Massimo Bergamasco

List of Publications by Year
in descending order

169 papers	4,310 citations	159585 30 h-index	149698 56 g-index
177 all docs	177 docs citations	177 times ranked	4432 citing authors

#	Article	IF	Citations
1	Beyond virtual museums: Experiencing immersive virtual reality in real museums. Journal of Cultural Heritage, 2010, 11, 452-458.	3.3	359
2	Virtual Hand Illusion Induced by Visuomotor Correlations. PLoS ONE, 2010, 5, e10381.	2.5	341
3	An EMG-Controlled Robotic Hand Exoskeleton for Bilateral Rehabilitation. IEEE Transactions on Haptics, 2015, 8, 140-151.	2.7	240
4	Dynamics of parallel manipulators by means of screw theory. Mechanism and Machine Theory, 2003, 38, 1113-1131.	4.5	222
5	A New Gaze-BCI-Driven Control of an Upper Limb Exoskeleton for Rehabilitation in Real-World Tasks. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2012, 42, 1169-1179.	2.9	171
6	Arm rehabilitation with a robotic exoskeleleton in Virtual Reality. , 2007, , .		115
7	Positive effects of robotic exoskeleton training of upper limb reaching movements after stroke. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 36.	4.6	107
8	A force-feedback exoskeleton for upper-limb rehabilitation in virtual reality. Applied Bionics and Biomechanics, 2009, 6, 115-126.	1.1	103
9	Evaluation of the effects of the Arm Light Exoskeleton on movement execution and muscle activities: a pilot study on healthy subjects. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 9.	4.6	101
10	The Body Extender: A Full-Body Exoskeleton for the Transport and Handling of Heavy Loads. IEEE Robotics and Automation Magazine, 2014, 21, 34-44.	2.0	85
11	EEG ultradian rhythmicity differences in disorders of consciousness during wakefulness. Journal of Neurology, 2016, 263, 1746-1760.	3.6	85
12	A Fingertip Haptic Display for Improving Curvature Discrimination. Presence: Teleoperators and Virtual Environments, 2008, 17, 550-561.	0.6	80
13	How stressful are 105days of isolation? Sleep EEG patterns and tonic cortisol in healthy volunteers simulating manned flight to Mars. International Journal of Psychophysiology, 2014, 93, 211-219.	1.0	73
14	A new screw theory method for the estimation of position accuracy in spatial parallel manipulators with revolute joint clearances. Mechanism and Machine Theory, 2011, 46, 1929-1949.	4.5	70
15	Evolutionary aspects of self- and world consciousness in vertebrates. Frontiers in Human Neuroscience, 2015, 9, 157.	2.0	62
16	Body Extender: Whole body exoskeleton for human power augmentation. , 2011, , .		59
17	Lowering the development time of multimodal interactive application. , 2005, , .		57
18	Design of a novel finger haptic interface for contact and orientation display. , 2010, , .		52

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19	Design and kinematic optimization of a novel underactuated robotic hand exoskeleton. Meccanica, 2017, 52, 749-761.	2.0	51
20	Virtual reality enhanced mannequin (VREM) that is well received by resuscitation experts. Resuscitation, 2009, 80, 489-492.	3.0	49
21	Beaming: An Asymmetric Telepresence System. IEEE Computer Graphics and Applications, 2012, 32, 10-17.	1.2	47
22	Process integration in energy and carbon intensive industries: An example of exploitation of optimization techniques and decision support. Applied Thermal Engineering, 2014, 70, 1148-1155.	6.0	43
23	Haptic Hand Exoskeleton for Precision Grasp Simulation. Journal of Mechanisms and Robotics, 2013, 5, .	2.2	42
24	The contribution of cutaneous and kinesthetic sensory modalities in haptic perception of orientation. Brain Research Bulletin, 2011, 85, 260-266.	3.0	40
25	Illusory movements induced by tendon vibration in right- and left-handed people. Experimental Brain Research, 2015, 233, 375-383.	1.5	40
26	Local and Remote Cooperation With Virtual and Robotic Agents: A P300 BCI Study in Healthy and People Living With Spinal Cord Injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1622-1632.	4.9	40
27	A new option for the visually impaired to experience 3D art at museums: manual exploration of virtual copies. Visual Impairment Research, 2003, 5, 1-12.	0.2	36
28	A novel BCI-SSVEP based approach for control of walking in Virtual Environment using a Convolutional Neural Network. , 2014, , .		36
29	Effects of Continuous Kinaesthetic Feedback Based on Tendon Vibration on Motor Imagery BCI Performance. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 105-114.	4.9	36
30	Vibrotactile perception assessment for a rowing training system. , 2009, , .		35
31	An EMG-based approach for on-line predicted torque control in robotic-assisted rehabilitation. , 2014, , .		35
32	Continuum thermo-electro-mechanical model for electrostrictive elastomers. Journal of Intelligent Material Systems and Structures, 2013, 24, 761-778.	2.5	34
33	Multisensory Feedback Can Enhance Embodiment Within an Enriched Virtual Walking Scenario. Presence: Teleoperators and Virtual Environments, 2014, 23, 253-266.	0.6	34
34	Thermal Feedback in Virtual Environments. Presence: Teleoperators and Virtual Environments, 1997, 6, 617-629.	0.6	33
35	Development of a new exoskeleton for upper limb rehabilitation. , 2009, , .		33
36	Design and validation of a complete haptic system for manipulative tasks. Advanced Robotics, 2006, 20, 367-389.	1.8	32

