Review article: intestinal serotonin signalling in irritable bowel syndrome

DOI: 10.1111/j.1365-2036.2006.02858.x
Alimentary Pharmacology and Therapeutics, 2006, 23, 1067-7

#	Paper	IF	Citations
166	Oxidative stress in autism. **2006**, 13, 171-81		416
165	Role of corticotropin-releasing factor in stress-related visceral hyperalgesia. **2006**, 41, 810-3		
164	[Visceral medicine: the gastroenterologist's point of view]. **2006**, 131, 1953-7		
163	Maternal serotonin is crucial for murine embryonic development. **2007**, 104, 329-34		279
162	Characterization of the novel human serotonin receptor subunits 5-HT3C,5-HT3D, and 5-HT3E. **2007**, 72, 8-17		137
161	Wirksamkeit und Vertr□glichkeit von E. coli Laves-Extrakt bei Kindern und Erwachsenen mit Reizdarmsyndrom. **2007**, 56, 389-398		
160	Regional distribution of solute carrier mRNA expression along the human intestinal tract. **2007**, 35, 590-4		195
159	Is this recently characterized gastrointestinal pathogen responsible for rising rates of inflammatory bowel disease (IBD) and IBD associated autism in Europe and the United States in the 1990s?. **2007**, 69, 652-9		15
158	IFN-gamma and TNF-alpha decrease serotonin transporter function and expression in Caco2 cells. **2007**, 292, G779-84		70
157	The serotonin signaling system: from basic understanding to drug development for functional GI disorders. **2007**, 132, 397-414		1011
156	Desperately seeking serotonin... A commentary on the withdrawal of tegaserod and the state of drug development for functional and motility disorders. **2007**, 132, 2287-90		79
155	Approaches to the treatment of visceral pain. **2007**, 4, 171-176		1
154	New insights into the pathogenesis and pathophysiology of irritable bowel syndrome. **2007**, 39, 201-15		106
153	5-Hydroxytryptophan activates colonic myenteric neurons and propulsive motor function through 5-HT4 receptors in conscious mice. **2007**, 292, G419-28		27
152	Serotonergic and non-serotonergic targets in the pharmacotherapy of visceral hypersensitivity. **2007**, 19, 89-119		45
151	Actions of sumatriptan on myenteric neurones: relief from an old headache in the enteric nervous system?. **2007**, 19, 1-3		6
150	Meta-analysis: a functional polymorphism in the gene encoding for activity of the serotonin transporter protein is not associated with the irritable bowel syndrome. *Alimentary Pharmacology and Therapeutics*, **2007**, 26, 979-86	6.1	76

149	Serotonin pharmacology in the gastrointestinal tract: a review. **2008**, 377, 181-203		77
148	Serotonin signaling in diverticular disease. **2008**, 12, 1439-45		79
147	The role of serotonin in irritable bowel syndrome: implications for management. **2008**, 10, 363-8		21
146	The role of serotonin in intestinal luminal sensing and secretion. **2008**, 193, 311-23		93
145	A randomized, double-blind, placebo-controlled clinical trial of the effectiveness of the novel serotonin type 3 receptor antagonist ramosetron in both male and female Japanese patients with diarrhea-predominant irritable bowel syndrome. **2008**, 43, 1202-11		88
144	The genetics of the serotonin transporter and irritable bowel syndrome. **2008**, 14, 295-304		33
143	Enterochromaffin cell hyperplasia in irritable pouch syndrome. *American Journal of Gastroenterology*, **2008**, 103, 2293-300	0.7	28
142	Serotonin type 3 receptor genes: HTR3A, B, C, D, E. **2008**, 9, 501-4		70
141	Continuous amperometric detection of co-released serotonin and melatonin from the mucosa in the ileum. **2008**, 133, 516-24		52
