

Nicolas Barnich

List of Publications by Year in descending order

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Version: 2024-02-01

109
papers

10,293
citations

57758

44
h-index

36028

97
g-index

114
all docs

114
docs citations

114
times ranked

9985
citing authors

#	ARTICLE	IF	CITATIONS
1	Role of adherent and invasive <i>Escherichia coli</i> in Crohn's disease: lessons from the postoperative recurrence model. <i>Gut</i> , 2023, 72, 39-48.	12.1	22
2	Effect of Concurrent Training on Body Composition and Gut Microbiota in Postmenopausal Women with Overweight or Obesity. <i>Medicine and Science in Sports and Exercise</i> , 2022, 54, 517-529.	0.4	20
3	Anti-TNF Agents Restrict Adherent-invasive <i>Escherichia coli</i> Replication Within Macrophages Through Modulation of Chitinase 3-like 1 in Patients with Crohn's Disease. <i>Journal of Crohn's and Colitis</i> , 2022, 16, 1140-1150.	1.3	5
4	The Nutrition-Microbiota-Physical Activity Triad: An Inspiring New Concept for Health and Sports Performance. <i>Nutrients</i> , 2022, 14, 924.	4.1	9
5	Beneficial Effects of Linseed Supplementation on Gut Mucosa-Associated Microbiota in a Physically Active Mouse Model of Crohn's Disease. <i>International Journal of Molecular Sciences</i> , 2022, 23, 5891.	4.1	7
6	Phage Therapy Against Adherent-invasive <i>E. coli</i> : Towards a Promising Treatment of Crohn's Disease Patients?. <i>Journal of Crohn's and Colitis</i> , 2022, 16, 1509-1510.	1.3	5
7	High-Intensity Interval Training and ω -3-Linolenic Acid Supplementation Improve DHA Conversion and Increase the Abundance of Gut Mucosa-Associated <i>Oscillospira</i> Bacteria. <i>Nutrients</i> , 2021, 13, 788.	4.1	11
8	Yersiniabactin Siderophore of Crohn's Disease-Associated Adherent-Invasive <i>Escherichia coli</i> Is Involved in Autophagy Activation in Host Cells. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3512.	4.1	5
9	Colibactin-Producing <i>Escherichia coli</i> Induce the Formation of Invasive Carcinomas in a Chronic Inflammation-Associated Mouse Model. <i>Cancers</i> , 2021, 13, 2060.	3.7	19
10	Beneficial Effects of Natural Mineral Waters on Intestinal Inflammation and the Mucosa-Associated Microbiota. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4336.	4.1	10
11	The Crohn's disease-related bacterial strain LF82 assembles biofilm-like communities to protect itself from phagolysosomal attack. <i>Communications Biology</i> , 2021, 4, 627.	4.4	21
12	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. <i>Nutrients</i> , 2021, 13, 1569.	4.1	13
13	Gut Microbiota as Potential Biomarker and/or Therapeutic Target to Improve the Management of Cancer: Focus on Colibactin-Producing <i>Escherichia coli</i> in Colorectal Cancer. <i>Cancers</i> , 2021, 13, 2215.	3.7	29
14	The Role of OmpR in Bile Tolerance and Pathogenesis of Adherent-Invasive <i>Escherichia coli</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 684473.	3.5	10
15	Heteropolysaccharides from <i>S. cerevisiae</i> show anti-adhesive properties against <i>E. coli</i> associated with Crohn's disease. <i>Carbohydrate Polymers</i> , 2021, 271, 118415.	10.2	8
16	Blockage of bacterial FimH prevents mucosal inflammation associated with Crohn's disease. <i>Microbiome</i> , 2021, 9, 176.	11.1	22
17	When Pathobiont-Carbohydrate Interaction Turns Bittersweet!. <i>Cellular and Molecular Gastroenterology and Hepatology</i> , 2021, 12, 1509-1510.	4.5	1
18	Propionate catabolism by CD-associated adherent-invasive <i>E. coli</i> counteracts its anti-inflammatory effect. <i>Gut Microbes</i> , 2021, 13, 1-18.	9.8	22

