

Michael Fromm

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230
papers

15,827
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63
h-index

120
g-index

247
ext. papers

17,615
ext. citations

5.9
avg, IF

6.19
L-index

#	Paper	IF	Citations
230	Complex phenotype of mice lacking occludin, a component of tight junction strands. <i>Molecular Biology of the Cell</i> , 2000 , 11, 4131-42	3.5	889
229	Interleukin-13 is the key effector Th2 cytokine in ulcerative colitis that affects epithelial tight junctions, apoptosis, and cell restitution. <i>Gastroenterology</i> , 2005 , 129, 550-64	13.3	809
228	Changes in expression and distribution of claudin 2, 5 and 8 lead to discontinuous tight junctions and barrier dysfunction in active Crohn's disease. <i>Gut</i> , 2007 , 56, 61-72	19.2	792
227	Interleukin-13 Is the Key Effector Th2 Cytokine in Ulcerative Colitis That Affects Epithelial Tight Junctions, Apoptosis, and Cell Restitution. <i>Gastroenterology</i> , 2005 , 129, 550-564	13.3	654
226	Claudin-2 expression induces cation-selective channels in tight junctions of epithelial cells. <i>Journal of Cell Science</i> , 2002 , 115, 4969-76	5.3	611
225	Altered tight junction structure contributes to the impaired epithelial barrier function in ulcerative colitis. <i>Gastroenterology</i> , 1999 , 116, 301-9	13.3	437
224	E-cadherin is essential for in vivo epidermal barrier function by regulating tight junctions. <i>EMBO Journal</i> , 2005 , 24, 1146-56	13	349
223	Crypts are the site of intestinal fluid and electrolyte secretion. <i>Science</i> , 1982 , 218, 1219-21	33.3	324
222	Claudin-2, a component of the tight junction, forms a paracellular water channel. <i>Journal of Cell Science</i> , 2010 , 123, 1913-21	5.3	291
221	Epithelial tight junctions in intestinal inflammation. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1165, 294-300	6.5	259
220	Tricellulin forms a barrier to macromolecules in tricellular tight junctions without affecting ion permeability. <i>Molecular Biology of the Cell</i> , 2009 , 20, 3713-24	3.5	252
219	Molecular basis for cation selectivity in claudin-2-based paracellular pores: identification of an electrostatic interaction site. <i>Journal of General Physiology</i> , 2009 , 133, 111-27	3.4	232
218	Epithelial transport and barrier function in occludin-deficient mice. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2005 , 1669, 34-42	3.8	230
217	Downregulation of epithelial apoptosis and barrier repair in active Crohn's disease by tumour necrosis factor alpha antibody treatment. <i>Gut</i> , 2004 , 53, 1295-302	19.2	230
216	Claudins and other tight junction proteins. <i>Comprehensive Physiology</i> , 2012 , 2, 1819-52	7.7	206
215	Leaks in the epithelial barrier caused by spontaneous and TNF-alpha-induced single-cell apoptosis. <i>FASEB Journal</i> , 2000 , 14, 1749-53	0.9	205
214	Mechanisms of diarrhea in collagenous colitis. <i>Gastroenterology</i> , 2002 , 123, 433-43	13.3	199

213	Epithelial barrier defects in ulcerative colitis: characterization and quantification by electrophysiological imaging. <i>Gastroenterology</i> , 2001 , 121, 1320-8	13.3	193
212	Tight junction, selective permeability, and related diseases. <i>Seminars in Cell and Developmental Biology</i> , 2014 , 36, 166-76	7.5	179
211	Effect of chronic <i>Giardia lamblia</i> infection on epithelial transport and barrier function in human duodenum. <i>Gut</i> , 2007 , 56, 328-35	19.2	179
210	Determinants of colonic barrier function in inflammatory bowel disease and potential therapeutics. <i>Journal of Physiology</i> , 2012 , 590, 1035-44	3.9	171
209	TNFalpha-induced and berberine-antagonized tight junction barrier impairment via tyrosine kinase, Akt and NFkappaB signaling. <i>Journal of Cell Science</i> , 2010 , 123, 4145-55	5.3	164
208	Claudin-3 acts as a sealing component of the tight junction for ions of either charge and uncharged solutes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010 , 1798, 2048-57	3.8	155
207	Disease-associated mutations affect intracellular traffic and paracellular Mg ²⁺ transport function of Claudin-16. <i>Journal of Clinical Investigation</i> , 2006 , 116, 878-91	15.9	147
206	Cl ⁻ secretion in epithelial monolayers of mucus-forming human colon cells (HT-29/B6). <i>American Journal of Physiology - Cell Physiology</i> , 1991 , 261, C574-82	5.4	140
205	The specific fates of tight junction proteins in apoptotic epithelial cells. <i>Journal of Cell Science</i> , 2004 , 117, 2097-107	5.3	139
204	Claudin-10 exists in six alternatively spliced isoforms that exhibit distinct localization and function. <i>Journal of Cell Science</i> , 2009 , 122, 1507-17	5.3	137
203	Contribution of claudin-5 to barrier properties in tight junctions of epithelial cells. <i>Cell and Tissue Research</i> , 2005 , 321, 89-96	4.2	135
202	Epithelial tight junction structure in the jejunum of children with acute and treated celiac sprue. <i>Pediatric Research</i> , 1998 , 43, 435-41	3.2	132
201	Disrupted barrier function through epithelial cell apoptosis. <i>Annals of the New York Academy of Sciences</i> , 2006 , 1072, 288-99	6.5	131
200	Impairment of the intestinal barrier is evident in untreated but absent in suppressively treated HIV-infected patients. <i>Gut</i> , 2009 , 58, 220-7	19.2	120
199	Epithelial barriers in intestinal inflammation. <i>Antioxidants and Redox Signaling</i> , 2011 , 15, 1255-70	8.4	117
198	Quercetin enhances epithelial barrier function and increases claudin-4 expression in Caco-2 cells. <i>Journal of Nutrition</i> , 2008 , 138, 1067-73	4.1	115
197	Structural and functional changes of the duodenum in human norovirus infection. <i>Gut</i> , 2009 , 58, 1070-7	19.2	114
196	TNFalpha up-regulates claudin-2 expression in epithelial HT-29/B6 cells via phosphatidylinositol-3-kinase signaling. <i>Cell and Tissue Research</i> , 2009 , 336, 67-77	4.2	112

