Benoit Chassaing

List of Publications by Year
in descending order

124 papers	12,572 citations	36203 51 h-index	26548 107 g-index
142 all docs	142 docs citations	142 times ranked	17311 citing authors

#	Article	IF	Citations
1	Dietary emulsifiers impact the mouse gut microbiota promoting colitis and metabolic syndrome. Nature, 2015, 519, 92-96.	13.7	1,457
2	Dextran Sulfate Sodium (DSS)â€Induced Colitis in Mice. Current Protocols in Immunology, 2014, 104, 15.25.1-15.25.14.	3.6	1,195
3	Transient Inability to Manage Proteobacteria Promotes Chronic Gut Inflammation in TLR5-Deficient Mice. Cell Host and Microbe, 2012, 12, 139-152.	5.1	459
4	TLR5-Mediated Sensing of Gut Microbiota Is Necessary for Antibody Responses to Seasonal Influenza Vaccination. Immunity, 2014, 41, 478-492.	6.6	444
5	Fecal Lipocalin 2, a Sensitive and Broadly Dynamic Non-Invasive Biomarker for Intestinal Inflammation. PLoS ONE, 2012, 7, e44328.	1.1	427
6	Sex steroid deficiencyâ€"associated bone loss is microbiota dependent and prevented by probiotics. Journal of Clinical Investigation, 2016, 126, 2049-2063.	3.9	416
7	Fiber-Mediated Nourishment of Gut Microbiota Protects against Diet-Induced Obesity by Restoring IL-22-Mediated Colonic Health. Cell Host and Microbe, 2018, 23, 41-53.e4.	5.1	410
8	The Commensal Microbiota and Enteropathogens in the Pathogenesis of Inflammatory Bowel Diseases. Gastroenterology, 2011, 140, 1720-1728.e3.	0.6	390
9	Dietary emulsifiers directly alter human microbiota composition and gene expression ex vivo potentiating intestinal inflammation. Gut, 2017, 66, 1414-1427.	6.1	380
10	Dysregulated Microbial Fermentation of Soluble Fiber Induces Cholestatic Liver Cancer. Cell, 2018, 175, 679-694.e22.	13.5	344
11	Innate and Adaptive Immunity Interact to Quench Microbiome Flagellar Motility in the Gut. Cell Host and Microbe, 2013, 14, 571-581.	5.1	321
12	Microbiota-liver axis in hepatic disease. Hepatology, 2014, 59, 328-339.	3.6	272
13	Intestinal Epithelial Cell Toll-like Receptor 5 Regulates the Intestinal Microbiota to Prevent Low-Grade Inflammation and Metabolic Syndrome in Mice. Gastroenterology, 2014, 147, 1363-1377.e17.	0.6	231
14	Crohn diseaseâ€"associated adherent-invasive E. coli bacteria target mouse and human Peyerâ€™s patches via long polar fimbriae. Journal of Clinical Investigation, 2011, 121, 966-975.	3.9	227
15	Antigen sampling by intestinal M cells is the principal pathway initiating mucosal IgA production to commensal enteric bacteria. Mucosal Immunology, 2016, 9, 907-916.	2.7	195
16	Prevention and cure of rotavirus infection via TLR5/NLRC4â€"mediated production of IL-22 and IL-18. Science, 2014, 346, 861-865.	6.0	188
17	Dietary Emulsifierâ€"Induced Low-Grade Inflammation Promotes Colon Carcinogenesis. Cancer Research, 2017, 77, 27-40.	0.4	187
18	AIEC pathobiont instigates chronic colitis in susceptible hosts by altering microbiota composition. Gut, 2014, 63, 1069-1080.	6.1	182

