Yuri P Ivanenko

List of Publications by Year
in descending order

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144	10,372	36271	37183
papers	citations	51 h-index	96 g-index

151	151	151	6014
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Higher Responsiveness of Pattern Generation Circuitry to Sensory Stimulation in Healthy Humans Is Associated with a Larger Hoffmann Reflex. Biology, 2022, 11, 707.	1.3	3
2	Relation between Step-To-Step Transition Strategies and Walking Pattern in Older Adults. Applied Sciences (Switzerland), 2022, 12, 5055.	1.3	2
3	Age-related changes in the neuromuscular control of forward and backward locomotion. PLoS ONE, 2021, 16, e0246372.	1.1	17
4	Increasing muscle activity correlations during spontaneous movements in the first six months of life. Neuroscience Letters, 2021, 756, 135957.	1.0	4
5	Neuromuscular Age-Related Adjustment of Gait When Moving Upwards and Downwards. Frontiers in Human Neuroscience, 2021, 15, 749366.	1.0	8
6	Postural control in the elephant. Journal of Experimental Biology, 2021, 224, .	0.8	3
7	Adjustments in the Range of Angular Motion during Walking after Amputation of the Toes: A Case Report. Symmetry, 2021, 13, 2065.	1.1	0
8	Pelvic movements during walking throughout gestation - the relationship between morphology and kinematic parameters. Clinical Biomechanics, 2020, 71, 146-151.	0.5	9
9	Maturation of the Locomotor Circuitry in Children With Cerebral Palsy. Frontiers in Bioengineering and Biotechnology, 2020, 8, 998.	2.0	20
10	Locomotor patterns during obstacle avoidance in children with cerebral palsy. Journal of Neurophysiology, 2020, 124, 574-590.	0.9	10
11	Spinal motoneurons of the human newborn are highly synchronized during leg movements. Science Advances, 2020, 6, .	4.7	44
12	Clinical Relevance of State-of-the-Art Analysis of Surface Electromyography in Cerebral Palsy. Frontiers in Neurology, 2020, 11, 583296.	1.1	10
13	Emergence of Different Gaits in Infancy: Relationship Between Developing Neural Circuitries and Changing Biomechanics. Frontiers in Bioengineering and Biotechnology, 2020, 8, 473.	2.0	25
14	Exoskeleton Walk Training in Paralyzed Individuals Benefits From Transcutaneous Lumbar Cord Tonic Electrical Stimulation. Frontiers in Neuroscience, 2020, 14, 416.	1.4	40
15	Distinct locomotor precursors in newborn babies. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9604-9612.	3.3	45
16	Development of Locomotor-Related Movements in Early Infancy. Frontiers in Cellular Neuroscience, 2020, 14, 623759.	1.8	9
17	Differential activation of lumbar and sacral motor pools during walking at different speeds and slopes. Journal of Neurophysiology, 2019, 122, 872-887.	0.9	18
18	Muscle Responses to Passive Joint Movements in Infants During the First Year of Life. Frontiers in Physiology, 2019, 10, 1158.	1.3	13

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19	Neuromusculoskeletal model that walks and runs across a speed range with a few motor control parameter changes based on the muscle synergy hypothesis. Scientific Reports, 2019, 9, 369.	1.6	55
20	Locomotor coordination in patients with Hereditary Spastic Paraplegia. Journal of Electromyography and Kinesiology, 2019, 45, 61-69.	0.7	26
21	Synergistic influences of sensory and central stimuli on non-voluntary rhythmic arm movements. Human Movement Science, 2019, 64, 230-239.	0.6	0
22	Progressive changes in walking kinematics throughout pregnancyâ€"A follow up study. Gait and Posture, 2019, 68, 518-524.	0.6	11
23	Early manifestation of armâ€"leg coordination during stepping on a surface in human neonates. Experimental Brain Research, 2018, 236, 1105-1115.	0.7	17
24	Gait assessment of the expectant mothers â€" Systematic review. Gait and Posture, 2018, 62, 7-19.	0.6	12
25	Differential changes in the spinal segmental locomotor output in Hereditary Spastic Paraplegia. Clinical Neurophysiology, 2018, 129, 516-525.	0.7	20
26	Human-Human Interaction Forces and Interlimb Coordination During Side-by-Side Walking With Hand Contact. Frontiers in Physiology, 2018, 9, 179.	1.3	38
27	Backward walking highlights gait asymmetries in children with cerebral palsy. Journal of Neurophysiology, 2018, 119, 1153-1165.	0.9	30
28	Human Postural Control. Frontiers in Neuroscience, 2018, 12, 171.	1.4	245
29	Kinematic patterns while walking on a slope at different speeds. Journal of Applied Physiology, 2018, 125, 642-653.	1.2	41
30	A kinematic synergy for terrestrial locomotion shared by mammals and birds. ELife, 2018, 7, .	2.8	29
31	Rhythmic wrist movements facilitate the soleus H-reflex and non-voluntary air-stepping in humans. Neuroscience Letters, 2017, 638, 39-45.	1.0	5
32	Interaction forces and step synchronization during side-by-side walking with hand contact. Gait and Posture, 2017, 57, 27.	0.6	0
33	Planar covariance of upper and lower limb elevation angles during handâ€"foot crawling in healthy young adults. Experimental Brain Research, 2017, 235, 3287-3294.	0.7	6
34	Foot Placement Characteristics and Plantar Pressure Distribution Patterns during Stepping on Ground in Neonates. Frontiers in Physiology, 2017, 8, 784.	1.3	18
35	Human Locomotion in Hypogravity: From Basic Research to Clinical Applications. Frontiers in Physiology, 2017, 8, 893.	1.3	31
36	Pendular energy transduction within the step during human walking on slopes at different speeds. PLoS ONE, 2017, 12, e0186963.	1.1	33

