Dana J Philpott

List of Publications by Year
in descending order

132 papers	19,849 citations	14614 66 h-index	15683 125 g-index
134 all docs	134 docs citations	134 times ranked	20900 citing authors

#	Article	IF	Citations
1	Nod2 Is a General Sensor of Peptidoglycan through Muramyl Dipeptide (MDP) Detection. Journal of Biological Chemistry, 2003, 278, 8869-8872.	1.6	2,026
2	Nod1 Detects a Unique Muropeptide from Gram-Negative Bacterial Peptidoglycan. Science, 2003, 300, 1584-1587.	6.0	1,388
3	Nod1 and Nod2 direct autophagy by recruiting ATG16L1 to the plasma membrane at the site of bacterial entry. Nature Immunology, 2010, 11, 55-62.	7.0	1,125
4	Nod1 responds to peptidoglycan delivered by the Helicobacter pylori cag pathogenicity island. Nature Immunology, 2004, 5, 1166-1174.	7.0	1,091
5	Nod-like proteins in immunity, inflammation and disease. Nature Immunology, 2006, 7, 1250-1257.	7.0	794
6	Bacterial infection causes stress-induced memory dysfunction in mice. Gut, 2011, 60, 307-317.	6.1	723
7	Peptidoglycan Molecular Requirements Allowing Detection by Nod1 and Nod2. Journal of Biological Chemistry, 2003, 278, 41702-41708.	1.6	578
8	CARD4/Nod1 mediates NFâ€ºB and JNK activation by invasive Shigella flexneri. EMBO Reports, 2001, 2, 736-742.	2.0	569
9	NOD proteins: regulators of inflammation in health and disease. Nature Reviews Immunology, 2014, 14, 9-23.	10.6	525
10	Modulating immunity as a therapy for bacterial infections. Nature Reviews Microbiology, 2012, 10, 243-254.	13.6	439
11	Bacterial membrane vesicles deliver peptidoglycan to NOD1 in epithelial cells. Cellular Microbiology, 2010, 12, 372-385.	1.1	382
12	Gut Microbial Metabolism Drives Transformation of Msh2-Deficient Colon Epithelial Cells. Cell, 2014, 158, 288-299.	13.5	375
13	Amino Acid Starvation Induced by Invasive Bacterial Pathogens Triggers an Innate Host Defense Program. Cell Host and Microbe, 2012, 11, 563-575.	5.1	331
14	A critical role for peptidoglycan N-deacetylation inListeriaevasion from the host innate immune system. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 997-1002.	3.3	329
15	Nods, Nalps and Naip: intracellular regulators of bacterial-induced inflammation. Cellular Microbiology, 2003, 5, 581-592.	1.1	309
16	The Multifaceted Role of the Intestinal Microbiota in Colon Cancer. Molecular Cell, 2014, 54, 309-320.	4.5	284
17	Regulation of Obesity-Related Insulin Resistance with Gut Anti-inflammatory Agents. Cell Metabolism, 2015, 21, 527-542.	7.2	283
18	NLRX1 is a mitochondrial NODâ€like receptor that amplifies NFâ€ºB and JNK pathways by inducing reactive oxygen species production. EMBO Reports, 2008, 9, 293-300.	2.0	282

#	Article	IF	Citations
19	Nod1-Mediated Innate Immune Recognition of Peptidoglycan Contributes to the Onset of Adaptive Immunity. Immunity, 2007, 26, 445-459.	6.6	281
20	NOD-Like Receptors: Versatile Cytosolic Sentinels. Physiological Reviews, 2015, 95, 149-178.	13.1	270
21	Unleashing the potential of NOD- and Toll-like agonists as vaccine adjuvants. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12294-12299.	3.3	253
22	The Immune Receptor NOD1 and Kinase RIP2 Interact with Bacterial Peptidoglycan on Early Endosomes to Promote Autophagy and Inflammatory Signaling. Cell Host and Microbe, 2014, 15, 623-635.	5.1	249
