Satish Rattan

List of Publications by Year
in descending order

102 papers	3,612 citations	117625 34 h-index	149698 56 g-index
102 all docs	102 docs citations	102 times ranked	1802 citing authors

#	Article	IF	Citations
1	Evidence for the presence and release of BDNF in the neuronal and nonâ€neuronal structures of the internal anal sphincter. Neurogastroenterology and Motility, 2022, 34, e14099.	3.0	40
2	In the memory of our following colleagues, and friends. Neurogastroenterology and Motility, 2022, 34, e14393.	3.0	1
3	BDNF rescues aging-associated internal anal sphincter dysfunction. American Journal of Physiology - Renal Physiology, 2021, 321, G87-G97.	3.4	29
4	BDNF augments rat internal anal sphincter smooth muscle tone via RhoA/ROCK signaling and nonadrenergic noncholinergic relaxation via increased NO release. American Journal of Physiology - Renal Physiology, 2020, 318, G23-G33.	3.4	37
5	Increased expression of desmin and vimentin reduces bladder smooth muscle contractility via JNK2. FASEB Journal, 2020, 34, 2126-2146.	0.5	5
6	Downregulation of thromboxane A2 and angiotensin II type 1 receptors associated with aging-related decrease in internal anal sphincter tone. Scientific Reports, 2019, 9, 6759.	3.3	7
7	NF-ÎºB and GATA-Binding Factor 6 Repress Transcription of Caveolins in Bladder Smooth Muscle Hypertrophy. American Journal of Pathology, 2019, 189, 847-867.	3.8	5
8	Acidosis potentiates endothelium-dependent vasorelaxation and gap junction communication in the superior mesenteric artery. European Journal of Pharmacology, 2018, 827, 22-31.	3.5	8
9	In vivo magnetofection: a novel approach for targeted topical delivery of nucleic acids for rectoanal motility disorders. American Journal of Physiology - Renal Physiology, 2018, 314, G109-G118.	3.4	12
10	Role of differentially expressed microRNA-139-5p in the regulation of phenotypic internal anal sphincter smooth muscle tone. Scientific Reports, 2017, 7, 1477.	3.3	8
11	Ca²⁺/calmodulin/MLCK pathway initiates, and RhoA/ROCK maintains, the internal anal sphincter smooth muscle tone. American Journal of Physiology - Renal Physiology, 2017, 312, G63-G66.	3.4	23
12	Aging-associated changes in microRNA expression profile of internal anal sphincter smooth muscle: Role of microRNA-133a. American Journal of Physiology - Renal Physiology, 2016, 311, G964-G973.	3.4	23
13	Role of microRNAs in gastrointestinal smooth muscle fibrosis and dysfunction: novel molecular perspectives on the pathophysiology and therapeutic targeting. American Journal of Physiology - Renal Physiology, 2016, 310, G449-G459.	3.4	11
14	Association between common variable immunodeficiency and collagenous infiltrative disorders of the gastrointestinal tract: A series of four patients. Indian Journal of Gastroenterology, 2016, 35, 133-138.	1.4	8
15	Role of muscarinic-3 receptor antibody in systemic sclerosis: correlation with disease duration and effects of IVIG. American Journal of Physiology - Renal Physiology, 2016, 310, G1052-G1060.	3.4	49
16	Nature of extracellular signal that triggers RhoA/ROCK activation for the basal internal anal sphincter tone in humans. American Journal of Physiology - Renal Physiology, 2015, 308, G924-G933.	3.4	16
17	Role of SM22 in the differential regulation of phasic vs. tonic smooth muscle. American Journal of Physiology - Renal Physiology, 2015, 308, G605-G612.	3.4	6
18	Bimodal effect of oxidative stress in internal anal sphincter smooth muscle. American Journal of Physiology - Renal Physiology, 2015, 309, G292-G300.	3.4	5