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37	Kinematic Design of a Two Contact Points Haptic Interface for the Thumb and Index Fingers of the Hand. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 520-529.	2.9	32
38	Reactive robot system using a haptic interface: an active interaction to transfer skills from the robot to unskilled persons. Advanced Robotics, 2007, 21, 267-291.	1.8	32
39	Feedback, Affordances, and Accelerators for Training Sports in Virtual Environments. Presence: Teleoperators and Virtual Environments, 2011, 20, 33-46.	0.6	32
40	Cortical source of blink-related delta oscillations and their correlation with levels of consciousness. Human Brain Mapping, 2013, 34, 2178-2189.	3.6	31
41	A pilot clinical study on robotic assisted rehabilitation in VR with an arm exoskeleton device. , 2007, , .		30
42	I'm in VR!. , 2014, , .		30
43	A Three-Axis Force Sensor for Dual Finger Haptic Interfaces. Sensors, 2012, 12, 13598-13616.	3.8	29
44	A new bounded jerk on-line trajectory planning for mimicking human movements in robot-aided neurorehabilitation. Robotics and Autonomous Systems, 2013, 61, 404-415.	5.1	29
45	Modeling and experimental validation of buckling dielectric elastomer actuators. Smart Materials and Structures, 2012, 21, 094005.	3.5	28
46	Spectral Parameters Modulation and Source Localization of Blink-Related Alpha and Low-Beta Oscillations Differentiate Minimally Conscious State from Vegetative State/Unresponsive Wakefulness Syndrome. PLoS ONE, 2014, 9, e93252.	2.5	28
47	Virtually preserving the intangible heritage of artistic handicraft. Journal of Cultural Heritage, 2011, 12, 82-87.	3.3	27
48	Real-Time Gesture Recognition, Evaluation and Feed-Forward Correction of a Multimodal Tai-Chi Platform. Lecture Notes in Computer Science, 2008, , 30-39.	1.3	27
49	Novel Magnetic Sensing Approach with Improved Linearity. Sensors, 2013, 13, 7618-7632.	3.8	25
50	Design of a cutaneous fingertip display for improving haptic exploration of virtual objects. , 2010, , .		24
51	Vitality Forms Processing in the Insula during Action Observation: A Multivoxel Pattern Analysis. Frontiers in Human Neuroscience, 2016, 10, 267.	2.0	24
52	Illusory perception of arm movement induced by visuo-proprioceptive sensory stimulation and controlled by motor imagery. , 2012, , .		23
53	Exoskeletons as Man-Machine Interface Systems for Teleoperation and Interaction in Virtual Environments. Springer Tracts in Advanced Robotics, 2007, , 61-76.	0.4	23
54	Haptic guidance of Light-Exoskeleton for arm-rehabilitation tasks. , 2009, , .		22

