Mathias Hornef

List of Publications by Year
in descending order

141 papers	10,124 citations	31976 53 h-index	38395 95 g-index
145 all docs	145 docs citations	145 times ranked	14241 citing authors

#	Article	IF	Citations
1	The Mouse Intestinal Bacterial Collection (miBC) provides host-specific insight into cultured diversity and functional potential of the gut microbiota. Nature Microbiology, 2016, 1, 16131.	13.3	465
2	The impact of perinatal immune development on mucosal homeostasis and chronic inflammation. Nature Reviews Immunology, 2012, 12, 9-23.	22.7	432
3	Postnatal acquisition of endotoxin tolerance in intestinal epithelial cells. Journal of Experimental Medicine, 2006, 203, 973-984.	8.5	429
4	Bacterial strategies for overcoming host innate and adaptive immune responses. Nature Immunology, 2002, 3, 1033-1040.	14.5	388
5	Toll-like Receptor 4 Resides in the Golgi Apparatus and Colocalizes with Internalized Lipopolysaccharide in Intestinal Epithelial Cells. Journal of Experimental Medicine, 2002, 195, 559-570.	8.5	385
6	IFN-Î» determines the intestinal epithelial antiviral host defense. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7944-7949.	7.1	369
7	Dysbiotic gut microbiota causes transmissible Crohn's disease-like ileitis independent of failure in antimicrobial defence. Gut, 2016, 65, 225-237.	12.1	317
8	Intracellular Recognition of Lipopolysaccharide by Toll-like Receptor 4 in Intestinal Epithelial Cells. Journal of Experimental Medicine, 2003, 198, 1225-1235.	8.5	301
9	Yersinia enterocolitica Impairs Activation of Transcription Factor NF-ÎºB: Involvement in the Induction of Programmed Cell Death and in the Suppression of the Macrophage Tumor Necrosis Factor Î± Production. Journal of Experimental Medicine, 1998, 187, 1069-1079.	8.5	237
10	Secreted enteric antimicrobial activity localises to the mucus surface layer. Gut, 2008, 57, 764-771.	12.1	235
11	Cesarean Delivery Is Associated With Celiac Disease but Not Inflammatory Bowel Disease in Children. Pediatrics, 2010, 125, e1433-e1440.	2.1	219
12	miR-146a Mediates Protective Innate ImmuneÂTolerance in the Neonate Intestine. Cell Host and Microbe, 2010, 8, 358-368.	11.0	190
13	Innate immune signalling at the intestinal epithelium in homeostasis and disease. EMBO Reports, 2012, 13, 684-698.	4.5	166
14	Specific and Rapid Detection by Fluorescent In Situ Hybridization of Bacteria in Clinical Samples Obtained from Cystic Fibrosis Patients. Journal of Clinical Microbiology, 2000, 38, 818-825.	3.9	164
15	Secretory IgA in the Coordination of Establishment and Maintenance of the Microbiota. Trends in Immunology, 2016, 37, 287-296.	6.8	160
16	Development of the Microbiota and Associations With Birth Mode, Diet, and Atopic Disorders in a Longitudinal Analysis of Stool Samples, Collected From Infancy Through Early Childhood. Gastroenterology, 2020, 158, 1584-1596.	1.3	159
17	Neonatal selection by Toll-like receptor 5 influences long-term gut microbiota composition. Nature, 2018, 560, 489-493.	27.8	153
18	Intravenous Tigecycline as Adjunctive or Alternative Therapy for Severe RefractoryClostridium difficileInfection. Clinical Infectious Diseases, 2009, 48, 1732-1735.	5.8	149

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19	The Neonatal Window of Opportunity: Setting the Stage for Life-Long Host-Microbial Interaction and Immune Homeostasis. Journal of Immunology, 2017, 198, 557-563.	0.8	146
20	Comparison of the SARS-CoV-2 Rapid antigen test to the real star Sars-CoV-2 RT PCR kit. Journal of Virological Methods, 2021, 288, 114024.	2.1	144
21	Age-Dependent TLR3 Expression of the Intestinal Epithelium Contributes to Rotavirus Susceptibility. PLoS Pathogens, 2012, 8, e1002670.	4.7	141
