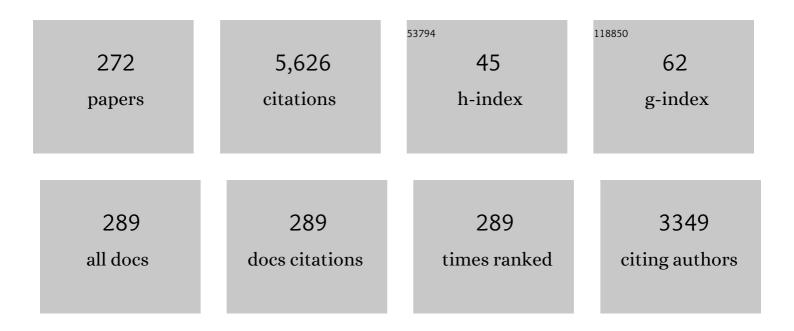
List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Assistive mobility devices focusing on Smart Walkers: Classification and review. Robotics and Autonomous Systems, 2012, 60, 548-562.	5.1	198
2	Polymer Optical Fiber Sensors in Healthcare Applications: A Comprehensive Review. Sensors, 2019, 19, 3156.	3.8	139
3	Smart textiles for multimodal wearable sensing using highly stretchable multiplexed optical fiber system. Scientific Reports, 2020, 10, 13867.	3.3	111
4	Liquid Level Measurement Based on FBG-Embedded Diaphragms With Temperature Compensation. IEEE Sensors Journal, 2018, 18, 193-200.	4.7	106
5	Polymer optical fiber-based sensor for simultaneous measurement of breath and heart rate under dynamic movements. Optics and Laser Technology, 2019, 109, 429-436.	4.6	105
6	Simultaneous measurement of pressure and temperature with a single FBG embedded in a polymer diaphragm. Optics and Laser Technology, 2019, 112, 77-84.	4.6	91
7	An IMU-to-Body Alignment Method Applied to Human Gait Analysis. Sensors, 2016, 16, 2090.	3.8	86
8	Simultaneous Measurement of Axial Strain, Bending and Torsion With a Single Fiber Bragg Grating in CYTOP Fiber. Journal of Lightwave Technology, 2019, 37, 971-980.	4.6	85
9	A Polymer Optical Fiber Temperature Sensor Based on Material Features. Sensors, 2018, 18, 301.	3.8	77
10	Polymer Optical Fiber Bragg Gratings in CYTOP Fibers for Angle Measurement with Dynamic Compensation. Polymers, 2018, 10, 674.	4.5	76
11	Photonic smart bandage for wound healing assessment. Photonics Research, 2021, 9, 272.	7.0	76
12	Material features based compensation technique for the temperature effects in a polymer diaphragm-based FBG pressure sensor. Optics Express, 2018, 26, 20590.	3.4	75
13	Multiplexing technique for quasi-distributed sensors arrays in polymer optical fiber intensity variation-based sensors. Optics and Laser Technology, 2019, 111, 81-88.	4.6	75
14	A review of the functionalities of smart walkers. Medical Engineering and Physics, 2015, 37, 917-928.	1.7	74
15	Compensation Method for Temperature Cross-Sensitivity in Transverse Force Applications With FBG Sensors in POFs. Journal of Lightwave Technology, 2018, 36, 3660-3665.	4.6	74
16	FBG-Embedded 3-D Printed ABS Sensing Pads: The Impact of Infill Density on Sensitivity and Dynamic Range in Force Sensors. IEEE Sensors Journal, 2018, 18, 8381-8388.	4.7	74
17	Multi-interface level in oil tanks and applications of optical fiber sensors. Optical Fiber Technology, 2018, 40, 82-92.	2.7	72
18	Multifunctional flexible optical waveguide sensor: on the bioinspiration for ultrasensitive sensors development. Opto-Flectronic Advances, 2022, 5, 210098-210098.	13.3	71