195	Sodium caprate as an enhancer of macromolecule permeation across tricellular tight junctions of intestinal cells. <i>Biomaterials</i> , 2013 , 34, 275-82	15.6	110
194	Segmental expression of claudin proteins correlates with tight junction barrier properties in rat intestine. <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 2010 , 180, 591-8	2.2	107
193	Tight junctions form a barrier in human epidermis. <i>European Journal of Cell Biology</i> , 2010 , 89, 839-42	6.1	107
192	Contribution of tight junction proteins to ion, macromolecule, and water barrier in keratinocytes. <i>Journal of Investigative Dermatology</i> , 2013 , 133, 1161-9	4.3	103
191	Claudins of intestine and nephron - a correlation of molecular tight junction structure and barrier function. <i>Acta Physiologica</i> , 2011 , 201, 133-40	5.6	100
190	Cytokine-dependent transcriptional down-regulation of epithelial sodium channel in ulcerative colitis. <i>Gastroenterology</i> , 2004 , 126, 1711-20	13.3	99
189	Mechanisms of epithelial translocation of the alpha(2)-gliadin-33mer in coeliac sprue. <i>Gut</i> , 2008 , 57, 747-54	5.2	97
188	Segmental heterogeneity of epithelial transport in rat large intestine. <i>Pflugers Archiv European Journal of Physiology</i> , 1978 , 378, 71-83	4.6	97
187	TRPV4-mediated regulation of epithelial permeability. <i>FASEB Journal</i> , 2006 , 20, 1802-12	0.9	93
186	Permeability of human HT-29/B6 colonic epithelium as a function of apoptosis. <i>Journal of Physiology</i> , 2001 , 535, 541-52	3.9	90
185	The effect of chitosan on transcellular and paracellular mechanisms in the intestinal epithelial barrier. <i>Biomaterials</i> , 2012 , 33, 2791-800	15.6	89
184	Regulation of mucosal structure and barrier function in rat colon exposed to tumor necrosis factor alpha and interferon gamma in vitro: a novel model for studying the pathomechanisms of inflammatory bowel disease cytokines. <i>Scandinavian Journal of Gastroenterology</i> , 2009 , 44, 1226-35	2.4	88
183	¹³ C-urea breath test in Helicobacter pylori diagnosis and eradication. Correlation to histology, origin of false results, and influence of food intake. <i>Scandinavian Journal of Gastroenterology</i> , 1997 , 32, 308-14	2.4	86
182	Claudin-17 forms tight junction channels with distinct anion selectivity. <i>Cellular and Molecular Life Sciences</i> , 2012 , 69, 2765-78	10.3	84
181	Celiac Disease: Role of the Epithelial Barrier. <i>Cellular and Molecular Gastroenterology and Hepatology</i> , 2017 , 3, 150-162	7.9	81
180	Disruption of the K ⁺ channel beta-subunit KCNE3 reveals an important role in intestinal and tracheal Cl ⁻ transport. <i>Journal of Biological Chemistry</i> , 2010 , 285, 7165-75	5.4	79
179	Na ⁺ absorption defends from paracellular back-leakage by claudin-8 upregulation. <i>Biochemical and Biophysical Research Communications</i> , 2009 , 378, 45-50	3.4	78
178	Proinflammatory cytokine-induced tight junction remodeling through dynamic self-assembly of claudins. <i>Molecular Biology of the Cell</i> , 2014 , 25, 2710-9	3.5	76