22	Norovirus Triggered Microbiota-driven Mucosal Inflammation in Interleukin 10-deficient Mice. Inflammatory Bowel Diseases, 2014, 20, 431-443.	1.9	131
23	Developmental switch of intestinal antimicrobial peptide expression. Journal of Experimental Medicine, 2008, 205, 183-193.	8.5	129
24	Maturation of the enteric mucosal innate immune system during the postnatal period. Immunological Reviews, 2014, 260, 21-34.	6.0	121
25	Comparison of four new commercial serologic assays for determination of SARS-CoV-2 IgG. Journal of Clinical Virology, 2020, 128, 104394.	3.1	120
26	Neonatal mucosal immunology. Mucosal Immunology, 2017, 10, 5-17.	6.0	117
27	Increased diversity of intestinal antimicrobial peptides by covalent dimer formation. Nature Immunology, 2004, 5, 836-843.	14.5	111
28	New Antiseptic Peptides To Protect against Endotoxin-Mediated Shock. Antimicrobial Agents and Chemotherapy, 2010, 54, 3817-3824.	3.2	111
29	Myeloid differentiation factor 88-dependent signalling controls bacterial growth during colonization and systemic pneumococcal disease in mice. Cellular Microbiology, 2005, 7, 1603-1615.	2.1	103
30	Toll-like receptor 4-mediated signaling by epithelial surfaces: necessity or threat?. Microbes and Infection, 2003, 5, 951-959.	1.9	102
31	Bile acids drive the newbornâ€™s gut microbiota maturation. Nature Communications, 2020, 11, 3692.	12.8	100
32	Antimicrobial peptides and the enteric mucus layer act in concert to protect the intestinal mucosa. Gut Microbes, 2014, 5, 761-765.	9.8	94
33	Cutting Edge: Instructive Role of Peripheral Tissue Cells in the Imprinting of T Cell Homing Receptor Patterns. Journal of Immunology, 2008, 181, 3745-3749.	0.8	93
34	The intestinal epithelium as guardian of gut barrier integrity. Cellular Microbiology, 2015, 17, 1561-1569.	2.1	93
35	Microbialâ€“host molecular exchange and its functional consequences in early mammalian life. Science, 2020, 368, 604-607.	12.6	91
36	The neonatal window of opportunityâ€”early priming for life. Journal of Allergy and Clinical Immunology, 2018, 141, 1212-1214.	2.9	87

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37	Caspase-8 controls the gut response to microbial challenges by Tnf-Î±-dependent and independent pathways. Gut, 2015, 64, 601-610.	12.1	84
38	MicroRNAâ€146aâ€mediated downregulation of IRAK1 protects mouse and human small intestine against ischemia/reperfusion injury. EMBO Molecular Medicine, 2012, 4, 1308-1319.	6.9	79
39	Preclinical Investigations Reveal the Broad-Spectrum Neutralizing Activity of Peptide Pep19-2.5 on Bacterial Pathogenicity Factors. Antimicrobial Agents and Chemotherapy, 2013, 57, 1480-1487.	3.2	78
40	Lytic Replication of Epstein-Barr Virus in the Peripheral Blood: Analysis of Viral Gene Expression in B Lymphocytes During Infectious Mononucleosis and in the Normal Carrier State. Blood, 1997, 89, 1665-1677.	1.4	76
41	Pathogens, Commensal Symbionts, and Pathobionts: Discovery and Functional Effects on the Host. ILAR Journal, 2015, 56, 159-162.	1.8	76
42	Antibiotic treatmentâ€“induced secondary IgA deficiency enhances susceptibility to Pseudomonas aeruginosa pneumonia. Journal of Clinical Investigation, 2018, 128, 3535-3545.	8.2	75
43	â€˜Layered immunityâ€™ and the â€˜neonatal window of opportunityâ€™ â€“ timed succession of nonâ€redundant phases to establish mucosal hostâ€“microbial homeostasis after birth. Immunology, 2020, 159, 15-25.	4.4	72
44	Chronic Prosthetic Hip Infection Caused by a Small-Colony Variant of Escherichia coli. Journal of Clinical Microbiology, 1998, 36, 2530-2534.	3.9	71