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37	Tonic and Rhythmic Spinal Activity Underlying Locomotion. Current Pharmaceutical Design, 2017, 23, 1753-1763.	0.9	20
38	Muscle Coordination and Locomotion in Humans. Current Pharmaceutical Design, 2017, 23, 1821-1833.	0.9	12
39	Immature Spinal Locomotor Output in Children with Cerebral Palsy. Frontiers in Physiology, 2016, 7, 478.	1.3	89
40	Are we ready to move beyond the reductionist approach of classical synergy control?. Physics of Life Reviews, 2016, 17, 38-39.	1.5	2
41	Drawing ellipses in water: evidence for dynamic constraints in the relation between velocity and path curvature. Experimental Brain Research, 2016, 234, 1649-1657.	0.7	14
42	Human cervical spinal cord circuitry activated by tonic input can generate rhythmic arm movements. Journal of Neurophysiology, 2016, 115, 1018-1030.	0.9	20
43	Editorial: Modularity in motor control: from muscle synergies to cognitive action representation. Frontiers in Computational Neuroscience, 2015, 9, 126.	1.2	52
44	Tapping into rhythm generation circuitry in humans during simulated weightlessness conditions. Frontiers in Systems Neuroscience, 2015, 9, 14.	1.2	15
45	Planar Covariation of Hindlimb and Forelimb Elevation Angles during Terrestrial and Aquatic Locomotion of Dogs. PLoS ONE, 2015, 10, e0133936.	1.1	32
46	Neuromuscular adjustments of gait associated with unstable conditions. Journal of Neurophysiology, 2015, 114, 2867-2882.	0.9	112
47	Visual gravity cues in the interpretation of biological movements: neural correlates in humans. NeuroImage, 2015, 104, 221-230.	2.1	46
48	Characteristics of EMG activity in infants with movement disorders. Human Physiology, 2015, 41, 39-46.	0.1	2
49	Design and Control of the MINDWALKER Exoskeleton. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 277-286.	2.7	287
50	Coordination of intrinsic and extrinsic foot muscles during walking. European Journal of Applied Physiology, 2015, 115, 691-701.	1.2	54
51	Spinal motor outputs during step-to-step transitions of diverse human gaits. Frontiers in Human Neuroscience, 2014, 8, 305.	1.0	37
52	EMG patterns during assisted walking in the exoskeleton. Frontiers in Human Neuroscience, 2014, 8, 423.	1.0	106
53	Control of Leg Movements Driven by EMG Activity of Shoulder Muscles. Frontiers in Human Neuroscience, 2014, 8, 838.	1.0	15
54	Locomotor patterns in cerebellar ataxia. Journal of Neurophysiology, 2014, 112, 2810-2821.	0.9	114

