

Gastone Ciuti

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

3,199
citations

159585

30
h-index

161849

54
g-index

98
all docs

98
docs citations

98
times ranked

2904
citing authors

#	ARTICLE	IF	CITATIONS
1	An Autonomous Robotic Platform for Manipulation and Inspection of Metallic Surfaces in Industry 4.0. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1691-1706.	5.2	8
2	Hybrid 6-DoF Magnetic Localization for Robotic Capsule Endoscopes Compatible With High-Grade Magnetic Field Navigation. IEEE Access, 2022, 10, 4414-4430.	4.2	6
3	Towards Foodservice Robotics: A Taxonomy of Actions of Foodservice Workers and a Critical Review of Supportive Technology. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1820-1858.	5.2	2
4	Colonoscopy robots. , 2022, , 31-59.		0
5	Flipping food during grilling tasks, a dataset of utensils kinematics and dynamics, food pose and subject gaze. Scientific Data, 2022, 9, 5.	5.3	3
6	Tether-colon interaction model and tribological characterization for front-wheel driven colonoscopic devices. Tribology International, 2021, 156, 106814.	5.9	3
7	Endoscopic Tactile Capsule for Non-Polypoid Colorectal Tumour Detection. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 64-73.	3.2	5
8	Training Simulators for Gastrointestinal Endoscopy: Current and Future Perspectives. Cancers, 2021, 13, 1427.	3.7	23
9	Endoluminal Motion Recognition of a Magnetically-Guided Capsule Endoscope Based on Capsule-Tissue Interaction Force. Sensors, 2021, 21, 2395.	3.8	4
10	RhinoFit: A Bionic Nasal Device for Mitigating Post-Operative Complications After Rhinosurgery. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 297-305.	3.2	0
11	Intraoperative-technologies advancements in automated cancer detection: a narrative review. , 2021, , .		1
12	The relevance of signal timing in human-robot collaborative manipulation. Science Robotics, 2021, 6, eabg1308.	17.6	17
13	A Novel Capacitive Measurement Device for Longitudinal Monitoring of Bone Fracture Healing. Sensors, 2021, 21, 6694.	3.8	7
14	Small bowel to closest human body surface distance calculation through a custom-made software using CT-based datasets. , 2021, 2021, 2903-2909.		0
15	Optical and Electromagnetic Tracking Systems for Biomedical Applications: A Critical Review on Potentialities and Limitations. IEEE Reviews in Biomedical Engineering, 2020, 13, 212-232.	18.0	87
16	Frontiers of Robotic Gastroscopy: A Comprehensive Review of Robotic Gastrosopes and Technologies. Cancers, 2020, 12, 2775.	3.7	43
17	Robotic-Assisted Colonoscopy Platform with a Magnetically-Actuated Soft-Tethered Capsule. Cancers, 2020, 12, 2485.	3.7	35
18	Endoscopic single-image size measurements. Measurement Science and Technology, 2020, 31, 074010.	2.6	10