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19	Survey of anal sphincter dysfunction using anal manometry in patients with fecal incontinence: a possible guide to therapy. Annals of Gastroenterology, 2015, 28, 469-74.	0.6	8
20	Heme oxygenase-1 upregulation modulates tone and fibroelastic properties of internal anal sphincter. American Journal of Physiology - Renal Physiology, 2014, 307, G595-G601.	3.4	6
21	Aging-associated oxidative stress leads to decrease in IAS tone via RhoA/ROCK downregulation. American Journal of Physiology - Renal Physiology, 2014, 306, G983-G991.	3.4	17
22	Smooth Muscleâ€"Specific Myosin Phosphatase Target Subunit 1 (MYPT1): An Important Piece of the Puzzle. Gastroenterology, 2013, 145, 1494-1495.	1.3	2
23	Role of PKC and RhoA/ROCK pathways in the spontaneous phasic activity in the rectal smooth muscle. American Journal of Physiology - Renal Physiology, 2013, 304, G723-G731.	3.4	15
24	Intestinal GUCY2C Prevents TGF-Î² Secretion Coordinating Desmoplasia and Hyperproliferation in Colorectal Cancer. Cancer Research, 2013, 73, 6654-6666.	0.9	21
25	Smooth muscle fascicular reorientation is required for esophageal morphogenesis and dependent on Cdo. Journal of Cell Biology, 2013, 201, 309-323.	5.2	20
26	Bioengineered human IAS reconstructs with functional and molecular properties similar to intact IAS. American Journal of Physiology - Renal Physiology, 2012, 303, G713-G722.	3.4	16
27	Biosynthetic Pathways and the Role of the Mas Receptor in the Effects of Angiotensin-(1â€"7) in Smooth Muscles. International Journal of Hypertension, 2012, 2012, 1-6.	1.3	8
28	Effects of Scleroderma Antibodies and Pooled Human Immunoglobulin on Anal Sphincter and Colonic Smooth Muscle Function. Gastroenterology, 2012, 143, 1308-1318.	1.3	38
29	RhoA/ROCK pathway is the major molecular determinant of basal tone in intact human internal anal sphincter. American Journal of Physiology - Renal Physiology, 2012, 302, G664-G675.	3.4	27
30	Role of rho kinase in the functional and dysfunctional tonic smooth muscles. Trends in Pharmacological Sciences, 2011, 32, 384-393.	8.7	59
31	Basal internal anal sphincter tone, inhibitory neurotransmission, and other factors contributing to the maintenance of high pressures in the anal canal. Neurogastroenterology and Motility, 2011, 23, 3-7.	3.0	21
32	Immunocytochemical evidence for PDBu-induced activation of RhoA/ROCK in human internal anal sphincter smooth muscle cells. American Journal of Physiology - Renal Physiology, 2011, 301, G317-G325.	3.4	13
33	3-Hydroxymethyl coenzyme A reductase inhibition attenuates spontaneous smooth muscle tone via RhoA/ROCK pathway regulated by RhoA prenylation. American Journal of Physiology - Renal Physiology, 2010, 298, G962-G969.	3.4	20
34	RhoA/Rho-Kinase: Pathophysiologic and Therapeutic Implications in Gastrointestinal Smooth Muscle Tone and Relaxation. Gastroenterology, 2010, 138, 13-18.e3.	1.3	54
35	COX-1 vs. COX-2 as a determinant of basal tone in the internal anal sphincter. American Journal of Physiology - Renal Physiology, 2009, 296, G219-G225.	3.4	13
36	Immunoglobulins from scleroderma patients inhibit the muscarinic receptor activation in internal anal sphincter smooth muscle cells. American Journal of Physiology - Renal Physiology, 2009, 297, G1206-G1213.	3.4	63

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37	Arachidonic acid metabolites follow the preferential course of cyclooxygenase pathway for the basal tone in the internal anal sphincter. American Journal of Physiology - Renal Physiology, 2009, 296, G727-G734.	3.4	14
38	Role of RHO Kinase in Gastrointestinal Motility. Gastroenterology, 2009, 136, 1109-1112.	1.3	2