#	Article	IF	CITATIONS
19	Quasi-Distributed Torque and Displacement Sensing on a Series Elastic Actuator's Spring Using FBG Arrays Inscribed in CYTOP Fibers. IEEE Sensors Journal, 2019, 19, 4054-4061.	4.7	70
20	A cost-effective edge-filter based FBG interrogator using catastrophic fuse effect micro-cavity interferometers. Measurement: Journal of the International Measurement Confederation, 2018, 124, 486-493.	5.0	69
21	Optical Fiber Specklegram Sensors for Mechanical Measurements: A Review. IEEE Sensors Journal, 2020, 20, 569-576.	4.7	69
22	Sensitive zone parameters and curvature radius evaluation for polymer optical fiber curvature sensors. Optics and Laser Technology, 2018, 100, 272-281.	4.6	68
23	Application of Additive Layer Manufacturing Technique on the Development of High Sensitive Fiber Bragg Grating Temperature Sensors. Sensors, 2018, 18, 4120.	3.8	68
24	A machine learning approach for simultaneous measurement of magnetic field position and intensity with fiber Bragg grating and magnetorheological fluid. Optical Fiber Technology, 2020, 56, 102184.	2.7	68
25	Optical Fiber Sensing for Sub-Millimeter Liquid-Level Monitoring: A Review. IEEE Sensors Journal, 2019, 19, 7179-7191.	4.7	67
26	Characterization of a new polymer optical fiber with enhanced sensing capabilities using a Bragg grating. Optics Letters, 2018, 43, 4799.	3.3	66
27	Analytical model for a polymer optical fiber under dynamic bending. Optics and Laser Technology, 2017, 93, 92-98.	4.6	65
28	Polymer-optical-fiber-based sensor system for simultaneous measurement of angle and temperature. Applied Optics, 2018, 57, 1717.	1.8	64
29	Low-Cost Interrogation Technique for Dynamic Measurements with FBC-Based Devices. Sensors, 2017, 17, 2414.	3.8	62
30	Polymer Optical Fiber for Angle and Torque Measurements of a Series Elastic Actuator's Spring. Journal of Lightwave Technology, 2018, 36, 1698-1705.	4.6	62
31	Measurement of Temperature and Relative Humidity with Polymer Optical Fiber Sensors Based on the Induced Stress-Optic Effect. Sensors, 2018, 18, 916.	3.8	62
32	Corrosion Resistant FBG-Based Quasi-Distributed Sensor for Crude Oil Tank Dynamic Temperature Profile Monitoring. Sensors, 2015, 15, 30693-30703.	3.8	60
33	Dynamic Mechanical Analysis on a PolyMethyl Methacrylate (PMMA) Polymer Optical Fiber. IEEE Sensors Journal, 2018, 18, 2353-2361.	4.7	60
34	Fiber Bragg Gratings in CYTOP Fibers Embedded in a 3D-Printed Flexible Support for Assessment of Human–Robot Interaction Forces. Materials, 2018, 11, 2305.	2.9	60
35	Polymethyl methacrylate (PMMA) recycling for the production of optical fiber sensor systems. Optics Express, 2017, 25, 30051.	3.4	58
36	Polymer optical fiber strain gauge for human-robot interaction forces assessment on an active knee orthosis. Optical Fiber Technology, 2018, 41, 205-211.	2.7	58

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37	Human–robot interaction based on wearable IMU sensor and laser range finder. Robotics and Autonomous Systems, 2014, 62, 1425-1439.	5.1	57
38	Polymer Optical Fiber Sensors in Wearable Devices: Toward Novel Instrumentation Approaches for Gait Assistance Devices. IEEE Sensors Journal, 2018, 18, 7085-7092.	4.7	57
39	Dynamic mechanical characterization with respect to temperature, humidity, frequency and strain in mPOFs made of different materials. Optical Materials Express, 2018, 8, 804.	3.0	57
40	Insole optical fiber Bragg grating sensors network for dynamic vertical force monitoring. Journal of Biomedical Optics, 2017, 22, 091507.	2.6	55
41	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.	5.1	54
42	Polymer Optical Fiber for In-Shoe Monitoring of Ground Reaction Forces During the Gait. IEEE Sensors Journal, 2018, 18, 2362-2368.	4.7	54
43	3D-printed POF insole: Development and applications of a low-cost, highly customizable device for plantar pressure and ground reaction forces monitoring. Optics and Laser Technology, 2019, 116, 256-264.	4.6	48
44	A Low-Cost Lower-Limb Brain-Machine Interface Triggered by Pedaling Motor Imagery for Post-Stroke Patients Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 988-996.	4.9	48
45	Multimodal Human–Robot Interaction for Walker-Assisted Gait. IEEE Systems Journal, 2016, 10, 933-943.	4.6	47
46	Viscoelastic features based compensation technique for polymer optical fiber curvature sensors. Optics and Laser Technology, 2018, 105, 35-40.	4.6	47
47	Perrogator: A Portable Energy-Efficient Interrogator for Dynamic Monitoring of Wavelength-Based Sensors in Wearable Applications. Sensors, 2019, 19, 2962.	3.8	47
48	Gait Shear and Plantar Pressure Monitoring: A Non-Invasive OFS Based Solution for e-Health Architectures. Sensors, 2018, 18, 1334.	3.8	45
49	Empowering and Assisting Natural Human Mobility: The Simbiosis Walker. International Journal of Advanced Robotic Systems, 2011, 8, 29.	2.1	42
50	A fiber Bragg gratings pair embedded in a polyurethane diaphragm: Towards a temperature-insensitive pressure sensor. Optics and Laser Technology, 2020, 131, 106440.	4.6	41
51	Analysis of viscoelastic properties influence on strain and temperature responses of Fabry-Perot cavities based on UV-curable resins. Optics and Laser Technology, 2019, 120, 105743.	4.6	40
52	Fabry–Perot Curvature Sensor With Cavities Based on UV-Curable Resins: Design, Analysis, and Data Integration Approach. IEEE Sensors Journal, 2019, 19, 9798-9805.	4.7	37
53	Knee Impedance Modulation to Control an Active Orthosis Using Insole Sensors. Sensors, 2017, 17, 2751.	3.8	36
54	Admittance Controller with Spatial Modulation for Assisted Locomotion using a Smart Walker. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 94, 621-637.	3.4	36

