

Paul F M J Verschure

List of Publications by Year in descending order

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Version: 2024-02-01

317
papers

7,320
citations

81900

39
h-index

88630

70
g-index

342
all docs

342
docs citations

342
times ranked

6613
citing authors

#	ARTICLE	IF	CITATIONS
1	Relationship between intensity and recovery in post-stroke rehabilitation: a retrospective analysis. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2022, 93, 226-228.	1.9	23
2	Healing the Virtualizing Brain Using Virtual Reality: How Goal-Oriented, Embodied, Immersive VR Training Works. <i>Biosystems and Biorobotics</i> , 2022, , 575-578.	0.3	0
3	Telehealth for rehabilitation and recovery after stroke: State of the evidence and future directions. <i>International Journal of Stroke</i> , 2022, 17, 487-493.	5.9	27
4	Escaping from the IIT Munchausen method: Re-establishing the scientific method in the study of consciousness. <i>Behavioral and Brain Sciences</i> , 2022, 45, e63.	0.7	0
5	Chronic use of cannabis impairs sensory error processing in the cerebellum through endocannabinoid dysregulation. <i>Addictive Behaviors</i> , 2022, 131, 107297.	3.0	0
6	Future memory: a digital humanities approach for the preservation and presentation of the history of the Holocaust and Nazi crimes. <i>Holocaust Studies</i> , 2022, 28, 331-357.	1.0	4
7	Saccade rate is associated with recall of items in working memory. <i>Learning and Memory</i> , 2022, 29, 146-154.	1.3	0
8	Bringing rehabilitation home with an e-health platform to treat stroke patients: study protocol of a randomized clinical trial (RGS@home). <i>Trials</i> , 2022, 23, .	1.6	5
9	Curing the broken brain model of addiction: Neurorehabilitation from a systems perspective. <i>Addictive Behaviors</i> , 2021, 112, 106602.	3.0	14
10	Towards sample-efficient policy learning with DAC-ML. <i>Procedia Computer Science</i> , 2021, 190, 256-262.	2.0	1
11	Volitional learning promotes theta phase coding in the human hippocampus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	30
12	Entorhinal mismatch: A model of self-supervised learning in the hippocampus. <i>IScience</i> , 2021, 24, 102364.	4.1	3
13	Epistemic Autonomy: Self-supervised Learning in the Mammalian Hippocampus. <i>Trends in Cognitive Sciences</i> , 2021, 25, 582-595.	7.8	2
14	Distinguishing Self, Other, and Autonomy From Visual Feedback: A Combined Correlation and Acceleration Transfer Analysis. <i>Frontiers in Human Neuroscience</i> , 2021, 15, 560657.	2.0	1
15	Robot regulatory behaviour based on fundamental homeostatic and allostatic principles. <i>Procedia Computer Science</i> , 2021, 190, 292-300.	2.0	2
16	OUP accepted manuscript. <i>Alcohol and Alcoholism</i> , 2021, , .	1.6	1
17	Challenging the Boundaries of the Physical Self: Distal Cues Impact Body Ownership. <i>Frontiers in Human Neuroscience</i> , 2021, 15, 704414.	2.0	3
18	Social cognition in individuals with schizophrenia: Ongoing randomised controlled pilot data analysis. <i>Journal of the Neurological Sciences</i> , 2021, 429, 119757.	0.6	0

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19	Supercritical dynamics at the edge-of-chaos underlies optimal decision-making. <i>Journal of Physics Complexity</i> , 2021, 2, 045017.	2.2	3
20	Active Learning in Digital Heritage: Introducing Geo-localisation, VR and AR at Holocaust Historical Sites. , 2021, , 145-176.		2
21	Excitatory-Inhibitory Homeostasis and Diaschisis: Tying the Local and Global Scales in the Post-stroke Cortex. <i>Frontiers in Systems Neuroscience</i> , 2021, 15, 806544.	2.5	10
22	Estimating upper-extremity function from kinematics in stroke patients following goal-oriented computer-based training. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2021, 18, 186.	4.6	3
23	From motor to visually guided bimanual affordance learning. <i>Adaptive Behavior</i> , 2020, 28, 63-78.	1.9	2
24	Switching Operation Modes in the Neocortex via Cholinergic Neuromodulation. <i>Molecular Neurobiology</i> , 2020, 57, 139-149.	4.0	4
25	Multisensory cueing facilitates naming in aphasia. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2020, 17, 122.	4.6	2
26	Subjective ratings of emotive stimuli predict the impact of the COVID-19 quarantine on affective states. <i>PLoS ONE</i> , 2020, 15, e0237631.	2.5	9
27	Prioritized Research for the Prevention, Treatment, and Reversal of Chronic Disease: Recommendations From the Lifestyle Medicine Research Summit. <i>Frontiers in Medicine</i> , 2020, 7, 585744.	2.6	36
28	Collaboration Variability in Autism Spectrum Disorder. <i>Frontiers in Human Neuroscience</i> , 2020, 14, 559793.	2.0	0
29	Modeling the formation of social conventions from embodied real-time interactions. <i>PLoS ONE</i> , 2020, 15, e0234434.	2.5	6
30	Adaptive conjunctive cognitive training (ACCT) in virtual reality for chronic stroke patients: a randomized controlled pilot trial. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2020, 17, 42.	4.6	35
31	The Use of Social Sensorimotor Contingencies in Humanoid Robots. <i>Lecture Notes in Computer Science</i> , 2020, , 378-389.	1.3	2
32	Machine Morality: From Harm-Avoidance to Human-Robot Cooperation. <i>Lecture Notes in Computer Science</i> , 2020, , 116-127.	1.3	1
33	Cholinergic Control of Chaos and Evidence Sensitivity in a Neocortical Model of Perceptual Decision-Making. <i>Lecture Notes in Computer Science</i> , 2020, , 92-96.	1.3	0
34	Distributed Adaptive Control: An Ideal Cognitive Architecture Candidate for Managing a Robotic Recycling Plant. <i>Lecture Notes in Computer Science</i> , 2020, , 153-164.	1.3	2
35	Modeling the formation of social conventions from embodied real-time interactions. , 2020, 15, e0234434.		0
36	Modeling the formation of social conventions from embodied real-time interactions. , 2020, 15, e0234434.		0