45	Neonatally imprinted stromal cell subsets induce tolerogenic dendritic cells in mesenteric lymph nodes. Nature Communications, 2018, 9, 3903.	12.8	69
46	Hormonal control of the renal immune response and antibacterial host defense by arginine vasopressin. Journal of Experimental Medicine, 2007, 204, 2837-2852.	8.5	68
47	Age-Dependent Enterocyte Invasion and Microcolony Formation by Salmonella. PLoS Pathogens, 2014, 10, e1004385.	4.7	67
48	On the origin of species: Factors shaping the establishment of infant's gut microbiota. Birth Defects Research Part C: Embryo Today Reviews, 2015, 105, 240-251.	3.6	66
49	How to Count Our Microbes? The Effect of Different Quantitative Microbiome Profiling Approaches. Frontiers in Cellular and Infection Microbiology, 2020, 10, 403.	3.9	65
50	Minimal SPI1-T3SS effector requirement for Salmonella enterocyte invasion and intracellular proliferation in vivo. PLoS Pathogens, 2018, 14, e1006925.	4.7	62
51	Bacterial Cell Wall Compounds as Promising Targets of Antimicrobial Agents I. Antimicrobial Peptides and Lipopolyamines. Current Drug Targets, 2012, 13, 1121-1130.	2.1	62
52	COINCIDENCE OF EPSTEIN-BARR VIRUS REACTIVATION, CYTOMEGALOVIRUS INFECTION, AND REJECTION EPISODES IN RENAL TRANSPLANT RECIPIENTS. Transplantation, 1995, 60, 474-480.	1.0	61
53	Cesarean delivery is associated with celiac disease but not inflammatory bowel disease in children. Gut Microbes, 2011, 2, 91-98.	9.8	61
54	O-Antigen Delays Lipopolysaccharide Recognition and Impairs Antibacterial Host Defense in Murine Intestinal Epithelial Cells. PLoS Pathogens, 2009, 5, e1000567.	4.7	60

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55	Gut Colonization by Methanogenic Archaea Is Associated with Organic Dairy Consumption in Children. Frontiers in Microbiology, 2017, 8, 355.	3.5	59
56	Active suppression of intestinal CD4+TCRÎ±Î²+ T-lymphocyte maturation during the postnatal period. Nature Communications, 2015, 6, 7725.	12.8	58
57	The mammalian intestinal epithelium as integral player in the establishment and maintenance of hostâ€“microbial homeostasis. Seminars in Immunology, 2012, 24, 25-35.	5.6	56
58	Pathways of host cell exit by intracellular pathogens. Microbial Cell, 2018, 5, 525-544.	3.2	56
59	The role of epithelial Toll-like receptor expression in host defense and microbial tolerance. Journal of Endotoxin Research, 2005, 11, 124-128.	2.5	54
60	Facts, myths and hypotheses on the zoonotic nature of Mycobacterium avium subspecies paratuberculosis. International Journal of Medical Microbiology, 2014, 304, 858-867.	3.6	52
61	Potentiation of Epithelial Innate Host Responses by Intercellular Communication. PLoS Pathogens, 2010, 6, e1001194.	4.7	50
62	Establishment of intestinal homeostasis during the neonatal period. Cellular and Molecular Life Sciences, 2011, 68, 3699-3712.	5.4	49
63	TLR4 Facilitates Translocation of Bacteria across Renal Collecting Duct Cells. Journal of the American Society of Nephrology: JASN, 2008, 19, 2364-2374.	6.1	48
64	IFIT2 Is an Effector Protein of Type I IFNâ€“Mediated Amplification of Lipopolysaccharide (LPS)-Induced TNF-Î± Secretion and LPS-Induced Endotoxin Shock. Journal of Immunology, 2013, 191, 3913-3921.	0.8	48
65	Triggering the ExoS regulon of Pseudomonas aeruginosa: A GFP-reporter analysis of exoenzyme (Exo) S, ExoT and ExoU synthesis. Microbial Pathogenesis, 2000, 29, 329-343.	2.9	45
66	Age-Dependent Susceptibility to Enteropathogenic Escherichia coli (EPEC) Infection in Mice. PLoS Pathogens, 2016, 12, e1005616.	4.7	45
67	Persistent Infection with Helicobacter Pylori and the Development of Gastric Cancer. Advances in Cancer Research, 2003, 90, 63-89.	5.0	44
