Laure B Bindels

List of Publications by Year
in descending order

106 papers	11,659 citations	53794 45 h-index	29157 104 g-index
107 all docs	107 docs citations	107 times ranked	15830 citing authors

#	Article	IF	Citations
1	Cross-talk between <i>Akkermansia muciniphila</i> and intestinal epithelium controls diet-induced obesity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9066-9071.	7.1	3,474
2	Towards a more comprehensive concept for prebiotics. Nature Reviews Gastroenterology and Hepatology, 2015, 12, 303-310.	17.8	679
3	Insight into the prebiotic concept: lessons from an exploratory, double blind intervention study with inulin-type fructans in obese women. Gut, 2013, 62, 1112-1121.	12.1	632
4	Low-dose penicillin in early life induces long-term changes in murine gut microbiota, brain cytokines and behavior. Nature Communications, 2017, 8, 15062.	12.8	329
5	Prebiotics: why definitions matter. Current Opinion in Biotechnology, 2016, 37, 1-7.	6.6	326
6	Gut microbiota-derived propionate reduces cancer cell proliferation in the liver. British Journal of Cancer, 2012, 107, 1337-1344.	6.4	238
7	Inulin-type fructans with prebiotic properties counteract GPR43 overexpression and PPARÎ^{3}-related adipogenesis in the white adipose tissue of high-fat diet-fed mice. Journal of Nutritional Biochemistry, 2011, 22, 712-722.	4.2	237
8	Gut microorganisms as promising targets for the management of type 2 diabetes. Diabetologia, 2015, 58, 2206-2217.	6.3	220
9	Inulin-type fructans modulate intestinal Bifidobacterium species populations and decrease fecal short-chain fatty acids in obese women. Clinical Nutrition, 2015, 34, 501-507.	5.0	220
10	Polyphenol-rich extract of pomegranate peel alleviates tissue inflammation and hypercholesterolaemia in high-fat diet-induced obese mice: potential implication of the gut microbiota. British Journal of Nutrition, 2013, 109, 802-809.	2.3	197
11	Intestinal epithelial MyD88 is a sensor switching host metabolism towards obesity according to nutritional status. Nature Communications, 2014, 5, 5648.	12.8	197
12	Intake of <i>Lactobacillus reuteri</i> Improves Incretin and Insulin Secretion in Glucose-Tolerant Humans: A Proof of Concept. Diabetes Care, 2015, 38, 1827-1834.	8.6	194
13	Restoring Specific Lactobacilli Levels Decreases Inflammation and Muscle Atrophy Markers in an Acute Leukemia Mouse Model. PLoS ONE, 2012, 7, e37971.	2.5	186
14	GPR43/FFA2: physiopathological relevance and therapeutic prospects. Trends in Pharmacological Sciences, 2013, 34, 226-232.	8.7	172
15	Targeting the gut microbiota with inulin-type fructans: preclinical demonstration of a novel approach in the management of endothelial dysfunction. Gut, 2018, 67, 271-283.	12.1	150
16	Synbiotic approach restores intestinal homeostasis and prolongs survival in leukaemic mice with cachexia. ISME Journal, 2016, 10, 1456-1470.	9.8	149
17	Coenzyme Q10 supplementation lowers hepatic oxidative stress and inflammation associated with diet-induced obesity in mice. Biochemical Pharmacology, 2009, 78, 1391-1400.	4.4	145
18	Muscle wasting: The gut microbiota as a new therapeutic target?. International Journal of Biochemistry and Cell Biology, 2013, 45, 2186-2190.	2.8	143

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19	Discovery of the gut microbial signature driving the efficacy of prebiotic intervention in obese patients. Gut, 2020, 69, 1975-1987.	12.1	141
20	Rhubarb extract prevents hepatic inflammation induced by acute alcohol intake, an effect related to the modulation of the gut microbiota. Molecular Nutrition and Food Research, 2017, 61, 1500899.	3.3	138