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37	Modeling the formation of social conventions from embodied real-time interactions. , 2020, 15, e0234434.		0
38	Modeling the formation of social conventions from embodied real-time interactions. , 2020, 15, e0234434.		0
39	Title is missing!. , 2020, 15, e0237631.		0
40	Title is missing!. , 2020, 15, e0237631.		0
41	Title is missing!. , 2020, 15, e0237631.		0
42	Title is missing!. , 2020, 15, e0237631.		0
43	Complex network changes during a virtual reality rehabilitation protocol following stroke: a case study. , 2019, , .		2
44	Modulating grid cell scale and intrinsic frequencies via slow high-threshold conductances: A simplified model. Neural Networks, 2019, 119, 66-73.	5.9	2
45	Motor Adaptation Impairment in Chronic Cannabis Users Assessed by a Visuomotor Rotation Task. Journal of Clinical Medicine, 2019, 8, 1049.	2.4	9
46	Effect of Specific Over Nonspecific VR-Based Rehabilitation on Poststroke Motor Recovery: A Systematic Meta-analysis. Neurorehabilitation and Neural Repair, 2019, 33, 112-129.	2.9	133
47	A critical time window for recovery extends beyond one-year post-stroke. Journal of Neurophysiology, 2019, 122, 350-357.	1.8	100
48	Coordinated representational reinstatement in the human hippocampus and lateral temporal cortex during episodic memory retrieval. Nature Communications, 2019, 10, 2255.	12.8	52
49	A comprehensive evaluation of emotional responsiveness in borderline personality disorder: a support for hypersensitivity hypothesis. Borderline Personality Disorder and Emotion Dysregulation, 2019, 6, 8.	2.6	9
50	Self Beyond the Body: Action-Driven and Task-Relevant Purely Distal Cues Modulate Performance and Body Ownership. Frontiers in Human Neuroscience, 2019, 13, 91.	2.0	16
51	Augmented Dyadic Therapy Boosts Recovery of Language Function in Patients With Nonfluent Aphasia. Stroke, 2019, 50, 1270-1274.	2.0	21
52	Cerebellar alterations in cannabis users: A systematic review. Addiction Biology, 2019, 24, 1121-1137.	2.6	35
53	A Hybrid Human-Robot Collaborative Environment for Recycling Electrical and Electronic Equipment. , 2019, , .		6
54	Principles of Neurorehabilitation After Stroke Based on Motor Learning and Brain Plasticity Mechanisms. Frontiers in Systems Neuroscience, 2019, 13, 74.	2.5	197

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55	Depression Modulates Attentional Processing After Stroke. <i>Biosystems and Biorobotics</i> , 2019, , 702-706.	0.3	2
56	Beyond Neural Coding? Lessons from Perceptual Control Theory. <i>Behavioral and Brain Sciences</i> , 2019, 42, e217.	0.7	3
57	Evaluation of the Facial Expressions of a Humanoid Robot. <i>Lecture Notes in Computer Science</i> , 2019, , 365-368.	1.3	0
58	Latent Morality in Algorithms and Machines. <i>Lecture Notes in Computer Science</i> , 2019, , 309-315.	1.3	3
59	Cholinergic Behavior State-Dependent Mechanisms of Neocortical Gain Control: a Neurocomputational Study. <i>Molecular Neurobiology</i> , 2018, 55, 249-257.	4.0	6
60	Emotional and cognitive influences in air traffic controller tasks: An investigation using a virtual environment?. <i>Applied Ergonomics</i> , 2018, 69, 1-9.	3.1	37
61	DAC-h3: A Proactive Robot Cognitive Architecture to Acquire and Express Knowledge About the World and the Self. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2018, 10, 1005-1022.	3.8	48
62	Long-term spatial clustering in free recall. <i>Memory</i> , 2018, 26, 798-806.	1.7	6
63	Human Vicarious Trial and Error Is Predictive of Spatial Navigation Performance. <i>Frontiers in Behavioral Neuroscience</i> , 2018, 12, 237.	2.0	18
64	A computational analysis of dynamic, multi-organ inflammatory crosstalk induced by endotoxin in mice. <i>PLoS Computational Biology</i> , 2018, 14, e1006582.	3.2	18
65	iCub-HRI: A Software Framework for Complex Human-Robot Interaction Scenarios on the iCub Humanoid Robot. <i>Frontiers in Robotics and AI</i> , 2018, 5, 22.	3.2	13
66	Measuring the Complexity of Consciousness. <i>Frontiers in Neuroscience</i> , 2018, 12, 424.	2.8	27
67	Modeling the Opponent's Action Using Control-Based Reinforcement Learning. <i>Lecture Notes in Computer Science</i> , 2018, , 179-186.	1.3	5
68	Challenges of Machine Learning for Living Machines. <i>Lecture Notes in Computer Science</i> , 2018, , 382-386.	1.3	0
69	Insect Behavioral Evidence of Spatial Memories During Environmental Reconfiguration. <i>Lecture Notes in Computer Science</i> , 2018, , 415-427.	1.3	4
70	A Temporal Estimate of Integrated Information for Intracranial Functional Connectivity. <i>Lecture Notes in Computer Science</i> , 2018, , 403-412.	1.3	2
71	Consensus Paper: Towards a Systems-Level View of Cerebellar Function: the Interplay Between Cerebellum, Basal Ganglia, and Cortex. <i>Cerebellum</i> , 2017, 16, 203-229.	2.5	321
72	Spectral Modes of Network Dynamics Reveal Increased Informational Complexity Near Criticality. <i>Procedia Computer Science</i> , 2017, 108, 119-128.	2.0	6