140	Role of anxiety in the pathophysiology of irritable bowel syndrome: importance of the amygdala. **2009**, 3, 47		45
139	The selective 5-hydroxytryptamine 1A antagonist, AZD7371 [3(R)-(N,N-dicyclobutylamino)-8-fluoro-3,4-dihydro-2H-1-benzopyran-5-carboxamide (R,R)-tartrate monohydrate] (robalzotan tartrate monohydrate), inhibits visceral pain-related visceromotor, but not autonomic cardiovascular, responses to colorectal distension in rats. **2009**, 329, 1048-55		17
138	Unbalanced expression of protease-activated receptors-1 and -2 in the colon of diarrhea-predominant irritable bowel syndrome patients. **2009**, 44, 666-74		23
137	The serotonin transporter polymorphism rs25531 is associated with irritable bowel syndrome. **2009** , 54, 2663-70		43
136	Understanding the role of tryptophan and serotonin metabolism in gastrointestinal function. **2009**, 21, 1239-49		212
135	Duodenal mastocytosis, eosinophilia and intraepithelial lymphocytosis as possible disease markers in the irritable bowel syndrome and functional dyspepsia. *Alimentary Pharmacology and Therapeutics*, **2009**, 29, 765-73	6.1	185
134	Citrobacter rodentium colitis evokes post-infectious hyperexcitability of mouse nociceptive colonic dorsal root ganglion neurons. **2009**, 587, 3505-21		37
133	Visceral hypersensitivity induced by activation of transient receptor potential vanilloid type 1 is mediated through the serotonin pathway in rat colon. *European Journal of Pharmacology*, **2010**, 647, 75-83	5.3	24
132	Mucosal serotonin signaling is altered in chronic constipation but not in opiate-induced constipation. *American Journal of Gastroenterology*, **2010**, 105, 1173-80	0.7	35

131	Analysis of real-time serotonin (5-HT) availability during experimental colitis in mouse. **2010**, 298, G446-55	54
130	Altered purinergic signaling in colorectal dorsal root ganglion neurons contributes to colorectal hypersensitivity. **2010**, 104, 3113-23	27
129	Release of 5-hydroxytryptamine from the mucosa is not required for the generation or propagation of colonic migrating motor complexes. **2010**, 138, 659-70 670.e1-2	125
128	Serotonin signaling is altered in irritable bowel syndrome with diarrhea but not in functional dyspepsia in pediatric age patients. **2010**, 139, 249-58	122
127	Serotonin release and uptake in the gastrointestinal tract. **2010**, 153, 47-57	181
126	Electrochemical measurements of serotonin (5-HT) release from the guinea pig mucosa using continuous amperometry with a boron-doped diamond microelectrode. **2010**, 19, 182-185	48
125	Understanding changes in uptake and release of serotonin from gastrointestinal tissue using a novel electroanalytical approach. **2010**, 135, 2340-7	17
124	The tryptophan hydroxylase inhibitor LX1031 shows clinical benefit in patients with nonconstipating irritable bowel syndrome. **2011**, 141, 507-16	81
123	Alterations in jejunal morphology and serotonin-containing enteroendocrine cells in peripubertal male rats associated with subchronic atrazine exposure. **2011**, 74, 2304-9	11
122	Boron-doped diamond nano/microelectrodes for biosensing and in vitro measurements. **2011**, 3, 518-40	20
121	Understanding and treating abdominal pain and spasms in organic gastrointestinal diseases: inflammatory bowel disease and biliary diseases. **2011**, 45 Suppl, S89-93	32
120	Genetics and gastrointestinal symptoms. **2011**, 29, 261-80	3
119	Postnatal development of the serotonin signaling system in the mucosa of the guinea pig ileum. **2011**, 23, 161-8, e40	8