21	The gut microbiota metabolite indole alleviates liver inflammation in mice. FASEB Journal, 2018, 32, 6681-6693.	0.5	137
22	Synbiotics Alter Fecal Microbiomes, But Not Liver Fat or Fibrosis, in a Randomized Trial of Patients With Nonalcoholic Fatty Liver Disease. Gastroenterology, 2020, 158, 1597-1610.e7.	1.3	123
23	Effects of a diet based on inulin-rich vegetables on gut health and nutritional behavior in healthy humans. American Journal of Clinical Nutrition, 2019, 109, 1683-1695.	4.7	121
24	Resistant starch can improve insulin sensitivity independently of the gut microbiota. Microbiome, 2017, 5, 12.	11.1	113
25	Non Digestible Oligosaccharides Modulate the Gut Microbiota to Control the Development of Leukemia and Associated Cachexia in Mice. PLoS ONE, 2015, 10, e0131009.	2.5	109
26	Gut microbiota and osteoarthritis management: An expert consensus of the European society for clinical and economic aspects of osteoporosis, osteoarthritis and musculoskeletal diseases (ESCEO). Ageing Research Reviews, 2019, 55, 100946.	10.9	103
27	<i>Dysosmobacter welbionis</i> is a newly isolated human commensal bacterium preventing diet-induced obesity and metabolic disorders in mice. Gut, 2022, 71, 534-543.	12.1	95
28	Critical role of Kupffer cells in the management of diet-induced diabetes and obesity. Biochemical and Biophysical Research Communications, 2009, 385, 351-356.	2.1	91
29	Increased gut permeability in cancer cachexia: mechanisms and clinical relevance. Oncotarget, 2018, 9, 18224-18238.	1.8	90
30	Gut Microbiota-Induced Changes in Î²-Hydroxybutyrate Metabolism Are Linked to Altered Sociability and Depression in Alcohol Use Disorder. Cell Reports, 2020, 33, 108238.	6.4	87
31	Link between gut microbiota and health outcomes in inulin -treated obese patients: Lessons from the Food4Gut multicenter randomized placebo-controlled trial. Clinical Nutrition, 2020, 39, 3618-3628.	5.0	87
32	Resistant starches for the management of metabolic diseases. Current Opinion in Clinical Nutrition and Metabolic Care, 2015, 18, 559-565.	2.5	84
33	Contribution of the gut microbiota to the regulation of host metabolism and energy balance: a focus on the gutâ€"liver axis. Proceedings of the Nutrition Society, 2019, 78, 319-328.	1.0	84
34	Changes in Intestinal Bifidobacteria Levels Are Associated with the Inflammatory Response in Magnesium-Deficient Mice. Journal of Nutrition, 2010, 140, 509-514.	2.9	83
35	Commensal Escherichia coli Strains Can Promote Intestinal Inflammation via Differential Interleukin-6 Production. Frontiers in Immunology, 2018, 9, 2318.	4.8	80
36	Dietary supplementation with chitosan derived from mushrooms changes adipocytokine profile in diet-induced obese mice, a phenomenon linked to its lipid-lowering action. International Immunopharmacology, 2009, 9, 767-773.	3.8	78

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37	The DPP-4 inhibitor vildagliptin impacts the gut microbiota and prevents disruption of intestinal homeostasis induced by a Western diet in mice. Diabetologia, 2018, 61, 1838-1848.	6.3	76
38	Klebsiella oxytoca expands in cancer cachexia and acts as a gut pathobiont contributing to intestinal dysfunction. Scientific Reports, 2018, 8, 12321.	3.3	71
39	A polyphenolic extract from green tea leaves activates fat browning in high-fat-diet-induced obese mice. Journal of Nutritional Biochemistry, 2017, 49, 15-21.	4.2	64
40	How do probiotics and prebiotics function at distant sites?. Beneficial Microbes, 2017, 8, 521-533.	2.4	61
41	Crosstalk between bile acid-activated receptors and microbiome in entero-hepatic inflammation. Trends in Molecular Medicine, 2022, 28, 223-236.	6.7	58
