinate: a metabolic signal in inflammation. Trends in Cell Biology, 2014, 24, 313-320.	7.9	507
86	Succinate strikes. Nature, 2014, 515, 350-351.	27.8	14
87	The Role of Ets2 Transcription Factor in the Induction of MicroRNA-155 (miR-155) by Lipopolysaccharide and Its Targeting by Interleukin-10. Journal of Biological Chemistry, 2014, 289, 4316-4325.	3.4	98
88	mTOR- and HIF-1 α -mediated aerobic glycolysis as metabolic basis for trained immunity. Science, 2014, 345, 1250684.	12.6	1,517
89	Glutathione transferase Omega 1 is required for the lipopolysaccharide-stimulated induction of NADPH oxidase 1 and the production of reactive oxygen species in macrophages. Free Radical Biology and Medicine, 2014, 73, 318-327.	2.9	62
90	A Long Noncoding RNA Mediates Both Activation and Repression of Immune Response Genes. Science, 2013, 341, 789-792.	12.6	925

#	ARTICLE	IF	CITATIONS
91	Cardiolipin and the Nlrp3 Inflammasome. <i>Cell Metabolism</i> , 2013, 18, 610-612.	16.2	25
92	Metabolism of inflammation limited by AMPK and pseudo-starvation. <i>Nature</i> , 2013, 493, 346-355.	27.8	946
93	The history of Toll-like receptors " redefining innate immunity. <i>Nature Reviews Immunology</i> , 2013, 13, 453-460.	22.7	1,338
94	Bruton's Tyrosine Kinase Mediates the Synergistic Signalling between TLR9 and the B Cell Receptor by Regulating Calcium and Calmodulin. <i>PLoS ONE</i> , 2013, 8, e74103.	2.5	49
95	Distinct Mechanisms for Induction and Tolerance Regulate the Immediate Early Genes Encoding Interleukin 1 β and Tumor Necrosis Factor α . <i>PLoS ONE</i> , 2013, 8, e70622.	2.5	33
96	Treatment With OPN-305, a Humanized Anti-Toll-Like Receptor-2 Antibody, Reduces Myocardial Ischemia/Reperfusion Injury in Pigs. <i>Circulation: Cardiovascular Interventions</i> , 2012, 5, 279-287.	3.9	95
97	"Transflammation": When Innate Immunity Meets Induced Pluripotency. <i>Cell</i> , 2012, 151, 471-473.	28.9	12
98	The GOLD domain-containing protein TMED7 inhibits TLR4 signalling from the endosome upon LPS stimulation. <i>Nature Communications</i> , 2012, 3, 707.	12.8	56
99	Biochemical regulation of the inflammasome. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2012, 47, 424-443.	5.2	114
100	Innate Immunity in Plants Goes to the PUB. <i>Science</i> , 2011, 332, 1386-1387.	12.6	6
101	Counter-regulation in the IKK family. <i>Biochemical Journal</i> , 2011, 434, e1-e2.	3.7	3
102	A critical role for citrate metabolism in LPS signalling. <i>Biochemical Journal</i> , 2011, 438, e5-e6.	3.7	92
103	The emerging role of metabolic regulation in the functioning of Toll-like receptors and the NOD-like receptor Nlrp3. <i>FEBS Letters</i> , 2011, 585, 1568-1572.	2.8	61
104	The Powerstroke and Camshaft of the RIG-I Antiviral RNA Detection Machine. <i>Cell</i> , 2011, 147, 259-261.	28.9	22
105	The Inflammasome in Atherosclerosis and Type 2 Diabetes. <i>Science Translational Medicine</i> , 2011, 3, 81ps17.	12.4	134
106	Myocardial Ischemia/Reperfusion Injury Is Mediated by Leukocytic Toll-Like Receptor-2 and Reduced by Systemic Administration of a Novel Anti-Toll-Like Receptor-2 Antibody. <i>Circulation</i> , 2010, 121, 80-90.	1.6	319
107	Therapeutic Targeting of Toll-Like Receptors for Infectious and Inflammatory Diseases and Cancer. <i>Pharmacological Reviews</i> , 2009, 61, 177-197.	16.0	387
108	The interleukin-1 receptor/Toll-like receptor superfamily: 10 years of progress. <i>Immunological Reviews</i> , 2008, 226, 10-18.	6.0	565

