Nicolas Barnich

List of Publications by Year in descending order

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57758 36028 10,293 109 44 97 citations h-index g-index papers 114 114 114 9985 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	High prevalence of adherent-invasive Escherichia coli associated with ileal mucosa in Crohn's disease. Gastroenterology, 2004, 127, 412-421.	1.3	1,325
2	Presence of adherent Escherichia coli strains in ileal mucosa of patients with Crohn's disease. Gastroenterology, 1998, 115, 1405-1413.	1.3	767
3	Gut microbiota imbalance and colorectal cancer. World Journal of Gastroenterology, 2016, 22, 501.	3.3	578
4	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
5	Transient Inability to Manage Proteobacteria Promotes Chronic Gut Inflammation in TLR5-Deficient Mice. Cell Host and Microbe, 2012, 12, 139-152.	11.0	459
6	Western diet induces dysbiosis with increased <i>E coli</i> in CEABAC10 mice <i>,</i> alters host barrier function favouring AIEC colonisation. Gut, 2014, 63, 116-124.	12.1	417
7	Adherent Invasive <i>Escherichia coli</i> 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
8	New insights into the interplay between autophagy, gut microbiota and inflammatory responses in IBD. Autophagy, 2020, 16, 38-51.	9.1	406
9	Adherent-invasive <i>Escherichia coli</i> in inflammatory bowel disease. Gut, 2018, 67, 574-587.	12.1	366
10	Western diet induces a shift in microbiota composition enhancing susceptibility to Adherent-Invasive E. coli infection and intestinal inflammation Scientific Reports, 2016, 6, 19032.	3.3	328
11	Crohn's disease adherent-invasive <i>Escherichia coli</i> colonize and induce strong gut inflammation in transgenic mice expressing human CEACAM. Journal of Experimental Medicine, 2009, 206, 2179-2189.	8.5	269
12	Microbiota, Inflammation and Colorectal Cancer. International Journal of Molecular Sciences, 2017, 18, 1310.	4.1	237
13	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
14	Immunopathogenesis of inflammatory bowel disease. Self/nonself, 2010, 1, 299-309.	2.0	177
15	Colibactin: More Than a New Bacterial Toxin. Toxins, 2018, 10, 151.	3.4	159
16	Point Mutations in FimH Adhesin of Crohn's Disease-Associated Adherent-Invasive Escherichia coli Enhance Intestinal Inflammatory Response. PLoS Pathogens, 2013, 9, e1003141.	4.7	150
17	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
18	Adherent-invasive Escherichia coli and Crohn's disease. Current Opinion in Gastroenterology, 2007, 23, 16-20.	2.3	126

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19	Abnormally expressed ER stress response chaperone Gp96 in CD favours adherent-invasive Escherichia coli invasion. Gut, 2010, 59, 1355-1362.	12.1	118
20	Comparative genomics of Crohn's disease-associated adherent-invasive <i>Escherichia coli </i> . Gut, 2017, 66, 1382-1389.	12.1	114
21	Crohnʽs 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
22	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
23	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
24	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
25	Dietary l-serine confers a competitive fitness advantage to Enterobacteriaceae in the inflamed gut. Nature Microbiology, 2020, 5, 116-125.	13.3	93
26	Chitin-Binding Domains of Escherichia Coli ChiA Mediate Interactions With Intestinal Epithelial Cells in Mice With Colitis. Gastroenterology, 2013, 145, 602-612.e9.	1.3	91
27	Microbial markers in colorectal cancer detection and/or prognosis. World Journal of Gastroenterology, 2018, 24, 2327-2347.	3.3	84
28	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
29	Pathogenicity Factors of Genomic Islands in Intestinal and Extraintestinal Escherichia coli. Frontiers in Microbiology, 2020, 11, 2065.	3.5	77
30	Prominence of ileal mucosa-associated microbiota to predict postoperative endoscopic recurrence in Crohn's disease. Gut, 2020, 69, 462-472.	12.1	76
31	Intestinal Microbiota: A Novel Target to Improve Anti-Tumor Treatment?. International Journal of Molecular Sciences, 2019, 20, 4584.	4.1	72
32	Dietary Emulsifiers Directly Impact Adherent-Invasive E.Âcoli Gene Expression to Drive Chronic Intestinal Inflammation. Cell Reports, 2020, 33, 108229.	6.4	66
33	Saccharomyces cerevisiae CNCM I-3856 Prevents Colitis Induced by AIEC Bacteria in the Transgenic Mouse Model Mimicking Crohn's Disease. Inflammatory Bowel Diseases, 2015, 21, 276-286.	1.9	65
34	Role of bacteria in the etiopathogenesis of inflammatory bowel disease. World Journal of Gastroenterology, 2007, 13, 5571.	3.3	64
35	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
36	Colibactinâ€positive <scp><i>Escherichia coli</i></scp> induce a procarcinogenic immune environment leading to immunotherapy resistance in colorectal cancer. International Journal of Cancer, 2020, 146, 3147-3159.	5.1	59