23	The role of Toll-like receptors and Nod proteins in bacterial infection. Molecular Immunology, 2004, 41, 1099-1108.	1.0	236
24	Identification of an innate T helper type 17 response to intestinal bacterial pathogens. Nature Medicine, 2011, 17, 837-844.	15.2	216
25	NLRC5 Limits the Activation of Inflammatory Pathways. Journal of Immunology, 2010, 185, 1681-1691.	0.4	209
26	Intracellular vs extracellular recognition of pathogens â€“ common concepts in mammals and flies. Trends in Microbiology, 2002, 10, 193-199.	3.5	203
27	pH-dependent Internalization of Muramyl Peptides from Early Endosomes Enables Nod1 and Nod2 Signaling. Journal of Biological Chemistry, 2009, 284, 23818-23829.	1.6	192
28	Tryptophan-derived microbial metabolites activate the aryl hydrocarbon receptor in tumor-associated macrophages to suppress anti-tumor immunity. Immunity, 2022, 55, 324-340.e8.	6.6	179
29	An N-terminal addressing sequence targets NLRX1 to the mitochondrial matrix. Journal of Cell Science, 2009, 122, 3161-3168.	1.2	167
30	Nod2-Dependent Th2 Polarization of Antigen-Specific Immunity. Journal of Immunology, 2008, 181, 7925-7935.	0.4	166
31	The Protein ATG16L1 Suppresses Inflammatory Cytokines Induced by the Intracellular Sensors Nod1 and Nod2 in an Autophagy-Independent Manner. Immunity, 2013, 39, 858-873.	6.6	162
32	Murine Nod1 but not its human orthologue mediates innate immune detection of tracheal cytotoxin. EMBO Reports, 2005, 6, 1201-1207.	2.0	147
33	NOD1 and NOD2 in inflammation, immunity and disease. Archives of Biochemistry and Biophysics, 2019, 670, 69-81.	1.4	140
34	Comparison of Co-housing and Littermate Methods for Microbiota Standardization in Mouse Models. Cell Reports, 2019, 27, 1910-1919.e2.	2.9	134
35	The pattern-recognition molecule Nod1 is localized at the plasma membrane at sites of bacterial interaction. Cellular Microbiology, 2007, 10, 071028185302001-???.	1.1	128
36	The microbial and danger signals that activate Nod-like receptors. Cytokine, 2008, 43, 368-373.	1.4	128

#	Article	IF	Citations
37	Nod1 and Nod2 signaling does not alter the composition of intestinal bacterial communities at homeostasis. Gut Microbes, 2013, 4, 222-231.	4.3	125
38	How autophagy controls the intestinal epithelial barrier. Autophagy, 2022, 18, 86-103.	4.3	125
39	Listeriaphospholipases subvert host autophagic defenses by stalling pre-autophagosomal structures. EMBO Journal, 2013, 32, 3066-3078.	3.5	123
40	Mitophagy pathways in health and disease. Journal of Cell Biology, 2020, 219, .	2.3	121
41	Reduced activation of inflammatory responses in host cells by mouse-adapted Helicobacter pylori isolates. Cellular Microbiology, 2002, 4, 285-296.	1.1	119
42	Mini-review: The role of peptidoglycan recognition in innate immunity. European Journal of Immunology, 2004, 34, 1777-1782.	1.6	119
43	Shiga Toxin/Lipopolysaccharide Activates Caspase-4 and Gasdermin D to Trigger Mitochondrial Reactive Oxygen Species Upstream of the NLRP3 Inflammasome. Cell Reports, 2018, 25, 1525-1536.e7.	2.9	117
44	Commensal and Probiotic Bacteria Influence Intestinal Barrier Function and Susceptibility to Colitis in Nod1â^'/â^';Nod2â^'/â^' Mice. Inflammatory Bowel Diseases, 2012, 18, 1434-1446.	0.9	114
