

Sergi Bermúdez i Badia

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

2,448
citations

279798

23
h-index

254184

43
g-index

102
all docs

102
docs citations

102
times ranked

2442
citing authors

#	ARTICLE	IF	CITATIONS
1	A virtual reality bus ride as an ecologically valid assessment of balance: a feasibility study. <i>Virtual Reality</i> , 2023, 27, 109-117.	6.1	5
2	Efficacy of adaptive cognitive training through desktop virtual reality and paper-and-pencil in the treatment of mental and behavioral disorders. <i>Virtual Reality</i> , 2023, 27, 291-306.	6.1	7
3	Impact of age, VR, immersion, and spatial resolution on classifier performance for a MI-based BCI. <i>Brain-Computer Interfaces</i> , 2022, 9, 169-178.	1.8	6
4	Virtual Reality for Safe Testing and Development in Collaborative Robotics: Challenges and Perspectives. <i>Electronics (Switzerland)</i> , 2022, 11, 1726.	3.1	10
5	Automatic Cognitive Fatigue Detection Using Wearable fNIRS and Machine Learning. <i>Sensors</i> , 2022, 22, 4010.	3.8	6
6	Effects of prolonged multidimensional fitness training with exergames on the physical exertion levels of older adults. <i>Visual Computer</i> , 2021, 37, 19-30.	3.5	9
7	Finding the Optimal Time Window for Increased Classification Accuracy during Motor Imagery. , 2021, , .		4
8	Efficacy of Augmented Reality-based Virtual Hiking in Cardiorespiratory Endurance: A Pilot Study. , 2021, , .		1
9	The Effect of Neurofeedback Training in ÁCAVE-VR for Enhancing Working Memory. <i>Human-computer Interaction Series</i> , 2021, , 11-45.	0.6	0
10	The use of game modes to promote engagement and social involvement in multi-user serious games: a within-person randomized trial with stroke survivors. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2021, 18, 62.	4.6	16
11	Clinical Effects of Immersive Multimodal BCI-VR Training after Bilateral Neuromodulation with rTMS on Upper Limb Motor Recovery after Stroke. A Study Protocol for a Randomized Controlled Trial. <i>Medicina (Lithuania)</i> , 2021, 57, 736.	2.0	9
12	Evaluation of a Low-Cost Virtual Reality Surround-Screen Projection System. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2021, PP, 1-1.	4.4	4
13	Emotional Reactions to Music in Dementia Patients and Healthy Controls: Differential Responding Depends on the Mechanism. <i>Music & Science</i> , 2021, 4, 205920432110101.	1.0	5
14	Diving into a Decade of Games for Health Research: A Systematic Review. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 520-528.	0.6	1
15	The Benefits of Custom Exergames for Fitness, Balance, and Health-Related Quality of Life: A Randomized Controlled Trial with Community-Dwelling Older Adults. <i>Games for Health Journal</i> , 2021, 10, 245-253.	2.0	9
16	A comparison of two personalization and adaptive cognitive rehabilitation approaches: a randomized controlled trial with chronic stroke patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2020, 17, 78.	4.6	51
17	User Experience of Interactive Technologies for People With Dementia: Comparative Observational Study. <i>JMIR Serious Games</i> , 2020, 8, e17565.	3.1	12
18	To Binge or not to Binge: Viewersâ€™ Moods and Behaviors During the Consumption of Subscribed Video Streaming. <i>Lecture Notes in Computer Science</i> , 2020, , 369-381.	1.3	3