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19	Antibiotic Treatment Suppresses Rotavirus Infection and Enhances Specific Humoral Immunity. Journal of Infectious Diseases, 2014, 210, 171-182.	1.9	182
20	Microbiota fermentation-NLRP3 axis shapes the impact of dietary fibres on intestinal inflammation. Gut, 2019, 68, 1801-1812.	6.1	157
21	Neonatal selection by Toll-like receptor 5 influences long-term gut microbiota composition. Nature, 2018, 560, 489-493.	13.7	153
22	Gut Microbiota, Low-grade Inflammation, and Metabolic Syndrome. Toxicologic Pathology, 2014, 42, 49-53.	0.9	137
23	Microbiota-Dependent Hepatic Lipogenesis Mediated by Stearoyl CoA Desaturase 1 (SCD1) Promotes Metabolic Syndrome in TLR5-Deficient Mice. Cell Metabolism, 2015, 22, 983-996.	7.2	129
24	Lack of soluble fiber drives diet-induced adiposity in mice. American Journal of Physiology - Renal Physiology, 2015, 309, G528-G541.	1.6	128
25	The intestinal microbiota regulates host cholesterol homeostasis. BMC Biology, 2019, 17, 94.	1.7	125
26	Experimental models to study intestinal microbesâ€“mucus interactions in health and disease. FEMS Microbiology Reviews, 2019, 43, 457-489.	3.9	114
27	Lipocalin 2 Deficiency Dysregulates Iron Homeostasis and Exacerbates Endotoxin-Induced Sepsis. Journal of Immunology, 2012, 189, 1911-1919.	0.4	111
28	Randomized Controlled-Feeding Study of Dietary Emulsifier Carboxymethylcellulose Reveals Detrimental Impacts on the Gut Microbiota and Metabolome. Gastroenterology, 2022, 162, 743-756.	0.6	111
29	Multi-omics analyses of the ulcerative colitis gut microbiome link Bacteroides vulgatus proteases with disease severity. Nature Microbiology, 2022, 7, 262-276.	5.9	110
30	Cutting Edge: IL-36 Receptor Promotes Resolution of Intestinal Damage. Journal of Immunology, 2016, 196, 34-38.	0.4	108
31	Direct impact of commonly used dietary emulsifiers on human gut microbiota. Microbiome, 2021, 9, 66.	4.9	108
32	Antibacterial Weapons: Targeted Destruction in the Microbiota. Trends in Microbiology, 2018, 26, 329-338.	3.5	106
33	Segmented Filamentous Bacteria Prevent and Cure Rotavirus Infection. Cell, 2019, 179, 644-658.e13.	13.5	106
34	Mammalian gut immunity. Biomedical Journal, 2014, 37, 246.	1.4	104
35	Intestinal Dysbiosis Contributes to the Delayed Gastrointestinal Transit in High-Fat Diet Fed Mice. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 328-339.	2.3	101
36	When pathogenic bacteria meet the intestinal microbiota. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150504.	1.8	100

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37	Microbiota-Inducible Innate Immune Siderophore Binding Protein Lipocalin 2 Is Critical for Intestinal Homeostasis. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 482-498.e6.	2.3	84
38	Bolus Weekly Vitamin D3 Supplementation Impacts Gut and Airway Microbiota in Adults With Cystic Fibrosis: A Double-Blind, Randomized, Placebo-Controlled Clinical Trial. Journal of Clinical Endocrinology and Metabolism, 2018, 103, 564-574.	1.8	82
39	Supplementation of Low- and High-fat Diets with Fermentable Fiber Exacerbates Severity of DSS-induced Acute Colitis. Inflammatory Bowel Diseases, 2017, 23, 1133-1143.	0.9	80
40	Colonic Microbiota Encroachment Correlates With Dysglycemia in Humans. Cellular and Molecular Gastroenterology and Hepatology, 2017, 4, 205-221.	2.3	79
41	Hepatocyte Toll-Like Receptor 5 Promotes Bacterial Clearance and Protects Mice Against High-Fat Dietâ€"Induced Liver Disease. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 584-604.	2.3	76
42	Swimming Motility Mediates the Formation of Neutrophil Extracellular Traps Induced by Flagellated Pseudomonas aeruginosa. PLoS Pathogens, 2016, 12, e1005987.	2.1	70
43	A Listeria monocytogenes Bacteriocin Can Target the Commensal Prevotella copri and Modulate Intestinal Infection. Cell Host and Microbe, 2019, 26, 691-701.e5.	5.1	66
44	Dietary Emulsifiers Directly Impact Adherent-Invasive E.Âcoli Gene Expression to Drive Chronic Intestinal Inflammation. Cell Reports, 2020, 33, 108229.	2.9	66
45	Flagellin-elicited adaptive immunity suppresses flagellated microbiota and vaccinates against chronic inflammatory diseases. Nature Communications, 2019, 10, 5650.	5.8	64
46	Western diet induces colonic nitrergic myenteric neuropathy and dysmotility in mice via saturated fatty acidâ€•and lipopolysaccharideâ€induced TLR4 signalling. Journal of Physiology, 2017, 595, 1831-1846.	1.3	63
47	Food Additive Emulsifiers and Their Impact on Gut Microbiome, Permeability, and Inflammation: Mechanistic Insights in Inflammatory Bowel Disease. Journal of Crohn's and Colitis, 2021, 15, 1068-1079.	0.6	63
48	Differential Role of Lipocalin 2 During Immune Complexâ€"Mediated Acute and Chronic Inflammation in Mice. Arthritis and Rheumatism, 2013, 65, 1064-1073.	6.7	60
49	Dietary emulsifiers consumption alters anxiety-like and social-related behaviors in mice in a sex-dependent manner. Scientific Reports, 2019, 9, 172.	1.6	60
50	Bile salts induce long polar fimbriae expression favouring Crohn's diseaseâ€associated adherentâ€invasive <i>Escherichia coli</i> interaction with Peyer's patches. Environmental Microbiology, 2013, 15, 355-371.	1.8	58
51	Acute and repeated exposure to social stress reduces gut microbiota diversity in Syrian hamsters. Behavioural Brain Research, 2018, 345, 39-48.	1.2	57
52	First victim, later aggressor: How the intestinal microbiota drives the pro-inflammatory effects of dietary emulsifiers?. Gut Microbes, 2018, 9, 289-291.	4.3	55
53	The microbiota influences cell death and microglial colonization in the perinatal mouse brain. Brain, Behavior, and Immunity, 2018, 67, 218-229.	2.0	54
54	Tryptophan: A gut microbiota-derived metabolites regulating inflammation. World Journal of Gastrointestinal Pharmacology and Therapeutics, 2017, 8, 7.	0.6	52