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19	Frontiers of Robotic Colonoscopy: A Comprehensive Review of Robotic Colonoscopes and Technologies. <i>Journal of Clinical Medicine</i> , 2020, 9, 1648.	2.4	63
20	Visual-Based Defect Detection and Classification Approaches for Industrial Applications—A SURVEY. <i>Sensors</i> , 2020, 20, 1459.	3.8	182
21	Novel Capacitive-Based Sensor Technology for Augmented Proximity Detection. <i>IEEE Sensors Journal</i> , 2020, 20, 6624-6633.	4.7	9
22	Intrinsically Distributed Probabilistic Algorithm for Human–Robot Distance Computation in Collision Avoidance Strategies. <i>Electronics (Switzerland)</i> , 2020, 9, 548.	3.1	1
23	Light source position calibration method for photometric stereo in capsule endoscopy. <i>Advanced Robotics</i> , 2020, 34, 789-801.	1.8	2
24	EXPERIMENTAL ASSESSMENT OF INTACT COLON DEFORMATION UNDER LOCAL FORCES APPLIED BY MAGNETIC CAPSULE ENDOSCOPES. <i>Journal of Mechanics in Medicine and Biology</i> , 2020, 20, 2050041.	0.7	2
25	Deep Endoscopic Visual Measurements. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2019, 23, 2211-2219.	6.3	27
26	A Soft Pneumatic Inchworm Double balloon (SPID) for colonoscopy. <i>Scientific Reports</i> , 2019, 9, 11109.	3.3	58
27	Sensorized Orthosis for Non-Operative Treatment of Pectus–Carinatum in Pediatric Patients. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2019, 1, 115-121.	3.2	2
28	Effects of Sleep Deprivation on Surgeons Dexterity. <i>Frontiers in Neurology</i> , 2019, 10, 595.	2.4	24
29	Real time position control of industrial robot over ethernet based communication framework. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	1
30	Tactile Decoding of Edge Orientation With Artificial Cuneate Neurons in Dynamic Conditions. <i>Frontiers in Neurobotics</i> , 2019, 13, 44.	2.8	9
31	A Mechatronic Platform for Computer Aided Detection of Nodules in Anatomopathological Analyses via Stiffness and Ultrasound Measurements. <i>Sensors</i> , 2019, 19, 2512.	3.8	4
32	Localization strategies for robotic endoscopic capsules: a review. <i>Expert Review of Medical Devices</i> , 2019, 16, 381-403.	2.8	73
33	Gastrointestinal diagnosis using non-white light imaging capsule endoscopy. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2019, 16, 429-447.	17.8	35
34	Assessing Pupil-linked Changes in Locus Coeruleus-mediated Arousal Elicited by Trigeminal Stimulation. <i>Journal of Visualized Experiments</i> , 2019, , .	0.3	3
35	A Biomechanical Model of the Shoulder Including Acromioclavicular Joint Ligaments: Preliminary Results. <i>Biosystems and Biorobotics</i> , 2019, , 642-645.	0.3	0
36	Towards a Computed-Aided Diagnosis System in Colonoscopy: Automatic Polyp Segmentation Using Convolution Neural Networks. <i>Journal of Medical Robotics Research</i> , 2018, 03, 1840002.	1.2	52

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37	The role of computed tomography data in the design of a robotic magnetically-guided endoscopic platform. <i>Advanced Robotics</i> , 2018, 32, 443-456.	1.8	5
38	Soft Robotic Manipulator for Improving Dexterity in Minimally Invasive Surgery. <i>Surgical Innovation</i> , 2018, 25, 69-76.	0.9	40
39	Magnetically-driven medical robots: An analytical magnetic model for endoscopic capsules design. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 452, 278-287.	2.3	40
40	Motion compensation with skin contact control for high intensity focused ultrasound surgery in moving organs. <i>Physics in Medicine and Biology</i> , 2018, 63, 035017.	3.0	19
41	A novel soft device for assisting magnetically-driven soft-tethered capsule navigation. , 2018, , .		1
42	Analytical Magnetic Model towards Compact Design of Magnetically-driven Capsule Robot. , 2018, , .		0
43	A structured light laser probe for gastrointestinal polyp size measurement: a preliminary comparative study. <i>Endoscopy International Open</i> , 2018, 06, E602-E609.	1.8	18
44	Fully convolutional neural networks for polyp segmentation in colonoscopy. <i>Proceedings of SPIE</i> , 2017, , .	0.8	50
45	Feedback Control of Soft Robot Actuators via Commercial Flex Bend Sensors. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 1881-1888.	5.8	158
46	Musculoskeletal injuries in gastrointestinal endoscopists: a systematic review. <i>Expert Review of Gastroenterology and Hepatology</i> , 2017, 11, 939-947.	3.0	46
47	An artificial neural network architecture for non-parametric visual odometry in wireless capsule endoscopy. <i>Measurement Science and Technology</i> , 2017, 28, 094005.	2.6	11
48	A novel magnetic-driven tissue retraction device for minimally invasive surgery. <i>Minimally Invasive Therapy and Allied Technologies</i> , 2017, 26, 7-14.	1.2	7
49	Visual Localization of Wireless Capsule Endoscopes Aided by Artificial Neural Networks. , 2017, , .		11
50	Robotic endoscopic capsule for closed-loop force-based control and safety strategies. , 2017, , .		3
51	Endoscopic tactile instrument for remote tissue palpation in colonoscopic procedures. , 2017, , .		3
52	A compensation strategy for accurate orientation of a tethered robotic capsule endoscope. , 2017, , .		3
53	An innovative robotic platform for magnetically-driven painless colonoscopy. <i>Annals of Translational Medicine</i> , 2017, 5, 421-421.	1.7	16
54	Trajectory analysis of endoscopic capsule images: A feasibility study. , 2016, , .		1