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19	Lessons Learned from Gamifying Functional Fitness Training Through Human-Centered Design Methods in Older Adults. <i>Games for Health Journal</i> , 2019, 8, 387-406.	2.0	24
20	Efficacy and Brain Imaging Correlates of an Immersive Motor Imagery BCI-Driven VR System for Upper Limb Motor Rehabilitation: A Clinical Case Report. <i>Frontiers in Human Neuroscience</i> , 2019, 13, 244.	2.0	99
21	Reh@City v2.0: a comprehensive virtual reality cognitive training system based on personalized and adaptive simulations of activities of daily living. , 2019, , .		5
22	Comparing adaptive cognitive training in virtual reality and paper-pencil in a sample of stroke patients. , 2019, , .		7
23	A usability study with healthcare professionals of a customizable framework for reminiscence and music based cognitive activities for people with dementia. , 2019, , .		7
24	Toward Emotionally Adaptive Virtual Reality for Mental Health Applications. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2019, 23, 1877-1887.	6.3	37
25	Development and Assessment of a Self-paced BCI-VR Paradigm Using Multimodal Stimulation and Adaptive Performance. <i>Lecture Notes in Computer Science</i> , 2019, , 1-22.	1.3	2
26	From Body Tracking Interaction in Floor Projection Displays to Elderly Cardiorespiratory Training Through Exergaming. <i>Lecture Notes in Computer Science</i> , 2019, , 58-77.	1.3	0
27	PhysioLab - a multivariate physiological computing toolbox for ECG, EMG and EDA signals: a case of study of cardiorespiratory fitness assessment in the elderly population. <i>Multimedia Tools and Applications</i> , 2018, 77, 11521-11546.	3.9	17
28	Capturing Expert Knowledge for the Personalization of Cognitive Rehabilitation: Study Combining Computational Modeling and a Participatory Design Strategy. <i>JMIR Rehabilitation and Assistive Technologies</i> , 2018, 5, e10714.	2.2	9
29	Measured and Perceived Physical Responses in Multidimensional Fitness Training through Exergames in Older Adults. , 2018, , .		4
30	Combined Cognitive-Motor Rehabilitation in Virtual Reality Improves Motor Outcomes in Chronic Stroke – A Pilot Study. <i>Frontiers in Psychology</i> , 2018, 9, 854.	2.1	63
31	Body schema plasticity after stroke: Subjective and neurophysiological correlates of the rubber hand illusion. <i>Neuropsychologia</i> , 2017, 96, 61-69.	1.6	37
32	Correlates of health-related quality of life in young-old and old-old community-dwelling older adults. <i>Quality of Life Research</i> , 2017, 26, 1561-1569.	3.1	47
33	EEG correlates of video game experience and user profile in motor-imagery-based brain-computer interaction. <i>Visual Computer</i> , 2017, 33, 533-546.	3.5	35
34	Virtual reality with customized positive stimuli in a cognitive-motor rehabilitation task. , 2017, , .		9
35	Open Rehab Initiative: Second development iteration. , 2017, , .		1
36	Music-based assistive feedback system for the exploration of virtual environments in individuals with dementia. , 2017, , .		3

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37	The Biocybernetic Loop Engine: An Integrated Tool for Creating Physiologically Adaptive Videogames. , 2017, , .		12
38	Eye Gaze Correlates of Motor Impairment in VR Observation of Motor Actions. Methods of Information in Medicine, 2016, 55, 79-83.	1.2	5
39	A dataset for the automatic assessment of functional senior fitness tests using kinect and physiological sensors. , 2016, , .		6
40	Modulation of Physiological Responses and Activity Levels during Exergame Experiences. , 2016, , .		8
41	Virtual Reality for Sensorimotor Rehabilitation Post Stroke: Design Principles and Evidence. , 2016, , 573-603.		23
42	The impact of positive, negative and neutral stimuli in a virtual reality cognitive-motor rehabilitation task: a pilot study with stroke patients. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 70.	4.6	25
43	Motor priming in virtual reality can augment motor-imagery training efficacy in restorative brain-computer interaction: a within-subject analysis. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 69.	4.6	88
44	Benefits of virtual reality based cognitive rehabilitation through simulated activities of daily living: a randomized controlled trial with stroke patients. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 96.	4.6	193
45	Usability and Cost-effectiveness in Brain-Computer Interaction. , 2016, , .		20
46	NeuRow: An Immersive VR Environment for Motor-Imagery Training with the Use of Brain-Computer Interfaces and Vibrotactile Feedback. , 2016, , .		37
47	Automating senior fitness testing through gesture detection with depth sensors. , 2015, , .		3
48	14. An Integrative Framework for Tailoring Virtual Reality Based Motor Rehabilitation After Stroke. , 2015, , 244-261.		0
49	Optimizing motor imagery neurofeedback through the use of multimodal immersive virtual reality and motor priming. , 2015, , .		15
50	Development and evaluation of a web-based cognitive task generator for personalized cognitive training. , 2015, , .		4
51	Visualization of multivariate physiological data for cardiorespiratory fitness assessment through ECG (R-peak) analysis. , 2015, 2015, 390-3.		2
52	Applications and Issues for Physiological Computing Systems: An Introduction to the Special Issue. Interacting With Computers, 2015, 27, 489-491.	1.5	0
53	Optimizing Performance of Non-Expert Users in Brain-Computer Interaction by Means of an Adaptive Performance Engine. Lecture Notes in Computer Science, 2015, , 202-211.	1.3	4
54	Personalization of Assistance and Knowledge of Performance Feedback on a Hybrid Mobile and Myo-electric Robotic System for Motor Rehabilitation After Stroke. Communications in Computer and Information Science, 2015, , 91-103.	0.5	0