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19	Beneficial Effects of High Intensity Interval Training and/or Linseed Oil Supplementation to Limit Obesity-Induced Oxidative Stress in High Fat Diet-Fed Rats. <i>Nutrients</i> , 2021, 13, 3531.	4.1	3
20	Faster and less invasive tools to identify patients with ileal colonization by adherent-invasive <i>E. coli</i> in Crohn's disease. <i>United European Gastroenterology Journal</i> , 2021, 9, 1007-1018.	3.8	11
21	Adaptation of adherent-invasive <i>E. coli</i> to gut environment: Impact on flagellum expression and bacterial colonization ability. <i>Gut Microbes</i> , 2020, 11, 364-380.	9.8	49
22	Prominence of ileal mucosa-associated microbiota to predict postoperative endoscopic recurrence in Crohn's disease. <i>Gut</i> , 2020, 69, 462-472.	12.1	76
23	New insights into the interplay between autophagy, gut microbiota and inflammatory responses in IBD. <i>Autophagy</i> , 2020, 16, 38-51.	9.1	406
24	Dietary l-serine confers a competitive fitness advantage to Enterobacteriaceae in the inflamed gut. <i>Nature Microbiology</i> , 2020, 5, 116-125.	13.3	93
25	Autophagy of Intestinal Epithelial Cells Inhibits Colorectal Carcinogenesis Induced by Colibactin-Producing <i>Escherichia coli</i> in Apc Mice. <i>Gastroenterology</i> , 2020, 158, 1373-1388.	1.3	53
26	Pathogenicity Factors of Genomic Islands in Intestinal and Extraintestinal <i>Escherichia coli</i> . <i>Frontiers in Microbiology</i> , 2020, 11, 2065.	3.5	77
27	Dietary Emulsifiers Directly Impact Adherent-Invasive <i>E. coli</i> Gene Expression to Drive Chronic Intestinal Inflammation. <i>Cell Reports</i> , 2020, 33, 108229.	6.4	66
28	TH1 cell-inducing <i>Escherichia coli</i> strain identified from the small intestinal mucosa of patients with Crohn's disease. <i>Gut Microbes</i> , 2020, 12, 1788898.	9.8	40
29	Ulcerative Colitis-associated <i>E. coli</i> pathobionts potentiate colitis in susceptible hosts. <i>Gut Microbes</i> , 2020, 12, 1847976.	9.8	26
30	Methyl-donor supplementation prevents intestinal colonization by Adherent-Invasive <i>E. coli</i> in a mouse model of Crohn's disease. <i>Scientific Reports</i> , 2020, 10, 12922.	3.3	9
31	Differential miRNA-Gene Expression in M Cells in Response to Crohn's Disease-Associated AIEC. <i>Microorganisms</i> , 2020, 8, 1205.	3.6	2
32	Study of a classification algorithm for AIEC identification in geographically distinct <i>E. coli</i> strains. <i>Scientific Reports</i> , 2020, 10, 8094.	3.3	7
33	Emerging Role of Exosomes in Diagnosis and Treatment of Infectious and Inflammatory Bowel Diseases. <i>Cells</i> , 2020, 9, 1111.	4.1	29
34	Exosomes transfer miRNAs from cell-to-cell to inhibit autophagy during infection with Crohn's disease-associated adherent-invasive <i>E. coli</i> . <i>Gut Microbes</i> , 2020, 11, 1677-1694.	9.8	22
35	Characterization of mucosa-associated <i>Escherichia coli</i> strains isolated from Crohn's disease patients in Brazil. <i>BMC Microbiology</i> , 2020, 20, 178.	3.3	12
36	When Adherent-invasive <i>E. coli</i> plays with host glycosylation: Does it open new perspectives for therapeutic strategies in Crohn's disease?. <i>EBioMedicine</i> , 2020, 55, 102752.	6.1	2