45	Nod1 and Nod2 Regulation of Inflammation in the Salmonella Colitis Model. Infection and Immunity, 2010, 78, 5107-5115.	1.0	109
46	Peptidoglycan: a critical activator of the mammalian immune system during infection and homeostasis. Immunological Reviews, 2011, 243, 40-60.	2.8	109
47	Influence of polymorphisms in the NOD1/CARD4 and NOD2/CARD15 genes on the clinical outcome of Helicobacter pylori infection. Cellular Microbiology, 2006, 8, 1188-1198.	1.1	108
48	Identification of the Critical Residues Involved in Peptidoglycan Detection by Nod1. Journal of Biological Chemistry, 2005, 280, 38648-38656.	1.6	106
49	Innate Immune Sensing of Microbes by Nod Proteins. Annals of the New York Academy of Sciences, 2006, 1072, 19-27.	1.8	104
50	The innate immune molecule, NOD1, regulates direct killing ofHelicobacter pyloriby antimicrobial peptides. Cellular Microbiology, 2010, 12, 626-639.	1.1	103
51	Essential role of Rip2 in the modulation of innate and adaptive immunity triggered by Nod1 and Nod2 ligands. European Journal of Immunology, 2011, 41, 1445-1455.	1.6	100
52	Inositol-Triphosphate 3-Kinase C Mediates Inflammasome Activation and Treatment Response in Kawasaki Disease. Journal of Immunology, 2016, 197, 3481-3489.	0.4	99
53	Thymic Stromal Lymphopoetin-Induced Expression of the Endogenous Inhibitory Enzyme SLPI Mediates Recovery from Colonic Inflammation. Immunity, 2011, 35, 223-235.	6.6	97
54	Nod2-mediated recognition of the microbiota is critical for mucosal adjuvant activity of cholera toxin. Nature Medicine, 2016, 22, 524-530.	15.2	94

#	Article	IF	Citations
55	NKT Cellâ€“Deficient Mice Harbor an Altered Microbiota That Fuels Intestinal Inflammation during Chemically Induced Colitis. Journal of Immunology, 2016, 197, 4464-4472.	0.4	92
56	Complement C3 Drives Autophagy-Dependent Restriction of Cyto-invasive Bacteria. Cell Host and Microbe, 2018, 23, 644-652.e5.	5.1	86
57	The heme-regulated inhibitor is a cytosolic sensor of protein misfolding that controls innate immune signaling. Science, 2019, 365, .	6.0	81
58	Nod-like receptors in the control of intestinal inflammation. Current Opinion in Immunology, 2012, 24, 398-404.	2.4	79
59	The NLR Protein NLRP6 Does Not Impact Gut Microbiota Composition. Cell Reports, 2017, 21, 3653-3661.	2.9	79
60	Nucleotide oligomerization domain-containing proteins instruct T cell helper type 2 immunity through stromal activation. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14896-14901.	3.3	78
61	What is new with Nods?. Current Opinion in Immunology, 2011, 23, 29-34.	2.4	76
62	Nod1 and Nod2 induce CCL5/RANTES through the NFâ€ºB pathway. European Journal of Immunology, 2007, 37, 2499-2508.	1.6	75
63	Nod-like receptors: sentinels at host membranes. Current Opinion in Immunology, 2010, 22, 428-434.	2.4	75
64	Innate signals from Nod2 block respiratory tolerance and program TH2-driven allergic inflammation. Journal of Allergy and Clinical Immunology, 2010, 126, 1284-1293.e10.	1.5	75
65	The Frameshift Mutation in Nod2 Results in Unresponsiveness Not Only to Nod2- but Also Nod1-activating Peptidoglycan Agonists. Journal of Biological Chemistry, 2005, 280, 35859-35867.	1.6	73
66	NLRX1 does not inhibit MAVS-dependent antiviral signalling. Innate Immunity, 2013, 19, 438-448.	1.1	73