118	The relationship between inflammation-induced neuronal excitability and disrupted motor activity in the guinea pig distal colon. **2011**, 23, 673-e279	33
117	Associations of tryptophan hydroxylase gene polymorphisms with irritable bowel syndrome. **2011**, 23, 233-9, e116	28
116	Ontogeny and regulation of the serotonin transporter: providing insights into human disorders. **2011**, 131, 61-79	82
115	Methodologies for Toxicity Monitoring and Nanotechnology Risk Assessment. **2011**, 141-180	5
114	Hemiplegic migraine, seizures, progressive spastic paraparesis, mood disorder, and coma in siblings with low systemic serotonin. **2011**, 31, 1580-6	12

113	Acute tryptophan depletion alters the effective connectivity of emotional arousal circuitry during visceral stimuli in healthy women. **2011**, 60, 1196-203		44
112	JCM-16021, a Chinese Herbal Formula, Attenuated Visceral Hyperalgesia in TNBS-Induced Postinflammatory Irritable Bowel Syndrome through Reducing Colonic EC Cell Hyperplasia and Serotonin Availability in Rats. **2012**, 2012, 239638		9
111	Nonruminant Nutrition Symposium: Involvement of gut neural and endocrine systems in pathological disorders of the digestive tract. **2012**, 90, 1203-12		5
110	Serotonin and GI Disorders: An Update on Clinical and Experimental Studies. **2012**, 3, e13		117
109	Postmenopausal women with constipation and cardiovascular disease. **2012**, 125, e5; author reply e7-8		
108	Revisiting concepts of visceral nociception in irritable bowel syndrome. **2012**, 16, 1444-54		31
107	Activation of colonic mucosal 5-HT(4) receptors accelerates propulsive motility and inhibits visceral hypersensitivity. **2012**, 142, 844-854.e4		189
106	Key factors in developing the trinitrobenzene sulfonic acid-induced post-inflammatory irritable bowel syndrome model in rats. *World Journal of Gastroenterology*, **2012**, 18, 2481-92	5.6	33
105	Effect of the 5-HT4 receptor and serotonin transporter on visceral hypersensitivity in rats. **2012**, 45, 948-54		18
104	Serotonin transporter gene polymorphisms in Southwestern Iranian patients with irritable bowel syndrome. **2013**, 14, 59-62		6
103	Loss of ascl1a prevents secretory cell differentiation within the zebrafish intestinal epithelium resulting in a loss of distal intestinal motility. **2013**, 376, 171-86		33
102	Decreased levels of kynurenic acid in the intestinal mucosa of IBS patients: relation to serotonin and psychological state. **2013**, 74, 501-4		35
101	Serotonin signalling in the gut--functions, dysfunctions and therapeutic targets. **2013**, 10, 473-86		537
100	Serotonin and serotonin transporter in the rectum of patients with irritable bowel disease. *Molecular Medicine Reports*, **2013**, 8, 451-5	2.9	31
99	A serotonin transporter gene (SLC6A4) polymorphism is associated with reduced risk of irritable bowel syndrome in American and Asian population: a meta-analysis. *PLoS ONE*, **2013**, 8, e75567	3.7	20
98	Is irritable bowel syndrome an organic disorder?. *World Journal of Gastroenterology*, **2014**, 20, 384-400	5.6	66
97	Increased serotonin transporter immunoreactivity intensity in the ileum of patients with irritable bowel disease. *Molecular Medicine Reports*, **2014**, 9, 180-4	2.9	25
96	A balance theory of peripheral corticotropin-releasing factor receptor type 1 and type 2 signaling to induce colonic contractions and visceral hyperalgesia in rats. **2014**, 155, 4655-64		24

