Vittorio Sanguineti

List of Publications by Year
in descending order

104	3,087	186265	168389
papers	citations	28 h-index	53 g-index

110	110	110	2596
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Artificial Partners to Understand Joint Action: Representing Others to Develop Effective Coordination. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 1473-1482.	4.9	2
2	Versatile and non-versatile occupational back-support exoskeletons: A comparison in laboratory and field studies. Wearable Technologies, 2021, 2, .	3.1	13
3	Self-operated stimuli improve subsequent visual motion integration. Journal of Vision, 2021, 21, 13.	0.3	0
4	Intention-detection strategies for upper limb exosuits: model-based myoelectric vs dynamic-based control. , 2020, , .		9
5	Beta oscillations during adaptation to inertial and velocity dependent perturbations. , 2020, , .		1
6	Haptic vs sensorimotor training in the treatment of upper limb dysfunction in multiple sclerosis: A multi-center, randomised controlled trial. Journal of the Neurological Sciences, 2020, 412, 116743.	0.6	11
7	Adaptive Model-Based Myoelectric Control for a Soft Wearable Arm Exosuit: A New Generation of Wearable Robot Control. IEEE Robotics and Automation Magazine, 2020, 27, 43-53.	2.0	86
8	Incomplete information about the partner affects the development of collaborative strategies in joint action. PLoS Computational Biology, 2019, 15, e1006385.	3.2	17
9	A User Model for Adaptation of Task Parameters in Robot-Assisted Exercise. Biosystems and Biorobotics, 2019, , 200-204.	0.3	0
10	Estimation of Muscle Torques from EMG and Kinematics During Planar Arm Movements. , 2018, , .		1
11	Assistive controllers and modalities for robot-aided neurorehabilitation. , 2018, , 63-74.		6
12	Computational models of the recovery process in robot-assisted training. , 2018, , 117-135.		3
13	Technological Approaches for Neurorehabilitation: From Robotic Devices to Brain Stimulation and Beyond. Frontiers in Neurology, 2018, 9, 212.	2.4	49
14	Haptic communication between humans is tuned by the hard or soft mechanics of interaction. PLoS Computational Biology, 2018, 14, e1005971.	3.2	49
15	Computational rehabilitation of neglect: Using state-space models to understand the recovery mechanisms. , 2017, 2017, 187-192.		0
16	Computational Models of Stroke Recovery. , 2017, , 505-525.		0
17	Toward EMG-controlled force field generation for training and rehabilitation: From movement data to muscle geometry. , 2017, 2017, 90-95.		2
18	Modelling Collaborative Strategies in Physical Human-Human Interaction. Biosystems and Biorobotics, 2017, , 253-258.	0.3	6

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19	Effect of Position- and Velocity-Dependent Forces on Reaching Movements at Different Speeds. Frontiers in Human Neuroscience, 2016, 10, 609.	2.0	5
20	Effect of interface type in the VR-based acquisition of pedestrian skills in persons with ASD. , 2015, 2015, 5728-31.		9
21	Modulation of motor performance by a monetary incentive: A pilot study. , 2015, 2015, 238-41.		2
22	Natural interfaces and virtual environments for the acquisition of street crossing and path following skills in adults with Autism Spectrum Disorders: a feasibility study. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 17.	4.6	60
23	Adaptive training with full-body movements to reduce bradykinesia in persons with Parkinsonâ€™s disease: a pilot study. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 16.	4.6	29
24	Slaves no longer: review on role assignment for humanâ€“robot joint motor action. Adaptive Behavior, 2014, 22, 70-82.	1.9	80
25	Reward-based learning of a redundant task. , 2013, 2013, 6650386.		0
26	Neuromotor recovery from stroke: computational models at central, functional, and muscle synergy level. Frontiers in Computational Neuroscience, 2013, 7, 97.	2.1	17
27	Robot therapy for severely impaired stroke survivors: Toward a concurrent regulation of task difficulty and degree of assistance. , 2012, , .		3
28	Robot-assisted acquisition of a motor skill: Evolution of performance and effort. , 2012, , .		3
29	Concurrent adaptation to force fields and visual rotations. , 2012, , .		1
30	Robotic Assessment of Upper Limb Motor Function After Stroke. American Journal of Physical Medicine and Rehabilitation, 2012, 91, S255-S269.	1.4	115
31	Learning, Retention, and Slacking: A Model of the Dynamics of Recovery in Robot Therapy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 286-296.	4.9	61
32	Robot-assisted intermanual transfer of handwriting skills. Human Movement Science, 2012, 31, 1175-1190.	1.4	13
33	Transferring complex motor skills from an expert to a novice through robotics platforms: A new methodology to approach neuromotor rehabilitation. Gait and Posture, 2011, 33, S51-S52.	1.4	1
34	Basal ganglia and kinematics modulation: Insights from Parkinsonâ€™s and Huntingtonâ€™s diseases. Parkinsonism and Related Disorders, 2011, 17, 642-644.	2.2	11
35	Adaptation to constant-magnitude assistive forces: kinematic and neural correlates. Experimental Brain Research, 2011, 209, 425-436.	1.5	17
36	Neural correlates of motor learning and performance in a virtual ball putting task. , 2011, 2011, 5975487.		5

