

# Ingvars Birznieks

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9534585/publications.pdf>

Version: 2024-02-01

58  
papers

2,160  
citations

394421

19  
h-index

243625

44  
g-index

66  
all docs

66  
docs citations

66  
times ranked

1862  
citing authors

#	ARTICLE	IF	CITATIONS
1	First spikes in ensembles of human tactile afferents code complex spatial fingertip events. <i>Nature Neuroscience</i> , 2004, 7, 170-177.	14.8	501
2	Encoding of Direction of Fingertip Forces by Human Tactile Afferents. <i>Journal of Neuroscience</i> , 2001, 21, 8222-8237.	3.6	299
3	Melatonin agonist tasimelteon (VEC-162) for transient insomnia after sleep-time shift: two randomised controlled multicentre trials. <i>Lancet, The</i> , 2009, 373, 482-491.	13.7	193
4	Tactile Sensors for Friction Estimation and Incipient Slip Detection – Toward Dexterous Robotic Manipulation: A Review. <i>IEEE Sensors Journal</i> , 2018, 18, 9049-9064.	4.7	130
5	Influence of object shape on responses of human tactile afferents under conditions characteristic of manipulation. <i>European Journal of Neuroscience</i> , 2003, 18, 164-176.	2.6	113
6	Effects of deep and superficial experimentally induced acute pain on muscle sympathetic nerve activity in human subjects. <i>Journal of Physiology</i> , 2009, 587, 183-193.	2.9	66
7	Slowly Adapting Mechanoreceptors in the Borders of the Human Fingernail Encode Fingertip Forces. <i>Journal of Neuroscience</i> , 2009, 29, 9370-9379.	3.6	63
8	Mechanisms for Force Adjustments to Unpredictable Frictional Changes at Individual Digits During Two-Fingered Manipulation. <i>Journal of Neurophysiology</i> , 1998, 80, 1989-2002.	1.8	49
9	Spike Timing Matters in Novel Neuronal Code Involved in Vibrotactile Frequency Perception. <i>Current Biology</i> , 2017, 27, 1485-1490.e2.	3.9	47
10	Encoding of tangential torque in responses of tactile afferent fibres innervating the fingerpad of the monkey. <i>Journal of Physiology</i> , 2010, 588, 1057-1072.	2.9	43
11	Individual differences in the cardiovascular responses to tonic muscle pain: parallel increases or decreases in muscle sympathetic nerve activity, blood pressure and heart rate. <i>Experimental Physiology</i> , 2012, 97, 1084-1092.	2.0	43
12	Muscle spindles in human tibialis anterior encode muscle fascicle length changes. <i>Journal of Neurophysiology</i> , 2017, 117, 1489-1498.	1.8	42
13	Recent progress in artificial synaptic devices: materials, processing and applications. <i>Journal of Materials Chemistry C</i> , 2021, 9, 8372-8394.	5.5	41
14	The effects of experimental muscle and skin pain on the static stretch sensitivity of human muscle spindles in relaxed leg muscles. <i>Journal of Physiology</i> , 2008, 586, 2713-2723.	2.9	36
15	Tactile sensory channels over-ruled by frequency decoding system that utilizes spike pattern regardless of receptor type. <i>ELife</i> , 2019, 8, .	6.0	33
16	Effects of deep and superficial experimentally induced acute pain on skin sympathetic nerve activity in human subjects. <i>Experimental Brain Research</i> , 2009, 195, 317-324.	1.5	30
17	Control of Forces Applied by Individual Fingers Engaged in Restraint of an Active Object. <i>Journal of Neurophysiology</i> , 1997, 78, 117-128.	1.8	28
18	Modulation of Human Muscle Spindle Discharge by Arterial Pulsations - Functional Effects and Consequences. <i>PLoS ONE</i> , 2012, 7, e35091.	2.5	23