177	Cell polarity-determining proteins Par-3 and PP-1 are involved in epithelial tight junction defects in coeliac disease. <i>Gut</i> , 2012 , 61, 220-8	19.2	76
176	Two-path impedance spectroscopy for measuring paracellular and transcellular epithelial resistance. <i>Biophysical Journal</i> , 2009 , 97, 2202-11	2.9	75
175	Transforming growth factor- β a whey protein component, strengthens the intestinal barrier by upregulating claudin-4 in HT-29/B6 cells. <i>Journal of Nutrition</i> , 2011 , 141, 783-9	4.1	74
174	Transient opening of the perineurial barrier for analgesic drug delivery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, E2018-27	11.5	74
173	Functional crosstalk between Wnt signaling and Cdx-related transcriptional activation in the regulation of the claudin-2 promoter activity. <i>Biochemical and Biophysical Research Communications</i> , 2004 , 314, 1001-7	3.4	73
172	Charge-selective claudin channels. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1257, 20-8	6.5	72
171	Epithelial barrier defects in HT-29/B6 colonic cell monolayers induced by tumor necrosis factor-alpha. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 193-203	6.5	72
170	Ion transport in the experimental short bowel syndrome of the rat. <i>Gastroenterology</i> , 1992 , 102, 497-504	13.3	65
169	Acute HIV infection induces mucosal infiltration with CD4+ and CD8+ T cells, epithelial apoptosis, and a mucosal barrier defect. <i>Gastroenterology</i> , 2010 , 139, 1289-300	13.3	64
168	Measurement of paracellular epithelial conductivity by conductance scanning. <i>Pflugers Archiv European Journal of Physiology</i> , 1997 , 434, 830-40	4.6	64
167	Oral and fecal <i>Campylobacter concisus</i> strains perturb barrier function by apoptosis induction in HT-29/B6 intestinal epithelial cells. <i>PLoS ONE</i> , 2011 , 6, e23858	3.7	63
166	Mechanisms of diarrhea in the interleukin-2-deficient mouse model of colonic inflammation. <i>American Journal of Physiology - Renal Physiology</i> , 2004 , 286, G244-52	5.1	63
165	Duodenal biopsies of HIV-infected patients with diarrhoea exhibit epithelial barrier defects but no active secretion. <i>Aids</i> , 1998 , 12, 43-51	3.5	63
164	Some properties of KCl-filled microelectrodes: correlation of potassium "leakage" with tip resistance. <i>Journal of Membrane Biology</i> , 1981 , 62, 239-44	2.3	63
163	Claudin-related intestinal diseases. <i>Seminars in Cell and Developmental Biology</i> , 2015 , 42, 30-8	7.5	62
162	Epithelial and subepithelial contributions to transmural electrical resistance of intact rat jejunum, in vitro. <i>Pflugers Archiv European Journal of Physiology</i> , 1985 , 405, 400-2	4.6	60
161	Claudin-2-mediated cation and water transport share a common pore. <i>Acta Physiologica</i> , 2017 , 219, 521-536	5.36	58
160	Single-cell epithelial defects close rapidly by an actinomyosin purse string mechanism with functional tight junctions. <i>Journal of Physiology</i> , 2002 , 545, 485-99	3.9	58

159	Improved cell line IPEC-J2, characterized as a model for porcine jejunal epithelium. <i>PLoS ONE</i> , 2013 , 8, e79643	3.7	57
158	Altered ENaC expression leads to impaired sodium absorption in the noninflamed intestine in Crohn's disease. <i>Gastroenterology</i> , 2008 , 134, 1436-47	13.3	56
157	Tight junctions: molecular structure meets function. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1165, 1-6	6.5	55
156	<i>Arcobacter butzleri</i> induces barrier dysfunction in intestinal HT-29/B6 cells. <i>Journal of Infectious Diseases</i> , 2009 , 200, 756-64	7	55
155	Mosaic expression of claudins in thick ascending limbs of Henle results in spatial separation of paracellular Na ⁺ and Mg ²⁺ transport. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E219-E227	11.5	53
154	Differential stimulation of intestinal mucin secretion by cholera toxin and carbachol. <i>Pflugers Archiv European Journal of Physiology</i> , 1997 , 433, 638-47	4.6	53
153	Gene expression of the tight junction protein occludin includes differential splicing and alternative promoter usage. <i>Biochemical and Biophysical Research Communications</i> , 2002 , 298, 657-66	3.4	53
152	Epithelial and subepithelial resistance of rat large intestine: segmental differences, effect of stripping, time course, and action of aldosterone. <i>Pflugers Archiv European Journal of Physiology</i> , 1986 , 407, 632-7	4.6	53
151	IL-1beta and TNFalpha regulate sodium absorption in rat distal colon. <i>Biochemical and Biophysical Research Communications</i> , 2004 , 317, 500-7	3.4	52
150	Barrier effects of nutritional factors. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1165, 267-73	6.5	51
149	Intestinal microcirculation and gut permeability in acute pancreatitis: early changes and therapeutic implications. <i>Journal of Gastrointestinal Surgery</i> , 1998 , 2, 518-25	3.3	51
148	Epithelial barrier and ion transport in coeliac sprue: electrical measurements on intestinal aspiration biopsy specimens. <i>Gut</i> , 1995 , 37, 777-82	19.2	50
147	Ussing chamber for high-frequency transmural impedance analysis of epithelial tissues. <i>Journal of Proteomics</i> , 1997 , 35, 81-8		48
146	Supernatants of HIV-infected immune cells affect the barrier function of human HT-29/B6 intestinal epithelial cells. <i>Aids</i> , 2002 , 16, 983-91	3.5	48
145	Aerolysin from <i>Aeromonas hydrophila</i> perturbs tight junction integrity and cell lesion repair in intestinal epithelial HT-29/B6 cells. <i>Journal of Infectious Diseases</i> , 2011 , 204, 1283-92	7	47
144	Protamine reversibly decreases paracellular cation permeability in <i>Necturus</i> gallbladder. <i>Journal of Membrane Biology</i> , 1985 , 87, 141-50	2.3	46
143	Cnksr3 is a direct mineralocorticoid receptor target gene and plays a key role in the regulation of the epithelial sodium channel. <i>FASEB Journal</i> , 2009 , 23, 3936-46	0.9	44
142	TcpC protein from <i>E. coli</i> Nissle improves epithelial barrier function involving PKC and ERK1/2 signaling in HT-29/B6 cells. <i>Mucosal Immunology</i> , 2014 , 7, 369-78	9.2	43