68	A philosophical perspective on the prenatal in utero microbiome debate. Microbiome, 2021, 9, 5.	11.1	42
69	The anti-inflammatory effect of the synthetic antimicrobial peptide 19-2.5 in a murine sepsis model: a prospective randomized study. Critical Care, 2013, 17, R3.	5.8	41
70	Duration of Fecal Shedding of Shiga Toxinâ€“Producing Escherichia coli O104:H4 in Patients Infected During the 2011 Outbreak in Germany: A Multicenter Study. Clinical Infectious Diseases, 2013, 56, 1132-1140.	5.8	41
71	Cell Polarization and Epigenetic Status Shape the Heterogeneous Response to Type III Interferons in Intestinal Epithelial Cells. Frontiers in Immunology, 2017, 8, 671.	4.8	41
72	Dextran sodium sulfate (DSS) induces necrotizing enterocolitis-like lesions in neonatal mice. PLoS ONE, 2017, 12, e0182732.	2.5	37

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73	Lytic Replication of Epstein-Barr Virus in the Peripheral Blood: Analysis of Viral Gene Expression in B Lymphocytes During Infectious Mononucleosis and in the Normal Carrier State. Blood, 1997, 89, 1665-1677.	1.4	37
74	Cytokine production in a whole-blood assay after Epstein-Barr virus infection in vivo. Vaccine Journal, 1995, 2, 209-213.	2.6	36
75	Transcription Factor PU.1 Controls Transcription Start Site Positioning and Alternative TLR4 Promoter Usage. Journal of Biological Chemistry, 2007, 282, 26874-26883.	3.4	33
76	Cytokine-mediated control of lipopolysaccharide-induced activation of small intestinal epithelial cells. Immunology, 2007, 122, 306-315.	4.4	33
77	Internalization-dependent recognition ofMycobacterium aviumssp.paratuberculosisby intestinal epithelial cells. Cellular Microbiology, 2009, 11, 1802-1815.	2.1	33
78	Real friends:Faecalibacterium prausnitziisupports mucosal immune homeostasis. Gut, 2016, 65, 365-367.	12.1	33
79	Interleukin-13-Mediated Paneth Cell Degranulation and Antimicrobial Peptide Release. Journal of Innate Immunity, 2014, 6, 530-541.	3.8	32
80	Identification of a Predominantly Interferon-Î»-Induced Transcriptional Profile in Murine Intestinal Epithelial Cells. Frontiers in Immunology, 2017, 8, 1302.	4.8	32
81	The olfactory epithelium as a port of entry in neonatal neurolisteriosis. Nature Communications, 2018, 9, 4269.	12.8	32
82	Innate immune recognition on the intestinal mucosa. International Journal of Medical Microbiology, 2007, 297, 379-392.	3.6	31
83	Brain Biopsy in Patients With Acquired Immunodeficiency Syndrome. Archives of Internal Medicine, 1999, 159, 2590.	3.8	29
84	TRIF Signaling Drives Homeostatic Intestinal Epithelial Antimicrobial Peptide Expression. Journal of Immunology, 2014, 193, 4223-4234.	0.8	29
85	Gut Microbiota: A Natural Adjuvant for Vaccination. Immunity, 2014, 41, 349-351.	14.3	29
86	Influence of probiotic supplementation on the developing microbiota in human preterm neonates. Gut Microbes, 2020, 12, 1826747.	9.8	26
87	Determination of SARS-CoV-2 antibodies with assays from Diasorin, Roche and IDvet. Journal of Virological Methods, 2021, 287, 113978.	2.1	26
88	Intestinal mucus affinity and biological activity of an orally administered antibacterial and anti-inflammatory peptide. Gut, 2015, 64, 222-232.	12.1	25
89	Generation of Mouse Small Intestinal Epithelial Cell Lines That Allow the Analysis of Specific Innate Immune Functions. PLoS ONE, 2013, 8, e72700.	2.5	25
90	Disturbed gut microbiota and bile homeostasis in Giardia -infected mice contributes to metabolic dysregulation and growth impairment. Science Translational Medicine, 2020, 12, .	12.4	24

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91	Î²7-Integrin and MAdCAM-1 play opposing roles during the development of non-alcoholic steatohepatitis. Journal of Hepatology, 2017, 66, 1251-1264.	3.7	23