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55	Analytical magnetic model for medical endoscopic robots: A ready-to-use implementation with permanent magnets. , 2016, , .		1
56	Analytical magnetic model applied to endoscopic robots design: A ready-to-use implementation and a case of study. , 2016, , .		5
57	Vision-based haptic feedback for capsule endoscopy navigation: a proof of concept. Journal of Micro-Bio Robotics, 2016, 11, 35-45.	2.1	19
58	A computer-assisted robotic platform for vascular procedures exploiting 3D US-based tracking. Computer Assisted Surgery, 2016, 21, 63-79.	1.3	7
59	Frontiers of robotic endoscopic capsules: a review. Journal of Micro-Bio Robotics, 2016, 11, 1-18.	2.1	116
60	Scoliosis and Pectus Excavatum in Adolescents: Does the Nuss Procedure Affect the Scoliotic Curvature?. Journal of Laparoendoscopic and Advanced Surgical Techniques - Part A, 2016, 26, 734-739.	1.0	6
61	Robotic validation of visual odometry for wireless capsule endoscopy. , 2016, , .		5
62	Frictional resistance model for tissue-capsule endoscope sliding contact in the gastrointestinal tract. Tribology International, 2016, 102, 472-484.	5.9	42
63	Design and development of a soft robotic gripper for manipulation in minimally invasive surgery: a proof of concept. Meccanica, 2015, 50, 2855-2863.	2.0	71
64	A New Concept for Magnetic Capsule Colonoscopy Based on an Electromagnetic System. International Journal of Advanced Robotic Systems, 2015, 12, 25.	2.1	31
65	A Novel Device for Measuring Forces in Endoluminal Procedures. International Journal of Advanced Robotic Systems, 2015, 12, 116.	2.1	12
66	Ultrasound-based tracking strategy for endoluminal devices in cardiovascular surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2015, 11, 319-330.	2.3	4
67	Inductive-Based Wireless Power Recharging System for an Innovative Endoscopic Capsule. Energies, 2015, 8, 10315-10334.	3.1	12
68	Smart sensorized polymeric skin for safe robot collision and environmental interaction. , 2015, , .		10
69	A computer-assisted robotic platform for Focused Ultrasound Surgery: Assessment of high intensity focused ultrasound delivery. , 2015, 2015, 1311-4.		5
70	MEMS Sensor Technologies for Human Centred Applications in Healthcare, Physical Activities, Safety and Environmental Sensing: A Review on Research Activities in Italy. Sensors, 2015, 15, 6441-6468.	3.8	125
71	Electromagnetic Control System for Capsule Navigation: Novel Concept for Magnetic Capsule Maneuvering and Preliminary Study. Journal of Medical and Biological Engineering, 2015, 35, 428-436.	1.8	27
72	Magnetically driven medical devices: a review. Expert Review of Medical Devices, 2015, 12, 737-752.	2.8	56

