Carlos A Cifuentes

List of Publications by Year
in descending order

100 papers	1,154 citations	394286 19 h-index	501076 28 g-index
106 all docs	106 docs citations	106 times ranked	756 citing authors

#	Article	IF	Citations
1	Social Robots in Therapy and Care. Current Robotics Reports, 2020, 1, 59-74.	5.1	72
2	Gait Phase Detection for Lower-Limb Exoskeletons using Foot Motion Data from a Single Inertial Measurement Unit in Hemiparetic Individuals. Sensors, 2019, 19, 2988.	2.1	62
3	Humanâ€"robot interaction based on wearable IMU sensor and laser range finder. Robotics and Autonomous Systems, 2014, 62, 1425-1439.	3.0	57
4	Development and evaluation of a novel robotic platform for gait rehabilitation in patients with Cerebral Palsy: CPWalker. Robotics and Autonomous Systems, 2017, 91, 101-114.	3.0	54
5	Multimodal Humanâ€"Robot Interaction for Walker-Assisted Gait. IEEE Systems Journal, 2016, 10, 933-943.	2.9	47
6	Humanâ€"Robotâ€"Environment Interaction Interface for Smart Walker Assisted Gait: AGoRA Walker. Sensors, 2019, 19, 2897.	2.1	45
7	Expectations and Perceptions of Healthcare Professionals for Robot Deployment in Hospital Environments During the COVID-19 Pandemic. Frontiers in Robotics and AI, 2021, 8, 612746.	2.0	36
8	Social Human-Robot Interaction for Gait Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1299-1307.	2.7	34
9	A Socially Assistive Robot for Long-Term Cardiac Rehabilitation in the Real World. Frontiers in Neurorobotics, 2021, 15, 633248.	1.6	32
10	Human-robot sensor interface for cardiac rehabilitation. , 2017, 2017, 1013-1018.		30
11	The Actuation System of the Ankle Exoskeleton T-FLEX: First Use Experimental Validation in People with Stroke. Brain Sciences, 2021, 11, 412.	1.1	29
12	Development of a wearable ZigBee sensor system for upper limb rehabilitation robotics. , 2012, , .		28
13	Collaborative and Inclusive Process with the Autism Community: A Case Study in Colombia About Social Robot Design. International Journal of Social Robotics, 2021, 13, 153-167.	3.1	27
14	Development of a Robotic Lower-Limb Exoskeleton for Gait Rehabilitation: AGoRA Exoskeleton. , 2018, , .		26
15	Evaluation of biomechanical gait parameters of patients with Cerebral Palsy at three different levels of gait assistance using the CPWalker. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 15.	2.4	25
16	Robot-Assisted Intervention for children with special needs: A comparative assessment for autism screening. Robotics and Autonomous Systems, 2020, 127, 103484.	3.0	25
17	Human-Robot Interaction Strategies for Walker-Assisted Locomotion. Springer Tracts in Advanced Robotics, 2016, , .	0.3	24
18	Social Assistive Robots: Assessing the Impact of a Training Assistant Robot in Cardiac Rehabilitation. International Journal of Social Robotics, 2021, 13, 1189-1203.	3.1	23

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19	Expectation vs. Reality: Attitudes Towards a Socially Assistive Robot in Cardiac Rehabilitation. Applied Sciences (Switzerland), 2019, 9, 4651.	1.3	22
20	Robot-Assisted Rehabilitation Therapy: Recovery Mechanisms and Their Implications for Machine Design. Biosystems and Biorobotics, 2016, , 197-223.	0.2	21
21	Large-Range Polymer Optical-Fiber Strain-Gauge Sensor for Elastic Tendons in Wearable Assistive Robots. Materials, 2019, 12, 1443.	1.3	21
22	Affordable passive 3D-printed prosthesis for persons with partial hand amputation. Prosthetics and Orthotics International, 2020, 44, 92-98.	0.5	21
23	An Open-Source Social Robot Based on Compliant Soft Robotics for Therapy with Children with ASD. Actuators, 2020, 9, 91.	1.2	19
24	A Novel Multimodal Cognitive Interaction for Walker-Assisted Rehabilitation Therapies. , 2019, 2019, 905-910.		18
25	Machine Learning Approach for Fatigue Estimation in Sit-to-Stand Exercise. Sensors, 2021, 21, 5006.	2.1	17
26	A Survey on Socially Assistive Robotics: Cliniciansâ€™ and Patientsâ€™ Perception of a Social Robot within Gait Rehabilitation Therapies. Brain Sciences, 2021, 11, 738.	1.1	15
27	The PoundCloud framework for ROS-based cloud robotics: Case studies on autonomous navigation and humanâ€“robot interaction. Robotics and Autonomous Systems, 2022, 150, 103981.	3.0	15
28	Smart Walkers: Advanced Robotic Human Walking-Aid Systems. Springer Tracts in Advanced Robotics, 2015, , 103-131.	0.3	13
29	Long-Term Social Human-Robot Interaction for Neurorehabilitation: Robots as a Tool to Support Gait Therapy in the Pandemic. Frontiers in Neurorobotics, 2021, 15, 612034.	1.6	13
30	Development of an Interface for Human-Robot Interaction on a Robotic Platform for Gait Assistance: AGoRA Smart Walker. , 2018, , .		12
31	Lokomat therapy in Colombia: Current state and cognitive aspects. , 2017, 2017, 394-399.		11
32	Therapy with T-FLEX Ankle-Exoskeleton for Motor Recovery: A Case Study with a Stroke Survivor. , 2020, , .		11
33	Experimental characterization of the T-FLEX ankle exoskeleton for gait assistance. Mechatronics, 2021, 78, 102608.	2.0	11
34	Impedance-based Backdrivability Recovery of a Lower-limb Exoskeleton for Knee Rehabilitation. , 2019, , .		10
35	Using a Personalised Socially Assistive Robot for Cardiac Rehabilitation: A Long-Term Case Study. , 2020, , .		10
36	Evaluation of Physical Interaction during Walker-Assisted Gait with the AGoRA Walker: Strategies Based on Virtual Mechanical Stiffness. Sensors, 2021, 21, 3242.	2.1	10