39	Sympathetic (Adrenergic) Innervation Modulates But Does Not Generate Basal Tone in the Internal Anal Sphincter Smooth Muscle. Gastroenterology, 2008, 134, 2179-2181.	1.3	3
40	Selectivity of ROCK inhibitors in the spontaneously tonic smooth muscle. American Journal of Physiology - Renal Physiology, 2008, 294, G687-G693.	3.4	24
41	PET Imaging of VPAC1 Expression in Experimental and Spontaneous Prostate Cancer. Journal of Nuclear Medicine, 2008, 49, 112-121.	5.0	46
42	Role of phospholipase A2 (group I secreted) in the genesis of basal tone in the internal anal sphincter smooth muscle. American Journal of Physiology - Renal Physiology, 2007, 293, G979-G986.	3.4	11
43	Cellular regulation of basal tone in internal anal sphincter smooth muscle by RhoA/ROCK. American Journal of Physiology - Renal Physiology, 2007, 292, G1747-G1756.	3.4	44
44	RhoA Prenylation Inhibitor Produces Relaxation of Tonic Smooth Muscle of Internal Anal Sphincter. Journal of Pharmacology and Experimental Therapeutics, 2007, 321, 501-508.	2.5	9
45	Vasoactive intestinal peptide (VIP) and pituitary adenylate cyclase activating peptide (PACAP) receptor specific peptide analogues for PET imaging of breast cancer: In vitro/in vivo evaluation. Regulatory Peptides, 2007, 144, 91-100.	1.9	37
46	H-ras Inhibits RhoA/ROCK Leading to a Decrease in the Basal Tone in the Internal Anal Sphincter. Gastroenterology, 2007, 132, 1401-1409.	1.3	8
47	Rho Kinase as a Novel Molecular Therapeutic Target for Hypertensive Internal Anal Sphincter. Gastroenterology, 2006, 131, 108-116.	1.3	42
48	Spontaneously tonic smooth muscle has characteristically higher levels of RhoA/ROK compared with the phasic smooth muscle. American Journal of Physiology - Renal Physiology, 2006, 291, G830-G837.	3.4	57
49	Translocation of AT1- and AT2-Receptors by Higher Concentrations of Angiotensin II in the Smooth Muscle Cells of Rat Internal Anal Sphincter. Journal of Pharmacology and Experimental Therapeutics, 2006, 319, 1088-1095.	2.5	29
50	Angiotensin-Converting Enzyme and Angiotensin II Receptor Subtype 1 Inhibitors Restitute Hypertensive Internal Anal Sphincter in the Spontaneously Hypertensive Rats. Journal of Pharmacology and Experimental Therapeutics, 2006, 318, 725-734.	2.5	25
51	The internal anal sphincter: regulation of smooth muscle tone and relaxation. Neurogastroenterology and Motility, 2005, 17, 50-59.	3.0	109
52	Autocrine regulation of internal anal sphincter tone by renin-angiotensin system: comparison with phasic smooth muscle. American Journal of Physiology - Renal Physiology, 2005, 289, G1164-G1175.	3.4	30
53	Nitric Oxide Not Carbon Monoxide Mediates Nonadrenergic Noncholinergic Relaxation in the Murine Internal Anal Sphincter. Gastroenterology, 2005, 129, 1954-1966.	1.3	41
54	Mechanism of internal anal sphincter relaxation by CORM-1, authentic CO, and NANC nerve stimulation. American Journal of Physiology - Renal Physiology, 2004, 287, G605-G611.	3.4	23

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55	Esophageal muscle physiology and morphogenesis require assembly of a collagen XIXâ€"rich basement membrane zone. Journal of Cell Biology, 2004, 166, 591-600.	5.2	52
56	Role of Adenylate and Guanylate Cyclases in Î²1-, Î²2-, and Î²3-Adrenoceptor-Mediated Relaxation of Internal Anal Sphincter Smooth Muscle. Journal of Pharmacology and Experimental Therapeutics, 2004, 308, 1111-1120.	2.5	28
57	Angiotensin II-Induced Relaxation of Anococcygeus Smooth Muscle via Desensitization of AT1 Receptor, and Activation of AT2 Receptor Associated with Nitric-Oxide Synthase Pathway. Journal of Pharmacology and Experimental Therapeutics, 2004, 311, 394-401.	2.5	17