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55	Long period grating in a multimode cyclic transparent optical polymer fiber inscribed using a femtosecond laser. Optics Letters, 2019, 44, 5346.	3.3	36
56	Analysis of the use of a robot to improve social skills in children with autism spectrum disorder. Research on Biomedical Engineering, 2016, 32, 161-175.	2.2	35
57	Design and evaluation of a fast model-based algorithm for ultrasonic range measurements. Sensors and Actuators A: Physical, 2008, 148, 335-341.	4.1	34
58	Highly Sensitive Fiberâ€Optic Intrinsic Electromagnetic Field Sensing. Advanced Photonics Research, 2021, 2, 2000078.	3.6	34
59	POF Smart Carpet: A Multiplexed Polymer Optical Fiber-Embedded Smart Carpet for Gait Analysis. Sensors, 2019, 19, 3356.	3.8	33
60	Envelope-based technique for liquid level sensors using an in-line fiber Mach–Zehnder interferometer. Applied Optics, 2016, 55, 9803.	2.1	31
61	Extraction of user's navigation commands from upper body force interaction in walker assisted gait. BioMedical Engineering OnLine, 2010, 9, 37.	2.7	30
62	Towards a Robotic Knee Exoskeleton Control Based on Human Motion Intention through EEG and sEMGsignals. Procedia Manufacturing, 2015, 3, 1379-1386.	1.9	30
63	Transmission–Reflection Analysis in high scattering optical fibers: A comparison with single-mode optical fiber. Optical Fiber Technology, 2020, 58, 102303.	2.7	30
64	Hysteresis compensation technique applied to polymer optical fiber curvature sensor for lower limb exoskeletons. Measurement Science and Technology, 2017, 28, 125103.	2.6	29
65	Control of a robotic knee exoskeleton for assistance and rehabilitation based on motion intention from sEMG. Research on Biomedical Engineering, 2018, 34, 198-210.	2.2	29
66	Development of a wearable ZigBee sensor system for upper limb rehabilitation robotics. , 2012, , .		28
67	Optimizing Linearity and Sensitivity of 3D-Printed Diaphragms With Chirped FBGs in CYTOP Fibers. IEEE Access, 2020, 8, 31983-31991.	4.2	28
68	Low-cost Fiberoptic Probe for Ammonia Early Detection in Fish Farms. Remote Sensing, 2020, 12, 1439.	4.0	27
69	Low-cost and high-resolution pressure sensors using highly stretchable polymer optical fibers. Materials Letters, 2020, 271, 127810.	2.6	27
70	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.	4.6	27
71	Wearable and Fully-Portable Smart Garment for Mechanical Perturbation Detection With Nanoparticles Optical Fibers. IEEE Sensors Journal, 2021, 21, 2995-3003.	4.7	27
72	A Lightweight Framework for Human Activity Recognition on Wearable Devices. IEEE Sensors Journal, 2021, 21, 24471-24481.	4.7	27

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73	Machine learning techniques for liquid level estimation using FBG temperature sensor array. Optical Fiber Technology, 2021, 65, 102612.	2.7	27
74	Strain, temperature, moisture, and transverse force sensing using fused polymer optical fibers. Optics Express, 2018, 26, 12939.	3.4	26
75	Robot-Assisted Autism Spectrum Disorder Diagnostic Based on Artificial Reasoning. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 96, 267-281.	3.4	26
76	FBG-Based Temperature Sensors for Liquid Identification and Liquid Level Estimation via Random Forest. Sensors, 2021, 21, 4568.	3.8	26
77	The smart walkers as geriatric assistive device. The simbiosis purpose. Gerontechnology, 2008, 7, .	0.1	26
78	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.	4.6	25
79	Robot-Assisted Intervention for children with special needs: A comparative assessment for autism screening. Robotics and Autonomous Systems, 2020, 127, 103484.	5.1	25
80	Estimation of gait parameters by measuring upper limb–walker interaction forces. Sensors and Actuators A: Physical, 2010, 162, 276-283.	4.1	24
81	Human-Robot Interaction Strategies for Walker-Assisted Locomotion. Springer Tracts in Advanced Robotics, 2016, , .	0.4	24
82	Adaptive Spatial Filter Based on Similarity Indices to Preserve the Neural Information on EEG Signals during On-Line Processing. Sensors, 2017, 17, 2725.	3.8	24
83	Design considerations, analysis, and application of a low-cost, fully portable, wearable polymer optical fiber curvature sensor. Applied Optics, 2018, 57, 6927.	1.8	24
84	A New Controller for a Smart Walker Based on Human-Robot Formation. Sensors, 2016, 16, 1116.	3.8	23
85	Dynamic Compensation Technique for POF Curvature Sensors. Journal of Lightwave Technology, 2018, 36, 1112-1117.	4.6	23
86	Mechanical properties characterization of polymethyl methacrylate polymer optical fibers after thermal and chemical treatments. Optical Fiber Technology, 2018, 43, 106-111.	2.7	23
87	Al-enabled photonic smart garment for movement analysis. Scientific Reports, 2022, 12, 4067.	3.3	23
88	Human-Machine Interface Based on Electro-Biological Signals for Mobile Vehicles. , 2006, , .		22
89	Design and characterization of a curvature sensor using fused polymer optical fibers. Optics Letters, 2018, 43, 2539.	3.3	22
90	Plane-by-Plane Written, Low-Loss Polymer Optical Fiber Bragg Grating Arrays for Multiparameter Sensing in a Smart Walker. IEEE Sensors Journal, 2019, 19, 9221-9228.	4.7	22