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37	A Data-Driven Approach to Physical Fatigue Management Using Wearable Sensors to Classify Four Diagnostic Fatigue States. Sensors, 2021, 21, 6401.	2.1	10
38	Human-robot interaction for rehabilitation scenarios. , 2020, , 1-31.		9
39	Human-in-the-Loop Control for AGoRA Unilateral Lower-Limb Exoskeleton. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	2.0	9
40	Development of a Zigbee platform for bioinstrumentation. , 2010, 2010, 390-3.		8
41	Adaptable Robotic Platform for Gait Rehabilitation and Assistance: Design Concepts and Applications. SpringerBriefs in Applied Sciences and Technology, 2020, , 67-93.	0.2	8
42	Cloud Robotics Experimentation Testbeds: a Cloud-Based Navigation Case Study. , 2019, , .		7
43	BCI-Based Control for Ankle Exoskeleton T-FLEX: Comparison of Visual and Haptic Stimuli with Stroke Survivors. Sensors, 2021, 21, 6431.	2.1	7
44	Evaluation of IMU ZigBee Sensors for Upper Limb Rehabilitation. Biosystems and Biorobotics, 2013, , 461-465.	0.2	7
45	ZigBee Wearable Sensor Development for Upper Limb Robotics Rehabilitation. IEEE Latin America Transactions, 2013, 11, 408-413.	1.2	6
46	Sensor fusion to control a robotic walker based on upper-limbs reaction forces and gait kinematics. , 2014, , .		6
47	Social Assistive Robot for Cardiac Rehabilitation. , 2018, , .		6
48	Architecture for a Social Assistive Robot in Cardiac Rehabilitation. , 2018, , .		6
49	Remote-Operated Multimodal Interface for Therapists During Walker-Assisted Gait Rehabilitation: A Preliminary Assessment. , 2019, , .		6
50	Online System for Gait Parameters Estimation Using a LRF Sensor for Assistive Devices. IEEE Sensors Journal, 2021, 21, 14272-14280.	2.4	6
51	Physical Human-Robot Interaction Through Hugs with CASTOR Robot. Lecture Notes in Computer Science, 2021, , 814-818.	1.0	6
52	Assistive Devices for Human Mobility and Gait Rehabilitation. Springer Tracts in Advanced Robotics, 2016, , 1-15.	0.3	5
53	A Therapist Helping Hand for Walker-Assisted Gait Rehabilitation: A Pre-Clinical Assessment. , 2019, , .		5
54	Control Strategies for Humanâ€"Robotâ€"Environment Interaction in Assisted Gait with Smart Walkers. , 2022, , 259-286.		5

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55	Technologies for Therapy and Assistance of Lower Limb Disabilities: Sit to Stand and Walking. SpringerBriefs in Applied Sciences and Technology, 2020, , 43-66.	0.2	5
56	Development of a 3D Relative Motion Method for Humanâ€"Robot Interaction Assessment. Sensors, 2022, 22, 2411.	2.1	5
57	Physical Human-Robot Interaction Influence in ASD Therapy Through an Affordable Soft Social Robot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 105, .	2.0	5
58	Assessment of walker-assisted gait based on Principal Component Analysis and wireless inertial sensors. Revista Brasileira De Engenharia Biomedica, 2014, 30, 220-231.	0.3	4
59	Human-walker interaction on slopes based on LRF and IMU sensors. , 2014, , .		4
60	First Interaction Assessment between a Social Robot and Children Diagnosed with Cerebral Palsy in a Rehabilitation Context. , 2021, , .		4
61	T-FLEX: Variable Stiffness Ankle-Foot Orthosis for Gait Assistance. Biosystems and Biorobotics, 2019, , 160-164.	0.2	4
62	The AGoRA V2 Unilateral Lower-Limb Exoskeleton: Mechatronic Integration and Biomechanical Assessment. IEEE Robotics and Automation Letters, 2022, 7, 7928-7933.	3.3	4
63	An approach to telemedicine intelligent, through web mining and instrumentation wearable. , 2011, , .		3
64	Human-Robot interaction strategy for overground rehabilitation in patients with Cerebral Palsy. , 2016, , .		3
65	Human-Robot Interaction for Assisting Human Locomotion. Springer Tracts in Advanced Robotics, 2016, , 17-31.	0.3	3
66	Semi-Remote Gait Assistance Interface: A Joystick with Visual Feedback Capabilities for Therapists. Sensors, 2021, 21, 3521.	2.1	3
67	Personalised socially assistive robot for cardiac rehabilitation: Critical reflections on long-term interactions in the real world. User Modeling and User-Adapted Interaction, 2023, 33, 497-544.	2.9	3
68	Development of a Cognitive HRI Strategy for Mobile Robot Control. Springer Tracts in Advanced Robotics, 2016, , 33-55.	0.3	2
69	PREC 2018. , 2018, , .		2
70	Feasibility study: Towards Estimation of Fatigue Level in Robot-Assisted Exercise for Cardiac Rehabilitation. , 2019, 2019, 911-916.		2
71	Experimental Characterization of Flexible and Soft Actuators for Rehabilitation and Assistive Devices. , 2022, , 169-192.		2
72	Brainâ€"Computer Interface for Controlling Lower-Limb Exoskeletons. , 2022, , 237-258.		2