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73	Why the Brain Might Operate Near the Edge of Criticality. Lecture Notes in Computer Science, 2017, , 326-333.	1.3	4
74	Conjunctive rehabilitation of multiple cognitive domains for chronic stroke patients in virtual reality. , 2017, 2017, 947-952.		11
75	The effects of silent visuomotor cueing on word retrieval in Broca's aphasies: A pilot study. , 2017, 2017, 193-199.		5
76	Modeling the neural substrates of learning through conditioning: A two-phased model. IBM Journal of Research and Development, 2017, 61, 9:1-9:11.	3.1	0
77	Visuotactile integration modulates motor performance in a perceptual decision-making task. Scientific Reports, 2017, 7, 3333.	3.3	17
78	The perceptual shaping of anticipatory actions. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171780.	2.6	15
79	Embodied artificial intelligence through distributed adaptive control: An integrated framework. , 2017, , .		8
80	Analyzing children's expectations from robotic companions in educational settings. , 2017, , .		9
81	A Spatial-Context Effect in Recognition Memory. Frontiers in Behavioral Neuroscience, 2017, 11, 143.	2.0	30
82	Size Matters: How Scaling Affects the Interaction between Grid and Border Cells. Frontiers in Computational Neuroscience, 2017, 11, 65.	2.1	13
83	Linear distributed source modeling of local field potentials recorded with intra-cortical electrode arrays. PLoS ONE, 2017, 12, e0187490.	2.5	4
84	Consciousness as an Evolutionary Game-Theoretic Strategy. Lecture Notes in Computer Science, 2017, , 509-514.	1.3	7
85	Domiciliary VR-Based Therapy for Functional Recovery and Cortical Reorganization: Randomized Controlled Trial in Participants at the Chronic Stage Post Stroke. JMIR Serious Games, 2017, 5, e15.	3.1	44
86	Behavior-State Dependent Modulation of Perception Based on a Model of Conditioning. Lecture Notes in Computer Science, 2017, , 387-393.	1.3	0
87	Adaptively Learning Levels of Coordination from One's Own Actions, Other's Actions and Task Related Errors Through a Cerebellar Circuit: A Dual Cart-Pole Setup. Lecture Notes in Computer Science, 2017, , 309-316.	1.3	0
88	An Interactive Space as a Creature. International Journal of Virtual and Augmented Reality, 2017, 1, 1-15.	0.8	3
89	Discrepancies between Multi-Electrode LFP and CSD Phase-Patterns: A Forward Modeling Study. Frontiers in Neural Circuits, 2016, 10, 51.	2.8	20
90	The Impact of Cortical Lesions on Thalamo-Cortical Network Dynamics after Acute Ischaemic Stroke: A Combined Experimental and Theoretical Study. PLoS Computational Biology, 2016, 12, e1005048.	3.2	26

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91	Differential neural mechanisms for early and late prediction error detection. Scientific Reports, 2016, 6, 24350.	3.3	11
92	The global dynamical complexity of the human brain network. Applied Network Science, 2016, 1, 16.	1.5	17
93	High Integrated Information in Complex Networks Near Criticality. Lecture Notes in Computer Science, 2016, , 184-191.	1.3	12
94	Counteracting learned non-use in chronic stroke patients with reinforcement-induced movement therapy. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 74.	4.6	69
95	Plasticity in the Granular Layer Enhances Motor Learning in a Computational Model of the Cerebellum. Lecture Notes in Computer Science, 2016, , 272-279.	1.3	0
96	Scaling Properties of Human Brain Functional Networks. Lecture Notes in Computer Science, 2016, , 107-114.	1.3	2
97	Synthetic consciousness: the distributed adaptive control perspective. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150448.	4.0	30
98	The EASEL Project: Towards Educational Human-Robot Symbiotic Interaction. Lecture Notes in Computer Science, 2016, , 297-306.	1.3	16
99	Towards a Synthetic Tutor Assistant: The EASEL Project and its Architecture. Lecture Notes in Computer Science, 2016, , 353-364.	1.3	11
100	Two possible driving forces supporting the evolution of animal communication. Physics of Life Reviews, 2016, 16, 88-90.	2.8	3
101	Computing Information Integration in Brain Networks. Lecture Notes in Computer Science, 2016, , 136-146.	1.3	9
102	Navigate the Unknown: Implications of Grid-Cells "Mental Travel" in Vicarious Trial and Error. Lecture Notes in Computer Science, 2016, , 251-262.	1.3	4
103	On Three Categories of Conscious Machines. Lecture Notes in Computer Science, 2016, , 389-392.	1.3	10
104	Towards Self-controlled Robots Through Distributed Adaptive Control. Lecture Notes in Computer Science, 2016, , 490-497.	1.3	2
105	Synaptogenesis: Constraining Synaptic Plasticity Based on a Distance Rule. Lecture Notes in Computer Science, 2016, , 28-35.	1.3	2
106	The Affective Slider: A Digital Self-Assessment Scale for the Measurement of Human Emotions. PLoS ONE, 2016, 11, e0148037.	2.5	223
107	Mapping the Language Connectome in Healthy Subjects and Brain Tumor Patients. Lecture Notes in Computer Science, 2016, , 83-90.	1.3	1
108	Learning to Balance While Reaching: A Cerebellar-Based Control Architecture for a Self-balancing Robot. Lecture Notes in Computer Science, 2016, , 214-226.	1.3	0