58	Impaired Rectoanal Inhibitory Response in Scleroderma (Systemic Sclerosis): An Association with Fecal Incontinence. Digestive Diseases and Sciences, 2004, 49, 1040-1045.	2.3	55
59	Evidence for the role of angiotensin II biosynthesis in the rat internal anal sphincter tone. Gastroenterology, 2004, 127, 127-138.	1.3	35
60	The multiple mediators of neurogenic smooth muscle relaxation. Trends in Endocrinology and Metabolism, 2004, 15, 189-191.	7.1	39
61	PET imaging of oncogene overexpression using 64Cu-vasoactive intestinal peptide (VIP) analog: comparison with 99mTc-VIP analog. Journal of Nuclear Medicine, 2004, 45, 1381-9.	5.0	49
62	Functional and Molecular Characterization of Î²-Adrenoceptors in the Internal Anal Sphincter. Journal of Pharmacology and Experimental Therapeutics, 2003, 305, 615-624.	2.5	20
63	Inhibitory Effect of Î²3-Adrenoceptor Agonist in Lower Esophageal Sphincter Smooth Muscle: In Vitro Studies. Journal of Pharmacology and Experimental Therapeutics, 2003, 304, 48-55.	2.5	19
64	Role of nitric oxide in Î²₃-adrenoceptor activation on basal tone of internal anal sphincter. American Journal of Physiology - Renal Physiology, 2003, 285, G547-G555.	3.4	15
65	Involvement of Rho and Rho-Associated Kinase in Sphincteric Smooth Muscle Contraction by Angiotensin II. Experimental Biology and Medicine, 2003, 228, 972-981.	2.4	35
66	Animal model for angiotensin II effects in the internal anal sphincter smooth muscle: mechanism of action. American Journal of Physiology - Renal Physiology, 2002, 282, G461-G469.	3.4	15
67	Î²3 adrenergic stimulation inhibits the opossum lower esophageal sphincter. Gastroenterology, 2002, 123, 1508-1515.	1.3	9
68	Comparison of angiotensin II (Ang II) effects in the internal anal sphincter (IAS) and lower esophageal sphincter smooth muscles. Life Sciences, 2002, 70, 2147-2164.	4.3	20
69	Role of<i>pp60^{c-src}</i>and<i>p^{44/42}</i>MAPK in ANG II-induced contraction of rat tonic gastrointestinal smooth muscles. American Journal of Physiology - Renal Physiology, 2002, 283, G390-G399.	3.4	12
70	Inducible and neuronal nitric oxide synthase involvement in lipopolysaccharide-induced sphincteric dysfunction. American Journal of Physiology - Renal Physiology, 2001, 280, G32-G42.	3.4	61
71	Mechanism of internal anal sphincter smooth muscle relaxation by phorbol 12,13-dibutyrate. American Journal of Physiology - Renal Physiology, 2001, 280, G1341-G1350.	3.4	11
72	Heme oxygenase-2 distribution in anorectum: colocalization with neuronal nitric oxide synthase. American Journal of Physiology - Renal Physiology, 2000, 278, G148-G155.	3.4	48

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73	Heme oxygenase activity in the internal anal sphincter: Effects of nonadrenergic, noncholinergic nerve stimulation. Gastroenterology, 2000, 118, 477-486.	1.3	24
74	Mechanism of inhibition of VIP-induced LES relaxation by heme oxygenase inhibitor zinc protoporphyrin IX. American Journal of Physiology - Renal Physiology, 1999, 276, G138-G145.	3.4	4
75	Mechanism of action of cholera toxin on the opossum internal anal sphincter smooth muscle. American Journal of Physiology - Renal Physiology, 1999, 277, G152-G160.	3.4	6
76	Role of Galanin in the Gastrointestinal Sphincters a. Annals of the New York Academy of Sciences, 1998, 863, 143-155.	3.8	11
77	Sites of Actions of Contractile and Relaxant Effects of Pituitary Adenylate Cyclase Activating Peptide (PACAP) in the Internal Anal Sphincter Smooth Musclea. Annals of the New York Academy of Sciences, 1998, 865, 503-511.	3.8	4
78	Neuronal NOS gene expression in gastrointestinal myenteric neurons and smooth muscle cells. American Journal of Physiology - Cell Physiology, 1997, 273, C1868-C1875.	4.6	34