95	Red kidney bean (Phaseolus vulgaris) lectin stimulation increases the number of enterochromaffin cells in the small intestine of suckling piglets. **2014**, 58, 289-294		2
94	Irritable bowel syndrome: emerging paradigm in pathophysiology. *World Journal of Gastroenterology*, **2014**, 20, 2456-69	5.6	88
93	Using human intestinal biopsies to study the pathogenesis of irritable bowel syndrome. **2014**, 26, 455-69		38
92	A novel serotonin-secreting cell type regulates ciliary motility in the mucociliary epidermis of Xenopus tadpoles. **2014**, 141, 1526-33		38
91	A biomarker panel and psychological morbidity differentiates the irritable bowel syndrome from health and provides novel pathophysiological leads. *Alimentary Pharmacology and Therapeutics*, **2014**, 39, 426-37	6.1	50
90	Effects and mechanisms of auricular electroacupuncture on visceral pain induced by colorectal distension in conscious rats. **2014**, 32, 472-7		10
89	Discovery and characterization of gut microbiota decarboxylases that can produce the neurotransmitter tryptamine. **2014**, 16, 495-503		281
88	Interaction between ingested nutrients and gut endocrine cells in patients with irritable bowel syndrome (review). **2014**, 34, 363-71		27
87	Visceral hypersensitivity in irritable bowel syndrome: evidence for involvement of serotonin metabolism--a preliminary study. **2015**, 27, 1127-37		18
86	Irritable bowel syndrome: an integrated explanatory model for clinical practice. **2015**, 27, 750-63		19
85	Association of 5-HT2A receptor gene polymorphisms with gastrointestinal disorders in Egyptian children with autistic disorder. **2015**, 36C, 485-490		7
84	Recent advances in the diagnosis of irritable bowel syndrome. **2015**, 9, 1161-74		9
83	Corticotropin-releasing factor receptor type 1 and type 2 interaction in irritable bowel syndrome. **2015**, 50, 819-30		33
82	l-Tryptophan Activates Mammalian Target of Rapamycin and Enhances Expression of Tight Junction Proteins in Intestinal Porcine Epithelial Cells. **2015**, 145, 1156-62		65
81	Gastrointestinal motility and its enteric actors in mechanosensitivity: past and present. **2015**, 467, 191-200		14
80	Regulation of the serotonin transporter in the pathogenesis of irritable bowel syndrome. *World Journal of Gastroenterology*, **2016**, 22, 8137-48	5.6	43
79	Rotavirus and Serotonin Cross-Talk in Diarrhoea. *PLoS ONE*, **2016**, 11, e0159660	3.7	30
78	The effect and mechanism of electroacupuncture at LI11 and ST37 on constipation in a rat model. **2016**, 34, 194-200		44

77	Acute paraquat exposure impairs colonic motility by selectively attenuating nitrergic signalling in the mouse. **2016**, 195, 8-15		3
76	Expression of serotonin, chromogranin-A, serotonin receptor-2B, tryptophan hydroxylase-1, and serotonin reuptake transporter in the intestine of dogs with chronic enteropathy. **2016**, 28, 271-8		6
75	Oridonin Alleviates Visceral Hyperalgesia in a Rat Model of Postinflammatory Irritable Bowel Syndrome: Role of Colonic Enterochromaffin Cell and Serotonin Availability. **2016**, 19, 586-92		9
74	Effective treatment with combination of peripheral 5-hydroxytryptamine synthetic inhibitor and 5-hydroxytryptamine 2 receptor antagonist on glucocorticoid-induced whole-body insulin resistance with hyperglycemia. **2016**, 7, 833-844		6
73	Alterations in serotonin metabolism in the irritable bowel syndrome. *Alimentary Pharmacology and Therapeutics*, **2016**, 43, 272-82	6.1	44
72	Interaction between diet and gastrointestinal endocrine cells. **2016**, 4, 651-656		21