67	The common mouse protozoaTritrichomonas murisalters mucosal T cell homeostasis and colitis susceptibility. Journal of Experimental Medicine, 2016, 213, 2841-2850.	4.2	71
68	Circulating NOD1 Activators and Hematopoietic NOD1 Contribute to Metabolic Inflammation and Insulin Resistance. Cell Reports, 2017, 18, 2415-2426.	2.9	70
69	VacA generates a protective intracellular reservoir for Helicobacter pylori that is eliminated by activation of the lysosomal calcium channel TRPML1. Nature Microbiology, 2019, 4, 1411-1423.	5.9	68
70	Lrrk2 alleles modulate inflammation during microbial infection of mice in a sex-dependent manner. Science Translational Medicine, 2019, 11, .	5.8	67
71	Nod proteins link bacterial sensing and autophagy. Autophagy, 2010, 6, 409-411.	4.3	53
72	NLRX1 Acts as an Epithelial-Intrinsic Tumor Suppressor through the Modulation of TNF-Mediated Proliferation. Cell Reports, 2016, 14, 2576-2586.	2.9	51

#	Article	IF	Citations
73	Nod-like receptors in intestinal homeostasis, inflammation, and cancer. Journal of Leukocyte Biology, 2011, 90, 471-482.	1.5	49
74	The interplay between microbes and the immune response in inflammatory bowel disease. Journal of Physiology, 2018, 596, 3869-3882.	1.3	49
75	Nodâ€like receptors are critical for gutâ€“brain axis signalling in mice. Journal of Physiology, 2019, 597, 5777-5797.	1.3	48
76	Nutrient sensing and metabolic stress pathways in innate immunity. Cellular Microbiology, 2013, 15, n/a-n/a.	1.1	47
77	Role of Nod1 in Mucosal Dendritic Cells during Salmonella Pathogenicity Island 1-Independent Salmonella enterica Serovar Typhimurium Infection. Infection and Immunity, 2009, 77, 4480-4486.	1.0	46
78	NOD-Like Receptors: Guardians of Intestinal Mucosal Barriers. Physiology, 2015, 30, 241-250.	1.6	45
79	Nod1 promotes colorectal carcinogenesis by regulating the immunosuppressive functions of tumor-infiltrating myeloid cells. Cell Reports, 2021, 34, 108677.	2.9	44
80	NF-Î²B Activation during AcuteHelicobacter pyloriInfection in Mice. Infection and Immunity, 2008, 76, 551-561.	1.0	43
81	Canonical and noncanonical inflammasomes in intestinal epithelial cells. Cellular Microbiology, 2019, 21, e13079.	1.1	39
82	Primed PMNs in healthy mouse and human circulation are first responders during acute inflammation. Blood Advances, 2019, 3, 1622-1637.	2.5	38
83	Identification of a synthetic muramyl peptide derivative with enhanced Nod2 stimulatory capacity. Innate Immunity, 2013, 19, 493-503.	1.1	34
84	The mitochondrial Nod-like receptor NLRX1 modifies apoptosis through SARM1. Molecular and Cellular Biochemistry, 2019, 453, 187-196.	1.4	33
85	Circadian GLP-1 Secretion in Mice Is Dependent on the Intestinal Microbiome for Maintenance of Diurnal Metabolic Homeostasis. Diabetes, 2020, 69, 2589-2602.	0.3	33
86	Neutrophil Migration During Liver Injury Is Under Nucleotide-Binding Oligomerization Domain 1 Control. Gastroenterology, 2010, 138, 1546-1556.e5.	0.6	32
87	Intracellular Bacterial Pathogens Trigger the Formation of U Small Nuclear RNA Bodies (U Bodies) through Metabolic Stress Induction. Journal of Biological Chemistry, 2015, 290, 20904-20918.	1.6	32
88	Crohn's disease-associated Nod2 mutants reduce IL10 transcription. Nature Immunology, 2009, 10, 455-457.	7.0	31