92	Comparison of MB/BacT and BACTEC 460 TB Systems for Recovery of Mycobacteria in a Routine Diagnostic Laboratory. Journal of Clinical Microbiology, 1999, 37, 3711-3712.	3.9	23
93	Control of intestinal Nod2-mediated peptidoglycan recognition by epithelium-associated lymphocytes. Mucosal Immunology, 2011, 4, 325-334.	6.0	21
94	Intra-amniotic Candida albicans infection induces mucosal injury and inflammation in the ovine fetal intestine. Scientific Reports, 2016, 6, 29806.	3.3	21
95	Ontogeny of Intestinal Epithelial Innate Immune Responses. Frontiers in Immunology, 2014, 5, 474.	4.8	19
96	Perinatal development of innate immune topology. ELife, 2021, 10, .	6.0	19
97	The function and biological role of toll-like receptors in infectious diseases: an update. Current Opinion in Infectious Diseases, 2008, 21, 304-312.	3.1	17
98	Thyrotoxicosis Induced by Thyroid Involvement of Disseminated Aspergillus fumigatus Infection. Journal of Clinical Microbiology, 2000, 38, 886-887.	3.9	17
99	Dedicated immunosensing of the mouse intestinal epithelium facilitated by a pair of genetically coupled lectin-like receptors. Mucosal Immunology, 2015, 8, 232-242.	6.0	16
100	Gut microbiota in wheezing preschool children and the association with childhood asthma. Allergy: European Journal of Allergy and Clinical Immunology, 2020, 75, 1473-1476.	5.7	16
101	Allergic diseases in infancy: I - Epidemiology and current interpretation. World Allergy Organization Journal, 2021, 14, 100591.	3.5	15
102	Bacterial Evasion of Innate Defense at Epithelial Linings. , 2005, 86, 72-98.		14
103	Seeing is understanding: Salmonellaâ€™s way to penetrate the intestinal epithelium. International Journal of Medical Microbiology, 2018, 308, 97-106.	3.6	14
104	Epstein-Barr Viral Gene Expression in B-Lymphocytes. Leukemia and Lymphoma, 1998, 30, 123-129.	1.3	13
105	Distribution of the outer membrane haem receptor protein ChuA in environmental and human isolates of. International Journal of Medical Microbiology, 2001, 291, 227-230.	3.6	13
106	The viral dsRNA analogue poly (I:C) induces necrotizing enterocolitis in neonatal mice. Pediatric Research, 2016, 79, 596-602.	2.3	12
107	Reduced PICD in Monocytes Mounts Altered Neonate Immune Response to Candida albicans. PLoS ONE, 2016, 11, e0166648.	2.5	12
108	Growth Control of Small-Colony Variants by Genetic Regulation of the Hemin Uptake System. Infection and Immunity, 2004, 72, 2254-2262.	2.2	11

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109	Outer Ear Canal Infection with Rhabditis sp. Nematodes in a Human. Journal of Clinical Microbiology, 2014, 52, 1793-1795.	3.9	11
110	Adaptation of Staphylococcus aureus to the Human Skin Environment Identified Using an ex vivo Tissue Model. Frontiers in Microbiology, 2021, 12, 728989.	3.5	11
111	DNA vaccination using coexpression of cytokine genes with a bacterial gene encoding a 60-kDa heat shock protein. Medical Microbiology and Immunology, 2000, 189, 97-104.	4.8	10
112	How neutrophils recognize bacteria and move toward infection. Nature Medicine, 2001, 7, 1182-1184.	30.7	10
113	Bacterial Cell Wall Compounds as Promising Targets of Antimicrobial Agents II. Immunological and Clinical Aspects. Current Drug Targets, 2012, 13, 1131-1137.	2.1	10
114	IMMUNOCYTOCHEMICAL DETECTION OF EPSTEIN-BARR VIRUS ANTIGENS IN PERIPHERAL B LYMPHOCYTES AFTER RENAL TRANSPLANTATION. Transplantation, 1995, 59, 138-140.	1.0	9
115	Humoral Response in a Patient with Cutaneous Nocardiosis. Dermatology, 2000, 200, 78-80.	2.1	9