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55	Combining virtual reality and a myoelectric limb orthosis to restore active movement after stroke: a pilot study. <i>International Journal on Disability and Human Development</i> , 2014, 13, .	0.2	1
56	RehabCity. , 2014, , .		28
57	AdaptNow " A Revamped Look for the Web: An Online Web Enhancement Tool for the Elderly. <i>Lecture Notes in Computer Science</i> , 2014, , 113-120.	1.3	3
58	An Assistive Mobile Platform for Delivering Knowledge of Performance Feedback. , 2014, , .		2
59	Eye Gaze Patterns after Stroke: Correlates of a VR Action Execution and Observation Task. , 2014, , .		1
60	A functional magnetic resonance imaging study of visuomotor processing in a virtual reality-based paradigm: Rehabilitation Gaming System. <i>European Journal of Neuroscience</i> , 2013, 37, 1441-1447.	2.6	61
61	Supporting collective learning experiences in special education. , 2013, , .		12
62	Using a Hybrid Brain Computer Interface and Virtual Reality System to Monitor and Promote Cortical Reorganization through Motor Activity and Motor Imagery Training. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2013, 21, 174-181.	4.9	90
63	WAYLA. , 2013, , .		3
64	RehabNet: A distributed architecture for motor and cognitive neuro-rehabilitation. , 2013, , .		29
65	The Neurorehabilitation Training Toolkit (NTT): A Novel Worldwide Accessible Motor Training Approach for At-Home Rehabilitation after Stroke. <i>Stroke Research and Treatment</i> , 2012, 2012, 1-13.	0.8	11
66	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
67	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
68	A high-throughput behavioral paradigm for <i>Drosophila</i> olfaction - The Flywalk. <i>Scientific Reports</i> , 2012, 2, 361.	3.3	78
69	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
70	The effect of social gaming in virtual reality based rehabilitation of stroke patients. , 2011, , .		2
71	Exploring the synergies of a hybrid BCI - VR neurorehabilitation system. , 2011, , .		7
72	Real-Time Position Reconstruction with Hippocampal Place Cells. <i>Frontiers in Neuroscience</i> , 2011, 5, 85.	2.8	35

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73	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. <i>Restorative Neurology and Neuroscience</i> , 2011, 29, 287-298.	0.7	201
74	Odour Mapping Under Strong Backgrounds With a Metal Oxide Sensor Array. , 2011, , .		0
75	Neurorehabilitation using the virtual reality based Rehabilitation Gaming System: methodology, design, psychometrics, usability and validation. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2010, 7, 48.	4.6	265
76	The real-world localization and classification of multiple odours using a biologically based neurorobotics approach. , 2010, , .		3
77	The role of neural synchrony and rate in high-dimensional input systems. <i>The Antennal Lobe: A case study.</i> , 2010, , .		2
78	Non-Linear Neuronal Responses as an Emergent Property of Afferent Networks: A Case Study of the Locust Lobula Giant Movement Detector. <i>PLoS Computational Biology</i> , 2010, 6, e1000701.	3.2	27
79	An insect-based method for learning landmark reliability using expectation reinforcement in dynamic environments. , 2010, , .		8
80	Action-Planning and Execution from Multimodal Cues: An Integrated Cognitive Model for Artificial Autonomous Systems. <i>Studies in Computational Intelligence</i> , 2010, , 479-497.	0.9	2
81	Insect-Like mapless navigation based on head direction cells and contextual learning using chemo-visual sensors. , 2009, , .		23
82	The Effects of Explicit and Implicit Interaction on User Experiences in a Mixed Reality Installation: The Synthetic Oracle. <i>Presence: Teleoperators and Virtual Environments</i> , 2009, 18, 277-285.	0.6	11
83	Learning from the Moth: A Comparative Study of Robot-Based Odor Source Localization Strategies. , 2009, , .		3
84	The rehabilitation gaming system: a review. <i>Studies in Health Technology and Informatics</i> , 2009, 145, 65-83.	0.3	27
85	A model for the neuronal substrate of dead reckoning and memory in arthropods: a comparative computational and behavioral study. <i>Theory in Biosciences</i> , 2008, 127, 163-175.	1.4	18
86	Using a Multi-Task Adaptive VR System for Upper Limb Rehabilitation in the Acute Phase of Stroke. , 2008, , .		18
87	Intelligent motor decision: From selective attention to a Bayesian world model. , 2008, , .		5
88	re(PER)curso. , 2008, , .		4
89	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. <i>International Journal of Robotics Research</i> , 2007, 26, 759-772.	8.5	42
90	A Biologically Based Chemo-Sensing UAV for Humanitarian Demining. <i>International Journal of Advanced Robotic Systems</i> , 2007, 4, 21.	2.1	15

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91	The Rehabilitation Gaming System: a Virtual Reality Based System for the Evaluation and Rehabilitation of Motor Deficits. , 2007, , .		32
92	An artificial moth: Chemical source localization using a robot based neuronal model of moth optomotor anemotactic search. Autonomous Robots, 2006, 20, 197-213.	4.8	110
93	Chemotactic Search in Complex Environments. , 2004, , 181-207.		6
94	A collision avoidance model based on the Lobula giant movement detector (LGMD) neuron of the locust. , 0, , .		19
95	A Biologically Based Flight Control System for a Blimp-based UAV. , 0, , .		12
96	Moth-Like Chemo-Source Localization and Classification on an Indoor Autonomous Robot. , 0, , .		7
97	Humanitarian Demining Using an Insect Based Chemical Unmanned Aerial Vehicle. , 0, , .		2