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37	Glycopolymers as Antiadhesives of <i>E. coli</i> Strains Inducing Inflammatory Bowel Diseases. Biomacromolecules, 2015, 16, 1827-1836.	5.4	58
38	Flagellin-mediated activation of IL-33-ST2 signaling by a pathobiont promotes intestinal fibrosis. Mucosal Immunology, 2019, 12, 632-643.	6.0	57
39	Adherent-Invasive E. coli: Update on the Lifestyle of a Troublemaker in Crohn's Disease. International Journal of Molecular Sciences, 2020, 21, 3734.	4.1	57
40	Development of Heptylmannoside-Based Glycoconjugate Antiadhesive Compounds against Adherent-Invasive Escherichia coli Bacteria Associated with Crohn's Disease. MBio, 2015, 6, e01298-15.	4.1	56
41	Activation of the EIF2AK4-EIF2A/eIF2α-ATF4 pathway triggers autophagy response to Crohn disease-associated adherent-invasive <i>Escherichia coli</i> infection. Autophagy, 2016, 12, 770-783.	9.1	54
42	Involvement of Lipoprotein NlpI 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
43	Metabolic adaptation of adherent-invasive Escherichia coli to exposure to bile salts. Scientific Reports, 2019, 9, 2175.	3.3	53
44	Autophagy of Intestinal Epithelial Cells Inhibits Colorectal Carcinogenesis Induced by Colibactin-Producing Escherichia coli in Apc Mice. Gastroenterology, 2020, 158, 1373-1388.	1.3	53
45	Understanding Host-Adherent-Invasive <i>Escherichia coli</i> Interaction in Crohn's Disease: Opening Up New Therapeutic Strategies. BioMed Research International, 2014, 2014, 1-16.	1.9	51
46	AIEC infection triggers modification of gut microbiota composition in genetically predisposed mice, contributing to intestinal inflammation. Scientific Reports, 2018, 8, 12301.	3.3	50
47	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.	9.8	49
48	Crohn disease-associated Escherichia coli promote gastrointestinal inflammatory disorders by activation of HIF-dependent responses. Gut Microbes, 2011, 2, 335-346.	9.8	46
49	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
50	Monocyte-derived Macrophages from Crohn's Disease Patients Are Impaired in the Ability to Control Intracellular Adherent-Invasive Escherichia coli and Exhibit Disordered Cytokine Secretion Profile. Journal of Crohn's and Colitis, 2015, 9, 410-420.	1.3	45
51	The Crohn's disease-associated Escherichia coli strain LF82 relies on SOS and stringent responses to survive, multiply and tolerate antibiotics within macrophages. PLoS Pathogens, 2019, 15, e1008123.	4.7	44
52	Abnormal CEACAM6 expression in Crohn disease patients favors gut colonization and inflammation by Adherent-Invasive <i>E. coli</i> . Virulence, 2010, 1, 281-282.	4.4	42
53	GipA Factor Supports Colonization of Peyer's Patches by Crohn's Disease-associated Escherichia Coli. Inflammatory Bowel Diseases, 2016, 22, 68-81.	1.9	41
54	TH1 cell-inducing <i>Escherichia coli</i> strain identified from the small intestinal mucosa of patients with Crohn's disease. Gut Microbes, 2020, 12, 1788898.	9.8	40