116	Experimental Colitis Is Exacerbated by Concomitant Infection with Mycobacterium avium ssp. paratuberculosis. Inflammatory Bowel Diseases, 2014, 20, 1962-1971.	1.9	9
117	ICAM-1, soluble-CD23, and interleukin-10 concentrations in serum in renal-transplant recipients with Epstein-Barr virus reactivation. Vaccine Journal, 1997, 4, 545-549.	2.6	9
118	Identification of heparin/heparan sulfate interacting protein as a major broadâ€spectrum antimicrobial protein in lung and small intestine. FASEB Journal, 2008, 22, 2427-2434.	0.5	8
119	Synthetic Anti-lipopolysaccharide Peptides (SALPs) as Effective Inhibitors of Pathogen-Associated Molecular Patterns (PAMPs). Advances in Experimental Medicine and Biology, 2019, 1117, 111-129.	1.6	8
120	Systemic and Mucosal Immune Reactivity upon Mycobacterium avium ssp. paratuberculosis Infection in Mice. PLoS ONE, 2014, 9, e94624.	2.5	7
121	Transcriptional profiling of intestinal CD4+ T cells in the neonatal and adult mice. Genomics Data, 2015, 5, 371-374.	1.3	7
122	Spatial and temporal key steps in earlyâ€life intestinal immune system development and education. FEBS Journal, 2022, 289, 4731-4757.	4.7	7
123	Stabilization but No Functional Influence of HIF-1Î± Expression in the Intestinal Epithelium during Salmonella Typhimurium Infection. Infection and Immunity, 2022, 90, iai0022221.	2.2	7
124	SPI2 T3SS effectors facilitate enterocyte apical to basolateral transmigration of Salmonella-containing vacuoles in vivo. Gut Microbes, 2021, 13, 1973836.	9.8	6
125	Should we modulate the neonatal microbiome and what should be the goal?. Microbiome, 2022, 10, 74.	11.1	6
126	The Staphylococcus epidermidis Transcriptional Profile During Carriage. Frontiers in Microbiology, 2022, 13, 896311.	3.5	5

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127	CD4 T Cell Dependent Colitis Exacerbation Following Re-Exposure of Mycobacterium avium ssp. paratuberculosis. Frontiers in Cellular and Infection Microbiology, 2017, 7, 75.	3.9	4
128	Allulose in human diet: the knowns and the unknowns. British Journal of Nutrition, 2022, 128, 172-178.	2.3	4
129	Between vigilance and tolerance: the immune function of the intestinal epithelium. Cellular and Molecular Life Sciences, 2011, 68, 3619-3621.	5.4	3
130	The deadly bite of Salmonella Typhi. EMBO Reports, 2015, 16, 887-888.	4.5	3
131	An unusual cause of ventriculoperitoneal shunt infection. JAAPA: Official Journal of the American Academy of Physician Assistants, 2015, 28, 39-42.	0.3	3
132	Allergic diseases in infancy IIâ€“oral tolerance and its failure. World Allergy Organization Journal, 2021, 14, 100586.	3.5	3
133	Postnatal acquisition of endotoxin tolerance in intestinal epithelial cells. Journal of Cell Biology, 2006, 173, i3-i3.	5.2	2
134	Significance of Cytoplasmic Staining in the Cytomegalovirus pp65 Antigen Test. European Journal of Clinical Microbiology and Infectious Diseases, 1999, 18, 66-68.	2.9	1
135	Microbiome and Early Life. , 2018, , 31-47.		1
136	The Timed Pathway to Homeostasis. Immunity, 2019, 50, 1127-1129.	14.3	1
137	Toward a porcine in vivo model to analyze the pathogenesis of TLR5-dependent enteropathies. Gut Microbes, 2020, 12, 1782163.	9.8	1
138	A Nod toward understanding Crohn's pathology. Nature Medicine, 2011, 17, 785-787.	30.7	0
139	Handle energy resources with care. Trends in Microbiology, 2014, 22, 5-6.	7.7	0
140	Early life host regulation of the mammalian enteric microbiota composition. International Journal of Medical Microbiology, 2021, 311, 151498.	3.6	0
141	On microbial syringes: Advances in our understanding of type III secretion systems in bacterial pathogenesis. Physics of Life Reviews, 2021, 39, 96-98.	2.8	0