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37	A tailored exercise of manipulation of virtual tools to treat upper limb impairment in Multiple Sclerosis. , 2011, 2011, 5975509.		6
38	Adaptive regulation of assistance ‘as needed’ in robot-assisted motor skill learning and neuro-rehabilitation. , 2011, 2011, 5975375.		25
39	Toward ‘optimal’ schemes of robot assistance to facilitate motor skill learning. , 2011, 2011, 2355-8.		2
40	Inter-limb interference during bimanual adaptation to dynamic environments. Experimental Brain Research, 2010, 202, 693-707.	1.5	10
41	Self-adaptive robot training of stroke survivors for continuous tracking movements. Journal of NeuroEngineering and Rehabilitation, 2010, 7, 13.	4.6	82
42	Adaptive robot training for the treatment of incoordination in Multiple Sclerosis. Journal of NeuroEngineering and Rehabilitation, 2010, 7, 37.	4.6	68
43	New perspectives on the dialogue between brains and machines. Frontiers in Neuroscience, 2010, 4, 44.	2.8	51
44	Size-Change Detection Thresholds of a Hand-Held Bar at Rest and during Movement. Lecture Notes in Computer Science, 2010, , 327-332.	1.3	4
45	Consciousness as the Emergent Property of the Interaction Between Brain, Body, and Environment. Journal of Psychophysiology, 2010, 24, 125-130.	0.7	0
46	Bilateral robot therapy based on haptics and reinforcement learning: Feasibility study of a new concept for treatment of patients after stroke. Journal of Rehabilitation Medicine, 2009, 41, 961-965.	1.1	23
47	Desirable features of a “humanoid” robot-therapist. , 2009, 2009, 2418-21.		19
48	Motor imagery in robot-assistive rehabilitation: A study with healthy subjects. , 2009, , .		3
49	A proof of concept study for the integration of robot therapy with physiotherapy in the treatment of stroke patients. Clinical Rehabilitation, 2009, 23, 217-228.	2.2	57
50	Minimally assistive robot training for proprioception enhancement. Experimental Brain Research, 2009, 194, 219-231.	1.5	73
51	Real-time artifact filtering in continuous VEPs/fMRI recording. Journal of Neuroscience Methods, 2009, 184, 213-223.	2.5	5
52	Measuring functional recovery of hemiparetic subjects during gentle robot therapy. Measurement: Journal of the International Measurement Confederation, 2009, 42, 1176-1187.	5.0	10
53	Modeling the dynamics of the recovery process in robot therapy. , 2009, , .		3
54	Robot therapy for stroke survivors: proprioceptive training and regulation of assistance. Studies in Health Technology and Informatics, 2009, 145, 126-42.	0.3	18

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55	Robot therapy of the upper limb in stroke patients: preliminary experiences for the principle-based use of this technology. Functional Neurology, 2009, 24, 195-202.	1.3	8
56	Computer-Neural Hybrids. , 2009, , 837-841.		0
57	Activity, tolerability and efficacy of levetiracetam on cerebellar symptoms in multiple sclerosis patients: a pilot kinematic study. European Journal of Neurology, 2008, 15, 619-626.	3.3	12
58	Abnormal sensorimotor control, but intact force field adaptation, in multiple sclerosis subjects with no clinical disability. Multiple Sclerosis Journal, 2008, 14, 330-342.	3.0	71
59	14-3-3. , 2008, , 1-1.		2
60	Adaptive robot training in the rehabilitation of incoordination in Multiple Sclerosis: a pilot study. , 2007, , .		7
61	A Haptic Robot Reveals the Adaptation Capability of Individuals with Multiple Sclerosis. International Journal of Robotics Research, 2007, 26, 1225-1233.	8.5	29
62	Subtle upper limb impairment in asymptomatic multiple sclerosis subjects. Multiple Sclerosis Journal, 2007, 13, 428-432.	3.0	33
63	Robot therapy: the importance of haptic interaction. , 2007, , .		6
64	Cross-correlation based methods for estimating the functional connectivity in cortical networks. BMC Neuroscience, 2007, 8, .	1.9	2
65	Braccio di Ferro: A new haptic workstation for neuromotor rehabilitation. Technology and Health Care, 2006, 14, 123-142.	1.2	152
66	Encoding of Time-varying Stimuli in Populations of Cultured Neurons. Biological Cybernetics, 2006, 94, 335-349.	1.3	25
67	Computational models to understand sensorimotor control and adaptation performance. , 2006, , .		0
68	Braccio di Ferro: a new haptic workstation for neuromotor rehabilitation. Technology and Health Care, 2006, 14, 123-42.	1.2	39
69	Bio-mimetic trajectory generation using a neural time-base generator. Journal of Field Robotics, 2005, 22, 625-637.	0.7	6
70	Body sway during quiet standing: Is it the residual chattering of an intermittent stabilization process?. Human Movement Science, 2005, 24, 588-615.	1.4	182
71	Preflexes and internal models in biomimetic robot systems. Cognitive Processing, 2005, 6, 25-36.	1.4	11
72	Computational analysisin vitro: dynamics and plasticity of a neuro-robotic system. Journal of Neural Engineering, 2005, 2, S250-S265.	3.5	23