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109	Modulating Learning Through Expectation in a Simulated Robotic Setup. Lecture Notes in Computer Science, 2016, , 400-408.	1.3	0
110	Autonomous development of turn-taking behaviors in agent populations: A computational study. , 2015, , .		7
111	A location-based Augmented Reality system for the spatial interaction with historical datasets. , 2015, , .		13
112	Reinforcement-induced movement therapy: A novel approach for overcoming learned non-use in chronic stroke patients. , 2015, , .		10
113	Connectomics to Semantomics: Addressing the Brain's Big Data Challenge1. Procedia Computer Science, 2015, 53, 48-55.	2.0	17
114	Recovering the history of Bergen Belsen using an interactive 3D reconstruction in a mixed reality space the role of pre-knowledge on memory recollection. , 2015, , .		8
115	11. The Human as the Mind in the Machine: Addressing Big Data. , 2015, , 198-212.		1
116	How? Why? What? Where? When? Who? Grounding Ontology in the Actions of a Situated Social Agent. Robotics, 2015, 4, 169-193.	3.5	12
117	Network dynamics with BrainX3: a large-scale simulation of the human brain network with real-time interaction. Frontiers in Neuroinformatics, 2015, 9, 02.	2.5	48
118	Motor Cost Influences Perceptual Decisions. PLoS ONE, 2015, 10, e0144841.	2.5	38
119	Skill refinement through cerebellar learning and human haptic feedback: An iCub learning to paint experiment. , 2015, , .		2
120	Towards the synthetic self: making others perceive me as an other. Paladyn, 2015, 6, .	2.7	13
121	The visual amplification of goal-oriented movements counteracts acquired non-use in hemiparetic stroke patients. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 50.	4.6	47
122	Accelerating motor adaptation by virtual reality based modulation of error memories. , 2015, , .		11
123	About the goal of a goalsâ€™ goal theory. Cognitive Neuroscience, 2015, 6, 218-219.	1.4	6
124	An embodied biologically constrained model of foraging: from classical and operant conditioning to adaptive real-world behavior in DAC-X. Neural Networks, 2015, 72, 88-108.	5.9	31
125	Symbiotic Adaptive Interfaces: A Case Study Using BrainX3. Lecture Notes in Computer Science, 2015, , 33-44.	1.3	1
126	Comparing Input Sensors in an Immersive Mixed-Reality Environment for Human-Computer Symbiosis. Lecture Notes in Computer Science, 2015, , 111-125.	1.3	2

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127	tTBS-Induced LTP-Like Plasticity Parallels Oscillatory Activity Changes in the Primary Sensory and Motor Areas of Macaque Monkeys. PLoS ONE, 2014, 9, e112504.	2.5	18
128	A Cerebellar Neuroprosthetic System: Computational Architecture and in vivo Test. Frontiers in Bioengineering and Biotechnology, 2014, 2, 14.	4.1	10
129	Fast mental states decoding in mixed reality. Frontiers in Behavioral Neuroscience, 2014, 8, 415.	2.0	8
130	Inference of human affective states from psychophysiological measurements extracted under ecologically valid conditions. Frontiers in Neuroscience, 2014, 8, 286.	2.8	28
131	XIM-engine. , 2014, , .		11
132	EFAA. , 2014, , .		3
133	A Signature of Attractor Dynamics in the CA3 Region of the Hippocampus. PLoS Computational Biology, 2014, 10, e1003641.	3.2	49
134	Subliminal Response Priming in Mixed Reality: The Ecological Validity of a Classic Paradigm of Perception. Presence: Teleoperators and Virtual Environments, 2014, 23, 1-17.	0.6	9
135	A biomimetic approach to machine olfaction, featuring a very large-scale chemical sensor array and embedded neuro-bio-inspired computation. Microsystem Technologies, 2014, 20, 729-742.	2.0	36
136	The why, what, where, when and how of goal-directed choice: neuronal and computational principles. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130483.	4.0	105
137	The principles of goal-directed decision-making: from neural mechanisms to computation and robotics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130470.	4.0	24
138	Effects of Gaze Synchronization in Human-Robot Interaction. Lecture Notes in Computer Science, 2014, , 370-373.	1.3	3
139	Manipulating complex network structures in virtual reality and 3D printing of the results. , 2014, , .		0
140	BrainX 3. , 2014, , .		14
141	Understanding large network datasets through embodied interaction in virtual reality. , 2014, , .		19
142	Social Integration of Stroke Patients through the Multiplayer Rehabilitation Gaming System. Lecture Notes in Computer Science, 2014, , 100-114.	1.3	24
143	The Role of a Cerebellum-Driven Perceptual Prediction within a Robotic Postural Task. Lecture Notes in Computer Science, 2014, , 76-87.	1.3	3
144	Acquisition of Synergistic Motor Responses through Cerebellar Learning in a Robotic Postural Task. Lecture Notes in Computer Science, 2014, , 202-212.	1.3	2

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145	Optimization of the Anticipatory Reflexes of a Computational Model of the Cerebellum. Lecture Notes in Computer Science, 2014, , 11-22.	1.3	8
146	Hippocampal Based Model Reveals the Distinct Roles of Dentate Gyrus and CA3 during Robotic Spatial Navigation. Lecture Notes in Computer Science, 2014, , 273-283.	1.3	4
147	Visual anticipation biases conscious decision making but not bottom-up visual processing. Frontiers in Psychology, 2014, 5, 1443.	2.1	8
148	The Influence of Behavioral Complexity on Robot Perception. Lecture Notes in Computer Science, 2014, , 332-343.	1.3	2
149	Optimising Robot Personalities for Symbiotic Interaction. Lecture Notes in Computer Science, 2014, , 392-395.	1.3	5
150	Empathy in Humanoid Robots. Lecture Notes in Computer Science, 2014, , 423-426.	1.3	2
151	Gesture Recognition Using Temporal Population Coding and a Conceptual Space. Lecture Notes in Computer Science, 2014, , 430-432.	1.3	0
152	Prefrontal cortical modulation of information flow in a large-scale model of the cortico-thalamic circuit. BMC Neuroscience, 2013, 14, .	1.9	0
153	Biomechanical costs of reaching movements bias perceptual decisions. BMC Neuroscience, 2013, 14, .	1.9	5
154	The dynamic connectome: towards large-scale 3D reconstruction of brain activity in real-time. BMC Neuroscience, 2013, 14, .	1.9	2
155	Acquisition and execution of motor sequences by a computational model of the cerebellum. BMC Neuroscience, 2013, 14, .	1.9	1
156	A functional magnetic resonance imaging study of visuomotor processing in a virtual reality-based paradigm: Rehabilitation Gaming System. European Journal of Neuroscience, 2013, 37, 1441-1447.	2.6	61
157	Integrated information for large complex networks. , 2013, , .		14
158	The state of the art in biomimetics. Bioinspiration and Biomimetics, 2013, 8, 013001.	2.9	187
159	Cooperative human robot interaction systems: IV. Communication of shared plans with Naïve humans using gaze and speech. , 2013, , .		20
160	Speed generalization capabilities of a cerebellar model on a rapid navigation task. , 2013, , .		9
161	Using a Hybrid Brain Computer Interface and Virtual Reality System to Monitor and Promote Cortical Reorganization through Motor Activity and Motor Imagery Training. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 174-181.	4.9	90
162	Nucleo-olivary inhibition balances the interaction between the reactive and adaptive layers in motor control. Neural Networks, 2013, 47, 64-71.	5.9	50