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37	Colibactin-positive <i>Escherichia coli</i> induce a procarcinogenic immune environment leading to immunotherapy resistance in colorectal cancer. <i>International Journal of Cancer</i> , 2020, 146, 3147-3159.	5.1	59
38	Prognostic value of a combination of innovative factors (gut microbiota, sarcopenia, obesity,) in colorectal cancer: a prospective cohort study protocol (METABIOTE). <i>BMJ Open</i> , 2020, 10, e031472.	1.9	8
39	Adherent-Invasive <i>E. coli</i> : Update on the Lifestyle of a Troublemaker in Crohn's Disease. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3734.	4.1	57
40	Tissue-Specific Oxidative Stress Modulation by Exercise: A Comparison between MICT and HIIT in an Obese Rat Model. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-11.	4.0	25
41	Heptylmannose-functionalized cellulose for the binding and specific detection of pathogenic <i>E. coli</i> . <i>Chemical Communications</i> , 2019, 55, 10158-10161.	4.1	13
42	Macrophages Inability to Mediate Adherent-Invasive <i>E. coli</i> Replication is Linked to Autophagy in Crohn's Disease Patients. <i>Cells</i> , 2019, 8, 1394.	4.1	17
43	The Crohn's disease-associated <i>Escherichia coli</i> strain LF82 relies on SOS and stringent responses to survive, multiply and tolerate antibiotics within macrophages. <i>PLoS Pathogens</i> , 2019, 15, e1008123.	4.7	44
44	Intestinal Microbiota: A Novel Target to Improve Anti-Tumor Treatment?. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4584.	4.1	72
45	High intensity interval training promotes total and visceral fat mass loss in obese Zucker rats without modulating gut microbiota. <i>PLoS ONE</i> , 2019, 14, e0214660.	2.5	26
46	Flagellin-mediated activation of IL-33-ST2 signaling by a pathobiont promotes intestinal fibrosis. <i>Mucosal Immunology</i> , 2019, 12, 632-643.	6.0	57
47	T cell clonal expansions in ileal Crohn's disease are associated with smoking behaviour and postoperative recurrence. <i>Gut</i> , 2019, 68, 1961-1970.	12.1	35
48	Metabolic adaptation of adherent-invasive <i>Escherichia coli</i> to exposure to bile salts. <i>Scientific Reports</i> , 2019, 9, 2175.	3.3	53
49	Preventive Effect of Spontaneous Physical Activity on the Gut-Adipose Tissue in a Mouse Model That Mimics Crohn's Disease Susceptibility. <i>Cells</i> , 2019, 8, 33.	4.1	10
50	Crohn's Disease-Associated Adherent-Invasive <i>Escherichia coli</i> Manipulate Host Autophagy by Impairing SUMOylation. <i>Cells</i> , 2019, 8, 35.	4.1	26
51	Adherent-invasive <i>Escherichia coli</i> in inflammatory bowel disease. <i>Gut</i> , 2018, 67, 574-587.	12.1	366
52	Adherent-Invasive <i>E. coli</i> enhances colonic hypersensitivity and P2X receptors expression during post-infectious period. <i>Gut Microbes</i> , 2018, 9, 26-37.	9.8	21
53	Colibactin: More Than a New Bacterial Toxin. <i>Toxins</i> , 2018, 10, 151.	3.4	159
54	Oligomannose-Rich Membranes of Dying Intestinal Epithelial Cells Promote Host Colonization by Adherent-Invasive <i>E. coli</i> . <i>Frontiers in Microbiology</i> , 2018, 9, 742.	3.5	15