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55	Design and implementation of a training strategy in chronic stroke with an arm robotic exoskeleton. , 2011, 2011, 5975512.		21
56	ISEE: Information access through the navigation of a 3D interactive environment. Journal of Cultural Heritage, 2011, 12, 287-294.	3.3	21
57	11 Evaluation of Multipoint Contact Interfaces in Haptic Perception of Shapes. , 0, , 177-188.		20
58	Designing interaction metaphors for Web3D cultural dissemination. Journal of Cultural Heritage, 2013, 14, 146-155.	3.3	18
59	Trackhold: A Novel Passive Arm-Support Device. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	18
60	Evaluating the Impact of Highly Immersive Technologies and Natural Interaction on Player Engagement and Flow Experience in Games. Lecture Notes in Computer Science, 2015, , 169-181.	1.3	18
61	A case of post-traumatic minimally conscious state reversed by midazolam: Clinical aspects and neurophysiological correlates. Restorative Neurology and Neuroscience, 2014, 32, 767-787.	0.7	17
62	Dynamics Modeling of Humanâ€"Machine Control Interface for Underwater Teleoperation. Robotica, 2021, 39, 618-632.	1.9	17
63	High performance haptic device for force rendering in textile exploration. Visual Computer, 2007, 23, 247-256.	3.5	16
64	MOTORE: A mobile haptic interface for neuro-rehabilitation. , 2011, , .		16
65	Safety Training Using Virtual Reality: A Comparative Approach. Lecture Notes in Computer Science, 2017, , 148-163.	1.3	16
66	Design of information landscapes for cultural heritage content. , 2008, , .		15
67	Bilateral teleoperation under time-varying delay using wave variables. , 2009, , .		15
68	A Low Cost Open-Controller for Interactive Robotic System. , 2015, , .		15
69	Humanâ€"Robot Augmentation. Springer Handbooks, 2016, , 1875-1906.	0.6	15
70	Desktop Haptic Interface for Simulation of Hand-Tremor. IEEE Transactions on Haptics, 2016, 9, 33-42.	2.7	15
71	An Orthopaedic Robotic-Assisted Rehabilitation Method of the Forearm in Virtual Reality Physiotherapy. Journal of Healthcare Engineering, 2018, 2018, 1-20.	1.9	15
72	Comparing Different Storytelling Approaches for Virtual Guides in Digital Immersive Museums. Lecture Notes in Computer Science, 2018, , 292-302.	1.3	15

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73	A new Kinect-based guidance mode for upper limb robot-aided neurorehabilitation. , 2012, , .		14
74	Voxel-Based Haptic Rendering Using Implicit Sphere Trees. , 2008, , .		12
75	Modelling and Experimental Evaluation of a Static Balancing Technique for a New Horizontally Mounted 3-UPU Parallel Mechanism. International Journal of Advanced Robotic Systems, 2012, 9, 193.	2.1	12
76	Hand and Arm Ownership Illusion through Virtual Reality Physical Interaction and Vibrotactile Stimulations. Lecture Notes in Computer Science, 2010, , 194-199.	1.3	12
77	The 3D interactive visit to Piazza dei Miracoli, Italy. , 2005, , .		11
78	A fingertip haptic display for improving local perception of shape cues. , 2007, , .		11
79	Robot-mediated arm rehabilitation in Virtual Environments for chronic stroke patients: A clinical study. , 2008, , .		11
80	Design of a new fMRI compatible haptic interface. , 2009, , .		11
81	The Modulation of Ownership and Agency in the Virtual Hand Illusion under Visuotactile and Visuomotor Sensory Feedback. Presence: Teleoperators and Virtual Environments, 2014, 23, 209-225.	0.6	11
82	Bimanual Haptic-desktop platform for upper-limb post-stroke rehabilitation: Practical trials. , 2009, , .		10
83	Robotic creatures: Anthropomorphism and interaction in contemporary art. , 2010, , .		10
84	Evaluation of a New Exoskeleton for Upper Limb Post-stroke Neuro-rehabilitation: Preliminary Results. Biosystems and Biorobotics, 2014, , 637-645.	0.3	10
85	Preliminary results of BRAVO project: Brain computer interfaces for Robotic enhanced Action in Visuo-motOr tasks. , 2011, 2011, 5975377.		9
86	A virtual reality system for robotic-assisted orthopedic rehabilitation of forearm and elbow fractures. , 2013, , .		9
87	Automatic inspection of railway carbon strips based on multi-modal visual information. , 2017, , .		9
88	Evaluating Virtual Embodiment with the ALEx Exoskeleton. Lecture Notes in Computer Science, 2014, , 133-140.	1.3	9
89	Description and Performance Analysis of a Distributed Rendering Architecture for Virtual Environments. , 2007, , .		8
90	Integration of multimodal technologies for a rowing platform. , 2009, , .		8