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163	Neural Variability in Premotor Cortex Is Modulated by Trial History and Predicts Behavioral Performance. <i>Neuron</i> , 2013, 78, 249-255.	8.1	80
164	The Convergence of Machine and Biological Intelligence. <i>IEEE Intelligent Systems</i> , 2013, 28, 28-43.	4.0	26
165	A sensorimotor account of visual and tactile integration for object categorization and grasping. , 2013, , .		3
166	Advanced interfaces to stem the data deluge in mixed reality. , 2013, , .		13
167	At Home Motor Rehabilitation in the Chronic Phase of Stroke Using the Rehabilitation Gaming System. <i>Biosystems and Biorobotics</i> , 2013, , 931-935.	0.3	8
168	The social perceptual salience effect.. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 2013, 39, 62-74.	0.9	15
169	Living Machines 2012: The First International Conference on Biomimetic and Biohybrid Systems. <i>Bioinspiration and Biomimetics</i> , 2013, 8, 030201.	2.9	0
170	Learning of Motor Sequences Based on a Computational Model of the Cerebellum. <i>Lecture Notes in Computer Science</i> , 2013, , 356-358.	1.3	3
171	A sensing architecture for empathetic data systems. , 2013, , .		10
172	Non-anthropomorphic Expression of Affective States through Parametrized Abstract Motifs. , 2013, , .		7
173	Modulating Behaviors Using Allostatic Control. <i>Lecture Notes in Computer Science</i> , 2013, , 287-298.	1.3	15
174	The effect of guided and free navigation on spatial memory in mixed reality. , 2013, , .		2
175	Virtual Reality Based Tool for Motor Function Assessment in Stroke Survivors. <i>Biosystems and Biorobotics</i> , 2013, , 1037-1041.	0.3	2
176	Towards a Roadmap for Living Machines. <i>Lecture Notes in Computer Science</i> , 2013, , 396-398.	1.3	1
177	The Hierarchical Accumulation of Knowledge in the Distributed Adaptive Control Architecture. , 2013, , 213-234.		3
178	The Dynamic Connectome: A Tool For Large-Scale 3D Reconstruction Of Brain Activity In Real-Time. , 2013, , .		14
179	Acquisition of Anticipatory Postural Adjustment through Cerebellar Learning in a Mobile Robot. <i>Lecture Notes in Computer Science</i> , 2013, , 399-401.	1.3	1
180	The Synthetic Moth. <i>Frontiers in Neuroengineering Series</i> , 2013, , 117-152.	0.4	1

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181	The Combined Impact of Virtual Reality Neurorehabilitation and Its Interfaces on Upper Extremity Functional Recovery in Patients With Chronic Stroke. <i>Stroke</i> , 2012, 43, 2720-2728.	2.0	149
182	Including Social Interaction in Stroke VR-Based Motor Rehabilitation Enhances Performance: A Pilot Study. <i>Presence: Teleoperators and Virtual Environments</i> , 2012, 21, 490-501.	0.6	29
183	Embodied interaction with complex neuronal data in mixed-reality. , 2012, , .		12
184	A high-throughput behavioral paradigm for <i>Drosophila</i> olfaction - The Flywalk. <i>Scientific Reports</i> , 2012, 2, 361.	3.3	78
185	A VLSI Field-Programmable Mixed-Signal Array to Perform Neural Signal Processing and Neural Modeling in a Prosthetic System. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012, 20, 455-467.	4.9	18
186	Distributed Adaptive Control: A theory of the Mind, Brain, Body Nexus. <i>Biologically Inspired Cognitive Architectures</i> , 2012, 1, 55-72.	0.9	88
187	A Biomimetic Approach to an Autonomous Unmanned Air Vehicle. <i>Lecture Notes in Computer Science</i> , 2012, , 333-334.	1.3	0
188	Insect-Like Odor Classification and Localization on an Autonomous Robot. <i>Lecture Notes in Computer Science</i> , 2012, , 371-372.	1.3	2
189	A wavelet-based neural model to optimize and read out a temporal population code. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 21.	2.1	3
190	PASAR: An integrated model of prediction, anticipation, sensation, attention and response for artificial sensorimotor systems. <i>Information Sciences</i> , 2012, 186, 1-19.	6.9	27
191	A Digital Neuromorphic Implementation of Cerebellar Associative Learning. <i>Lecture Notes in Computer Science</i> , 2012, , 13-25.	1.3	3
192	The State-of-the-Art in Biomimetics. <i>Lecture Notes in Computer Science</i> , 2012, , 367-368.	1.3	2
193	Cerebellar Memory Transfer and Partial Savings during Motor Learning: A Robotic Study. <i>Lecture Notes in Computer Science</i> , 2012, , 321-332.	1.3	0
194	A Framework for Mobile Robot Navigation Using a Temporal Population Code. <i>Lecture Notes in Computer Science</i> , 2012, , 144-155.	1.3	1
195	Generalization of Integrator Models to Foraging: A Robot Study Using the DAC9 Model. <i>Lecture Notes in Computer Science</i> , 2012, , 156-167.	1.3	0
196	Internal Drive Regulation of Sensorimotor Reflexes in the Control of a Catering Assistant Autonomous Robot. <i>Lecture Notes in Computer Science</i> , 2012, , 238-249.	1.3	0
197	The application of a real-time rapid-prototyping environment for the behavioral rehabilitation of a lost brain function in rats. , 2011, , .		0
198	The effect of social gaming in virtual reality based rehabilitation of stroke patients. , 2011, , .		2