42	Increased Serpina3n release into circulation during glucocorticoidâ€mediated muscle atrophy. Journal of Cachexia, Sarcopenia and Muscle, 2018, 9, 929-946.	7.3	53
43	Fat binding capacity and modulation of the gut microbiota both determine the effect of wheat bran fractions on adiposity. Scientific Reports, 2017, 7, 5621.	3.3	51
44	Spirulina Protects against Hepatic Inflammation in Aging: An Effect Related to the Modulation of the Gut Microbiota?. Nutrients, 2017, 9, 633.	4.1	49
45	Ability of the gut microbiota to produce PUFAâ€derived bacterial metabolites: Proof of concept in germâ€free versus conventionalized mice. Molecular Nutrition and Food Research, 2015, 59, 1603-1613.	3.3	48
46	Can prebiotics and probiotics improve therapeutic outcomes for undernourished individuals?. Gut Microbes, 2014, 5, 74-82.	9.8	47
47	The Potential Role of the Dipeptidyl Peptidase-4-Like Activity From the Gut Microbiota on the Host Health. Frontiers in Microbiology, 2018, 9, 1900.	3.5	47
48	Prebiotic dietary fibre intervention improves fecal markers related to inflammation in obese patients: results from the Food4Gut randomized placebo-controlled trial. European Journal of Nutrition, 2021, 60, 3159-3170.	3.9	46
49	The nuclear receptor FXR inhibits Glucagon-Like Peptide-1 secretion in response to microbiota-derived Short-Chain Fatty Acids. Scientific Reports, 2020, 10, 174.	3.3	45
50	Disparate Metabolic Responses in Mice Fed a High-Fat Diet Supplemented with Maize-Derived Non-Digestible Feruloylated Oligo- and Polysaccharides Are Linked to Changes in the Gut Microbiota. PLoS ONE, 2016, 11, e0146144.	2.5	43
51	Hepatic steatosis in n-3 fatty acid depleted mice: focus on metabolic alterations related to tissue fatty acid composition. BMC Physiology, 2008, 8, 21.	3.6	42
52	A gut pathobiont synergizes with the microbiota to instigate inflammatory disease marked by immunoreactivity against other symbionts but not itself. Scientific Reports, 2017, 7, 17707.	3.3	41
53	Evaluation of the relationship between GPR43 and adiposity in human. Nutrition and Metabolism, 2013, 10, 11.	3.0	40
54	Gut microbiota alteration in a mouse model of Anorexia Nervosa. Clinical Nutrition, 2021, 40, 181-189.	5.0	40

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55	Ganoderma lucidum, a new prebiotic agent to treat obesity?. Nature Reviews Gastroenterology and Hepatology, 2015, 12, 553-554.	17.8	39
56	Milk Polar Lipids in a Highâ€Fat Diet Can Prevent Body Weight Gain: Modulated Abundance of Gut Bacteria in Relation with Fecal Loss of Specific Fatty Acids. Molecular Nutrition and Food Research, 2019, 63, e1801078.	3.3	35
57	Functional Effects of EPS-Producing Bifidobacterium Administration on Energy Metabolic Alterations of Diet-Induced Obese Mice. Frontiers in Microbiology, 2019, 10, 1809.	3.5	35
58	Prebiotic effect on mood in obese patients is determined by the initial gut microbiota composition: A randomized, controlled trial. Brain, Behavior, and Immunity, 2021, 94, 289-298.	4.1	35
59	Design and rationale of the INSYTE study: A randomised, placebo controlled study to test the efficacy of a synbiotic on liver fat, disease biomarkers and intestinal microbiota in non-alcoholic fatty liver disease. Contemporary Clinical Trials, 2018, 71, 113-123.	1.8	31
60	Metabolite profiling reveals the interaction of chitin-glucan with the gut microbiota. Gut Microbes, 2020, 12, 1810530.	9.8	31
61	Multiâ€compartment metabolomics and metagenomics reveal major hepatic and intestinal disturbances in cancer cachectic mice. Journal of Cachexia, Sarcopenia and Muscle, 2021, 12, 456-475.	7.3	30