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73	Modular soft mechatronic manipulator for minimally invasive surgery (MIS): overall architecture and development of a fully integrated soft module. <i>Meccanica</i> , 2015, 50, 2865-2878.	2.0	57
74	Vision and inertial-based image mapping for capsule endoscopy. , 2015, , .		9
75	A Sensorized Nuss Bar for Patient-Specific Treatment of Pectus Excavatum. <i>Sensors</i> , 2014, 14, 18096-18113.	3.8	4
76	Searching for the Perfect Wave: The Effect of Radiofrequency Electromagnetic Fields on Cells. <i>International Journal of Molecular Sciences</i> , 2014, 15, 5366-5387.	4.1	66
77	Metal/polymer composite Nuss bar for minimally invasive bar removal after <i>Pectus Excavatum</i> treatment: FEM simulations. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2014, 30, 1530-1540.	2.1	1
78	Flexible and capsule endoscopy for screening, diagnosis and treatment. <i>Expert Review of Medical Devices</i> , 2014, 11, 649-666.	2.8	72
79	Is a Shorter Bar an Effective Solution to Avoid Bar Dislocation in a Nuss Procedure?. <i>Annals of Thoracic Surgery</i> , 2014, 97, 1022-1027.	1.3	23
80	HuMOVE: A Low-invasive Wearable Monitoring Platform in Sexual Medicine. <i>Urology</i> , 2014, 84, 976-981.	1.0	7
81	Experimental assessment of a novel robotically-driven endoscopic capsule compared to traditional colonoscopy. <i>Digestive and Liver Disease</i> , 2013, 45, 657-662.	0.9	49
82	Wireless Insufflation of the Gastrointestinal Tract. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 1225-1233.	4.2	38
83	Intraoperative bowel cleansing tool in active locomotion capsule endoscopy. , 2013, 2013, 4843-6.		2
84	An innovative platform for treatment of vascular obstructions: System design and preliminary results. , 2012, , .		6
85	A Comparative Evaluation of Control Interfaces for a Robotic-Aided Endoscopic Capsule Platform. <i>IEEE Transactions on Robotics</i> , 2012, 28, 534-538.	10.3	20
86	Intra-operative monocular 3D reconstruction for image-guided navigation in active locomotion capsule endoscopy. , 2012, , .		27
87	A discrete-time localization method for capsule endoscopy based on on-board magnetic sensing. <i>Measurement Science and Technology</i> , 2012, 23, 015701.	2.6	72
88	A wireless module for vibratory motor control and inertial sensing in capsule endoscopy. <i>Sensors and Actuators A: Physical</i> , 2012, 186, 270-276.	4.1	18
89	Magnetic propulsion and ultrasound tracking of endovascular devices. <i>Journal of Robotic Surgery</i> , 2012, 6, 5-12.	1.8	41
90	Magnetic air capsule robotic system: proof of concept of a novel approach for painless colonoscopy. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2012, 26, 1238-1246.	2.4	80

#	ARTICLE	IF	CITATIONS
91	Capsule Endoscopy: From Current Achievements to Open Challenges. IEEE Reviews in Biomedical Engineering, 2011, 4, 59-72.	18.0	421
92	A Wireless Module for Vibratory Motor Control and Inertial Sensing in Capsule Endoscopy. Procedia Engineering, 2011, 25, 92-95.	1.2	6
93	Robotic magnetic steering and locomotion of capsule endoscope for diagnostic and surgical endoluminal procedures. Robotica, 2010, 28, 199-207.	1.9	242
94	Toward tetherless insufflation of the GI Tract. , 2010, 2010, 1946-9.		9
95	Magnetic link design for a robotic laparoscopic camera. Journal of Applied Physics, 2010, 107, .	2.5	20
96	Robotic versus manual control in magnetic steering of an endoscopic capsule. Endoscopy, 2010, 42, 148-152.	1.8	121