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91	Large-Range Polymer Optical-Fiber Strain-Gauge Sensor for Elastic Tendons in Wearable Assistive Robots. Materials, 2019, 12, 1443.	2.9	21
92	A Comparative Study of Markerless Systems Based on Color-Depth Cameras, Polymer Optical Fiber Curvature Sensors, and Inertial Measurement Units: Towards Increasing the Accuracy in Joint Angle Estimation. Electronics (Switzerland), 2019, 8, 173.	3.1	21
93	Polymer optical fiber-embedded, 3D-printed instrumented support for microclimate and human-robot interaction forces assessment. Optics and Laser Technology, 2019, 112, 323-331.	4.6	21
94	FPI-POFBG Angular Movement Sensor Inscribed in CYTOP Fibers With Dynamic Angle Compensator. IEEE Sensors Journal, 2020, 20, 5962-5969.	4.7	21
95	Assistive locomotion device with haptic feedback for guiding visually impaired people. Medical Engineering and Physics, 2020, 80, 18-25.	1.7	21
96	Multi-Parameter Interferometric Sensor Based on a Reduced Diameter Core Axial Offseted Fiber. IEEE Photonics Technology Letters, 2017, 29, 239-242.	2.5	20
97	Polymer Optical Fiber-Based Sensor System for Smart Walker Instrumentation and Health Assessment. IEEE Sensors Journal, 2019, 19, 567-574.	4.7	20
98	Thermal and Mechanical Analyses of Fiber Bragg Gratings-Embedded Polymer Diaphragms. IEEE Photonics Technology Letters, 2020, 32, 623-626.	2.5	20
99	Fiber Bragg grating-based sensor for torque and angle measurement in a series elastic actuator's spring. Applied Optics, 2018, 57, 7883.	1.8	19
100	3D-Printing Techniques on the Development of Multiparameter Sensors Using One FBG. Sensors, 2019, 19, 3514.	3.8	19
101	A Novel Multimodal Cognitive Interaction for Walker-Assisted Rehabilitation Therapies. , 2019, 2019, 905-910.		18
102	Human–Robot Cognitive Interaction. , 0, , 87-125.		17
103	Sleeve for Knee Angle Monitoring: An IMU-POF Sensor Fusion System. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 465-474.	6.3	17
104	Hybridization between multi-objective genetic algorithm and support vector machine for feature selection in walker-assisted gait. Computer Methods and Programs in Biomedicine, 2014, 113, 736-748.	4.7	15
105	POF-IMU sensor system: A fusion between inertial measurement units and POF sensors for low-cost and highly reliable systems. Optical Fiber Technology, 2018, 43, 82-89.	2.7	15
106	Dynamic mechanical analysis on fused polymer optical fibers: towards sensor applications. Optics Letters, 2018, 43, 1754.	3.3	15
107	Thermal Treatments and Compensation Techniques for the Improved Response of FBG Sensors in POFs. Journal of Lightwave Technology, 2018, 36, 3611-3617.	4.6	15
108	Assessment of an Assistive Control Approach Applied in an Active Knee Orthosis Plus Walker for Post-Stroke Gait Rehabilitation. Sensors, 2020, 20, 2452.	3.8	15

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109	The PoundCloud framework for ROS-based cloud robotics: Case studies on autonomous navigation and human–robot interaction. Robotics and Autonomous Systems, 2022, 150, 103981.	5.1	15
110	Real time control of the ASBGo walker through a physical human–robot interface. Measurement: Journal of the International Measurement Confederation, 2014, 48, 77-86.	5.0	14
111	High Sensitive Ammonia Detection in Water With Fabry-Perot Interferometers. IEEE Photonics Technology Letters, 2020, 32, 863-866.	2.5	14
112	Legs tracking for walker-rehabilitation purposes. , 2014, , .		13
113	Smart Walkers: Advanced Robotic Human Walking-Aid Systems. Springer Tracts in Advanced Robotics, 2015, , 103-131.	0.4	13
114	IoToF: A Long-Reach Fully Passive Low-Rate Upstream PHY for IoT over Fiber. Electronics (Switzerland), 2019, 8, 359.	3.1	13
115	On Human-in-the-Loop CPS in Healthcare: A Cloud-Enabled Mobility Assistance Service. Robotica, 2019, 37, 1477-1493.	1.9	13
116	Bragg Gratings Inscribed in Solid-Core Microstructured Single-Mode Polymer Optical Fiber Drawn From a 3D-Printed Polycarbonate Preform. IEEE Sensors Journal, 2020, 20, 12744-12757.	4.7	13
117	Design, implementation and testing of a new user interface for a smart walker. , 2014, , .		12
118	Robot-Assisted Diagnosis for Children with Autism Spectrum Disorder Based on Automated Analysis of Nonverbal Cues. , 2018, , .		12
119	Polymer Optical Fiber-Based Integrated Instrumentation in a Robot-Assisted Rehabilitation Smart Environment: A Proof of Concept. Sensors, 2020, 20, 3199.	3.8	12
120	Characterization of spatio-temporal parameters of human gait assisted by a robotic walker. , 2012, , .		11
121	Online control of a mobility assistance Smart Walker. , 2012, , .		11
122	Dexterous hand gestures recognition based on low-density sEMG signals for upper-limb forearm amputees. Research on Biomedical Engineering, 2017, 33, 202-217.	2.2	11
123	Combined Bending and Torsion Sensing by Induced Birefringence in Distributed Bragg Reflector Laser. Journal of Lightwave Technology, 2019, 37, 861-867.	4.6	11
124	FBG-Embedded Robotic Manipulator Tool for Structural Integrity Monitoring From Critical Strain-Stress Pair Estimation. IEEE Sensors Journal, 2022, 22, 5695-5702.	4.7	11
125	Towards semg classification based on Bayesian and k-NN to control a prosthetic hand. , 2013, , .		10
126	Influence of the Cladding Structure in PMMA mPOFs Mechanical Properties for Strain Sensors Applications. IEEE Sensors Journal, 2018, 18, 5805-5811.	4.7	10