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55	Human Locomotion under Reduced Gravity Conditions: Biomechanical and Neurophysiological Considerations. BioMed Research International, 2014, 2014, 1-12.	0.9	34
56	Function dictates the phase dependence of vision during human locomotion. Journal of Neurophysiology, 2014, 112, 165-180.	0.9	55
57	Effects of transcranial magnetic stimulation during voluntary and non-voluntary stepping movements in humans. Neuroscience Letters, 2014, 579, 64-69.	1.0	22
58	Can modular strategies simplify neural control of multidirectional human locomotion?. Journal of Neurophysiology, 2014, 111, 1686-1702.	0.9	97
59	Visual control of trunk translation and orientation during locomotion. Experimental Brain Research, 2014, 232, 1941-1951.	0.7	17
60	Investigation of muscle tone in patients with Parkinsonâ€™s disease in unloading conditions. Human Physiology, 2014, 40, 125-131.	0.1	4
61	Muscle activation patterns are bilaterally linked during split-belt treadmill walking in humans. Journal of Neurophysiology, 2014, 111, 1541-1552.	0.9	58
62	Locomotor-Like Leg Movements Evoked by Rhythmic Arm Movements in Humans. PLoS ONE, 2014, 9, e90775.	1.1	45
63	Coupling of upper and lower limb pattern generators during human crawling at different arm/leg speed combinations. Experimental Brain Research, 2013, 225, 217-225.	0.7	18
64	Are effects of the symmetric and asymmetric tonic neck reflexes still visible in healthy adults?. Neuroscience Letters, 2013, 556, 89-92.	1.0	17
65	Changes in the Spinal Segmental Motor Output for Stepping during Development from Infant to Adult. Journal of Neuroscience, 2013, 33, 3025-3036.	1.7	74
66	Lack of non-voluntary stepping responses in Parkinsonâ€™s disease. Neuroscience, 2013, 235, 96-108.	1.1	19
67	Plasticity and Different Solutions to Reorganize Muscle Patterns during Gait. Biosystems and Biorobotics, 2013, , 1249-1252.	0.2	2
68	Evolutionary and Developmental Modules. Frontiers in Computational Neuroscience, 2013, 7, 61.	1.2	50
69	Plasticity and modular control of locomotor patterns in neurological disorders with motor deficits. Frontiers in Computational Neuroscience, 2013, 7, 123.	1.2	38
70	Biological oscillations for learning walking coordination: dynamic recurrent neural network functionally models physiological central pattern generator. Frontiers in Computational Neuroscience, 2013, 7, 70.	1.2	19
71	Changes of Gait Kinematics in Different Simulators of Reduced Gravity. Journal of Motor Behavior, 2013, 45, 495-505.	0.5	21
72	Trunk Orientation, Stability, and Quadrupedalism. Frontiers in Neurology, 2013, 4, 20.	1.1	20

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73	Features of hand-foot crawling behavior in human adults. Journal of Neurophysiology, 2012, 107, 114-125.	0.9	48
74	MINDWALKER: Going one step further with assistive lower limbs exoskeleton for SCI condition subjects. , 2012, , .		36
75	Foot anatomy specialization for postural sensation and control. Journal of Neurophysiology, 2012, 107, 1513-1521.	0.9	97
76	Recurrence quantification analysis of gait in normal and hypovestibular subjects. Gait and Posture, 2012, 35, 48-55.	0.6	70
77	Development of human locomotion. Current Opinion in Neurobiology, 2012, 22, 822-828.	2.0	89
78	From Spinal Central Pattern Generators to Cortical Network: Integrated BCI for Walking Rehabilitation. Neural Plasticity, 2012, 2012, 1-13.	1.0	91
79	Patterned control of human locomotion. Journal of Physiology, 2012, 590, 2189-2199.	1.3	258
80	Humans Running in Place on Water at Simulated Reduced Gravity. PLoS ONE, 2012, 7, e37300.	1.1	10
81	Locomotor Primitives in Newborn Babies and Their Development. Science, 2011, 334, 997-999.	6.0	552
82	Smooth changes in the EMG patterns during gait transitions under body weight unloading. Journal of Neurophysiology, 2011, 106, 1525-1536.	0.9	32
83	Assisted leg displacements and progressive loading by a tilt table combined with FES promote gait recovery in acute stroke. NeuroRehabilitation, 2011, 29, 67-77.	0.5	20
84	Gait transitions in simulated reduced gravity. Journal of Applied Physiology, 2011, 110, 781-788.	1.2	38
85	Idiosyncratic control of the center of mass in expert climbers. Scandinavian Journal of Medicine and Science in Sports, 2011, 21, 688-699.	1.3	27
86	A novel approach to mechanical foot stimulation during human locomotion under body weight support. Human Movement Science, 2011, 30, 352-367.	0.6	27
87	Locomotor body scheme. Human Movement Science, 2011, 30, 341-351.	0.6	55
88	Optimal walking speed following changes in limb geometry. Journal of Experimental Biology, 2011, 214, 2276-2282.	0.8	38
89	Impulses of activation but not motor modules are preserved in the locomotion of subacute stroke patients. Journal of Neurophysiology, 2011, 106, 202-210.	0.9	170
90	Motor Patterns During Walking on a Slippery Walkway. Journal of Neurophysiology, 2010, 103, 746-760.	0.9	102

