Nicholas J Gay

List of Publications by Year
in descending order

63 papers	5,492 citations	136885 32 h-index	114418 63 g-index
66 all docs	66 docs citations	66 times ranked	6866 citing authors

#	Article	IF	Citations
1	The Parkinson's diseaseâ€"associated kinase LRRK2 regulates genes required for cell adhesion, polarization, and chemotaxis in activated murine macrophages. Journal of Biological Chemistry, 2020, 295, 10857-10867.	1.6	12
2	MyD88 Death-Domain Oligomerization Determines Myddosome Architecture: Implications for Toll-like Receptor Signaling. Structure, 2020, 28, 281-289.e3.	1.6	45
3	Negative Regulation of TLR Signaling by BCAP Requires Dimerization of Its DBB Domain. Journal of Immunology, 2020, 204, 2269-2276.	0.4	3
4	Putative link between Polo-like kinases (PLKs) and Toll-like receptor (TLR) signaling in transformed and primary human immune cells. Scientific Reports, 2019, 9, 13168.	1.6	3
5	Phosphorylation of the multifunctional signal transducer B-cell adaptor protein (BCAP) promotes recruitment of multiple SH2/SH3 proteins including GRB2. Journal of Biological Chemistry, 2019, 294, 19852-19861.	1.6	6
6	The lectin-specific activity of Toxoplasma gondii microneme proteins 1 and 4 binds Toll-like receptor 2 and 4 N-glycans to regulate innate immune priming. PLoS Pathogens, 2019, 15, e1007871.	2.1	29
7	Saturation of acyl chains converts cardiolipin from an antagonist to an activator of Toll-like receptor-4. Cellular and Molecular Life Sciences, 2019, 76, 3667-3678.	2.4	31
8	Role of self-organising myddosome oligomers in inflammatory signalling by Toll-like receptors. BMC Biology, 2019, 17, 15.	1.7	11
9	Toll-like receptor 3 activation impairs excitability and synaptic activity via TRIF signalling in immature rat and human neurons. Neuropharmacology, 2018, 135, 1-10.	2.0	17
10	Activation of Toll-like receptors nucleates assembly of the MyDDosome signaling hub. ELife, 2018, 7, .	2.8	83
11	Immunogenicity Testing of Lipidoids InÂVitro and In Silico: Modulating Lipidoid-Mediated TLR4 Activation by Nanoparticle Design. Molecular Therapy - Nucleic Acids, 2018, 11, 159-169.	2.3	27
12	Structure of the Toll/Interleukin-1 Receptor (TIR) Domain of the B-cell Adaptor That Links Phosphoinositide Metabolism with the Negative Regulation of the Toll-like Receptor (TLR) Signalosome. Journal of Biological Chemistry, 2017, 292, 652-660.	1.6	22
13	Three-tier regulation of cell number plasticity by neurotrophins and Tolls in <i>Drosophila</i>. Journal of Cell Biology, 2017, 216, 1421-1438.	2.3	32
14	Toll-like receptor 2 promiscuity is responsible for the immunostimulatory activity of nucleic acid nanocarriers. Journal of Controlled Release, 2017, 247, 182-193.	4.8	13
15	Targeting and Recognition of Toll-Like Receptors by Plant and Pathogen Lectins. Frontiers in Immunology, 2017, 8, 1820.	2.2	33
16	Impact of mutations in Toll-like receptor pathway genes on esophageal carcinogenesis. PLoS Genetics, 2017, 13, e1006808.	1.5	19
17	Kek-6: A truncated-Trk-like receptor for Drosophila neurotrophin 2 regulates structural synaptic plasticity. PLoS Genetics, 2017, 13, e1006968.	1.5	11
18	The N-terminal loop of IRAK-4 death domain regulates ordered assembly of the Myddosome signalling scaffold. Scientific Reports, 2016, 6, 37267.	1.6	17