89	The eIF2Î± kinase HRI in innate immunity, proteostasis, and mitochondrial stress. FEBS Journal, 2021, 288, 3094-3107.	2.2	30
90	Isoginkgetin, a Natural Biflavonoid Proteasome Inhibitor, Sensitizes Cancer Cells to Apoptosis via Disruption of Lysosomal Homeostasis and Impaired Protein Clearance. Molecular and Cellular Biology, 2019, 39, .	1.1	29

#	Article	IF	Citations
91	Impaired Resolution of Inflammation in theEndoglinHeterozygous Mouse Model of Chronic Colitis. Mediators of Inflammation, 2014, 2014, 1-13.	1.4	28
92	Nod2 Activates NF-kB in CD4+ T Cells but Its Expression Is Dispensable for T Cell-Induced Colitis. PLoS ONE, 2013, 8, e82623.	1.1	26
93	LRRK2 and Nod2 promote lysozyme sorting in Paneth cells. Nature Immunology, 2015, 16, 898-900.	7.0	26
94	SLIT2/ROBO1-signaling inhibits macropinocytosis by opposing cortical cytoskeletal remodeling. Nature Communications, 2020, 11, 4112.	5.8	26
95	New Role of Nod Proteins in Regulation of Intestinal Goblet Cell Response in the Context of Innate Host Defense in an Enteric Parasite Infection. Infection and Immunity, 2016, 84, 275-285.	1.0	25
96	Innate Immune Influences on the Gut Microbiome: Lessons from Mouse Models. Trends in Immunology, 2018, 39, 992-1004.	2.9	25
97	Disruption of autophagy by increased 5-HT alters gut microbiota and enhances susceptibility to experimental colitis and Crohnâ€™s disease. Science Advances, 2021, 7, eabi6442.	4.7	25
98	Resilience of the intestinal microbiota following pathogenic bacterial infection is independent of innate immunity mediated by NOD1 or NOD2. Microbes and Infection, 2016, 18, 460-471.	1.0	22
99	The transcriptional and splicing landscape of intestinal organoids undergoing nutrient starvation or endoplasmic reticulum stress. BMC Genomics, 2016, 17, 680.	1.2	21
100	The Impact of the Gut Microbiome on Colorectal Cancer. Annual Review of Cancer Biology, 2018, 2, 229-249.	2.3	21
101	The impact of dextran sodium sulphate and probiotic pre-treatment in a murine model of Parkinsonâ€™s disease. Journal of Neuroinflammation, 2021, 18, 20.	3.1	21
102	The eIF2Î± kinase HRI triggers the autophagic clearance of cytosolic protein aggregates. Journal of Biological Chemistry, 2021, 296, 100050.	1.6	21
103	The Cytosolic Microbial Receptor Nod2 Regulates Small Intestinal Crypt Damage and Epithelial Regeneration following T Cellâ€“Induced Enteropathy. Journal of Immunology, 2016, 197, 345-355.	0.4	20
104	Innate Immune Molecule NLRC5 Protects Mice From Helicobacter-induced Formation of Gastric Lymphoid Tissue. Gastroenterology, 2020, 159, 169-182.e8.	0.6	18
105	Paneth cell marker CD24 in NOD2 knockout organoids and in inflammatory bowel disease (IBD). Gut, 2015, 64, 353-354.	6.1	17
106	'Nodophagy'. Gut Microbes, 2010, 1, 307-315.	4.3	16
107	The dialogue between unconventional T cells and the microbiota. Mucosal Immunology, 2020, 13, 867-876.	2.7	16
108	NOD2 modulates immune tolerance via the GM-CSFâ€“dependent generation of CD103⁺dendritic cells. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10946-10957.	3.3	15

#	Article	IF	Citations
109	Genetic Profiling in Inflammatory Bowel Disease: From Association to Bedside. Gastroenterology, 2011, 141, 1566-1571.e1.	0.6	14