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73	Direct measurement of ankle stiffness during quiet standing: implications for control modelling and clinical application. Gait and Posture, 2005, 21, 410-424.	1.4	286
74	The Sway-Density Curve and the Underlying Postural Stabilization Process. Motor Control, 2004, 8, 292-311.	0.6	84
75	Cerebellar ataxia: Quantitative assessment and cybernetic interpretation. Human Movement Science, 2003, 22, 189-205.	1.4	35
76	Modelling Motor Control Paradigms. Chapman & Hall/CRC Mathematical and Computational Biology Series, 2003, , .	0.1	0
77	Ankle Muscle Stiffness Alone Cannot Stabilize Balance During Quiet Standing. Journal of Neurophysiology, 2002, 88, 2157-2162.	1.8	214
78	Cortical Maps as Topology-Representing Neural Networks Applied to Motor Control:. Mathematical Modelling: Theory and Applications, 2001, , 189-218.	0.2	0
79	Connecting Brains to Robots: An Artificial Body for Studying the Computational Properties of Neural Tissues. Artificial Life, 2000, 6, 307-324.	1.3	108
80	Representation of Space and Time in Motor Control. Studies in Cognitive Systems, 2000, , 472-509.	0.1	1
81	Computational Implications of Modeling Grasping as a Form of (Multiple-Parallel) Reaching. Motor Control, 1999, 3, 276-279.	0.6	2
82	Advances in modeling cortical maps. , 1999, , 267-278.		0
83	Coordinate-free sensorimotor processing: computing with population codes. Neural Networks, 1998, 11, 1417-1428.	5.9	15
84	A dynamic biomechanical model for neural control of speech production. Journal of the Acoustical Society of America, 1998, 103, 1615-1627.	1.1	77
85	Are Complex Control Signals Required for Human Arm Movement?. Journal of Neurophysiology, 1998, 79, 1409-1424.	1.8	252
86	Computational Maps for Articulatory Speech Synthesis. Perspectives in Neural Computing, 1998, , 213-218.	0.1	0
87	Artificial Force-Field Based Methods in Robotics. Advances in Psychology, 1997, , 169-190.	0.1	3
88	Cortical Maps of Sensorimotor Spaces. Advances in Psychology, 1997, , 1-36.	0.1	6
89	Computational maps and target fields for reaching movements. Advances in Psychology, 1997, , 507-546.	0.1	6
90	From Cortical Maps to the Control of Muscles. Advances in Psychology, 1997, , 547-591.	0.1	5

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91	Topologic organization of context fields for sensorimotor coordination. Behavioral and Brain Sciences, 1997, 20, 693-693.	0.7	0
92	Learning tidal waves versus learning sensorimotor mappings. Behavioral and Brain Sciences, 1997, 20, 260-261.	0.7	0
93	A computational theory of targeting movements based on force fields and topology representing networks. Neurocomputing, 1997, 15, 411-434.	5.9	40
94	A control model of human tongue movements in speech. Biological Cybernetics, 1997, 77, 11-22.	1.3	64
95	Field Computation and Sensory Fusion. , 1997, , 123-137.		0
96	How the brain can discover the existence of external egocentric space. Neurocomputing, 1996, 12, 289-310.	5.9	40
97	Tongue articulators as muscle synergies. Journal of the Acoustical Society of America, 1996, 100, 2659-2659.	1.1	1
98	Kinematic invariances and body schema. Behavioral and Brain Sciences, 1995, 18, 769-770.	0.7	2
99	Self-Organizing Body Schema for Motor Planning. Journal of Motor Behavior, 1995, 27, 52-66.	0.9	63
100	Neurocomputing aspects in modelling cursive handwriting. Acta Psychologica, 1993, 82, 213-235.	1.5	9
101	Self-Organizing Neural Network for Diagnosis. , 1993, , 806-809.		0
102	SOC: A Self-Organizing Classifier. , 1992, , 1223-1226.		7
103	Analogic and Symbolic Aspects in Distributed Motor Control. , 1991, , 233-252.		0
104	Game theory and partner representation in joint action: toward a computational theory of joint agency. Phenomenology and the Cognitive Sciences, 0, , 1.	1.8	6