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55	Diet-induced hypoxia responsive element demethylation increases CEACAM6 expression, favouring Crohn's disease-associatedEscherichia colicolonisation. Gut, 2015, 64, 428-437.	12.1	35
56	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
57	T cell clonal expansions in ileal Crohn's disease are associated with smoking behaviour and postoperative recurrence. Gut, 2019, 68, 1961-1970.	12.1	35
58	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
59	Enterohemorrhagic Escherichia coli pathogenesis: role of Long polar fimbriae in Peyer's patches interactions. Scientific Reports, 2017, 7, 44655.	3.3	30
60	Exosomes Released from Cells Infected with Crohn's Disease–associated Adherent-Invasive Escherichia coli Activate Host Innate Immune Responses and Enhance Bacterial Intracellular Replication. Inflammatory Bowel Diseases, 2016, 22, 516-528.	1.9	29
61	Emerging Role of Exosomes in Diagnosis and Treatment of Infectious and Inflammatory Bowel Diseases. Cells, 2020, 9, 1111.	4.1	29
62	Gut Microbiota as Potential Biomarker and/or Therapeutic Target to Improve the Management of Cancer: Focus on Colibactin-Producing Escherichia coli in Colorectal Cancer. Cancers, 2021, 13, 2215.	3.7	29
63	High intensity interval training promotes total and visceral fat mass loss in obese Zucker rats without modulating gut microbiota. PLoS ONE, 2019, 14, e0214660.	2.5	26
64	Crohn's Disease-Associated Adherent-Invasive Escherichia coli Manipulate Host Autophagy by Impairing SUMOylation. Cells, 2019, 8, 35.	4.1	26
65	Ulcerative Colitis-associated <i>E. coli</i> pathobionts potentiate colitis in susceptible hosts. Gut Microbes, 2020, 12, 1847976.	9.8	26
66	Tissue-Specific Oxidative Stress Modulation by Exercise: A Comparison between MICT and HIIT in an Obese Rat Model. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-11.	4.0	25
67	Exosomes transfer miRNAs from cell-to-cell to inhibit autophagy during infection with Crohn's disease-associated adherent-invasive <i>E. coli</i>). Gut Microbes, 2020, 11, 1677-1694.	9.8	22
68	Blockage of bacterial FimH prevents mucosal inflammation associated with Crohn's disease. Microbiome, 2021, 9, 176.	11.1	22
69	Propionate catabolism by CD-associated adherent-invasive <i>E. coli</i> counteracts its anti-inflammatory effect. Gut Microbes, 2021, 13, 1-18.	9.8	22
70	Role of adherent and invasive <i>Escherichia coli</i> in Crohn's disease: lessons from the postoperative recurrence model. Gut, 2023, 72, 39-48.	12.1	22
71	Adherent-Invasive <i>E. coli</i> enhances colonic hypersensitivity and P2X receptors expression during post-infectious period. Gut Microbes, 2018, 9, 26-37.	9.8	21
72	The Crohn's disease-related bacterial strain LF82 assembles biofilm-like communities to protect itself from phagolysosomal attack. Communications Biology, 2021, 4, 627.	4.4	21

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73	Analysis of the İf 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.	2.2	20
74	Effect of Concurrent Training on Body Composition and Gut Microbiota in Postmenopausal Women with Overweight or Obesity. Medicine and Science in Sports and Exercise, 2022, 54, 517-529.	0.4	20
75	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
76	Colibactin-Producing Escherichia coli Induce the Formation of Invasive Carcinomas in a Chronic Inflammation-Associated Mouse Model. Cancers, 2021, 13, 2060.	3.7	19
77	Macrophages Inability to Mediate Adherent-Invasive E. coli Replication is Linked to Autophagy in Crohn's Disease Patients. Cells, 2019, 8, 1394.	4.1	17
78	Brilliant glyconanocapsules for trapping of bacteria. Chemical Communications, 2015, 51, 13193-13196.	4.1	16
79	Ribonucleotide Reductase NrdR as a Novel Regulator for Motility and Chemotaxis during Adherent-Invasive Escherichia coli Infection. Infection and Immunity, 2015, 83, 1305-1317.	2.2	16
80	Role of Decreased Levels of Fis Histone-Like Protein in Crohn's Disease-Associated Adherent Invasive <i>E scherichia coli</i> LF82 Bacteria Interacting with Intestinal Epithelial Cells. Journal of Bacteriology, 2010, 192, 1832-1843.	2.2	15
81	Oligomannose-Rich Membranes of Dying Intestinal Epithelial Cells Promote Host Colonization by Adherent-Invasive E. coli. Frontiers in Microbiology, 2018, 9, 742.	3.5	15
82	Physiochemical Tuning of Potent <i>Escherichia coli</i> Antiâ€Adhesives by Microencapsulation and Methylene Homologation. ChemMedChem, 2017, 12, 986-998.	3.2	14
83	Heptylmannose-functionalized cellulose for the binding and specific detection of pathogenic <i>E. coli</i> i>. Chemical Communications, 2019, 55, 10158-10161.	4.1	13
84	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.	4.1	13
85	Characterization of mucosa-associated Escherichia coli strains isolated from Crohn's disease patients in Brazil. BMC Microbiology, 2020, 20, 178.	3.3	12
86	Influenza A Virus Infection of Intestinal Epithelial Cells Enhances the Adhesion Ability of Crohn's Disease Associated Escherichia coli Strains. PLoS ONE, 2015, 10, e0117005.	2.5	11
87	Differentiation of Crohn's Disease-Associated Isolates from Other Pathogenic Escherichia coli by Fimbrial Adhesion under Shear Force. Biology, 2016, 5, 14.	2.8	11
88	A library of heptyl mannose-functionalized copolymers with distinct compositions, microstructures and neighboring non-sugar motifs as potent antiadhesives of type 1 piliated $\langle i \rangle$ E. coli $\langle i \rangle$. Polymer Chemistry, 2016, 7, 2674-2683.	3.9	11
89	High-Intensity Interval Training and α-Linolenic Acid Supplementation Improve DHA Conversion and Increase the Abundance of Gut Mucosa-Associated Oscillospira Bacteria. Nutrients, 2021, 13, 788.	4.1	11
90	Faster and less invasive tools to identify patients with ileal colonization by adherentâ€invasive ⟨i⟩E. coli⟨l⟩ in Crohn's disease. United European Gastroenterology Journal, 2021, 9, 1007-1018.	3.8	11