110	The intestinal microbiota: from health to disease, and back. Microbes and Infection, 2021, 23, 104849.	1.0	14
111	An epithelial armamentarium to sense the microbiota. Seminars in Immunology, 2013, 25, 323-333.	2.7	13
112	Salmonella enterica serovar Typhimurium Î”msbB Triggers Exacerbated Inflammation in Nod2 Deficient Mice. PLoS ONE, 2014, 9, e113645.	1.1	12
113	Defects in NLRP6, autophagy and goblet cell homeostasis are associated with reduced duodenal CRH receptor 2 expression in patients with functional dyspepsia. Brain, Behavior, and Immunity, 2022, 101, 335-345.	2.0	12
114	Hematopoietic LTÎ²R deficiency results in skewed T cell cytokine profiles during a mucosal viral infection. Journal of Leukocyte Biology, 2016, 100, 103-110.	1.5	11
115	Irreversible splenic atrophy following chronic LCMV infection is associated with compromised immunity in mice. European Journal of Immunology, 2017, 47, 94-106.	1.6	11
116	T Cell Intrinsic NOD2 Is Dispensable for CD8 T Cell Immunity. PLoS ONE, 2013, 8, e56014.	1.1	11
117	NLRC5 deficiency has a moderate impact on immunodominant <scp>CD</scp>8⁺ Tâ€cell responses during rotavirus infection of adult mice. Immunology and Cell Biology, 2019, 97, 552-562.	1.0	10
118	Vitamin D deficiency enhances expression of autophagy-regulating miR-142-3p in mouse and â€œinvolvedâ€• IBD patient intestinal tissues. American Journal of Physiology - Renal Physiology, 2021, 321, G171-G184.	1.6	9
119	Enterohaemorrhagic, but not enteropathogenic, Escherichia coli infection of epithelial cells disrupts signalling responses to tumour necrosis factor-alpha. Microbiology (United Kingdom), 2011, 157, 2963-2973.	0.7	7
120	Defined gut microbial communities: promising tools to understand and combat disease. Microbes and Infection, 2021, 23, 104816.	1.0	6
121	Diurnal changes in the murine small intestine are disrupted by obesogenic Western Diet feeding and microbial dysbiosis. Scientific Reports, 2021, 11, 20571.	1.6	6
122	An optimized procedure for quantitative analysis of mitophagy with the mtKeima system using flow cytometry. BioTechniques, 2020, 69, 249-256.	0.8	4
123	NLRs: Nucleotide-Binding Domain and Leucine-Rich-Repeat-Containing Proteins. EcoSal Plus, 2009, 3, .	2.1	3
124	gp130 blockade to NOD off Crohnâ€™s disease. Trends in Immunology, 2021, 42, 551-553.	2.9	2
125	E.coli Nissle increases transcription of flagella assembly and formate hydrogenlyase genes in response to colitis. Gut Microbes, 2021, 13, 1994832.	4.3	2
126	Gut symbionts dial up RA to prime host defense. Cell Host and Microbe, 2021, 29, 1727-1729.	5.1	1

#	Article	IF	Citations
127	Innate immunity: The connection with inflammation and disease. Seminars in Immunology, 2009, 21, 173-174.	2.7	0
128	Editorial overview: Hostâ€“microbe interactions: bacteria. Current Opinion in Microbiology, 2015, 23, v-viii.	2.3	0
129	Defined mouse microbiota: An â€œevolvingâ€•tool. Cell Host and Microbe, 2021, 29, 545-547.	5.1	0
130	Mice, Models, Microbiota: How Can We More Accurately Reflect Human Disease?. University of Toronto Journal of Undergraduate Life Sciences, 2021, 15, 8.	0.2	0
131	Nod1 and Nod2 and the Immune Response to Bacteria. , 2013, , 191-217.		0
132	NOD1 and NOD2 and the Immune Response to Bacteria. , 2019, , 251-280.		0