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127	Highly Stretchable Polymer Optical Fiber for Mechanical Sensing in Artificial Tendons: Towards Novel Sensors for Soft Robotics. Actuators, 2020, 9, 125.	2.3	10
128	Development and Characterization of UV-Resin Coated Fiber Bragg Gratings. Sensors, 2020, 20, 3026.	3.8	10
129	Effect of a Brain–Computer Interface Based on Pedaling Motor Imagery on Cortical Excitability and Connectivity. Sensors, 2021, 21, 2020.	3.8	10
130	Advanced Hybrid Technology for Neurorehabilitation: The HYPER Project. Intelligent Systems Reference Library, 2012, , 89-108.	1.2	9
131	Simulation System of Electric-Powered Wheelchairs for Training Purposes. Sensors, 2020, 20, 3565.	3.8	9
132	Bringing proxemics to walker-assisted gait: using admittance control with spatial modulation to navigate in confined spaces. Personal and Ubiquitous Computing, 2022, 26, 1491-1509.	2.8	9
133	A novel human-machine interface for guiding: The NeoASAS smart walker. , 2012, , .		8
134	Development and pilot test of a virtual reality system for electric powered wheelchair simulation. , 2017, , .		8
135	Performance Analysis of a Lower Limb Multi Joint Angle Sensor Using CYTOP Fiber: Influence of Light Source Wavelength and Angular Velocity Compensation. Sensors, 2020, 20, 326.	3.8	8
136	Datacenter Thermal Monitoring Without Blind Spots: FBG-Based Quasi-Distributed Sensing. IEEE Sensors Journal, 2021, 21, 9869-9876.	4.7	8
137	Robotics as a Tool for Physiotherapy and Rehabilitation Sessions**Authors acknowledge the financial support from FAPES, CAPES and CNPq IFAC-PapersOnLine, 2015, 48, 148-153.	0.9	7
138	Smart walker use for ataxia's rehabilitation: Case study. , 2015, , .		7
139	Adaptation of a smart walker for stroke individuals: a study on sEMG and accelerometer signals. Research on Biomedical Engineering, 2017, 33, 293-300.	2.2	7
140	FBG-Embedded Oblong Diaphragms with Extended Dynamic Range. , 2018, 2, 1-4.		7
141	Cloud Robotics Experimentation Testbeds: a Cloud-Based Navigation Case Study. , 2019, , .		7
142	Evaluation of IMU ZigBee Sensors for Upper Limb Rehabilitation. Biosystems and Biorobotics, 2013, , 461-465.	0.3	7
143	ZigBee Wearable Sensor Development for Upper Limb Robotics Rehabilitation. IEEE Latin America Transactions, 2013, 11, 408-413.	1.6	6
144	Pattern recognition of hand movements with low density sEMG for prosthesis control purposes. , 2013, 2013, 6650361.		6

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145	Sensor fusion to control a robotic walker based on upper-limbs reaction forces and gait kinematics. , 2014, , .		6
146	Design of active orthoses for a robotic gait rehabilitation system. Frontiers of Mechanical Engineering, 2015, 10, 242-254.	4.3	6
147	Remote-Operated Multimodal Interface for Therapists During Walker-Assisted Gait Rehabilitation: A Preliminary Assessment. , 2019, , .		6
148	Comparative Study of γ- and e-Radiation-Induced Effects on FBGs Using Different Femtosecond Laser Inscription Methods. Sensors, 2021, 21, 8379.	3.8	6
149	Temperature-Insensitive Curvature Sensor With Plane-by-Plane Inscription of Off-Center Tilted Bragg Gratings in CYTOP Fibers. IEEE Sensors Journal, 2022, 22, 11725-11731.	4.7	6
150	Transmission-Reflection Performance Analysis Using Oxide Nanoparticle-Doped High Scattering Fibers. IEEE Photonics Technology Letters, 2022, 34, 874-877.	2.5	6
151	Assessment of the laterality effects through forearm reaction forces in walker assisted gait. Procedia Chemistry, 2009, 1, 1227-1230.	0.7	5
152	Robotic walkers from a clinical point of view: Feature-based classification and proposal of the UFES Walker. , 2012, , .		5
153	Identification of low level sEMG signals for individual finger prosthesis. , 2014, , .		5
154	Feature reduction with PCA/KPCA for gait classification with different assistive devices. International Journal of Intelligent Computing and Cybernetics, 2015, 8, 363-382.	2.7	5
155	Assistive Devices for Human Mobility and Gait Rehabilitation. Springer Tracts in Advanced Robotics, 2016, , 1-15.	0.4	5
156	Feature reduction and multi-classification of different assistive devices according to the gait pattern. Disability and Rehabilitation: Assistive Technology, 2016, 11, 202-218.	2.2	5
157	Towards a New Generation of Smart Devices for Mobility Assistance: CloudWalker, a Cloud-Enabled Cyber-Physical System. , 2018, , .		5
158	Neurorehabilitation Platform Based on EEG, sEMG and Virtual Reality Using Robotic Monocycle. IFMBE Proceedings, 2019, , 315-321.	0.3	5
159	Development of Serious Games for Neurorehabilitation of Children with Attention-Deficit/Hyperactivity Disorder through Neurofeedback. , 2019, , .		5
160	A Therapist Helping Hand for Walker-Assisted Gait Rehabilitation: A Pre-Clinical Assessment. , 2019, , .		5
161	Polymer Optical Fiber Sensor System for Multi Plane Bending Angle Assessment. IEEE Sensors Journal, 2020, 20, 2518-2525.	4.7	5
162	Control Strategies for Human–Robot–Environment Interaction in Assisted Gait with Smart Walkers. , 2022, , 259-286.		5