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55	Microbial markers in colorectal cancer detection and/or prognosis. World Journal of Gastroenterology, 2018, 24, 2327-2347.	3.3	84
56	AIEC infection triggers modification of gut microbiota composition in genetically predisposed mice, contributing to intestinal inflammation. Scientific Reports, 2018, 8, 12301.	3.3	50
57	Interactions between microsatellite instability and human gut colonization by <i>Escherichia coli</i> in colorectal cancer. Clinical Science, 2017, 131, 471-485.	4.3	35
58	Comparative genomics of Crohn's disease-associated adherent-invasive <i>Escherichia coli</i> . Gut, 2017, 66, 1382-1389.	12.1	114
59	Physiochemical Tuning of Potent <i>Escherichia coli</i> Anti-Adhesives by Microencapsulation and Methylene Homologation. ChemMedChem, 2017, 12, 986-998.	3.2	14
60	Bacteriophages targeting adherent invasive <i>Escherichia coli</i> strains as a promising new treatment for Crohn's disease. Journal of Crohn's and Colitis, 2017, 11, jjw224.	1.3	102
61	Enterohemorrhagic <i>Escherichia coli</i> pathogenesis: role of Long polar fimbriae in Peyer's patches interactions. Scientific Reports, 2017, 7, 44655.	3.3	30
62	The potential of FimH as a novel therapeutic target for the treatment of Crohn's disease. Expert Opinion on Therapeutic Targets, 2017, 21, 837-847.	3.4	31
63	Microbiota, Inflammation and Colorectal Cancer. International Journal of Molecular Sciences, 2017, 18, 1310.	4.1	237
64	Differentiation of Crohn's Disease-Associated Isolates from Other Pathogenic <i>Escherichia coli</i> by Fimbrial Adhesion under Shear Force. Biology, 2016, 5, 14.	2.8	11
65	Gut microbiota imbalance and colorectal cancer. World Journal of Gastroenterology, 2016, 22, 501.	3.3	578
66	The Vat-AIEC protease promotes crossing of the intestinal mucus layer by Crohn's disease-associated <i>Escherichia coli</i> . Cellular Microbiology, 2016, 18, 617-631.	2.1	64
67	Macrophages Versus <i>Escherichia coli</i> . Inflammatory Bowel Diseases, 2016, 22, 2943-2955.	1.9	10
68	Western diet induces a shift in microbiota composition enhancing susceptibility to Adherent-Invasive <i>E. coli</i> infection and intestinal inflammation.. Scientific Reports, 2016, 6, 19032.	3.3	328
69	Exosomes: From Functions in Host-Pathogen Interactions and Immunity to Diagnostic and Therapeutic Opportunities. Reviews of Physiology, Biochemistry and Pharmacology, 2016, 172, 39-75.	1.6	19
70	GipA Factor Supports Colonization of Peyer's Patches by Crohn's Disease-associated <i>Escherichia coli</i> . Inflammatory Bowel Diseases, 2016, 22, 68-81.	1.9	41
71	Exosomes Released from Cells Infected with Crohn's Disease-associated Adherent-Invasive <i>Escherichia coli</i> Activate Host Innate Immune Responses and Enhance Bacterial Intracellular Replication. Inflammatory Bowel Diseases, 2016, 22, 516-528.	1.9	29
72	The Antiadhesive Strategy in Crohn's Disease: Orally Active Mannosides to Decolonize Pathogenic <i>Escherichia coli</i> from the Gut. ChemBioChem, 2016, 17, 936-952.	2.6	46