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91	Macrophages Versus Escherichia coli. Inflammatory Bowel Diseases, 2016, 22, 2943-2955.	1.9	10
92	Preventive Effect of Spontaneous Physical Activity on the Gut-Adipose Tissue in a Mouse Model That Mimics Crohn's Disease Susceptibility. Cells, 2019, 8, 33.	4.1	10
93	Beneficial Effects of Natural Mineral Waters on Intestinal Inflammation and the Mucosa-Associated Microbiota. International Journal of Molecular Sciences, 2021, 22, 4336.	4.1	10
94	The Role of OmpR in Bile Tolerance and Pathogenesis of Adherent-Invasive Escherichia coli. Frontiers in Microbiology, 2021, 12, 684473.	3.5	10
95	Methyl-donor supplementation prevents intestinal colonization by Adherent-Invasive E. coli in a mouse model of Crohn's disease. Scientific Reports, 2020, 10, 12922.	3.3	9
96	The Nutrition-Microbiota-Physical Activity Triad: An Inspiring New Concept for Health and Sports Performance. Nutrients, 2022, 14, 924.	4.1	9
97	Prognostic value of a combination of innovative factors (gut microbiota, sarcopenia, obesity,) Tj ETQq1 1 0.78433 colorectal cancer: a prospective cohort study protocol (METABIOTE). BMJ Open, 2020, 10, e031472.	14 rgBT /0 1.9	Overlock 10 8
98	Heteropolysaccharides from S. cerevisiae show anti-adhesive properties against E. coli associated with Crohn's disease. Carbohydrate Polymers, 2021, 271, 118415.	10.2	8
99	Study of a classification algorithm for AIEC identification in geographically distinct E. coli strains. Scientific Reports, 2020, 10, 8094.	3.3	7
100	Beneficial Effects of Linseed Supplementation on Gut Mucosa-Associated Microbiota in a Physically Active Mouse Model of Crohn's Disease. International Journal of Molecular Sciences, 2022, 23, 5891.	4.1	7
101	Yersiniabactin Siderophore of Crohn's Disease-Associated Adherent-Invasive Escherichia coli Is Involved in Autophagy Activation in Host Cells. International Journal of Molecular Sciences, 2021, 22, 3512.	4.1	5
102	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. Journal of Crohn's and Colitis, 2022, 16, 1140-1150.	1.3	5
103	Phage Therapy Against Adherent-invasive <i>E. coli</i> : Towards a Promising Treatment of Crohn's Disease Patients?. Journal of Crohn's and Colitis, 2022, 16, 1509-1510.	1.3	5
104	In Memoriam, Arlette Darfeuille-Michaud, PhD. Gut, 2014, 63, 1681-1682.	12.1	4
105	Beneficial Effects of High Intensity Interval Training and/or Linseed Oil Supplementation to Limit Obesity-Induced Oxidative Stress in High Fat Diet-Fed Rats. Nutrients, 2021, 13, 3531.	4.1	3
106	Differential miRNA-Gene Expression in M Cells in Response to Crohn's Disease-Associated AIEC. Microorganisms, 2020, 8, 1205.	3.6	2
107	When Adherent-invasive E. coli plays with host glycosylation: Does it open new perspectives for therapeutic strategies in Crohn's disease?. EBioMedicine, 2020, 55, 102752.	6.1	2
108	Mo1777 Involvement of Type VI Secretion Systems in Virulence of Adherent-Invasive Escherichia coli Isolated From Patients With Crohn's Disease. Gastroenterology, 2015, 148, S-709.	1.3	1

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109	When Pathobiont-Carbohydrate Interaction Turns Bittersweet!. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 1509-1510.	4.5	1