71	Decreased Serotonin Levels and Serotonin-Mediated Osteoblastic Inhibitory Signaling in Patients With Ankylosing Spondylitis. **2016**, 31, 630-9		10
70	Water avoidance stress induces visceral hyposensitivity through peripheral corticotropin releasing factor receptor type 2 and central dopamine D2 receptor in rats. **2016**, 28, 522-31		9
69	Effect of ramosetron in female patients with irritable bowel syndrome with diarrhea: a phase III long-term study. **2016**, 51, 874-82		16
68	The chemical coding of 5-hydroxytryptamine containing enteroendocrine cells in the mouse gastrointestinal tract. **2016**, 364, 489-497		31
67	The TNF-□antagonist etanercept reverses age-related decreases in colonic SERT expression and faecal output in mice. **2017**, 7, 42754		15
66	Genetic and biochemical changes of the serotonergic system in migraine pathobiology. *Journal of Headache and Pain*, **2017**, 18, 20	8.8	39
65	Diverse Effects of Gut-Derived Serotonin in Intestinal Inflammation. *ACS Chemical Neuroscience*, **2017**, 8, 920-931	5.7	42
64	Abnormal differentiation of stem cells into enteroendocrine cells in rats with DSS-induced colitis. *Molecular Medicine Reports*, **2017**, 15, 2106-2112	2.9	5
63	Visceral Sensitivity. **2017**, 39-52		2
62	3D Printed Molds Encompassing Carbon Composite Electrodes To Conduct Multisite Monitoring in the Entire Colon. *Analytical Chemistry*, **2017**, 89, 11690-11696	7.8	11
61	Role of serotonin on the intestinal mucosal immune response to stress-induced diarrhea in weaning mice. *BMC Gastroenterology*, **2017**, 17, 82	3	10
60	The Role of Serotonin Transporter in Human Lung Development and in Neonatal Lung Disorders. *Canadian Respiratory Journal*, **2017**, 2017, 9064046	2.1	12

59	Efficacy and safety of 5-hydroxytryptamine 3 receptor antagonists in irritable bowel syndrome: A systematic review and meta-analysis of randomized controlled trials. *PLoS ONE*, **2017**, 12, e0172846	3.7	45
58	DSP-6952, a novel 5-HT receptor partial agonist, inhibits visceral hypersensitivity and ameliorates gastrointestinal dysfunction in experimental animals. *European Journal of Pharmacology*, **2018**, 826, 123-132	5.3	10
57	Sulfation of catecholamines and serotonin by SULT1A3 allozymes. *Biochemical Pharmacology*, **2018**, 151, 104-113	6	7
56	Putative mechanisms of kiwifruit on maintenance of normal gastrointestinal function. *Critical Reviews in Food Science and Nutrition*, **2018**, 58, 2432-2452	11.5	12
55	Upregulation of the high-affinity choline transporter in colon relieves stress-induced hyperalgesia. *Journal of Pain Research*, **2018**, 11, 1971-1982	2.9	3
54	What We Know and What We Need to Know about Aromatic and Cationic Biogenic Amines in the Gastrointestinal Tract. *Foods*, **2018**, 7,	4.9	19
53	Association between SERT insertion/deletion polymorphism and the risk of irritable bowel syndrome: A meta-analysis based on 7039 subjects. *Gene*, **2018**, 679, 133-137	3.8	25
52	Altered colonic sensory and barrier functions by CRF: roles of TLR4 and IL-1. *Journal of Endocrinology*, **2018**, 239, 241-252	4.7	22
51	Gastrointestinal Hormones ?. **2018**, 31-70		15
50	Serotonin in the gut: Blessing or a curse. *Biochimie*, **2019**, 161, 56-64	4.6	50
49	Diet in Irritable Bowel Syndrome (IBS): Interaction with Gut Microbiota and Gut Hormones. *Nutrients*, **2019**, 11,	6.7	39
48	Effect of Flavobacterium psychrophilum on the neuroendocrine response of rainbow trout (Oncorhynchus mykiss) in a time course experiment. *Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology*, **2019**, 236, 110525	2.6	2