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55	Host-derived fecal microRNAs can indicate gut microbiota healthiness and ability to induce inflammation. Theranostics, 2019, 9, 4542-4557.	4.6	52
56	Interactions with M Cells and Macrophages as Key Steps in the Pathogenesis of Enterohemorragic Escherichia coli Infections. PLoS ONE, 2011, 6, e23594.	1.1	51
57	Host/microbiota interactions in health and diseasesâ€"Time for mucosal microbiology!. Mucosal Immunology, 2021, 14, 1006-1016.	2.7	51
58	Adaptation of adherent-invasive <i>E. coli</i> to gut environment: Impact on flagellum expression and bacterial colonization ability. Gut Microbes, 2020, 11, 364-380.	4.3	49
59	â€œWestern Dietâ€•Induced Adipose Inflammation Requires a Complex Gut Microbiota. Cellular and Molecular Gastroenterology and Hepatology, 2020, 9, 313-333.	2.3	45
60	Commensal epitopes drive differentiation of colonic T _{regs}. Science Advances, 2020, 6, eaaz3186.	4.7	44
61	GipA Factor Supports Colonization of PeyerÊ¼s Patches by CrohnÊ¼s Disease-associated Escherichia Coli. Inflammatory Bowel Diseases, 2016, 22, 68-81.	0.9	41
62	How diet can impact gut microbiota to promote or endanger health. Current Opinion in Gastroenterology, 2017, 33, 417-421.	1.0	41
63	Gut Microbiota Drives Metabolic Disease in Immunologically Altered Mice. Advances in Immunology, 2012, 116, 93-112.	1.1	40
64	Role of vitamin D on gut microbiota in cystic fibrosis. Journal of Steroid Biochemistry and Molecular Biology, 2018, 175, 82-87.	1.2	38
65	Amelioration of metabolic syndrome by metformin associates with reduced indices of low-grade inflammation independently of the gut microbiota. American Journal of Physiology - Endocrinology and Metabolism, 2019, 317, E1121-E1130.	1.8	38
66	Erythroid differentiation regulator-1 induced by microbiota in early life drives intestinal stem cell proliferation and regeneration. Nature Communications, 2020, 11, 513.	5.8	38
67	Emulsifiers Impact Colonic Length in Mice and Emulsifier Restriction is Feasible in People with Crohnâ€™s Disease. Nutrients, 2020, 12, 2827.	1.7	34
68	Inulin Fermentable Fiber Ameliorates Type I Diabetes via IL22 and Short-Chain Fatty Acids in Experimental Models. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 983-1000.	2.3	33
69	The Ïƒ ^E Pathway Is Involved in Biofilm Formation by Crohn's Disease-Associated Adherent-Invasive Escherichia coli. Journal of Bacteriology, 2013, 195, 76-84.	1.0	32
70	Has provoking microbiota aggression driven the obesity epidemic?. BioEssays, 2016, 38, 122-128.	1.2	31
71	Ingestion of probiotic (Lactobacillus helveticus and Bifidobacterium longum) alters intestinal microbial structure and behavioral expression following social defeat stress. Scientific Reports, 2021, 11, 3763.	1.6	31
72	Enterohemorrhagic Escherichia coli pathogenesis: role of Long polar fimbriae in Peyerâ€™s patches interactions. Scientific Reports, 2017, 7, 44655.	1.6	30