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19	Yeast expressed ArtinM shares structure, carbohydrate recognition, and biological effects with native ArtinM. International Journal of Biological Macromolecules, 2016, 82, 22-30.	3.6	9
20	Bioinformatic Analysis of Toll-Like Receptor Sequences and Structures. Methods in Molecular Biology, 2016, 1390, 29-39.	0.4	3
21	Critical residues involved in Toll-like receptor 4 activation by cationic lipid nanocarriers are not located at the lipopolysaccharide-binding interface. Cellular and Molecular Life Sciences, 2015, 72, 3971-3982.	2.4	28
22	Advances in Toll-like receptor biology: Modes of activation by diverse stimuli. Critical Reviews in Biochemistry and Molecular Biology, 2015, 50, 359-379.	2.3	71
23	Toll-like receptor signalling through macromolecular protein complexes. Molecular Immunology, 2015, 63, 162-165.	1.0	72
24	Molecular and Cellular Regulation of Toll-Like Receptor-4 Activity Induced by Lipopolysaccharide Ligands. Frontiers in Immunology, 2014, 5, 473.	2.2	57
25	Therapeutic Administration of Recombinant Paracoccin Confers Protection against Paracoccidioides brasiliensis Infection: Involvement of TLRs. PLoS Neglected Tropical Diseases, 2014, 8, e3317.	1.3	35
26	The COP II adaptor protein TMED7 is required to initiate and mediate the delivery of TLR4 to the plasma membrane. Science Signaling, 2014, 7, ra70.	1.6	53
27	Assembly and localization of Toll-like receptor signalling complexes. Nature Reviews Immunology, 2014, 14, 546-558.	10.6	653
28	The TLR signaling adaptor TRAM interacts with TRAF6 to mediate activation of the inflammatory response by TLR4. Journal of Leukocyte Biology, 2014, 96, 427-436.	1.5	38
29	Identification of Key Residues That Confer Rhodobacter sphaeroides LPS Activity at Horse TLR4/MD-2. PLoS ONE, 2014, 9, e98776.	1.1	17
30	The TLR4 D299G and T399I SNPs Are Constitutively Active to Up-Regulate Expression of Trif-Dependent Genes. PLoS ONE, 2014, 9, e111460.	1.1	19
31	Toll-6 and Toll-7 function as neurotrophin receptors in the Drosophila melanogaster CNS. Nature Neuroscience, 2013, 16, 1248-1256.	7.1	90
32	An Alanine-to-Proline Mutation in the BB-Loop of TLR3 Toll/IL-1R Domain Switches Signalling Adaptor Specificity from TRIF to MyD88. Journal of Immunology, 2013, 191, 6101-6109.	0.4	40
33	Functional Insights from the Crystal Structure of the N-Terminal Domain of the Prototypical Toll Receptor. Structure, 2013, 21, 143-153.	1.6	13
34	Cytokine SpÃtzle binds to the <i>Drosophila</i> immunoreceptor Toll with a neurotrophin-like specificity and couples receptor activation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20461-20466.	3.3	36
35	A Quantitative Comparison of Single-Dye Tracking Analysis Tools Using Monte Carlo Simulations. PLoS ONE, 2013, 8, e64287.	1.1	61
36	What the Myddosome structure tells us about the initiation of innate immunity. Trends in Immunology, 2011, 32, 104-109.	2.9	155