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73	Activation of the EIF2AK4-EIF2A/eIF2 $\hat{\pm}$ -ATF4 pathway triggers autophagy response to Crohn disease-associated adherent-invasive <i>Escherichia coli</i> infection. <i>Autophagy</i> , 2016, 12, 770-783.	9.1	54
74	A library of heptyl mannose-functionalized copolymers with distinct compositions, microstructures and neighboring non-sugar motifs as potent antiadhesives of type 1 pilated <i>E. coli</i> . <i>Polymer Chemistry</i> , 2016, 7, 2674-2683.	3.9	11
75	Influenza A Virus Infection of Intestinal Epithelial Cells Enhances the Adhesion Ability of Crohn's Disease Associated <i>Escherichia coli</i> Strains. <i>PLoS ONE</i> , 2015, 10, e0117005.	2.5	11
76	Monocyte-derived Macrophages from Crohn's Disease Patients Are Impaired in the Ability to Control Intracellular Adherent-Invasive <i>Escherichia coli</i> and Exhibit Disordered Cytokine Secretion Profile. <i>Journal of Crohn's and Colitis</i> , 2015, 9, 410-420.	1.3	45
77	Glycopolymers as Antiadhesives of <i>E. coli</i> Strains Inducing Inflammatory Bowel Diseases. <i>Biomacromolecules</i> , 2015, 16, 1827-1836.	5.4	58
78	Development of Heptylmannoside-Based Glycoconjugate Antiadhesive Compounds against Adherent-Invasive <i>Escherichia coli</i> Bacteria Associated with Crohn's Disease. <i>MBio</i> , 2015, 6, e01298-15.	4.1	56
79	Analysis of the σ^E Regulon in Crohn's Disease-Associated <i>Escherichia coli</i> Revealed Involvement of the waaWVL Operon in Biofilm Formation. <i>Journal of Bacteriology</i> , 2015, 197, 1451-1465.	2.2	20
80	Brilliant glyconanocapsules for trapping of bacteria. <i>Chemical Communications</i> , 2015, 51, 13193-13196.	4.1	16
81	Mo1777 Involvement of Type VI Secretion Systems in Virulence of Adherent-Invasive <i>Escherichia coli</i> Isolated From Patients With Crohn's Disease. <i>Gastroenterology</i> , 2015, 148, S-709.	1.3	1
82	Ribonucleotide Reductase NrdR as a Novel Regulator for Motility and Chemotaxis during Adherent-Invasive <i>Escherichia coli</i> Infection. <i>Infection and Immunity</i> , 2015, 83, 1305-1317.	2.2	16
83	<i>Saccharomyces cerevisiae</i> CNCM I-3856 Prevents Colitis Induced by AIEC Bacteria in the Transgenic Mouse Model Mimicking Crohn's Disease. <i>Inflammatory Bowel Diseases</i> , 2015, 21, 276-286.	1.9	65
84	Diet-induced hypoxia responsive element demethylation increases CEACAM6 expression, favouring Crohn's disease-associated <i>Escherichia coli</i> colonisation. <i>Gut</i> , 2015, 64, 428-437.	12.1	35
85	Western diet induces dysbiosis with increased <i>E. coli</i> in CEABAC10 mice, which alters host barrier function favouring AIEC colonisation. <i>Gut</i> , 2014, 63, 116-124.	12.1	417
86	In Memoriam, Arlette Darfeuille-Michaud, PhD. <i>Gut</i> , 2014, 63, 1681-1682.	12.1	4
87	Understanding Host-Adherent-Invasive <i>Escherichia coli</i> Interaction in Crohn's Disease: Opening Up New Therapeutic Strategies. <i>BioMed Research International</i> , 2014, 2014, 1-16.	1.9	51
88	Chitin-Binding Domains of <i>Escherichia coli</i> ChiA Mediate Interactions With Intestinal Epithelial Cells in Mice With Colitis. <i>Gastroenterology</i> , 2013, 145, 602-612.e9.	1.3	91
89	Point Mutations in FimH Adhesin of Crohn's Disease-Associated Adherent-Invasive <i>Escherichia coli</i> Enhance Intestinal Inflammatory Response. <i>PLoS Pathogens</i> , 2013, 9, e1003141.	4.7	150
90	Transient Inability to Manage Proteobacteria Promotes Chronic Gut Inflammation in TLR5-Deficient Mice. <i>Cell Host and Microbe</i> , 2012, 12, 139-152.	11.0	459