141	Haemolysin of Escherichia coli in IBD: a potentiator of inflammatory activity in the colon. <i>Gut</i> , 2014 , 63, 1893-901	19.2	43
140	IL-1beta and TNF-alpha, but not IFN-alpha, IFN-gamma, IL-6 or IL-8, are secretory mediators in human distal colon. <i>Cytokine</i> , 1998 , 10, 457-65	4	43
139	Escherichia coli alpha-haemolysin induces focal leaks in colonic epithelium: a novel mechanism of bacterial translocation. <i>Cellular Microbiology</i> , 2007 , 9, 2530-40	3.9	41
138	Active and passive involvement of claudins in the pathophysiology of intestinal inflammatory diseases. <i>Pflugers Archiv European Journal of Physiology</i> , 2017 , 469, 15-26	4.6	40
137	Water channels and barriers formed by claudins. <i>Annals of the New York Academy of Sciences</i> , 2017 , 1397, 100-109	6.5	40
136	Inflamed pouch mucosa possesses altered tight junctions indicating recurrence of inflammatory bowel disease. <i>International Journal of Colorectal Disease</i> , 2009 , 24, 1149-56	3	40
135	Claudin Tight Junction Proteins: Novel Aspects in Paracellular Transport. <i>Peritoneal Dialysis International</i> , 2008 , 28, 577-584	2.8	40
134	Endothelin antagonism: effects of FP receptor agonists prostaglandin F2alpha and fluprostenol on trabecular meshwork contractility. <i>Investigative Ophthalmology and Visual Science</i> , 2006 , 47, 938-45		39
133	Defective tight junctions in refractory celiac disease. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1258, 43-51	6.5	38
132	Claudin-16 affects transcellular Cl- secretion in MDCK cells. <i>Journal of Physiology</i> , 2009 , 587, 3777-93	3.9	38
131	Epithelial barrier and transport function of the colon in ulcerative colitis. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 312-26	6.5	38
130	Creation and biochemical analysis of a broad-specific claudin binder. <i>Biomaterials</i> , 2012 , 33, 3464-74	15.6	37
129	Perspectives on tight junction research. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1257, 1-19	6.5	37
128	Tight junction proteins as channel formers and barrier builders. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1165, 211-9	6.5	37
127	Tricellulin forms homomeric and heteromeric tight junctional complexes. <i>Cellular and Molecular Life Sciences</i> , 2010 , 67, 2057-68	10.3	37
126	Butyrate induces intestinal sodium absorption via Sp3-mediated transcriptional up-regulation of epithelial sodium channels. <i>Gastroenterology</i> , 2007 , 132, 236-48	13.3	37
125	Angubindin-1, a novel paracellular absorption enhancer acting at the tricellular tight junction. <i>Journal of Controlled Release</i> , 2017 , 260, 1-11	11.7	36
124	Tricellulin is regulated via interleukin-13-receptor α , affects macromolecule uptake, and is decreased in ulcerative colitis. <i>Mucosal Immunology</i> , 2018 , 11, 345-356	9.2	36

123	Claudins in the tight junctions of stria vascularis marginal cells. <i>Biochemical and Biophysical Research Communications</i> , 2003 , 304, 5-10	3.4	36
122	Apoptosis and intestinal barrier function. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 270-4	6.5	34
121	Mechanisms of epithelial barrier impairment in HIV infection. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 293-303	6.5	34
120	Potassium transport across rabbit descending colon in vitro: evidence for single-file diffusion through a paracellular pathway. <i>Journal of Membrane Biology</i> , 1981 , 63, 93-8	2.3	34
119	Endothelin antagonism as an active principle for glaucoma therapy. <i>British Journal of Pharmacology</i> , 2011 , 162, 806-16	8.6	33
118	Tight junction proteins: a novel class of integral membrane proteins. Expression in human epidermis and in HaCaT keratinocytes. <i>Archives of Dermatological Research</i> , 2002 , 294, 14-8	3.3	32
117	CK2-dependent phosphorylation of occludin regulates the interaction with ZO-proteins and tight junction integrity. <i>Cell Communication and Signaling</i> , 2013 , 11, 40	7.5	31
116	<i>Yersinia enterocolitica</i> induces epithelial barrier dysfunction through regional tight junction changes in colonic HT-29/B6 cell monolayers. <i>Laboratory Investigation</i> , 2011 , 91, 310-24	5.9	31
115	Sheep rumen and omasum primary cultures and source epithelia: barrier function aligns with expression of tight junction proteins. <i>Journal of Experimental Biology</i> , 2011 , 214, 2871-82	3	31
114	Low edge damage container insert that adjusts intestinal forceps biopsies into Ussing chamber systems. <i>Pflügers Archiv European Journal of Physiology</i> , 1999 , 438, 107-12	4.6	30
113	Inhibition of 11 beta-hydroxysteroid dehydrogenase and its effect on epithelial sodium transport. <i>Kidney International</i> , 1990 , 38, 673-8	9.9	30
112	Protamine alters structure and conductance of <i>Necturus</i> gallbladder tight junctions without major electrical effects on the apical cell membrane. <i>Journal of Membrane Biology</i> , 1987 , 95, 9-20	2.3	30
111	Impaired intestinal sodium and chloride transport in the blind loop syndrome of the rat. <i>Gastroenterology</i> , 1987 , 92, 693-8	13.3	29
110	Interleukin-7 links T lymphocyte and intestinal epithelial cell homeostasis. <i>PLoS ONE</i> , 2012 , 7, e31939	3.7	29
109	Impedance analysis for the determination of epithelial and subepithelial resistance in intestinal tissues. <i>Journal of Proteomics</i> , 1998 , 37, 35-46		28
108	Restitution of single-cell defects in the mouse colon epithelium differs from that of cultured cells. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2006 , 290, R1496-507 ³⁻²		28
107	The interleukin-2-deficient mouse model. <i>Pathobiology</i> , 2002 , 70, 139-42	3.6	28
106	Localization of cAMP- and aldosterone-induced K ⁺ secretion in rat distal colon by conductance scanning. <i>Journal of Physiology</i> , 1998 , 507 (Pt 2), 561-70	3.9	27