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163	Polymer Optical Fiber-Based Smart Garment for Impact Identification and Balance Assessment. IEEE Sensors Journal, 2021, 21, 20078-20085.	4.7	5
164	Serious Game for Post-stroke Upper Limb Rehabilitation. Biosystems and Biorobotics, 2017, , 1445-1450.	0.3	5
165	FBG-Based Sensor for the Assessment of Heat Transfer Rate of Liquids in a Forced Convective Environment. Sensors, 2021, 21, 6922.	3.8	5
166	The Impact of Assembly Configuration on Diaphragm-Embedded Fiber Bragg Gratings Pressure Sensors. IEEE Sensors Journal, 2022, 22, 2237-2243.	4.7	5
167	Fiber-Optic Hydrophone Based on Michelson's Interferometer with Active Stabilization for Liquid Volume Measurement. Sensors, 2022, 22, 4404.	3.8	5
168	Feature extraction and classification of sEMG signals applied to a virtual hand prosthesis. , 2013, 2013, 1911-4.		4
169	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
170	Human-walker interaction on slopes based on LRF and IMU sensors. , 2014, , .		4
171	A new optical pressure sensor interrogated by speckles pattern for oil industry. Proceedings of SPIE, 2015, , .	0.8	4
172	Compensation technique for environmental and light source power variations applied in a polymer optical fiber curvature sensor for wearable devices. Research on Biomedical Engineering, 2018, 34, 37-44.	2.2	4
173	Smartphone Integrated Polymer Optical Fiber Humidity Sensor: Towards a Fully Portable Solution for Healthcare. , 2019, 3, 1-4.		4
174	Virtual Reality Simulator for Electric Powered Wheelchairs Using a Joystick. IFMBE Proceedings, 2019, , 729-736.	0.3	4
175	Design of an Enhanced FLC-Based Controller for Selective Harmonic Compensation in Active Power Filters. Electronics (Switzerland), 2020, 9, 2052.	3.1	4
176	The effect of smart mirror environment on proprioception factors of children with Down syndrome. Research on Biomedical Engineering, 2020, 36, 187-195.	2.2	4
177	Polymer Optical Fiber-Embedded Force Sensor System for Assistive Devices With Dynamic Compensation. IEEE Sensors Journal, 2021, 21, 13255-13262.	4.7	4
178	An Optimized Self-Compensated Solution for Temperature and Strain Cross-Sensitivity in FBG Interrogators Based on Edge Filter. Sensors, 2021, 21, 5828.	3.8	4
179	Stance Control with the Active Knee Orthosis ALLOR for Post-Stroke Patients During Walking. Biosystems and Biorobotics, 2019, , 196-200.	0.3	4
180	Polymer optical fibers for mechanical wave monitoring. Optics Letters, 2020, 45, 5057.	3.3	4

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181	Development of Polymer Optical Fiber Sensors for Lower Limb Exoskeletons Instrumentation. Biosystems and Biorobotics, 2019, , 155-159.	0.3	4
182	Force-Displacement Analysis in Diaphragm-Embedded Fiber Bragg Grating Sensors. Sensors, 2022, 22, 5355.	3.8	4
183	A new integrated device to read user intentions when walking with a Smart Walker. , 2013, , .		3
184	Use of computer vision for localization of a robotic wheelchair in an intelligent space. , 2013, , .		3
185	Human-Robot interaction strategy for overground rehabilitation in patients with Cerebral Palsy. , 2016, , .		3
186	Human-Robot Interaction for Assisting Human Locomotion. Springer Tracts in Advanced Robotics, 2016, , 17-31.	0.4	3
187	Dynamic Vehicle Programming and Routing System Applied to Wheelchair Transportation. IEEE Latin America Transactions, 2017, 15, 317-323.	1.6	3
188	Perfluorinated fiber material properties following femtosecond laser inscription. Optical Materials, 2020, 109, 110412.	3.6	3
189	Influence of Two-Plane Position and Stress on Intensity-Variation-Based Sensors: Towards Shape Sensing in Polymer Optical Fibers. Sensors, 2021, 21, 7848.	3.8	3
190	Towards an upper limb rehabilitation tool after stroke based on surface electromyography biofeedback and virtual reality. Research on Biomedical Engineering, 2022, 38, 1017-1025.	2.2	3
191	Capture protocol of forearm sEMG signals with four channels in healthy and amputee people. , 2012, , .		2
192	Towards a Smart Walker controller for physiotherapy and rehabilitation purposes. , 2014, , .		2
193	Design of a robotic cane to assist people with disabilities. , 2015, , .		2
194	Unobtrusive heart rate monitor based on a fiber specklegram sensor and a single-board computer. Proceedings of SPIE, 2015, , .	0.8	2
195	Development of a Cognitive HRI Strategy for Mobile Robot Control. Springer Tracts in Advanced Robotics, 2016, , 33-55.	0.4	2
196	Interrogation of optical fiber based on the fusion of OFDR and TRA techniques. Optical and Quantum Electronics, 2016, 48, 1.	3.3	2
197	Hysteresis compensation technique for POF curvature sensors. Proceedings of SPIE, 2017, , .	0.8	2
198	Fiber Bragg Based Sensors for Foot Plantar Pressure Analysis. Communications in Computer and Information Science, 2019, , 3-25.	0.5	2