#	ARTICLE	IF	CITATIONS
19	Differential sensitivity to surface compliance by tactile afferents in the human finger pad. <i>Journal of Neurophysiology</i> , 2014, 111, 1308-1317.	1.8	22
20	Spontaneous fluctuations in the peripheral photoplethysmographic waveform: roles of arterial pressure and muscle sympathetic nerve activity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2012, 302, H826-H836.	3.2	21
21	Tactile afferents encode grip safety before slip for different frictions. , 2014, 2014, 4123-6.		19
22	Initial contact shapes the perception of friction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	19
23	The effects of preferential A- and C-fibre blocks and T-type calcium channel antagonist on detection of low-force monofilaments in healthy human participants. <i>BMC Neuroscience</i> , 2015, 16, 52.	1.9	18
24	Consistent interindividual increases or decreases in muscle sympathetic nerve activity during experimental muscle pain. <i>Experimental Brain Research</i> , 2014, 232, 1309-1315.	1.5	17
25	Effects of changing skin mechanics on the differential sensitivity to surface compliance by tactile afferents in the human finger pad. <i>Journal of Neurophysiology</i> , 2015, 114, 2249-2257.	1.8	17
26	Decoding tactile afferent activity to obtain an estimate of instantaneous force and torque applied to the fingerpad. <i>Journal of Neurophysiology</i> , 2015, 114, 474-484.	1.8	16
27	Friction sensing mechanisms for perception and motor control: passive touch without sliding may not provide perceivable frictional information. <i>Journal of Neurophysiology</i> , 2021, 125, 809-823.	1.8	15
28	Directional encoding of fingertip force by human tactile afferents. <i>Acta Physiologica Scandinavica</i> , 1999, 167, 181 A24-181 A24.	2.2	14
29	Tonic muscle pain does not increase fusimotor drive to human leg muscles: implications for chronic muscle pain. <i>Experimental Physiology</i> , 2013, 98, 1125-1132.	2.0	14
30	Classification of Texture and Frictional Condition at Initial Contact by Tactile Afferent Responses. <i>Lecture Notes in Computer Science</i> , 2014, , 460-468.	1.3	14
31	Tactile Motion Adaptation Reduces Perceived Speed but Shows No Evidence of Direction Sensitivity. <i>PLoS ONE</i> , 2012, 7, e45438.	2.5	14
32	The tactile motion aftereffect suggests an intensive code for speed in neurons sensitive to both speed and direction of motion. <i>Journal of Neurophysiology</i> , 2016, 115, 1703-1712.	1.8	13
33	Temporal patterns in electrical nerve stimulation: Burst gap code shapes tactile frequency perception. <i>PLoS ONE</i> , 2020, 15, e0237440.	2.5	10
34	Cutaneous Mechanoreceptors, <i>Functional Behavior</i> . , 2009, , 914-922.		10
35	Perceived Frequency of Aperiodic Vibrotactile Stimuli Depends on Temporal Encoding. <i>Lecture Notes in Computer Science</i> , 2018, , 199-208.	1.3	9
36	Movement Planning Determines Sensory Suppression: An Event-related Potential Study. <i>Journal of Cognitive Neuroscience</i> , 2021, 33, 2427-2439.	2.3	9

#	ARTICLE	IF	CITATIONS
37	Biphasic effects of tonic stimulation of muscle nociceptors on skin sympathetic nerve activity in human subjects. <i>Experimental Brain Research</i> , 2012, 221, 107-114.	1.5	8
38	Tapping Into the Language of Touch: Using Non-invasive Stimulation to Specify Tactile Afferent Firing Patterns. <i>Frontiers in Neuroscience</i> , 2020, 14, 500.	2.8	8
39	Can Video Self-Modeling Improve Affected Limb Reach and Grasp Ability in Stroke Patients?. <i>Journal of Motor Behavior</i> , 2018, 50, 117-126.	0.9	7
40	Peripheral Nerve Activation Evokes Machine-Learnable Signals in the Dorsal Column Nuclei. <i>Frontiers in Systems Neuroscience</i> , 2019, 13, 11.	2.5	7
41	Effects of tonic muscle pain on fusimotor control of human muscle spindles during isometric ankle dorsiflexion. <i>Journal of Neurophysiology</i> , 2019, 121, 1143-1149.	1.8	7
42	Lateral Skin Stretch Influences Direction Judgments of Motion Across the Skin. <i>Lecture Notes in Computer Science</i> , 2014, , 425-431.	1.3	7
43	Somatotopic mismatch following stroke: a pathophysiological condition escaping detection. <i>BMJ Case Reports</i> , 2012, 2012, bcr2012006304-bcr2012006304.	0.5	7
44	Generating tactile afferent stimulation patterns for slip and touch feedback in neural prosthetics. , 2013, 2013, 5922-5.		6
45	Single tactile afferents outperform human subjects in a vibrotactile intensity discrimination task. <i>Journal of Neurophysiology</i> , 2014, 112, 2382-2387.	1.8	6
46	Classifying Torque, Normal Force and Direction Using Monkey Afferent Nerve Spike Rates. <i>Lecture Notes in Computer Science</i> , 2010, , 43-50.	1.3	6
47	Somatotopic mismatch of hand representation following stroke: is recovery possible?. <i>Neurocase</i> , 2016, 22, 95-102.	0.6	5
48	Burst gap code predictions for tactile frequency are valid across the range of perceived frequencies attributed to two distinct tactile channels. <i>Journal of Neurophysiology</i> , 2021, 125, 687-692.	1.8	5
49	Differential responses in populations of fingertip tactile afferents to objects's surface curvatures. <i>Acta Physiologica Scandinavica</i> , 1999, 167, 181 A24-181 A25.	2.2	3
50	Decoding tactile sensation: Multiple regression analysis of monkey fingertip afferent mechanoreceptor population responses. , 2012, 2012, 4631-4.		3
51	Submillimeter Lateral Displacement Enables Friction Sensing and Awareness of Surface Slipperiness. <i>IEEE Transactions on Haptics</i> , 2022, 15, 20-25.	2.7	3
52	14-3-3. , 2008, , 1-1.		2
53	The Relationship Between Tactile Intensity Perception and Afferent Spike Count Is Moderated by a Function of Frequency. <i>IEEE Transactions on Haptics</i> , 2022, PP, 1-1.	2.7	2
54	The burst gap is a peripheral temporal code for pitch perception that is shared across audition and touch. <i>Scientific Reports</i> , 2022, 12, .	3.3	2

#	ARTICLE	IF	CITATIONS
55	The Bayesian Decoding of Force Stimuli from Slowly Adapting Type I Fibers in Humans. PLoS ONE, 2016, 11, e0153366.	2.5	1
56	A point process approach to encode tactile afferents. , 2015, , .		0
57	Haptics in Neuroscience. IEEE Transactions on Haptics, 2016, 9, 443-445.	2.7	0
58	Does muscle pain increase muscle stiffness?. , 2009, , 21-22.		0