#	ARTICLE	IF	CITATIONS
199	The encoding of complex visual stimuli by a canonical model of the primary visual cortex: Temporal population code for face recognition on the iCub robot. , 2011, , .		5
200	Integrating neuroscience-based models towards an autonomous biomimetic Synthetic Forager. , 2011, , .		4
201	Exploring the synergies of a hybrid BCI - VR neurorehabilitation system. , 2011, , .		7
202	A biologically based model for the integration of sensoryâ€“motor contingencies in rules and plans: A prefrontal cortex based extension of the Distributed Adaptive Control architecture. Brain Research Bulletin, 2011, 85, 289-304.	3.0	30
203	Quantifying human subjective experience and social interaction using the eXperience Induction Machine. Brain Research Bulletin, 2011, 85, 305-312.	3.0	15
204	The hippocampalâ€“striatal axis in learning, prediction and goal-directed behavior. Trends in Neurosciences, 2011, 34, 548-559.	8.6	252
205	The complexity of reality and human computer confluence. , 2011, , .		2
206	Real-Time Position Reconstruction with Hippocampal Place Cells. Frontiers in Neuroscience, 2011, 5, 85.	2.8	35
207	The acquisition of intentionally indexed and object centered affordance gradients: A biomimetic controller and mobile robotics benchmark. , 2011, , .		0
208	A computational model of thalamocortical dysrhythmia. European Journal of Neuroscience, 2011, 33, 1281-1290.	2.6	26
209	CEEDs: Unleashing the Power of the Subconscious. Procedia Computer Science, 2011, 7, 214-215.	2.0	8
210	Robot Companions for Citizens. Procedia Computer Science, 2011, 7, 47-51.	2.0	24
211	Large Scale Funding vs. Small Scale Funding. Procedia Computer Science, 2011, 7, 125.	2.0	0
212	Behavioral rehabilitation of the eye closure reflex in senescent rats using a real-time biosignal acquisition system. , 2011, 2011, 4211-4.		7
213	The acquisition of intentionally indexed and object centered affordance gradients: A biomimetic controller and mobile robotics benchmark. , 2011, , .		12
214	Adaptive rehabilitation gaming system: On-line individualization of stroke rehabilitation. , 2011, 2011, 6749-52.		19
215	Virtual reality based rehabilitation speeds up functional recovery of the upper extremities after stroke: A randomized controlled pilot study in the acute phase of stroke using the Rehabilitation Gaming System. Restorative Neurology and Neuroscience, 2011, 29, 287-298.	0.7	201
216	Expression of emotional states during locomotion based on canonical parameters. , 2011, , .		16

#	ARTICLE	IF	CITATIONS
217	Neuroscience, virtual reality and neurorehabilitation: Brain repair as a validation of brain theory. , 2011, 2011, 2254-7.		15
218	Odour Mapping Under Strong Backgrounds With a Metal Oxide Sensor Array. , 2011, , .		0
219	iqr: A Tool for the Construction of Multi-level Simulations of Brain and Behaviour. Neuroinformatics, 2010, 8, 113-134.	2.8	34
220	Unifying perceptual and behavioral learning with a correlative subspace learning rule. Neurocomputing, 2010, 73, 1818-1830.	5.9	16
221	Neurorehabilitation using the virtual reality based Rehabilitation Gaming System: methodology, design, psychometrics, usability and validation. Journal of NeuroEngineering and Rehabilitation, 2010, 7, 48.	4.6	265
222	Allostatic control for robot behaviour regulation: An extension to path planning. , 2010, , .		13
223	The neuronal substrate underlying order and interval representations in sequential tasks: A biologically based robot study. , 2010, , .		5
224	The real-world localization and classification of multiple odours using a biologically based neurorobotics approach. , 2010, , .		3
225	The role of neural synchrony and rate in high-dimensional input systems. The Antennal Lobe: A case study. , 2010, , .		2
226	An integrated computational model of the two phase theory of classical conditioning. , 2010, , .		7
227	Non-Linear Neuronal Responses as an Emergent Property of Afferent Networks: A Case Study of the Locust Lobula Giant Movement Detector. PLoS Computational Biology, 2010, 6, e1000701.	3.2	27
228	ALLOSTATIC CONTROL FOR ROBOT BEHAVIOR REGULATION: A COMPARATIVE RODENT-ROBOT STUDY. International Journal of Modeling, Simulation, and Scientific Computing, 2010, 13, 377-403.	1.4	24
229	Interaction mapping affects spatial memory and the sense of presence when navigating in a virtual environment. , 2010, , .		6
230	The Mechanism of Rate Remapping in the Dentate Gyrus. Neuron, 2010, 68, 1051-1058.	8.1	72
231	An insect-based method for learning landmark reliability using expectation reinforcement in dynamic environments. , 2010, , .		8
232	The eXperience Induction Machine: A New Paradigm for Mixed-Reality Interaction Design and Psychological Experimentation. Human-computer Interaction Series, 2010, , 357-379.	0.6	19
233	Distributed Adaptive Control: A Proposal on the Neuronal Organization of Adaptive Goal Oriented Behavior. Studies in Computational Intelligence, 2010, , 15-41.	0.9	7
234	Action-Planning and Execution from Multimodal Cues: An Integrated Cognitive Model for Artificial Autonomous Systems. Studies in Computational Intelligence, 2010, , 479-497.	0.9	2