105	In Colon Epithelia, Clostridium perfringens Enterotoxin Causes Focal Leaks by Targeting Claudins Which are Apically Accessible Due to Tight Junction Derangement. <i>Journal of Infectious Diseases</i> , 2017 , 217, 147-157	7	26
104	Effects of quercetin studied in colonic HT-29/B6 cells and rat intestine in vitro. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1258, 100-7	6.5	26
103	Glucocorticoids and tumor necrosis factor-alpha synergize to induce absorption by the epithelial sodium channel in the colon. <i>Gastroenterology</i> , 2009 , 136, 933-42	13.3	26
102	Time course of aldosterone and corticosterone plasma levels in rats during general anaesthesia and abdominal surgery. <i>Pflugers Archiv European Journal of Physiology</i> , 1983 , 399, 249-54	4.6	26
101	Activation of muscarinic receptors prevents TNF- α -mediated intestinal epithelial barrier disruption through p38 MAPK. <i>Cellular Signalling</i> , 2017 , 35, 188-196	4.9	24
100	Laurate permeabilizes the paracellular pathway for small molecules in the intestinal epithelial cell model HT-29/B6 via opening the tight junctions by reversible relocation of claudin-5. [Corrected]. <i>Pharmaceutical Research</i> , 2014 , 31, 2539-48	4.5	24
99	Probing the cis-arrangement of prototype tight junction proteins claudin-1 and claudin-3. <i>Biochemical Journal</i> , 2015 , 468, 449-58	3.8	24
98	Altered expression of tight junction proteins in mammary epithelium after discontinued suckling in mice. <i>Pflugers Archiv European Journal of Physiology</i> , 2012 , 463, 391-8	4.6	24
97	Molecular architecture and assembly of the tight junction backbone. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2020 , 1862, 183279	3.8	23
96	Molecular basis of claudin-17 anion selectivity. <i>Cellular and Molecular Life Sciences</i> , 2016 , 73, 185-200	10.3	22
95	Ion transport and barrier function are disturbed in microscopic colitis. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1258, 143-8	6.5	22
94	Interleukin-13 affects the epithelial sodium channel in the intestine by coordinated modulation of STAT6 and p38 MAPK activity. <i>Journal of Physiology</i> , 2015 , 593, 5269-82	3.9	22
93	Epithelial barrier dysfunction in lymphocytic colitis through cytokine-dependent internalization of claudin-5 and -8. <i>Journal of Gastroenterology</i> , 2017 , 52, 1090-1100	6.9	21
92	Increased bacterial permeation in long-lasting ileoanal pouches. <i>Inflammatory Bowel Diseases</i> , 2006 , 12, 736-44	4.5	21
91	Analgesic drug delivery via recombinant tissue plasminogen activator and microRNA-183-triggered opening of the blood-nerve barrier. <i>Biomaterials</i> , 2016 , 82, 20-33	15.6	20
90	Listeriolysin O affects barrier function and induces chloride secretion in HT-29/B6 colon epithelial cells. <i>American Journal of Physiology - Renal Physiology</i> , 2009 , 296, G1350-9	5.1	20
89	High-resolution analysis of barrier function. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1165, 74-81	6.5	20
88	Modulation of tight junction proteins in the perineurium to facilitate peripheral opioid analgesia. <i>Anesthesiology</i> , 2012 , 116, 1323-34	4.3	20