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73	Variable Stiffness Actuators for Wearable Applications in Gait Rehabilitation. , 2022, , 193-212.		2
74	Towards a Fabric-Based Soft Hand Exoskeleton for Various Grasp Taxonomies. Biosystems and Biorobotics, 2022, , 369-373.	0.2	2
75	Visual Feedback Strategy Based on Serious Games for Therapy with T-FLEX Ankle Exoskeleton. Biosystems and Biorobotics, 2022, , 467-472.	0.2	2
76	Biomechanical Assessment of Post-Stroke Patientsâ€™ Upper Limb before and after Rehabilitation Therapy Based on FES and VR. Sensors, 2022, 22, 2693.	2.1	2
77	Assessment of a Robotic Walker in Older Adults With Parkinson's Disease in Daily Living Activities. Frontiers in Neurorobotics, 2021, 15, 742281.	1.6	2
78	Implementation of a Shoulder and Elbow musculoskeletal model in musculoskeletal modelling and simulation software (MSMS). , 2016, , .		1
79	Bioinspired Hip Exoskeleton for Enhanced Physical Interaction. Biosystems and Biorobotics, 2017, , 1497-1501.	0.2	1
80	Conversational Agents for Healthcare Delivery: Potential Solutions to the Challenges of the Pandemic. , 2021, , 111-136.		1
81	Introduction to Robotics for Gait Assistance and Rehabilitation. , 2022, , 1-41.		1
82	Serious Games in Robot-Assisted Rehabilitation Therapy for Neurological Patients. , 2022, , 309-329.		1
83	Fundamentals for the Design of Lower-Limb Exoskeletons. , 2022, , 93-120.		1
84	Fundamentals for the Design of Smart Walkers. , 2022, , 121-141.		1
85	3D Relative Motion Assessment in Lower-Limb Exoskeletons: A Case of Study with AGoRA Exoskeleton. Biosystems and Biorobotics, 2022, , 633-637.	0.2	1
86	Editorial: Interfacing Humans and Machines for Rehabilitation and Assistive Devices. Frontiers in Robotics and AI, 2021, 8, 796431.	2.0	1
87	Motor and bioelectric evaluation of human movements through inertial and myoelectric sensors. , 2013, , .		0
88	Pattern classification of brain tissues for navigation in telemedicine systems. , 2014, , .		0
89	Multimodal Interface for Human Mobility Assistance. Springer Tracts in Advanced Robotics, 2016, , 81-100.	0.3	0
90	Conclusions and Future Works. Springer Tracts in Advanced Robotics, 2016, , 101-105.	0.3	0

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91	BIOMECHANICAL COMPARISON OF PATIENTS WITH CP WITH DIFFERENT LEVELS OF GAIT ASSISTANCE USING CPWALKER. , 2017, , .		0
92	PREC 2019: Personal Robots for Exercising and Coaching. , 2019, , .		0
93	Wearable Sensors for Monitoring Exercise and Fatigue Estimation in Rehabilitation. , 2021, , 83-110.		0
94	Assessment of Robotic Devices for Gait Assistance and Rehabilitation. , 2022, , 331-348.		0
95	Experiences of Clinicians Using Rehabilitation Robotics. , 2022, , 349-375.		0
96	Socially Assistive Robotics for Gait Rehabilitation. , 2022, , 287-307.		0
97	Impedance Control Strategies for Lower-Limb Exoskeletons. , 2022, , 213-236.		0
98	Kinematics, Actuation, and Sensing Architectures for Rehabilitation and Assistive Robotics. , 2022, , 43-92.		0
99	Sensing Methodologies for Gait Parameters Estimation and Control. , 2022, , 143-168.		0
100	Technology and Environmental Supports in the Home and Community: An Interprofessional Project in BogotÃ¡, Colombia. American Journal of Occupational Therapy, 2020, 74, 7411510324p1-7411510324p1.	0.1	0