#	ARTICLE	IF	CITATIONS
235	The Complementary Roles of Allostatic and Contextual Control Systems in Foraging Tasks. Lecture Notes in Computer Science, 2010, , 370-379.	1.3	4
236	Insect-Like mapless navigation based on head direction cells and contextual learning using chemo-visual sensors. , 2009, , .		23
237	The Effects of Explicit and Implicit Interaction on User Experiences in a Mixed Reality Installation: The Synthetic Oracle. Presence: Teleoperators and Virtual Environments, 2009, 18, 277-285.	0.6	11
238	Learning from the Moth: A Comparative Study of Robot-Based Odor Source Localization Strategies. , 2009, , .		3
239	Social cooperation and competition in the mixed reality space eXperience Induction Machine XIM. Virtual Reality, 2009, 13, 153-158.	6.1	7
240	The rehabilitation gaming system: a review. Studies in Health Technology and Informatics, 2009, 145, 65-83.	0.3	27
241	A model for the neuronal substrate of dead reckoning and memory in arthropods: a comparative computational and behavioral study. Theory in Biosciences, 2008, 127, 163-175.	1.4	18
242	Using a Multi-Task Adaptive VR System for Upper Limb Rehabilitation in the Acute Phase of Stroke. , 2008, , .		18
243	Perceptsynth: mapping perceptual musical features to sound synthesis parameters. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	4
244	Editorial. Network: Computation in Neural Systems, 2008, 19, 1-2.	3.6	0
245	Intelligent motor decision: From selective attention to a Bayesian world model. , 2008, , .		5
246	re(PER)curso. , 2008, , .		4
247	New Technologies and Concepts for Rehabilitation in the Acute Phase of Stroke: A Collaborative Matrix. Neurodegenerative Diseases, 2007, 4, 57-69.	1.4	16
248	VR-RoBoser. , 2007, , .		4
249	A fly-locust based neuronal control system applied to an unmanned aerial vehicle: the invertebrate neuronal principles for course stabilization, altitude control and collision avoidance. International Journal of Robotics Research, 2007, 26, 759-772.	8.5	42
250	Time and space are complementary encoding dimensions in the moth antennal lobe. Network: Computation in Neural Systems, 2007, 18, 35-62.	3.6	10
251	A Biologically Based Chemo-Sensing UAV for Humanitarian Demining. International Journal of Advanced Robotic Systems, 2007, 4, 21.	2.1	15
252	Understanding and Realizing Presence in the Presencia Project. IEEE Computer Graphics and Applications, 2007, 27, 90-93.	1.2	27

#	ARTICLE	IF	CITATIONS
253	A MODEL OF GRID CELLS BASED ON A TWISTED TORUS TOPOLOGY. <i>International Journal of Neural Systems</i> , 2007, 17, 231-240.	5.2	164
254	PREDICTION OF THE POSITION OF AN ANIMAL BASED ON POPULATIONS OF GRID AND PLACE CELLS: A COMPARATIVE SIMULATION STUDY. <i>Journal of Integrative Neuroscience</i> , 2007, 06, 433-446.	1.7	22
255	Cognitive Virtual-Reality Based Stroke Rehabilitation. , 2007, , 2839-2843.		4
256	The Rehabilitation Gaming System: a Virtual Reality Based System for the Evaluation and Rehabilitation of Motor Deficits. , 2007, , .		32
257	A tactile luminous floor for an interactive autonomous space. <i>Robotics and Autonomous Systems</i> , 2007, 55, 433-443.	5.1	25
258	Interactive visuo-motor therapy system for stroke rehabilitation. <i>Medical and Biological Engineering and Computing</i> , 2007, 45, 901-907.	2.8	100
259	Dynamical features of higher-order correlation events: impact on cortical cells. <i>Cognitive Neurodynamics</i> , 2007, 1, 53-69.	4.0	8
260	Dynamical features of higher-order correlation events: impact on cortical cells. <i>Cognitive Neurodynamics</i> , 2007, 1, 273-273.	4.0	2
261	Learning Temporally Stable Representations from Natural Sounds: Temporal Stability as a General Objective Underlying Sensory Processing. <i>Lecture Notes in Computer Science</i> , 2007, , 129-138.	1.3	3
262	An Investigation of Collective Human Behavior in Large-Scale Mixed Reality Spaces. <i>Presence: Teleoperators and Virtual Environments</i> , 2006, 15, 403-418.	0.6	14
263	A Model of the Ventral Visual System Based on Temporal Stability and Local Memory. <i>PLoS Biology</i> , 2006, 4, e120.	5.6	110
264	An artificial moth: Chemical source localization using a robot based neuronal model of moth optomotor anemotactic search. <i>Autonomous Robots</i> , 2006, 20, 197-213.	4.8	110
265	A Model of Grid Cells Based on a Path Integration Mechanism. <i>Lecture Notes in Computer Science</i> , 2006, , 740-749.	1.3	12
266	Spatio-temporal Ca ²⁺ dynamics of moth olfactory projection neurones. <i>European Journal of Neuroscience</i> , 2005, 22, 647-657.	2.6	30
267	Roboser: A Real-World Composition System. <i>Computer Music Journal</i> , 2005, 29, 55-74.	0.1	21
268	An Interactive Space That Learns to Influence Human Behavior. <i>IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans</i> , 2005, 35, 66-77.	2.9	33
269	Decoding a Temporal Population Code. <i>Neural Computation</i> , 2004, 16, 2079-2100.	2.2	15
270	High-order events in cortical networks: A lower bound. <i>Physical Review E</i> , 2004, 70, 051909.	2.1	6