87	Claudin-15 forms a water channel through the tight junction with distinct function compared to claudin-2. <i>Acta Physiologica</i> , 2020 , 228, e13334	5.6	20
86	The HIV Protease Inhibitors Saquinavir, Ritonavir, and Nelfinavir Induce Apoptosis and Decrease Barrier Function in Human Intestinal Epithelial Cells. <i>Antiviral Therapy</i> , 2005 , 10, 645-655	1.6	20
85	Autocrine release of angiotensin-2 mediates cerebrovascular disintegration in Moyamoya disease. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017 , 37, 1527-1539	7.3	19
84	Analysis of absorption enhancers in epithelial cell models. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1258, 86-92	6.5	19
83	<i>Aeromonas hydrophila</i> beta-hemolysin induces active chloride secretion in colon epithelial cells (HT-29/B6). <i>Infection and Immunity</i> , 2004 , 72, 4848-58	3.7	19
82	Ontogeny of 11beta-hydroxysteroid dehydrogenase: activity in the placenta, kidney, colon of fetal rats and rabbits. <i>Hormone and Metabolic Research</i> , 2001 , 33, 78-83	3.1	19
81	Net ion fluxes and zero flux limiting concentrations in rat upper colon and rectum during anaesthesia-induced aldosterone liberation. <i>Pflugers Archiv European Journal of Physiology</i> , 1987 , 408, 185-93	4.6	19
80	Versatile piezoelectric driver for cell puncture. <i>Pflugers Archiv European Journal of Physiology</i> , 1980 , 384, 69-73	4.6	19
79	Tight junctions of the proximal tubule and their channel proteins. <i>Pflugers Archiv European Journal of Physiology</i> , 2017 , 469, 877-887	4.6	18
78	Comparative analysis of theophylline and cholera toxin in rat colon reveals an induction of sealing tight junction proteins. <i>Pflugers Archiv European Journal of Physiology</i> , 2014 , 466, 2059-65	4.6	18
77	Glucocorticoid receptor is indispensable for physiological responses to aldosterone in epithelial Na ⁺ channel induction via the mineralocorticoid receptor in a human colonic cell line. <i>European Journal of Cell Biology</i> , 2011 , 90, 432-9	6.1	18
76	Impairment of epithelial transport but not of barrier function in idiopathic pouchitis after ulcerative colitis. <i>Gut</i> , 2002 , 50, 821-6	19.2	18
75	Uncoupled basal sodium absorption and chloride secretion in prairie dog (<i>Cynomys ludovicianus</i>) gallbladder. <i>Comparative Biochemistry and Physiology A, Comparative Physiology</i> , 1991 , 100, 335-41		18
74	Tight junction proteins contribute to barrier properties in human pleura. <i>Respiratory Physiology and Neurobiology</i> , 2011 , 175, 331-5	2.8	17
73	Permanently increased mucosal permeability in patients with backwash ileitis after ileoanal pouch for ulcerative colitis. <i>Scandinavian Journal of Gastroenterology</i> , 2008 , 43, 704-11	2.4	17
72	Impairment of the antiproliferative effect of glucocorticosteroids by 11beta-hydroxysteroid dehydrogenase type 2 overexpression in MCF-7 breast-cancer cells. <i>Hormone and Metabolic Research</i> , 2004 , 36, 437-44	3.1	17
71	Antisecretory effect of loperamide in colon epithelial cells by inhibition of basolateral K ⁺ conductance. <i>Scandinavian Journal of Gastroenterology</i> , 2001 , 36, 731-7	2.4	17
70	Ion transport and enteric nervous system (ENS) in rat rectal colon: mechanical stretch causes electrogenic Cl ⁻ secretion via plexus Meissner and amiloride-sensitive electrogenic Na ⁺ absorption is not affected by intramural neurons. <i>Pflugers Archiv European Journal of Physiology</i> , 1989 , 414, 216-21	4.6	17

69	Activation of muscarinic cholinceptor ameliorates tumor necrosis factor- β -induced barrier dysfunction in intestinal epithelial cells. <i>FEBS Letters</i> , 2015 , 589, 3640-7	3.8	16
68	Pharmacological and functional characterization of endothelin receptors in bovine trabecular meshwork and ciliary muscle. <i>Ophthalmic Research</i> , 2005 , 37, 179-87	2.9	16
67	Aldosterone low-dose, short-term action in adrenalectomized glucocorticoid-substituted rats: Na, K, Cl, HCO ₃ , osmolyte, and water transport in proximal and rectal colon. <i>Pflugers Archiv European Journal of Physiology</i> , 1990 , 416, 573-9	4.6	16
66	ENaC Dysregulation Through Activation of MEK1/2 Contributes to Impaired Na ⁺ Absorption in Lymphocytic Colitis. <i>Inflammatory Bowel Diseases</i> , 2016 , 22, 539-47	4.5	16
65	Campylobacter jejuni impairs sodium transport and epithelial barrier function via cytokine release in human colon. <i>Mucosal Immunology</i> , 2018 , 11, 474-485	9.2	16
64	Modulation of tight junction proteins in the perineurium for regional pain control. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1257, 199-206	6.5	15
63	Differential regulation of ENaC by aldosterone in rat early and late distal colon. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 92-4	6.5	15
62	Effect of TNF β and IFN γ on Epithelial Barrier Function in Rat Rectum in Vitro. <i>Annals of the New York Academy of Sciences</i> , 2006 , 915, 282-286	6.5	15
61	Potential for Tight Junction Protein-Directed Drug Development Using Claudin Binders and Angubindin-1. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	14
60	Functionality of MDCK kidney tubular cells on flat polymer membranes for biohybrid kidney. <i>Journal of Materials Science: Materials in Medicine</i> , 1998 , 9, 711-5	4.5	13
59	Restoration of ENaC expression by glucocorticoid receptor transfection in human HT-29/B6 colon cells. <i>Biochemical and Biophysical Research Communications</i> , 2006 , 344, 1065-70	3.4	13
58	Gelatinolytic activity of autocrine matrix metalloproteinase-9 leads to endothelial de-arrangement in Moyamoya disease. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018 , 38, 1940-1953	7.3	11
57	The plant-derived glucocorticoid receptor agonist Endiandrin A acts as co-stimulator of colonic epithelial sodium channels (ENaC) via SGK-1 and MAPKs. <i>PLoS ONE</i> , 2012 , 7, e49426	3.7	11
56	The mechanism of diarrhea in HIV is based on an impaired epithelial barrier function that could be induced by a specific cytokine pattern. <i>Annals of the New York Academy of Sciences</i> , 1998 , 859, 267-70	6.5	11
55	Endothelin receptor B in trabecular meshwork. <i>Experimental Eye Research</i> , 2007 , 85, 482-91	3.7	11
54	Expression from the human occludin promoter is affected by tumor necrosis factor alpha and interferon gamma. <i>Gastroenterology</i> , 2000 , 118, A602	13.3	11
53	Gestational age dependence of 11 beta-hydroxysteroid dehydrogenase and its relationship to the enzymes of phosphatidylcholine synthesis in lung and liver of fetal rat. <i>Lipids and Lipid Metabolism</i> , 1994 , 1210, 348-54		11
52	Tilivalline- and Tilimycin-Independent Effects of on Tight Junction-Mediated Intestinal Barrier Impairment. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	11