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91	A novel compact and lightweight actuator for wearable robots. , 2010, , .		7
92	Training and assessment of upper limb motor function with a robotic exoskeleton after stroke. , 2012, , .		7
93	Virtual reconstruction of paintings as a tool for research and learning. Journal of Cultural Heritage, 2014, 15, 308-312.	3.3	7
94	Design of an Underactuated Hand Exoskeleton with Joint Estimation. Mechanisms and Machine Science, 2017, , 97-105.	0.5	7
95	An IMU and RFID-based Navigation System Providing Vibrotactile Feedback for Visually Impaired People. Lecture Notes in Computer Science, 2016, , 360-370.	1.3	7
96	Regressor-free force/position control of fixed-base exoskeletons for rehabilitation tasks. , 2009, , .		6
97	Robust Tracking of the Lightâ€"Exoskeleton for Arm Rehabilitation Tasks* *This work is partially supported by Skills-IP project and Scuola Superiore Sant'Anna.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 663-668.	0.4	6
98	A Novel Actuator for Wearable Robots with Improved Torque Density and Mechanical Efficiency. Advanced Robotics, 2010, 24, 2019-2041.	1.8	6
99	Tactile transducer based on electromechanical solenoids. , 2011, , .		6
100	AMICA: Virtual Reality as a tool for learning and communicating the craftsmanship of engraving. , 2015, , .		6
101	Looking for a precursor of spontaneous Sleep Slow Oscillations in human sleep: The role of the sigma activity. International Journal of Psychophysiology, 2015, 97, 99-107.	1.0	6
102	An Immersive VR Experience to Learn the Craft of Printmaking. Lecture Notes in Computer Science, 2016, , 378-389.	1.3	6
103	Assisting to Sketch Unskilled People with Fixed and Interactive Virtual Templates. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	5
104	Mechanical design and optimization of a novel fMRI compatible haptic manipulator. , 2010, , .		5
105	Network streaming of dynamic 3D content with on-line compression of frame data. , 2010, , .		5
106	A new gaze-tracking guidance mode for upper limb robot-aided neurorehabilitation. , 2011, , .		5
107	[Poster] Interacting with your own hands in a fully immersive MR system. , 2014, , .		5
108	Investigating the process of emotion recognition in immersive and non-immersive virtual technological setups. , 2016, , .		5

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109	Perception of Basic Emotions from Facial Expressions of Dynamic Virtual Avatars. Lecture Notes in Computer Science, 2015, , 409-419.	1.3	5
110	ADITHO â€" A Serious Game for Training and Evaluating Medical Ethics Skills. Lecture Notes in Computer Science, 2015, , 59-71.	1.3	5
111	Interactive Digital Storytelling for Children's Education. , 2012, , 231-252.		5
112	Development of a 3D real time gesture recognition methodology for virtual environment control. , 2008, , .		4
113	A new method for the estimation of position accuracy in parallel manipulators with joint clearances by screw theory. , 2008, , .		4
114	Digital representation of skills for human-robot interaction. , 2009, , .		4
115	Interactive Storytelling for Children Education. , 2009, , .		4
116	Human gait recognition for virtual environments exploration. , 2010, , .		4
117	Visualizing perspectives and trends in robotics based on patent mining. , 2010, , .		4
118	Natural User Interface to Assess Social Skills in Autistic Population. Lecture Notes in Computer Science, 2017, , 144-154.	1.3	4
119	Rehabilitation Training and Evaluation with the L-EXOS in Chronic Stroke. Lecture Notes in Computer Science, 2012, , 242-245.	1.3	4
120	Building 3D interactive environments for the children's narrative. , 2005, , .		3
121	Haptic rendering of sharp objects using lateral forces. , 2006, , .		3
122	A dynamically reconfigurable stereoscopic/panoramic vision mobile robot head controlled from a virtual environment. Visual Computer, 2008, 24, 941-946.	3.5	3
123	Virtual Laboratory: a virtual distributed platform to share and perform experiments. , 2008, , .		3
124	Control strategies and perception effects in co-located and large workspace dynamical encountered haptics. , 2009, , .		3
125	Real-time compression of depth streams through meshification and valence-based encoding. , 2012, , .		3
126	A comparison of algorithms for motor imagery for BCI under different sensory feedback conditions. , 2012, , .		3