62	Specific gut microbial, biological, and psychiatric profiling related to binge eating disorders: A cross-sectional study in obese patients. Clinical Nutrition, 2021, 40, 2035-2044.	5.0	30
63	Microbiota analysis and transient elastography reveal new extra-hepatic components of liver steatosis and fibrosis in obese patients. Scientific Reports, 2021, 11, 659.	3.3	29
64	Wheat-derived arabinoxylan oligosaccharides with bifidogenic properties abolishes metabolic disorders induced by western diet in mice. Nutrition and Diabetes, 2018, 8, 15.	3.2	28
65	Targeting the Gut Microbiota to Treat Cachexia. Frontiers in Cellular and Infection Microbiology, 2019, 9, 305.	3.9	28
66	Bile acids contribute to the development of non-alcoholic steatohepatitis in mice. JHEP Reports, 2022, 4, 100387.	4.9	28
67	Immunomodulatory properties of two wheat bran fractions â€" aleurone-enriched and crude fractions â€" in obese mice fed a high fat diet. International Immunopharmacology, 2008, 8, 1423-1432.	3.8	27
68	Lipid peroxidation is not a prerequisite for the development of obesity and diabetes in high-fat-fed mice. British Journal of Nutrition, 2009, 102, 462-469.	2.3	27
69	Intestinal Sucrase as a Novel Target Contributing to the Regulation of Glycemia by Prebiotics. PLoS ONE, 2016, 11, e0160488.	2.5	27
70	Hepatoprotective Effects of Indole, a Gut Microbial Metabolite, in Leptin-Deficient Obese Mice. Journal of Nutrition, 2021, 151, 1507-1516.	2.9	27
71	Iron supplementation is sufficient to rescue skeletal muscle mass and function in cancer cachexia. EMBO Reports, 2022, 23, e53746.	4.5	26
72	Microbiome metabolomics reveals new drivers of human liver steatosis. Nature Medicine, 2018, 24, 906-907.	30.7	25

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73	Chitinâ€“glucan and pomegranate polyphenols improve endothelial dysfunction. Scientific Reports, 2019, 9, 14150.	3.3	25
74	Particle size determines the anti-inflammatory effect of wheat bran in a model of fructose over-consumption: Implication of the gut microbiota. Journal of Functional Foods, 2018, 41, 155-162.	3.4	24
75	Inulin Improves Postprandial Hypertriglyceridemia by Modulating Gene Expression in the Small Intestine. Nutrients, 2018, 10, 532.	4.1	24
76	A dynamic association between myosteatosis and liver stiffness: Results from a prospective interventional study in obese patients. JHEP Reports, 2021, 3, 100323.	4.9	24
77	Inflammationâ€induced cholestasis in cancer cachexia. Journal of Cachexia, Sarcopenia and Muscle, 2021, 12, 70-90.	7.3	24
78	Cachexia, a Systemic Disease beyond Muscle Atrophy. International Journal of Molecular Sciences, 2020, 21, 8592.	4.1	22
79	Prebiotic Effect of Berberine and Curcumin Is Associated with the Improvement of Obesity in Mice. Nutrients, 2021, 13, 1436.	4.1	22
80	Physical activity enhances the improvement of body mass index and metabolism by inulin: a multicenter randomized placebo-controlled trial performed in obese individuals. BMC Medicine, 2022, 20, 110.	5.5	21
81	Galactooligosaccharide supplementation provides protection against Citrobacter rodentium-induced colitis without limiting pathogen burden. Microbiology (United Kingdom), 2018, 164, 154-162.	1.8	20
82	Predictors of tacrolimus pharmacokinetic variability: current evidences and future perspectives. Expert Opinion on Drug Metabolism and Toxicology, 2020, 16, 769-782.	3.3	19
83	Effects of probiotics and synbiotics on diarrhea in undernourished children: Systematic review with meta-analysis. Clinical Nutrition, 2021, 40, 3158-3169.	5.0	19