51	Myrrh exerts barrier-stabilising and -protective effects in HT-29/B6 and Caco-2 intestinal epithelial cells. <i>International Journal of Colorectal Disease</i> , 2017 , 32, 623-634	3	10
50	Determinants contributing to claudin ion channel formation. <i>Annals of the New York Academy of Sciences</i> , 2012 , 1257, 45-53	6.5	10
49	Distension-induced electrogenic Cl ⁻ secretion is mediated via VIP-ergic neurons in rat rectal colon. <i>American Journal of Physiology - Renal Physiology</i> , 1995 , 268, G725-31	5.1	10
48	Tricellulin Effect on Paracellular Water Transport. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	10
47	A colonic mineralocorticoid receptor cell model expressing epithelial Na ⁺ channels. <i>Biochemical and Biophysical Research Communications</i> , 2009 , 382, 280-5	3.4	9
46	Effects of HIV protease inhibitors on barrier function in the human intestinal cell line HT-29/B6. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 117-22	6.5	9
45	Segmental heterogeneity of swelling-induced Cl ⁻ transport in rat small intestine. <i>Pflugers Archiv European Journal of Physiology</i> , 1996 , 432, 293-300	4.6	9
44	Enkephalin affects ion transport via the enteric nervous system in guinea-pig ileum. <i>European Journal of Clinical Investigation</i> , 1990 , 20, 182-91	4.6	9
43	Tight junction regulation during impaired ion transport in blind loops of rat jejunum. <i>Research in Experimental Medicine</i> , 1990 , 190, 59-68		9
42	pH dependence of protamine action on apical membrane permeability in Necturus gallbladder epithelium. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1990 , 1027, 179-84	3.8	9
41	Architectural and functional alterations of the small intestinal mucosa in classical Whipple's disease. <i>Mucosal Immunology</i> , 2017 , 10, 1542-1552	9.2	8
40	Campylobacter fetus impairs barrier function in HT-29/B6 cells through focal tight junction alterations and leaks. <i>Annals of the New York Academy of Sciences</i> , 2017 , 1405, 189-201	6.5	8
39	Clinical models of intestinal adaptation. <i>Annals of the New York Academy of Sciences</i> , 1998 , 859, 127-38	6.5	8
38	Enhanced expression of iNOS in inflamed colons of IL-2-deficient mice does not impair colonic epithelial barrier function. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 204-13	6.5	8
37	Trans/paracellular, surface/crypt, and epithelial/subepithelial resistances of mammalian colonic epithelia. <i>Pflugers Archiv European Journal of Physiology</i> , 2000 , 439, 477-482	4.6	8
36	Electrogenic Na ⁺ transport in rat late distal colon by natural and synthetic glucocorticosteroids. <i>American Journal of Physiology - Renal Physiology</i> , 1999 , 276, G491-8	5.1	8
35	The HIV protease inhibitors saquinavir, ritonavir, and nelfinavir but not indinavir impair the epithelial barrier in the human intestinal cell line HT-29/B6. <i>Aids</i> , 1999 , 13, 2595-7	3.5	8
34	Effect of acute <i>Yersinia enterocolitica</i> infection on intestinal barrier function in the mouse. <i>Scandinavian Journal of Gastroenterology</i> , 1994 , 29, 814-9	2.4	8