47	5-HT receptor antagonism reduces defecation in rat: A potential treatment strategy for irritable bowel syndrome with diarrhea. *European Journal of Pharmacology*, **2019**, 864, 172718	5.3	3
46	The Microbiota-Gut-Brain Axis. *Physiological Reviews*, **2019**, 99, 1877-2013	47.9	979
45	Effect of banana peel extract on serotonin immunoreactivity and stool consistency in colon of healthy male Wistar rat. **2019**,		
44	Tryptophan Supplementation Increases Reproduction Performance, Milk Yield, and Milk Composition in Lactating Sows and Growth Performance of Their Piglets. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 5096-5104	5.7	12
43	Expression and clinical significance of 5-HT and 5-HTR in the intestinal mucosa of patient with diarrhea-type irritable bowel syndrome. *Experimental and Therapeutic Medicine*, **2019**, 17, 3077-3082	2.1	8
42	Serotonin-estrogen interactions: What can we learn from pregnancy?. *Biochimie*, **2019**, 161, 88-108	4.6	19

41	Review article: the pharmacological causes of colon ischaemia. *Alimentary Pharmacology and Therapeutics*, **2019**, 49, 51-63	6.1	14
40	Irritable bowel syndrome and the gut microbiota. *Journal of the Royal Society of New Zealand*, **2020**, 50, 470-490	2	0
39	The trace aminergic system: a gender-sensitive therapeutic target for IBS?. *Journal of Biomedical Science*, **2020**, 27, 95	13.3	6
38	PPAR□A turning point for irritable bowel syndrome treatment. *Life Sciences*, **2020**, 257, 118103	6.8	4
37	Food intake-related genes in chicken determined through combinatorial genome-wide association study and transcriptome analysis. *Animal Genetics*, **2020**, 51, 741-751	2.5	2
36	The microbiota-gut-brain axis: Focus on the fundamental communication pathways. *Progress in Molecular Biology and Translational Science*, **2020**, 176, 43-110	4	10
35	Involvement of 5-HT1B/1D receptors in the inflammatory response and oxidative stress in intestinal ischemia/reperfusion in rats. *European Journal of Pharmacology*, **2020**, 882, 173265	5.3	5
34	Tryptophan Metabolites Along the Microbiota-Gut-Brain Axis: An Interkingdom Communication System Influencing the Gut in Health and Disease. *International Journal of Tryptophan Research*, **2020**, 13, 1178646920928984	5.6	42
33	Oxidative Stress in Autism Spectrum Disorder. *Molecular Neurobiology*, **2020**, 57, 2314-2332	6.2	76
32	Fecal microbiota transplantation for irritable bowel syndrome: An intervention for the 21 century. *World Journal of Gastroenterology*, **2021**, 27, 2921-2943	5.6	1
31	Characterisation of novel functionality within the Blastocystis tryptophanase gene. *PLoS Neglected Tropical Diseases*, **2021**, 15, e0009730	4.8	
30	The Physiological Control of Eating: Signals, Neurons, and Networks. *Physiological Reviews*, **2021**,	47.9	8
29	The brain-gut interaction: the conversation and the implications. *South African Journal of Clinical Nutrition*, **2011**, 24, 8-14	1.1	6
28	Influence of the serotonin transporter 5HTTLPR polymorphism on symptom severity in irritable bowel syndrome. *PLoS ONE*, **2013**, 8, e54831	3.7	34
27	ACG Clinical Guideline: Management of Irritable Bowel Syndrome. *American Journal of Gastroenterology*, **2021**, 116, 17-44	0.7	98
26	Serotonin Transporter Gene (SLC6A4) Polymorphism and Mucosal Serotonin Levels in Southeastern Iranian Patients with Irritable Bowel Syndrome. *Middle East Journal of Digestive Diseases*, **2017**, 9, 26-32	1.1	8