84	Improvement of gastrointestinal discomfort and inflammatory status by a synbiotic in middle-aged adults: a double-blind randomized placebo-controlled trial. Scientific Reports, 2021, 11, 2627.	3.3	18
85	A Preventive Prebiotic Supplementation Improves the Sweet Taste Perception in Diet-Induced Obese Mice. Nutrients, 2019, 11, 549.	4.1	17
86	Nutrition in cancer patients with cachexia: A role for the gut microbiota?. Clinical Nutrition Experimental, 2016, 6, 74-82.	2.0	16
87	Food for thought about manipulating gut bacteria. Nature, 2020, 577, 32-34.	27.8	16
88	The Janus Face of Cereals: Wheatâ€Derived Prebiotics Counteract the Detrimental Effect of Gluten on Metabolic Homeostasis in Mice Fed a Highâ€Fat/Highâ€Sucrose Diet. Molecular Nutrition and Food Research, 2019, 63, e1900632.	3.3	15
89	Restoring an adequate dietary fiber intake by inulin supplementation: a pilot study showing an impact on gut microbiota and sociability in alcohol use disorder patients. Gut Microbes, 2022, 14, 2007042.	9.8	15
90	Growth differentiation factor-15 and the association between type 2 diabetes and liver fibrosis in NAFLD. Nutrition and Diabetes, 2021, 11, 32.	3.2	13

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91	Ffar2 expression regulates leukaemic cell growth in vivo. British Journal of Cancer, 2017, 117, 1336-1340.	6.4	12
92	Dietary fiber deficiency as a component of malnutrition associated with psychological alterations in alcohol use disorder. Clinical Nutrition, 2021, 40, 2673-2682.	5.0	11
93	Contribution of gut microbiotaâ€"host cooperation to drug efficacy. Nature Reviews Gastroenterology and Hepatology, 2018, 15, 69-70.	17.8	10
94	Stearidonicâ€Enriched Soybean Oil Modulates Obesity, Glucose Metabolism, and Fatty Acid Profiles Independently of <i>Akkermansia muciniphila</i>. Molecular Nutrition and Food Research, 2020, 64, e2000162.	3.3	8
95	Noninvasive monitoring of fibre fermentation in healthy volunteers by analyzing breath volatile metabolites: lessons from the FiberTAG intervention study. Gut Microbes, 2021, 13, 1-16.	9.8	8
96	Implication of trans-11,trans-13 conjugated linoleic acid in the development of hepatic steatosis. PLoS ONE, 2018, 13, e0192447.	2.5	8
97	Colonic acetate in obesity: location matters!. Clinical Science, 2016, 130, 2083-2086.	4.3	7
98	Marked Increased Production of Acute Phase Reactants by Skeletal Muscle during Cancer Cachexia. Cancers, 2020, 12, 3221.	3.7	7
99	Breath volatile metabolome reveals the impact of dietary fibres on the gut microbiota: Proof of concept in healthy volunteers. EBioMedicine, 2022, 80, 104051.	6.1	7
100	Polyunsaturated fatty acids, polyphenols, amino acids, prebiotics. Current Opinion in Clinical Nutrition and Metabolic Care, 2018, 21, 458-464.	2.5	6
101	Activin A Causes Muscle Atrophy through MEF2C-Dependent Impaired Myogenesis. Cells, 2022, 11, 1119.	4.1	6
102	Microbiota and Metabolite Profiling as Markers of Mood Disorders: A Cross-Sectional Study in Obese Patients. Nutrients, 2022, 14, 147.	4.1	6
103	Lack of anti-inflammatory effect of coenzyme Q10 supplementation in the liver of rodents after lipopolysaccharide challenge. Clinical Nutrition Experimental, 2015, 1, 10-18.	2.0	4
104	The RNA-binding protein tristetraprolin regulates RALDH2 expression by intestinal dendritic cells and controls local Treg homeostasis. Mucosal Immunology, 2021, 14, 80-91.	6.0	4
105	Bile Acid Dysregulation Is Intrinsically Related to Cachexia in Tumor-Bearing Mice. Cancers, 2021, 13, 6389.	3.7	4
106	Interactions entre les traitements du diabÃ¨te et le microbiote intestinalÂ: Ã©tat des connaissances et perspectives. Medecine Des Maladies Metaboliques, 2022, 16, 148-159.	0.1	1