#	ARTICLE	IF	CITATIONS
271	Involving the motor system in decision making. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, S50-2.	2.6	13
272	Two-State Membrane Potential Fluctuations Driven by Weak Pairwise Correlations. Neural Computation, 2004, 16, 2351-2378.	2.2	12
273	Chemotactic Search in Complex Environments. , 2004, , 181-207.		6
274	Chemotactic Search in Complex Environments. , 2004, , 181-207.		0
275	A real-world rational agent: unifying old and new AI. Cognitive Science, 2003, 27, 561-590.	1.7	69
276	Neuroscience data and tool sharing. Neuroinformatics, 2003, 1, 149-165.	2.8	54
277	Environmentally mediated synergy between perception and behaviour in mobile robots. Nature, 2003, 425, 620-624.	27.8	237
278	Live soundscape composition based on synthetic emotions. IEEE MultiMedia, 2003, 10, 82-90.	1.7	47
279	Invariant representations of visual patterns in a temporal population code. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 324-329.	7.1	75
280	Properties of a Temporal Population Cod. Reviews in the Neurosciences, 2003, 14, 21-33.	2.9	7
281	Design for a Brain Revisited: The Neuromorphic Design and Functionality of the Interactive Space 'Ada'. Reviews in the Neurosciences, 2003, 14, 145-80.	2.9	19
282	Existence of high-order correlations in cortical activity. Physical Review E, 2003, 68, 041905.	2.1	4
283	Real-world behavior as a constraint on the cognitive architecture: Comparing ACT-R and DAC in the Newell Test. Behavioral and Brain Sciences, 2003, 26, 624-626.	0.7	1
284	Locustâ€™s Looming Detectors for Robot Sensors. , 2003, , 237-250.		14
285	A real-world rational agent: unifying old and new AI. Cognitive Science, 2003, 27, 561-590.	1.7	8
286	NEUROINFORMATICS: THE INTEGRATION OF SHARED DATABASES AND TOOLS TOWARDS INTEGRATIVE NEUROSCIENCE. Journal of Integrative Neuroscience, 2002, 01, 117-128.	1.7	77
287	NEUROSCIENCE: Neurons in Action. Science, 2002, 296, 1817-1818.	12.6	10
288	Learning sensory maps with real-world stimuli in real time using a biophysically realistic learning rule. IEEE Transactions on Neural Networks, 2002, 13, 619-632.	4.2	12

#	ARTICLE	IF	CITATIONS
289	IQR: a distributed system for real-time real-world neuronal simulation. <i>Neurocomputing</i> , 2002, 44-46, 1043-1048.	5.9	30
290	Invariant encoding of spatial stimulus topology in the temporal domain. <i>Neurocomputing</i> , 2002, 44-46, 703-708.	5.9	2
291	The cerebellum in action: a simulation and robotics study. <i>European Journal of Neuroscience</i> , 2002, 16, 1361-1376.	2.6	61
292	A biologically plausible model for the development of selective microcircuits in striate cortex. <i>Neurocomputing</i> , 2001, 38-40, 851-857.	5.9	0
293	Learning in a neural network model in real time using real world stimuli. <i>Neurocomputing</i> , 2001, 38-40, 859-865.	5.9	1
294	A real-time model of the cerebellar circuitry underlying classical conditioning: A combined simulation and robotics study. <i>Neurocomputing</i> , 2001, 38-40, 1019-1024.	5.9	16
295	Stimulus encoding during the early stages of olfactory processing: A modeling study using an artificial olfactory system. <i>Neurocomputing</i> , 2001, 38-40, 299-306.	5.9	15
296	How accurate need sensory coding be for behaviour? Experiments using a mobile robot. <i>Neurocomputing</i> , 2001, 38-40, 1113-1119.	5.9	8
297	<title>Collision avoidance in a robot using looming detectors from a locust</title>. , 2000, , .		1
298	Collision avoidance using a model of the locust LGMD neuron. <i>Robotics and Autonomous Systems</i> , 2000, 30, 17-38.	5.1	100
299	Local and Global Gating of Synaptic Plasticity. <i>Neural Computation</i> , 2000, 12, 519-529.	2.2	21
300	The Cognitive Development of an Autonomous Behaving Artifact: The Self-Organization of Categorization, Sequencing, and Chunking. <i>Studies in Cognitive Systems</i> , 2000, , 928-947.	0.1	0
301	What Can Robots Tell Us About Brains? A Synthetic Approach Towards the Study of Learning and Problem Solving. <i>Reviews in the Neurosciences</i> , 1999, 10, 291-310.	2.9	22
302	USING A MOBILE ROBOT TO STUDY LOCUST COLLISION AVOIDANCE RESPONSES. <i>International Journal of Neural Systems</i> , 1999, 09, 405-410.	5.2	29
303	On the Role of Biophysical Properties of Cortical Neurons in Binding and Segmentation of Visual Scenes. <i>Neural Computation</i> , 1999, 11, 1113-1138.	2.2	23
304	A bottom up approach towards the acquisition and expression of sequential representations applied to a behaving real-world device: Distributed Adaptive Control III. <i>Neural Networks</i> , 1998, 11, 1531-1549.	5.9	81
305	Multilevel analysis of classical conditioning in a behaving real world artifact. <i>Robotics and Autonomous Systems</i> , 1995, 16, 247-265.	5.1	37
306	Unified Theories of Cognition. <i>American Journal of Psychology</i> , 1994, 107, 454.	0.3	4

#	ARTICLE	IF	CITATIONS
307	Formal minds and biological brains: AI and Edelman's extended theory of neuronal group selection. IEEE Intelligent Systems, 1993, 8, 66-75.	1.0	16
308	The Remembered Present: A Biological Theory of Consciousness. American Journal of Psychology, 1992, 105, 477.	0.3	1
309	Beyond Rationalism: Symbols, Patterns and Behavior. Connection Science, 1992, 4, 313-325.	3.0	41
310	Distributed adaptive control: The self-organization of structured behavior. Robotics and Autonomous Systems, 1992, 9, 181-196.	5.1	145
311	Adaptive fields: distributed representations of classically conditioned associations. Network: Computation in Neural Systems, 1991, 2, 189-206.	3.6	21
312	Adaptive fields: distributed representations of classically conditioned associations. Network: Computation in Neural Systems, 1991, 2, 189-206.	3.6	18
313	Smolensky's theory of mind. Behavioral and Brain Sciences, 1990, 13, 407-407.	0.7	4
314	A note on chaotic behavior in simple neural networks. Neural Networks, 1990, 3, 119-122.	5.9	71
315	Scoring rules and probability testing. Bulletin of the Psychonomic Society, 1987, 25, 280-282.	0.2	0
316	Collective Human Behavior in Interactive Spaces. , 0, , .		2
317	A Biologically Based Flight Control System for a Blimp-based UAV. , 0, , .		12