25	Brain and Gut CRF Signaling: Biological Actions and Role in the Gastrointestinal Tract. *Current Molecular Pharmacology*, **2018**, 11, 51-71	3.7	59
24	Decreased expression of serotonin in the jejunum and increased numbers of mast cells in the terminal ileum in patients with irritable bowel syndrome. *World Journal of Gastroenterology*, **2007**, 13, 6041-7	5.6	68

23	Analgesic effects of JCM-16021 on neonatal maternal separation-induced visceral pain in rats. *World Journal of Gastroenterology*, **2010**, 16, 837-45	5.6	19
22	Comparison of 5-hydroxytryptophan signaling pathway characteristics in diarrhea-predominant irritable bowel syndrome and ulcerative colitis. *World Journal of Gastroenterology*, **2016**, 22, 3451-9	5.6	16
21	Possible role of intestinal stem cells in the pathophysiology of irritable bowel syndrome. *World Journal of Gastroenterology*, **2020**, 26, 1427-1438	5.6	4
20	Expression of serotonin receptors in the colonic tissue of chronic diarrhea rats. *Saudi Journal of Gastroenterology*, **2016**, 22, 234-9	3	2
19	Traditional Korean diet can alter the urine organic acid profile, which may reflect the metabolic influence of the diet. *Journal of Nutrition and Health*, **2020**, 53, 231	0.8	3
18	Microbiota-Gut-Brain Axis and Epilepsy: A Review on Mechanisms and Potential Therapeutics. *Frontiers in Immunology*, **2021**, 12, 742449	8.4	11
17	Buikpijn. **2009**, 16-46		
16	Gastrointestinal system. **2011**, 43-128		
15	Visceral Sensitivity. **2013**, 37-48		
14	Irritable Bowel Syndrome and Functional Gastrointestinal Disorders in Pediatric Inflammatory Bowel Disease. **2013**, 505-514		
13	Irritable Bowel Syndrome and Functional GI Disorders in Inflammatory Bowel Disease. **2017**, 639-649		
12	Irritable bowel syndrome and small intestinal bacterial overgrowth: Assessment with breath test. *Archives of Clinical Gastroenterology*, 041-048	0.1	
11	Diarrhea-Predominant and Constipation-Predominant Irritable Bowel Syndrome: Current Prescription Drug Treatment Options. *Drugs*, **2021**, 81, 1953-1968	12.1	3
10	Irritable Bowel Syndrome and Functional Gastrointestinal Disorders in Pediatric Inflammatory Bowel Disease. **2008**, 581-591		
9	Need for a comprehensive medical approach to the neuro-immuno-gastroenterology of irritable bowel syndrome. *World Journal of Gastroenterology*, **2011**, 17, 2791-800	5.6	11
8	Irritable bowel syndrome: a review article. *Middle East Journal of Digestive Diseases*, **2010**, 2, 66-77	1.1	8
7	Characterization of immune cells and perforin mutations in familiar venous thromboembolism. *International Journal of Clinical and Experimental Medicine*, **2015**, 8, 7951-7		2
6	Lack of an Association between a Functional Polymorphism in the Promoter and Breast Cancer in Women in Northeast Iran. *Reports of Biochemistry and Molecular Biology*, **2017**, 6, 112-117	1.3	1

5	Neurotransmitter and Intestinal Interactions: Focus on the Microbiota-Gut-Brain Axis in Irritable Bowel Syndrome.. *Frontiers in Endocrinology*, **2022**, 13, 817100	5.7	1
4	Evaluation of Xiaoyao-san for treatment of irritable bowel syndrome: A systematic review and meta-analysis of randomized controlled trials. *European Journal of Integrative Medicine*, **2022**, 102152	1.7	
3	Visceral Sensitivity. **2022**, 43-59		0
2	Irritable Bowel Syndrome and Functional GI Disorders in Inflammatory Bowel Disease. **2023**, 729-739		0
1	Changes in Tryptophan Metabolism on Serotonin and Kynurenine Pathways in Patients with Irritable Bowel Syndrome. **2023**, 15, 1262		0