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73	Policing of gut microbiota by the adaptive immune system. BMC Medicine, 2016, 14, 27.	2.3	29
74	Fungal lysozyme leverages the gut microbiota to curb DSS-induced colitis. Gut Microbes, 2021, 13, 1988836.	4.3	29
75	Effects of gut-derived endotoxin on anxiety-like and repetitive behaviors in male and female mice. Biology of Sex Differences, 2018, 9, 7.	1.8	27
76	Identification of Inner Mucus-Associated Bacteria by Laser Capture Microdissection. Cellular and Molecular Gastroenterology and Hepatology, 2019, 7, 157-160.	2.3	27
77	IL-22â€“induced cell extrusion and IL-18â€“induced cell death prevent and cure rotavirus infection. Science Immunology, 2020, 5, .	5.6	27
78	Linking genetic variation in human Toll-like receptor 5 genes to the gut microbiome's potential to cause inflammation. Immunology Letters, 2014, 162, 3-9.	1.1	26
79	Vasopressin deletion is associated with sex-specific shifts in the gut microbiome. Gut Microbes, 2018, 9, 13-25.	4.3	26
80	Toxin-positive <i>Clostridium difficile</i> latently infect mouse colonies and protect against highly pathogenic <i>C. difficile</i>. Gut, 2018, 67, 860-871.	6.1	25
81	Mice harboring pathobiont-free microbiota do not develop intestinal inflammation that normally results from an innate immune deficiency. PLoS ONE, 2018, 13, e0195310.	1.1	23
82	MyD88-mediated TLR signaling protects against acute rotavirus infection while inflammasome cytokines direct Ab response. Innate Immunity, 2015, 21, 416-428.	1.1	22
83	Impact of food additives on the gut-brain axis. Physiology and Behavior, 2018, 192, 173-176.	1.0	22
84	Enhanced E. coli LF82 Translocation through the Follicle-associated Epithelium in Crohnâ€™s Disease is Dependent on Long Polar Fimbriae and CEACAM6 expression, and Increases Paracellular Permeability. Journal of Crohn's and Colitis, 2020, 14, 216-229.	0.6	21
85	Analysis of the Ïƒ E Regulon in Crohn's Disease-Associated Escherichia coli Revealed Involvement of the waaWVL Operon in Biofilm Formation. Journal of Bacteriology, 2015, 197, 1451-1465.	1.0	20
86	Microbiota and metabolism: what's new in 2018?. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E1-E6.	1.8	19
87	Associations of the Fecal Microbial Proteome Composition and Proneness to Diet-induced Obesity. Molecular and Cellular Proteomics, 2019, 18, 1864-1879.	2.5	19
88	Impact of a high-fat diet on the fatty acid composition of the retina. Experimental Eye Research, 2020, 196, 108059.	1.2	19
89	Maltodextrin, Modern Stressor of the Intestinal Environment. Cellular and Molecular Gastroenterology and Hepatology, 2019, 7, 475-476.	2.3	18
90	Chronic Inflammatory Diseases: Are We Ready for Microbiota-based Dietary Intervention?. Cellular and Molecular Gastroenterology and Hepatology, 2019, 8, 61-71.	2.3	16