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127	On multiuser perspectives in passive stereographic virtual environments. Computer Animation and Virtual Worlds, 2014, 25, 69-81.	1.2	3
128	Energy recovery in time-varying delay teleoperated system using wave-variables. , 2010, , .		2
129	Design of a Motion Based Sailing Simulator. , 2010, , .		2
130	A low-cost human locomotion speed recognition for augmented virtual environments exploration. , 2011, , .		2
131	Real-Time Network Streaming of Dynamic 3D Content with In-frame and Inter-frame Compression. , 2011, , .		2
132	A novel wearable biometric capture system. , 2014, , .		2
133	A networked haptic embedded controller. , 2014, , .		2
134	An Experimental Study on Fused-Deposition-Modeling Technology as an Alternative Method for Low-Cost Braille Printing. Advances in Intelligent Systems and Computing, 2016, , 201-211.	0.6	2
135	A Scalable Cluster-Rendering Architecture for Immersive Virtual Environments. Lecture Notes in Computer Science, 2016, , 102-119.	1.3	2
136	The Effect of Emotional Narrative Virtual Environments on User Experience. Lecture Notes in Computer Science, 2016, , 120-132.	1.3	2
137	Automatic Creation of a Virtual/Augmented Gallery Based on User Defined Queries on Online Public Repositories. Communications in Computer and Information Science, 2019, , 135-147.	0.5	2
138	<title>Preliminary considerations on the design of controllers for haptic interfaces</title>. , 1997, , .		1
139	Non-Invasive Biomechanical Device for the Club-Foot Medical Treatment: A Robotic Rehabilitation Analysis. , 2008, , .		1
140	A mechatronic analysis and synthesis of human walking gait. , 2009, , .		1
141	A strategic map for high-impact virtual experience design. , 2009, , .		1
142	Clinical VR applications with the light-exoskeleton for upper-part neurorehabilitation. , 2010, , .		1
143	Visibility techniques applied to robotics. , 2010, , .		1
144	Positive effects of rehabilitation training with the L-EXOS in chronic stroke. BIO Web of Conferences, 2011, 1, 00027.	0.2	1

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145	Haptic hand-tremor simulation for enhancing empathy with disabled users. , 2013, , .		1
146	An immersive information system for the communication of the restoration of Simone Martini's Polyptich. Journal of Cultural Heritage, 2015, 16, 741-746.	3.3	1
147	A 6-DOF haptic manipulation system to verify assembly procedures on CAD models. Procedia Manufacturing, 2019, 38, 1292-1299.	1.9	1
148	Efficient Augmented Reality on Low-Power Embedded Systems. Lecture Notes in Computer Science, 2021, , 227-244.	1.3	1
149	Inter-brain co-activations during mindfulness meditation. Implications for devotional and clinical settings. Consciousness and Cognition, 2021, 95, 103210.	1.5	1
150	Design guidelines for generating force feedback on fingertips using haptic interfaces. , 2008, , 393-410.		1
151	A Measuring Tool for Accurate Haptic Modeling in Industrial Maintenance Training. Lecture Notes in Computer Science, 2010, , 377-384.	1.3	1
152	Skill Modeling and Feedback Design for Training Rowing with Virtual Environments. Advances in Human Factors and Ergonomics Series, 2010, , 832-841.	0.2	1
153	A Real-Time Video Stream Stabilization System Using Inertial Sensor. Lecture Notes in Computer Science, 2019, , 274-291.	1.3	1
154	Hypnotizability and the position sense: proprioceptive localization of the hand. Archives Italiennes De Biologie, 2015, 153, 46-55.	0.4	1
155	<title>Teleoperation with large time delay using a prevision system</title>. , 1997, , .		0
156	<title>Framework for transputer-based control architectures</title>. , 1997, 3203, 152.		0
157	<title>Museum of Pure Form: preliminary considerations</title>. , 2001, 4195, 292.		0
158	Using stereoscopic real-time graphics to shorten training time for complex mechanical tasks. , 2006, 6055, 7.		0
159	Patent based analysis of innovative rehabilitation technologies. , 2007, , .		0
160	Surface perception in a large workspace encounter interface. , 2008, , .		0
161	Human forces in hands free interaction: a new paradigm for immersive virtual environments. , 2009, , .		0
162	Towards the ultimate aesthetic experience. , 2009, , .		0

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163	Developing a Tactile Actuator to be Integrated Into a Force Feedback Device for the Haptic Rendering of Virtual Textiles. , 2011, , .		0
164	Automatic creation of bas-reliefs from single images. , 2013, , .		0
165	Interactive Technology Maps for Strategic Planning and Research Directions Based on Textual and Citation Analysis of Patents. , 2010, , 487-514.		0
166	Training Skills with Virtual Environments. , 2010, , 314-343.		0
167	Haptic Interfaces for Skills Training. Human Factors and Ergonomics, 2012, , 91-110.	0.0	0
168	TESBE: Technologies for Efficient and Safe Body Extenders. Springer Tracts in Advanced Robotics, 2014, , 241-265.	0.4	0
169	A Virtual Travel in Leonardoâ€™s Codex of Flight. Lecture Notes in Computer Science, 2017, , 310-318.	1.3	0