#	Article	IF	CITATIONS
199	Human Activity Recognition Based on Convolutional Neural Network. IFMBE Proceedings, 2019, , 247-252.	0.3	2
200	Characterization and analysis of a POF sensor embedded in different materials: Towards wearable systems for stiffness estimation. Optics and Laser Technology, 2022, 145, 107504.	4.6	2
201	Biaxial optical fiber sensor based in two multiplexed Bragg gratings for simultaneous shear stress and vertical pressure monitoring. , 2018, , .		2
202	LAZARIM: Standing-up frame to support mobility for older persons. Gerontechnology, 2009, 8, .	0.1	2
203	Platform for Multimodal Signal Acquisition for the Control of Lower Limb Rehabilitation Devices. , 2014, , .		2
204	Pseudo-online Multimodal Interface Based on Movement Prediction for Lower Limbs Rehabilitation. Biosystems and Biorobotics, 2017, , 1415-1419.	0.3	2
205	Femtosecond laser-written long period grating in a multimode CYTOP polymer fibre. , 2020, , .		2
206	Fibre Bragg grating sensors for sutural expansion assessment in rapid palatal expanders: an exâ€vivo validation. IET Optoelectronics, 2020, 14, 337-342.	3.3	2
207	BCI based on pedal end-effector triggered through pedaling imagery to promote excitability over the feet motor area. Research on Biomedical Engineering, 2022, 38, 439-449.	2.2	2
208	Diaphragm-assisted impact amplitude and localization measurement system with FBG sensors. Optical Fiber Technology, 2022, 70, 102854.	2.7	2
209	Assessing the mental state of attention using a neurofeedback system and serious game tool. Entertainment Computing, 2022, 43, 100492.	2.9	2
210	Polymer Optical Fiber Multimaterial: Flexible and Customizable Approach in Sensors Development. IEEE Photonics Technology Letters, 2022, 34, 611-614.	2.5	2
211	Movement analysis in learning by repetitive recall. An approach for automatic assistance in physiotherapy. , 2012, , .		1
212	Measurement of head relocation accuracy in the sagittal plane using static photogrammetry and inertial measurement unit. , 2012, , .		1
213	Multivariate analysis of walker-assisted ambulation. , 2013, , .		1
214	Using linear discriminant function to detect eyes closing activities through alpha wave. , 2014, , .		1
215	New sequence voltage detector for Distributed Generation with high-harmonic distortion using Fourier Linear Combiner. , 2017, , .		1
216	Assistive Device for Guiding Visually Impaired People With Mobility Disorders. , 2018, , .		1

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#	Article	IF	CITATIONS
217	Recognition of Navigation Commands for a Smart Walker Through Force Sensors. IFMBE Proceedings, 2019, , 689-694.	0.3	1
218	Development of Game-Based System for Improvement of the Left-Right Recognition Ability in Children with Down Syndrome. IFMBE Proceedings, 2019, , 627-634.	0.3	1
219	Radiation induced effects on FBGs using different femtosecond laser inscription methods. , 2021, , .		1
220	Proof-of-Concept of POF-Based Pressure Sensors Embedded in a Smart Garment for Impact Detection in Perturbation Assessment. Biosystems and Biorobotics, 2022, , 21-25.	0.3	1
221	Simulation of FBG Temperature Sensor Array for Oil Identification via Random Forest Classification. , 0, , .		1
222	Feasibility in human machine interfaces for elderly people. Gerontechnology, 2008, 7, .	0.1	1
223	Assessment of Walker-assisted Human Interaction from LRF and Wearable Wireless Inertial Sensors. , 2013, , .		1
224	SOFTWARE INTERFACE FOR ONLINE MONITORING OF PEDALING ON AN EXERCISE BIKE. , 2018, , .		1
225	Temperature cross-sensitivity compensation in liquid level sensor using Mach-Zehnder interferometers. , 2019, , .		1
226	A Robotic Lower-Limb Exoskeleton for Rehabilitation. IFMBE Proceedings, 2020, , 1130-1136.	0.3	1
227	Instrumentation and validation of polymer optical fiber sensor technology on a knee exoskeleton. , 2019, , .		1
228	Design and Analysis of a Smartphone-integrated Polymer Optical Fiber Curvature Sensor. , 2019, , .		1
229	Adhesive assisted fabrication of chirped POF Bragg grating. , 2020, , .		1
230	Mechanical analysis of microstructured polymer optical fibres with different drawing pressures. Electronics Letters, 2020, 56, 1128-1130.	1.0	1
231	Detection of water, oil and oil contamination in water using chirped fiber Bragg gratings inscribed in CYTOP fibers. , 2020, , .		1
232	Soft wearable robots. , 2022, , 27-52.		1
233	Smart structures and textiles for gait analysis. , 2022, , 175-200.		1
234	Gait analysis: overview, trends, and challenges. , 2022, , 53-64.		1