33	Biophysical Methods to Study Tight Junction Permeability. <i>Current Topics in Membranes</i> , 2010 , 39-78	2.2	7
32	Epithelial ion transport in the ileal J-pouch after proctocolectomy in the rat. <i>Scandinavian Journal of Gastroenterology</i> , 1993 , 28, 533-9	2.4	7
31	11-beta-Hydroxysteroid dehydrogenase of rat lung: enzyme kinetic, oxidase-reductase ratio, electrolyte and trace element dependence. <i>Enzyme & Protein</i> , 1993 , 47, 83-91		7
30	Tight junctions and paracellular permeability in cultured bovine corneal endothelial cells. <i>Graefes Archive for Clinical and Experimental Ophthalmology</i> , 1994 , 232, 608-13	3.8	7
29	Electrical measurements in large intestine (including caecum, colon, rectum). <i>Methods in Enzymology</i> , 1990 , 192, 459-84	1.7	7
28	Expression of tricellular tight junction proteins and the paracellular macromolecule barrier are recovered in remission of ulcerative colitis. <i>BMC Gastroenterology</i> , 2021 , 21, 141	3	7
27	Zinc prevents intestinal epithelial barrier dysfunction induced by alpha-hemolysin-producing <i>Escherichia coli</i> 536 infection in porcine colon. <i>Veterinary Microbiology</i> , 2020 , 243, 108632	3.3	6
26	Tissue plasminogen activator and neuropathy open the blood-nerve barrier with upregulation of microRNA-155-5p in male rats. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2019 , 1865, 1160-1169	6.9	6
25	Adaptation of the jejunal mucosa in the experimental blind loop syndrome: changes in paracellular conductance and tight junction structure. <i>Gut</i> , 1987 , 28 Suppl, 159-64	19.2	5
24	Leptin Downregulates Angulin-1 in Active Crohn's Disease via STAT3. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	5
23	Cross-talk Between Host, Microbiome and Probiotics: A Systems Biology Approach for Analyzing the Effects of Probiotic <i>Enterococcus faecium</i> NCIMB 10415 in Piglets. <i>Molecular Informatics</i> , 2014 , 33, 171-82	3.8	4
22	Trans- and paracellular conductivity of HT-29/B6 cells measured by high-resolution conductance scanning. <i>Annals of the New York Academy of Sciences</i> , 1998 , 859, 295-9	6.5	4
21	Adaptation of epithelial ion transport in the short bowel syndrome. <i>Digestion</i> , 1990 , 46 Suppl 2, 467-71	3.6	4
20	Store-operated calcium entry (SOCE) contributes to phosphorylation of p38 MAPK and suppression of TNF- β signalling in the intestinal epithelial cells. <i>Cellular Signalling</i> , 2019 , 63, 109358	4.9	3
19	Prostaglandin I(2) sensory input into the enteric nervous system during distension-induced colonic chloride secretion in rat colon. <i>Acta Physiologica</i> , 2010 , 199, 305-16	5.6	3
18	Patients with dyspepsia benefit from eradication of <i>Helicobacter pylori</i> if other organic causes for dyspepsia were carefully ruled out. <i>Zeitschrift Fur Gastroenterologie</i> , 2000 , 38, 211-9	1.6	3
17	Zinc strengthens the jejunal barrier by reversibly tightening the paracellular route. <i>American Journal of Physiology - Renal Physiology</i> , 2017 , 313, G537-G548	5.1	3
16	Tricellulin in Crohn's disease and ulcerative colitis. <i>FASEB Journal</i> , 2010 , 24, 998.1	0.9	3

15	Su1461 Lymphocytic Colitis-Related Diarrhea Is Caused by Both, ERK1/2-Dependent Inhibition of the Epithelial Sodium Channel (ENaC) and a Claudin-Induced Barrier Defect. <i>Gastroenterology</i> , 2014 , 146, S-475	13.3	2
14	Cartography of barrier defects in human colon by low-resolution conductance scanning. <i>Annals of the New York Academy of Sciences</i> , 1998 , 859, 285-9	6.5	2
13	Nonmalabsorptive mechanisms of diarrhea in HIV infection. <i>Pathobiology</i> , 1998 , 66, 165-9	3.6	2
12	Bovine and porcine large intestine as model epithelia in a student lab course. <i>American Journal of Physiology - Advances in Physiology Education</i> , 1993 , 265, S10-9	1.9	2
11	Epithelial barrier dysfunction as permissive pathomechanism in human intestinal graft-versus-host disease. <i>Bone Marrow Transplantation</i> , 2018 , 53, 1083-1086	4.4	1
10	Effects of endotoxin on human large intestine. <i>Annals of the New York Academy of Sciences</i> , 2000 , 915, 264-6	6.5	1
9	Modulation of epithelial barrier function by pathogenic <i>Y. enterocolitica</i> or probiotic <i>E. coli</i> Nissle. <i>FASEB Journal</i> , 2011 , 25, 1036.6	0.9	1
8	Angulin-1 (LSR) Affects Paracellular Water Transport, However Only in Tight Epithelial Cells. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	1
7	Phospholipid effects on SGLT1-mediated glucose transport in rabbit ileum brush border membrane vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2019 , 1861, 182985	3.8	0
6	Ion transport in rat colon measured by medium-resolution conductance scanning. <i>Annals of the New York Academy of Sciences</i> , 1998 , 859, 300-3	6.5	
5	Transport in Membranen und Epithelien. <i>Springer-Lehrbuch</i> , 2007 , 41-54	0.4	
4	Role of the Epithelium in Diseases of the Intestine. <i>Physiology in Health and Disease</i> , 2020 , 77-109	0.2	
3	Modulation of the epithelial barrier by a fragment of <i>Clostridium perfringens</i> iota-toxin (1062.5). <i>FASEB Journal</i> , 2014 , 28, 1062.5	0.9	
2	Molecular Basis for Cation Selectivity in Claudin-2Based Paracellular Pores: Identification of an Electrostatic Interaction Site. <i>Journal of Cell Biology</i> , 2009 , 184, i3-i3	7.3	
1	The tight junction protein claudin-2 forms a paracellular water channel. <i>FASEB Journal</i> , 2009 , 23, 796.5	0.9	