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91	Consumption of Select Dietary Emulsifiers Exacerbates the Development of Spontaneous Intestinal Adenoma. International Journal of Molecular Sciences, 2021, 22, 2602.	1.8	16
92	Soluble Fiber Inulin Consumption Limits Alterations of the Gut Microbiota and Hepatic Fatty Acid Metabolism Caused by High-Fat Diet. Nutrients, 2021, 13, 1037.	1.7	16
93	Contribution of Mesenteric Lymph Nodes and GALT to the Intestinal Foxp3+ Regulatory T-Cell Compartment. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 274-280.e3.	2.3	14
94	The TOTUM-63 Supplement and High-Intensity Interval Training Combination Limits Weight Gain, Improves Glycemic Control, and Influences the Composition of Gut Mucosa-Associated Bacteria in Rats on a High Fat Diet. Nutrients, 2021, 13, 1569.	1.7	13
95	First Encounters: Effects of the Microbiota on Neonatal Brain Development. Frontiers in Cellular Neuroscience, 2021, 15, 682505.	1.8	13
96	Dietary fat and low fiber in purified diets differently impact the gut-liver axis to promote obesity-linked metabolic impairments. American Journal of Physiology - Renal Physiology, 2021, 320, G1014-G1033.	1.6	12
97	Social overcrowding impacts gut microbiota, promoting stress, inflammation, and dysglycemia. Gut Microbes, 2021, 13, 2000275.	4.3	12
98	Pathobiont hypnotises enterocytes to promote tumour development. Gut, 2014, 63, 1837-1838.	6.1	11
99	Ectopic Expression of Innate Immune Protein, Lipocalin-2, in Lactococcus lactis Protects Against Gut and Environmental Stressors. Inflammatory Bowel Diseases, 2017, 23, 1120-1132.	0.9	11
100	High-Intensity Interval Training and Î±-Linolenic Acid Supplementation Improve DHA Conversion and Increase the Abundance of Gut Mucosa-Associated Oscillospira Bacteria. Nutrients, 2021, 13, 788.	1.7	11
101	Critical Role of Innate Immunity to Flagellin in the Absence of Adaptive Immunity. Journal of Infectious Diseases, 2021, 223, 1478-1487.	1.9	10
102	Beneficial Effects of Natural Mineral Waters on Intestinal Inflammation and the Mucosa-Associated Microbiota. International Journal of Molecular Sciences, 2021, 22, 4336.	1.8	10
103	Not so Splendid for the Gut Microbiota. Inflammatory Bowel Diseases, 2018, 24, 1055-1056.	0.9	8
104	Lipocalin 2 deficiency-induced gut microbiota dysbiosis evokes metabolic syndrome in aged mice. Physiological Genomics, 2020, 52, 314-321.	1.0	8
105	Tolerogenic Dendritic Cells Shape a Transmissible Gut Microbiota That Protects From Metabolic Diseases. Diabetes, 2021, 70, 2067-2080.	0.3	7
106	Beneficial Effects of Linseed Supplementation on Gut Mucosa-Associated Microbiota in a Physically Active Mouse Model of Crohnâ€™s Disease. International Journal of Molecular Sciences, 2022, 23, 5891.	1.8	7
107	Dietary emulsifier consumption alters gene expression in the amygdala and paraventricular nucleus of the hypothalamus in mice. Scientific Reports, 2022, 12, .	1.6	7
108	Insights on the impact of diet-mediated microbiota alterations on immunity and diseases. American Journal of Transplantation, 2018, 18, 550-555.	2.6	6

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109	Impact of PepT1 deletion on microbiota composition and colitis requires multiple generations. Npj Biofilms and Microbiomes, 2020, 6, 27.	2.9	6
110	Organ-level protein networks as a reference for the host effects of the microbiome. Genome Research, 2020, 30, 276-286.	2.4	6
111	The Intestinal Microbiota: Our Best Frenemy in Radiation-Induced Damages?. Cell Host and Microbe, 2021, 29, 7-9.	5.1	6
112	The postnatal window is critical for the development of sex-specific metabolic and gut microbiota outcomes in offspring. Gut Microbes, 2021, 13, 2004070.	4.3	6
113	In Memoriam, Arlette Darfeuille-Michaud, PhD. Gut, 2014, 63, 1681-1682.	6.1	4
114	In Memoriam, Arlette Darfeuille-Michaud, PhD. Gastroenterology, 2014, 147, 943-944.	0.6	4
115	Gut Microbiome and Metabolism. , 2018, , 775-793.		3
116	Microbiota Alterations in Inflammatory Bowel Diseases: From Correlation to Causality. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 403-404.	2.3	2
117	Genome Sequence of a Toxin-Positive Clostridium difficile Strain Isolated from Murine Feces. Genome Announcements, 2017, 5, .	0.8	2
118	Gut barrier dysfunction and type 2 immunity: Implications for compulsive behavior. Medical Hypotheses, 2022, 161, 110799.	0.8	2
119	The Hidden Effect of Nod2 in the Host/Microbiota Relationship. Cellular and Molecular Gastroenterology and Hepatology, 2020, 10, 424-425.	2.3	1
120	When Pathobiont-Carbohydrate Interaction Turns Bittersweet!. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 1509-1510.	2.3	1
121	Local Delivery of Streptomycin in Microcontainers Facilitates Colonization of Streptomycin-Resistant Escherichia coli in the Rat Colon. Applied and Environmental Microbiology, 0, , .	1.4	1
122	Use of Gnotobiotic Mice in the Study of Metabolic Syndrome. , 2017, , 385-390.		0
123	A Microbiota-Dependent Response to Anticancer Treatment in an In Vitro Human Microbiota Model: A Pilot Study With Hydroxycarbamide and Daunorubicin. Frontiers in Cellular and Infection Microbiology, 2022, 12, .	1.8	0
124	Ã‰mulsifiants alimentaires etÂmicrobiote intestinal. Medecine/Sciences, 2022, 38, 539-541.	0.0	0