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91	Adherent-Invasive Escherichia coli Induce Claudin-2 Expression and Barrier Defect in CEABAC10 Mice and Crohn's Disease Patients. Inflammatory Bowel Diseases, 2012, 18, 294-304.	1.9	77
92	Crohn disease-associated Escherichia coli promote gastrointestinal inflammatory disorders by activation of HIF-dependent responses. Gut Microbes, 2011, 2, 335-346.	9.8	46
93	Immunopathogenesis of inflammatory bowel disease. Self/nonself, 2010, 1, 299-309.	2.0	177
94	Role of Decreased Levels of Fis Histone-Like Protein in Crohn's Disease-Associated Adherent Invasive Escherichia coli LF82 Bacteria Interacting with Intestinal Epithelial Cells. Journal of Bacteriology, 2010, 192, 1832-1843.	2.2	15
95	Abnormally expressed ER stress response chaperone Gp96 in CD favours adherent-invasive Escherichia coli invasion. Gut, 2010, 59, 1355-1362.	12.1	118
96	Abnormal CEACAM6 expression in Crohn disease patients favors gut colonization and inflammation by Adherent-Invasive E. coli. Virulence, 2010, 1, 281-282.	4.4	42
97	Crohn's disease adherent-invasive Escherichia coli colonize and induce strong gut inflammation in transgenic mice expressing human CEACAM. Journal of Experimental Medicine, 2009, 206, 2179-2189.	8.5	269
98	Crohn's disease-associated Escherichia coli LF82 aggravates colitis in injured mouse colon via signaling by flagellin. Inflammatory Bowel Diseases, 2008, 14, 1051-1060.	1.9	110
99	Adherent-invasive Escherichia coli and Crohn's disease. Current Opinion in Gastroenterology, 2007, 23, 16-20.	2.3	126
100	CEACAM6 acts as a receptor for adherent-invasive E. coli, supporting ileal mucosa colonization in Crohn disease. Journal of Clinical Investigation, 2007, 117, 1566-1574.	8.2	490
101	Role of bacteria in the etiopathogenesis of inflammatory bowel disease. World Journal of Gastroenterology, 2007, 13, 5571.	3.3	64
102	Strong Decrease in Invasive Ability and Outer Membrane Vesicle Release in Crohn's Disease-Associated Adherent-Invasive Escherichia coli Strain LF82 with the yfgL Gene Deleted. Journal of Bacteriology, 2005, 187, 2286-2296.	2.2	100
103	HtrA Stress Protein Is Involved in Intramacrophagic Replication of Adherent and Invasive Escherichia coli Strain LF82 Isolated from a Patient with Crohn's Disease. Infection and Immunity, 2005, 73, 712-721.	2.2	103
104	Involvement of Lipoprotein Nlpl in the Virulence of Adherent Invasive Escherichia coli Strain LF82 Isolated from a Patient with Crohn's Disease. Infection and Immunity, 2004, 72, 2484-2493.	2.2	53
105	Type 1 pili-mediated adherence of Escherichia coli strain LF82 isolated from Crohn's disease is involved in bacterial invasion of intestinal epithelial cells. Molecular Microbiology, 2004, 39, 1272-1284.	2.5	187
106	High prevalence of adherent-invasive Escherichia coli associated with ileal mucosa in Crohn's disease. Gastroenterology, 2004, 127, 412-421.	1.3	1,325
107	Regulatory and functional co-operation of flagella and type 1 pili in adhesive and invasive abilities of AIEC strain LF82 isolated from a patient with Crohn's disease. Molecular Microbiology, 2003, 48, 781-794.	2.5	128
108	Adherent Invasive Escherichia coli Strains from Patients with Crohn's Disease Survive and Replicate within Macrophages without Inducing Host Cell Death. Infection and Immunity, 2001, 69, 5529-5537.	2.2	412

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109	Presence of adherent Escherichia coli strains in ileal mucosa of patients with Crohn's disease. Gastroenterology, 1998, 115, 1405-1413.	1.3	767