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91	The many roles of vision during walking. Experimental Brain Research, 2010, 206, 337-350.	0.7	79
92	Kinematic Strategies in Newly Walking Toddlers Stepping Over Different Support Surfaces. Journal of Neurophysiology, 2010, 103, 1673-1684.	0.9	42
93	Migration of Motor Pool Activity in the Spinal Cord Reflects Body Mechanics in Human Locomotion. Journal of Neurophysiology, 2010, 104, 3064-3073.	0.9	49
94	Changes in the Limb Kinematics and Walking-Distance Estimation After Shank Elongation: Evidence for a Locomotor Body Schema?. Journal of Neurophysiology, 2009, 101, 1419-1429.	0.9	32
95	Activation of walking by electrical stimulation in humans under the conditions of muscle unloading and its variations under the effect of afferent influences. Human Physiology, 2009, 35, 295-305.	0.1	0
96	Distributed neural networks for controlling human locomotion. Brain Research Bulletin, 2009, 78, 13-21.	1.4	74
97	Tonic Central and Sensory Stimuli Facilitate Involuntary Air-Stepping in Humans. Journal of Neurophysiology, 2009, 101, 2847-2858.	0.9	71
98	Spatiotemporal organization of Î±â€motoneuron activity in the human spinal cord during different gaits and gait transitions. European Journal of Neuroscience, 2008, 27, 3351-3368.	1.2	101
99	Asymmetric leg loading during sit-to-stand, walking and quiet standing in patients after unilateral total hip replacement surgery. Clinical Biomechanics, 2008, 23, 424-433.	0.5	119
100	On the Origin of Planar Covariation of Elevation Angles During Human Locomotion. Journal of Neurophysiology, 2008, 99, 1890-1898.	0.9	120
101	Modular Control of Limb Movements during Human Locomotion. Journal of Neuroscience, 2007, 27, 11149-11161.	1.7	206
102	Review Article: Plasticity of Spinal Centers in Spinal Cord Injury Patients: New Concepts for Gait Evaluation and Training. Neurorehabilitation and Neural Repair, 2007, 21, 358-365.	1.4	48
103	Control of Foot Trajectory in Walking Toddlers: Adaptation to Load Changes. Journal of Neurophysiology, 2007, 97, 2790-2801.	0.9	43
104	Development of Independent Walking in Toddlers. Exercise and Sport Sciences Reviews, 2007, 35, 67-73.	1.6	98
105	Spaceâ€"Time Relativity in Self-Motion Reproduction. Journal of Neurophysiology, 2007, 97, 451-461.	0.9	53
106	Motor Patterns in Human Walking and Running. Journal of Neurophysiology, 2006, 95, 3426-3437.	0.9	633
107	Spinal Cord Maps of Spatiotemporal Alpha-Motoneuron Activation in Humans Walking at Different Speeds. Journal of Neurophysiology, 2006, 95, 602-618.	0.9	173
108	Interaction of involuntary post-contraction activity with locomotor movements. Experimental Brain Research, 2006, 169, 255-260.	0.7	50