#	ARTICLE	IF	CITATIONS
109	Toll-like Receptors. , 2008, , 1207-1212.		0
110	The family of five: TIR-domain-containing adaptors in Toll-like receptor signalling. Nature Reviews Immunology, 2007, 7, 353-364.	22.7	2,285
111	Inflammasomes in inflammatory disorders: the role of TLRs and their interactions with NLRs. Seminars in Immunopathology, 2007, 29, 239-248.	6.1	153
112	Camelpox virus encodes a schlafen-like protein that affects orthopoxvirus virulence. Journal of General Virology, 2007, 88, 1667-1676.	2.9	31
113	How Toll-like receptors signal: what we know and what we don't know. Current Opinion in Immunology, 2006, 18, 3-9.	5.5	572
114	New insights into the regulation of TLR signaling. Journal of Leukocyte Biology, 2006, 80, 220-226.	3.3	229
115	Immunity's Early-Warning System. Scientific American, 2005, 292, 38-45.	1.0	47
116	Therapeutic targeting of Toll-like receptors for inflammatory and infectious diseases. Current Opinion in Pharmacology, 2003, 3, 396-403.	3.5	147
117	Mal and MyD88: adapter proteins involved in signal transduction by Toll-like receptors. Journal of Endotoxin Research, 2003, 9, 55-59.	2.5	36
118	A gene for Crohn's disease is given the nod. Trends in Pharmacological Sciences, 2001, 22, 398-399.	8.7	0
119	Specificity in the innate response: pathogen recognition by Toll-like receptor combinations. Trends in Immunology, 2001, 22, 70.	6.8	16
120	Who needs adaptive immunity?. Trends in Immunology, 2001, 22, 125.	6.8	0
121	A roll-call of monocytic gene induction. Trends in Immunology, 2001, 22, 182.	6.8	1
122	Dioxins damage dendritic cells. Trends in Immunology, 2001, 22, 296.	6.8	2
123	Fixing a broken heart with bone. Trends in Immunology, 2001, 22, 298.	6.8	0
124	A role for leptin in autoimmunity?. Trends in Immunology, 2001, 22, 352.	6.8	2
125	Gob genes, mucus and asthma. Trends in Immunology, 2001, 22, 353.	6.8	4
126	A vaccine for colorectal cancer. Trends in Immunology, 2001, 22, 354.	6.8	38

#	ARTICLE	IF	CITATIONS
127	Vaccine safety concerns. Trends in Immunology, 2001, 22, 420-421.	6.8	0
128	Irish say no to Nice but yes to immunology. Trends in Immunology, 2001, 22, 421.	6.8	1
129	Passive smoking increases allergy. Trends in Immunology, 2001, 22, 660.	6.8	0
130	IL1 and TLR Signal Transduction-Ancient Signalling Pathways Involved In Host Defence. Biochemical Society Transactions, 2000, 28, A489-A489.	3.4	0
131	Staurosporine, but not Ro 31-8220, induces interleukin 2 production and synergizes with interleukin 1 α in EL4 thymoma cells: Activation of nuclear factor κ B as a common signal for staurosporine and interleukin 1 α . Biochemical Journal, 1997, 325, 39-45.	3.7	10
132	STUDIES INTO THE MECHANISM OF NF κ B ACTIVATION BY IL1, TNF AND H2O2 IN PRIMARY AND TRANSFORMED ENDOTHELIAL CELLS. Biochemical Society Transactions, 1997, 25, 125S-125S.	3.4	3
133	VITAMIN C INHIBITS NF κ B ACTIVATION IN ENDOTHELIAL CELLS. Biochemical Society Transactions, 1997, 25, 131S-131S.	3.4	11
134	Mechanism of NF κ B activation by interleukin-1 and tumour necrosis factor in endothelial cells. Biochemical Society Transactions, 1996, 24, 2S-2S.	3.4	8
135	Autocrine regulation of the transcription factor NF κ B by TNF α in the human T cell lymphoma line Hut 78. Biochemical Society Transactions, 1995, 23, 113S-113S.	3.4	5
136	SUSTAINED ACTIVATION OF NF κ B AND TRANSIENT I κ B α DEGRADATION INDUCED BY TUMOUR NECROSIS FACTOR IN 1321N1 HUMAN ASTROCYTOMA. Biochemical Society Transactions, 1995, 23, 597S-597S.	3.4	1
137	What is Life? The next fifty years. An introduction. , 1995, , 1-4.		3
138	Glutathione and Glutathione Transferase Omega 1 as Key Posttranslational Regulators in Macrophages. , 0, , 787-801.		1