#	Article	IF	CITATIONS
235	Magnetic, Angular Rate and Gravity Sensor System Fusion for Orientation Estimation. Studies in Health Technology and Informatics, 2015, 217, 261-6.	0.3	1
236	Characterization and diagnosis of fibromyalgia based on fatigue analysis with sEMG signals. , 2012, , .		0
237	An approach to automatic assistance in physiotherapy based on on-line movement identification. , 2012, , ,		0
238	Motor and bioelectric evaluation of human movements through inertial and myoelectric sensors. , 2013, , .		0
239	DYNAMICS OF HUMAN LOWER LIMBS USING CGA DATA AND BSIP PREDICTIVE EQUATIONS. , 2013, , .		0
240	Assessment of Cervical Spine Range of Rotation with Inertial Sensors After a Vertebral Manipulation Procedure. Journal of Medical Imaging and Health Informatics, 2014, 4, 131-136.	0.3	0
241	Assessment of applicability of robotic walker for post-stroke hemiparetic individuals through muscle pattern analysis. , 2014, , .		0
242	Synthesis of gold nanoparticles for application as biosensors in engineering. Proceedings of SPIE, 2014, , .	0.8	0
243	Development of a real-time web based power quality and consumption smart meter. , 2015, , .		0
244	Multimodal Interface for Human Mobility Assistance. Springer Tracts in Advanced Robotics, 2016, , 81-100.	0.4	0
245	Conclusions and Future Works. Springer Tracts in Advanced Robotics, 2016, , 101-105.	0.4	0
246	BIOMECHANICAL COMPARISON OF PATIENTS WITH CP WITH DIFFERENT LEVELS OF GAIT ASSISTANCE USING CPWALKER. , 2017, , .		0
247	Non-supervised Feature Selection: Evaluation in a BCI for Single-Trial Recognition of Gait Preparation/Stop. Biosystems and Biorobotics, 2017, , 1115-1120.	0.3	0
248	Path following control for assistance robots. , 2017, , .		0
249	Novel active filter selective control strategy using fourier linear combiners. , 2018, , .		0
250	Identification of Kinematic Parameters of Stroke Gait Using Accelerometer. IFMBE Proceedings, 2019, , 261-267.	0.3	0
251	Lower Limb Exoskeletons in Latin-America. Biosystems and Biorobotics, 2019, , 206-209.	0.3	0
252	PROTOCOL AND SYSTEM FOR ACQUISITION AND PROCESSING EEG AND SEMG SIGNALS FOR LOWER LIMBS REHABILITATION USE / PROTOCOLO E SISTEMA PARA AQUISIÇÃO E PROCESSAMENTO DE SINAIS EEG E SEMG PARA USO DE REABILITAÇÃO DE MEMBROS INFERIORES. Brazilian Journal of Development, 2021, 7, 7763-7782.	0.1	0

#	Article	IF	CITATIONS
253	Desenvolvimento De Um Phase-Locked Loop A Partir De Um Combinador Linear De Fourier. Eletrônica De Potência, 2024, 22, 148-155.	0.1	0
254	Water-oil interface level sensor based on FBG-embedded multi-diaphragms system. , 2018, , .		0
255	A cost-effective edge-filter-based FBG strain interrogator using catastrophic fuse effect microcavity interferometers. , 2018, , .		0
256	Design and Development of Hardware and Software to Command a Motorized Exercise Static Bike. IFMBE Proceedings, 2019, , 609-617.	0.3	0
257	A Multi-Kinect System for Serious Game Development Using ROS and Unity. IFMBE Proceedings, 2019, , 585-591.	0.3	0
258	Proof-of-concept of a carpet-embedded heterogeneous optical fiber sensor system for gait analysis. , 2019, , .		0
259	Analysis of the Diaphragm Thickness Influence in a FBG Pressure Sensor Response. , 2019, , .		0
260	Polymer Optical Fiber Sensors for Treadmill Instrumentation. , 2019, , .		0
261	Temperature Cross-Sensitivity Optimization for Mach-Zehnder Interferometers Liquid Level Sensors. , 2019, , .		0
262	Fiber Bragg Gratings Sensors on Sutural Expansion Assessment: a Pilot Study. , 2019, , .		0
263	Fast and Safe Path Planning Method for an Autonomous Smart Walker. , 2020, , .		0
264	Optical fiber materials. , 2022, , 93-118.		0
265	Optical fiber sensing technologies. , 2022, , 119-148.		0
266	Wearable robots instrumentation. , 2022, , 151-173.		0
267	Optical fiber fundaments and overview. , 2022, , 67-91.		0
268	Soft robotics and compliant actuators instrumentation. , 2022, , 201-219.		0
269	Wearable multifunctional smart textiles. , 2022, , 223-243.		0
270	Introduction and overview of wearable technologies. , 2022, , 3-26.		0

#	Article	IF	CITATIONS
271	Smart walker's instrumentation and development with compliant optical fiber sensors. , 2022, , 245-261.		0
272	Filtrado Adaptativo de Componentes Involuntarias en Marcha Asistida por Andador para Detección de Intenciones. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2011, 8, 71-80.	1.0	0