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109	Motor Control Programs and Walking. Neuroscientist, 2006, 12, 339-348.	2.6	229
110	Fast Adaptation of the Internal Model of Gravity for Manual Interceptions: Evidence for Event-Dependent Learning. Journal of Neurophysiology, 2005, 93, 1055-1068.	0.9	61
111	Kinematics in Newly Walking Toddlers Does Not Depend Upon Postural Stability. Journal of Neurophysiology, 2005, 94, 754-763.	0.9	48
112	Eye Movements Induced by Changes in the Internal Representation of Body Posture. Human Physiology, 2005, 31, 554-558.	0.1	1
113	Kinematics in Newly Walking Toddlers Does Not Depend Upon Postural Stability. Journal of Neurophysiology, 2005, 94, 754-763.	0.9	97
114	Coordination of Locomotion with Voluntary Movements in Humans. Journal of Neuroscience, 2005, 25, 7238-7253.	1.7	359
115	Distributed plasticity of locomotor pattern generators in spinal cord injured patients. Brain, 2004, 127, 1019-1034.	3.7	158
116	Internal Models of Target Motion: Expected Dynamics Overrides Measured Kinematics in Timing Manual Interceptions. Journal of Neurophysiology, 2004, 91, 1620-1634.	0.9	200
117	Development of pendulum mechanism and kinematic coordination from the first unsupported steps in toddlers. Journal of Experimental Biology, 2004, 207, 3797-3810.	0.8	134
118	Five basic muscle activation patterns account for muscle activity during human locomotion. Journal of Physiology, 2004, 556, 267-282.	1.3	854
119	Recovery of forward stepping in spinal cord injured patients does not transfer to untrained backward stepping. Experimental Brain Research, 2004, 157, 377-82.	0.7	46
120	Postural instability enhances motor responses to transcranial magnetic stimulation in humans. Neuroscience Letters, 2003, 337, 25-28.	1.0	100
121	Spatial invariance in anticipatory orienting behaviour during human navigation. Neuroscience Letters, 2003, 339, 243-247.	1.0	41
122	Temporal Components of the Motor Patterns Expressed by the Human Spinal Cord Reflect Foot Kinematics. Journal of Neurophysiology, 2003, 90, 3555-3565.	0.9	157
123	Two-thirds power law in human locomotion: role of ground contact forces. NeuroReport, 2002, 13, 1171-1174.	0.6	59
124	Control of Foot Trajectory in Human Locomotion: Role of Ground Contact Forces in Simulated Reduced Gravity. Journal of Neurophysiology, 2002, 87, 3070-3089.	0.9	234
125	Spatial, not temporal cues drive predictive orienting movements during navigation. NeuroReport, 2000, 11, 775-778.	0.6	36
126	Neck muscle vibration makes walking humans accelerate in the direction of gaze. Journal of Physiology, 2000, 525, 803-814.	1.3	76

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127	Influence of Leg Muscle Vibration on Human Walking. Journal of Neurophysiology, 2000, 84, 1737-1747.	0.9	118
128	Lack of anticipatory gaze-orienting responses in patients with right brain damage. Neurology, 2000, 54, 1656-1661.	1.5	3
129	The direction of postural instability affects postural reactions to ankle muscle vibration in humans. Neuroscience Letters, 2000, 292, 103-106.	1.0	76
130	Adaptation as a Sensorial Profile in Trait Anxiety. Journal of Anxiety Disorders, 2000, 14, 583-601.	1.5	35
131	Support stability influences postural responses to muscle vibration in humans. European Journal of Neuroscience, 1999, 11, 647-654.	1.2	128
132	Effect of gaze on postural responses to neck proprioceptive and vestibular stimulation in humans. Journal of Physiology, 1999, 519, 301-314.	1.3	88
133	Non-specific directional adaptation to asymmetrical visual-vestibular stimulation. Cognitive Brain Research, 1999, 7, 507-510.	3.3	7
134	Time course of gaze influences on postural responses to neck proprioceptive and galvanic vestibular stimulation in humans. Neuroscience Letters, 1999, 273, 121-124.	1.0	19
135	Sex, Lies And Virtual Reality. Nature Neuroscience, 1998, 1, 15-16.	7.1	52
136	Eye-head coordination for the steering of locomotion in humans: an anticipatory synergy. Neuroscience Letters, 1998, 253, 115-118.	1.0	204
137	Integration of somatosensory and vestibular inputs in perceiving the direction of passive whole-body motion. Cognitive Brain Research, 1997, 5, 323-327.	3.3	14
138	Human equilibrium on unstable support: the importance of feet-support interaction. Neuroscience Letters, 1997, 235, 109-112.	1.0	82
139	Muscle resistance to slow ramp weakly depends on activation level. Neuroscience, 1997, 80, 299-306.	1.1	6
140	The contribution of otoliths and semicircular canals to the perception of two-dimensional passive whole-body motion in humans. Journal of Physiology, 1997, 502, 223-233.	1.3	75
141	Spatial orientation in humans: perception of angular whole-body displacements in two-dimensional trajectories. Experimental Brain Research, 1997, 117, 419-427.	0.7	58
142	The influence of head rotation on human upright posture during balanced bilateral vibration. NeuroReport, 1995, 7, 137-140.	0.6	34
143	Kinesthetic reference for human orthograde posture. Neuroscience, 1995, 68, 229-243.	1.1	190
144	On biological principles of motor control. , 0, , .		0