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37	Crystal structure of Toll-like receptor adaptor MAL/TIRAP reveals the molecular basis for signal transduction and disease protection. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14879-14884.	3.3	123
38	Molecular Mechanism That Induces Activation of SpÃtzle, the Ligand for the Drosophila Toll Receptor. Journal of Biological Chemistry, 2010, 285, 19502-19509.	1.6	72
39	The molecular basis of the host response to lipopolysaccharide. Nature Reviews Microbiology, 2010, 8, 8-14.	13.6	303
40	An Oligomeric Signaling Platform Formed by the Toll-like Receptor Signal Transducers MyD88 and IRAK-4. Journal of Biological Chemistry, 2009, 284, 25404-25411.	1.6	323
41	Structure and regulation of cytoplasmic adapter proteins involved in innate immune signaling. Immunological Reviews, 2009, 227, 161-175.	2.8	31
42	Assembly of Oligomeric Death Domain Complexes during Toll Receptor Signaling. Journal of Biological Chemistry, 2008, 283, 33447-33454.	1.6	60
43	Structural Insight into the Mechanism of Activation of the Toll Receptor by the Dimeric Ligand SpÃtzle. Journal of Biological Chemistry, 2008, 283, 14629-14635.	1.6	67
44	Role of the SpÃtzle Pro-domain in the Generation of an Active Toll Receptor Ligand. Journal of Biological Chemistry, 2007, 282, 13522-13531.	1.6	48
45	Structure and Function of Toll Receptors and Their Ligands. Annual Review of Biochemistry, 2007, 76, 141-165.	5.0	562
46	A Dimer of the Toll-Like Receptor 4 Cytoplasmic Domain Provides a Specific Scaffold for the Recruitment of Signalling Adaptor Proteins. PLoS ONE, 2007, 2, e788.	1.1	166
47	Toll-like receptors as molecular switches. Nature Reviews Immunology, 2006, 6, 693-698.	10.6	160
48	The myristoylation of TRIF-related adaptor molecule is essential for Toll-like receptor 4 signal transduction. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6299-6304.	3.3	238
49	Activation of Insect and Vertebrate Toll Signaling: From Endogenous Cytokine Ligand to Direct Recognition of Pathogen Patterns. , 2005, 560, 19-27.		0
50	Ligand-Receptor and Receptor-Receptor Interactions Act in Concert to Activate Signaling in the Drosophila Toll Pathway. Journal of Biological Chemistry, 2005, 280, 22793-22799.	1.6	69
51	Solution structure of the isolated Pelle death domain. FEBS Letters, 2005, 579, 3920-3926.	1.3	5
52	Four N-linked Glycosylation Sites in Human Toll-like Receptor 2 Cooperate to Direct Efficient Biosynthesis and Secretion. Journal of Biological Chemistry, 2004, 279, 34589-34594.	1.6	112
53	Binding of the Drosophila cytokine SpÃtzle to Toll is direct and establishes signaling. Nature Immunology, 2003, 4, 794-800.	7.0	412
54	A family of proteins related to SpÃtzle, the toll receptor ligand, are encoded in theDrosophilagenome. Proteins: Structure, Function and Bioinformatics, 2001, 45, 71-80.	1.5	82

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55	Formation and Biochemical Characterization of Tube/Pelle Death Domain Complexes:â€‰ Critical Regulators of Postreceptor Signaling by the Drosophila Toll Receptor. Biochemistry, 1999, 38, 11722-11733.	1.2	27
56	Getting knotted: a model for the structure and activation of SpÃtzle. Trends in Biochemical Sciences, 1998, 23, 239-242.	3.7	101
57	Expression and subcellular distribution of rel/NFÎºB transcription factors in the preimplantation mouse embryo: novel ÎºB binding activities in the blastocyst stage embryo. Zygote, 1998, 6, 249-260.	0.5	5
58	Casein kinase II phosphorylates Ser468 in the PEST domain of the Drosophila IÎºB homologue cactus. FEBS Letters, 1997, 400, 45-50.	1.3	32
59	X-ray diffraction and far-UV CD studies of filaments formed by a leucine-rich repeat peptide: structural similarity to the amyloid fibrils of prions and Alzheimer's disease Î²-protein. FEBS Letters, 1997, 412, 397-403.	1.3	25
60	Wild type and constitutively activated forms of theDrosophilaToll receptor have different patterns of N-linked glycosylation. FEBS Letters, 1995, 365, 83-86.	1.3	7
61	The Drosophila ankyrin repeat protein cactus has a predominantly Î±-helical secondary structure. FEBS Letters, 1993, 335, 155-160.	1.3	12
62	A leucine-rich repeat peptide derived from theDrosophilaToll receptor forms extended filaments with a Î²-sheet structure. FEBS Letters, 1991, 291, 87-91.	1.3	67
63	Drosophila Toll and IL-1 receptor. Nature, 1991, 351, 355-356.	13.7	518