79	Colocalization of NADPH-diaphorase staining and VIP immunoreactivity in neurons in opossum internal anal sphincter. Digestive Diseases and Sciences, 1995, 40, 781-791.	2.3	25
80	Differential Isoactin Gene Expression in the Sphincteric and Nonsphincteric Gastrointestinal Smooth Muscles of the Opossum. Experimental Biology and Medicine, 1994, 205, 321-326.	2.4	6
81	Vasoactve intestinal polypeptide gene expression is characteristically higher in opossum gastrointestinal sphincters. Gastroenterology, 1994, 106, 1467-1476.	1.3	6
82	Role of nitric oxide in sympathetic neurotransmission in opossum internal anal sphincter. Gastroenterology, 1993, 105, 827-836.	1.3	21
83	Nitric oxide pathway in rectoanal inhibitory reflex of opossum internal anal sphincter. Gastroenterology, 1992, 103, 43-50.	1.3	101
84	Effects of galanin on the opossum internal anal sphincter: Structure-activity relationship. Gastroenterology, 1991, 100, 711-718.	1.3	21
85	Role of galanin in the gut. Gastroenterology, 1991, 100, 1762-1768.	1.3	66
86	Peptide Histidine Isoleucine and Vasoactive Intestinal Polypeptide Cause Relaxation of Opossum Internal Anal Sphincter via Two Distinct Receptors. Gastroenterology, 1989, 96, 403-413.	1.3	27
87	Inhibitory effect of calcitonin gene-related peptide and calcitonin on opossum esophageal smooth muscle. Gastroenterology, 1988, 94, 284-293.	1.3	50
88	Effect of galanin on the opossium lower esophageal sphincter. Life Sciences, 1987, 41, 2783-2790.	4.3	31
89	Structure-activity relationship of subtypes of cholecystokinin receptors in the cat lower esophageal sphincter. Gastroenterology, 1986, 90, 94-102.	1.3	40
90	Membrane potential and mechanical responses of the opossum esophagus to vagal stimulation and swallowing. Gastroenterology, 1983, 85, 922-928.	1.3	49

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91	Vasoactive intestinal peptide causes peristaltic contractions in the esophageal body. Life Sciences, 1982, 30, 1557-1563.	4.3	27
92	Neural Regulation of Gastrointestinal Motility: Nature of Neurotransmission. Medical Clinics of North America, 1981, 65, 1129-1147.	2.5	10
93	VIP as a possible neurotransmitter of non-cholinergic non-adrenergic inhibitory neurones. Nature, 1980, 288, 378-380.	27.8	338
94	Evidence against purinergic inhibitory nerves in the vagal pathway to the opossum lower esophageal sphincter. Gastroenterology, 1980, 78, 898-904.	1.3	27
95	Neurohumoral, hormonal, and drug receptors for the lower esophageal sphincter. Gastroenterology, 1978, 74, 598-619.	1.3	289
96	Effect of Vasoactive Intestinal Polypeptide (VIP) on the Lower Esophageal Sphincter Pressure (LESP). Experimental Biology and Medicine, 1977, 155, 40-43.	2.4	56
97	Genesis of Basal Sphincter Pressure: Effect of Tetrodotoxin on Lower Esophageal Sphincter Pressure in Opossum in Vivo. Gastroenterology, 1976, 71, 62-67.	1.3	184
98	Effect of Nicotine on the Lower Esophageal Sphincter. Gastroenterology, 1975, 69, 154-159.	1.3	43
99	Neural Control of the Lower Esophageal Sphincter INFLUENCE OF THE VAGUS NERVES. Journal of Clinical Investigation, 1974, 54, 899-906.	8.2	118
100	Comparison of the Effects of Prostaglandins E1, E2, and A2, and of Hypovolumic Hypotension on the Lower Esophageal Sphincter. Gastroenterology, 1973, 65, 608-612.	1.3	50
101	Mechanism of the Lower Esophageal Sphincter Relaxation ACTION OF PROSTAGLANDIN E1 AND THEOPHYLLINE. Journal of Clinical Investigation, 1973, 52, 337-341.	8.2	119
102	Effect of Prostaglandin F2Â and Gastrin Pentapeptide on the Lower Esophageal Sphincter. Experimental Biology and Medicine, 1972, 141, 573-575.	2.4	17