

# Sergio Silvestri

## List of Publications by Year in descending order

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Version: 2024-02-01

119  
papers

2,690  
citations

218381

26  
h-index

205818

48  
g-index

120  
all docs

120  
docs citations

120  
times ranked

2581  
citing authors

#	ARTICLE	IF	CITATIONS
1	Contactless Vital Signs Monitoring From Videos Recorded With Digital Cameras: An Overview. <i>Frontiers in Physiology</i> , 2022, 13, 801709.	1.3	20
2	Multi-ROI Spectral Approach for the Continuous Remote Cardio-Respiratory Monitoring from Mobile Device Built-In Cameras. <i>Sensors</i> , 2022, 22, 2539.	2.1	13
3	Non-Contact Respiratory Monitoring Using an RGB Camera for Real-World Applications. <i>Sensors</i> , 2021, 21, 5126.	2.1	22
4	Is age rating enough to investigate changes in breathing motion pattern associated with aging of physically active women?. <i>Journal of Biomechanics</i> , 2021, 125, 110582.	0.9	0
5	Preliminary analysis of ultrasound elastography imaging-based thermometry on non-perfused ex vivo swine liver. <i>Journal of Ultrasound</i> , 2020, 23, 69-75.	0.7	6
6	Sclerostin Regulation, Microarchitecture, and Advanced Glycation End-products in the Bone of Elderly Women With Type 2 Diabetes. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 2415-2422.	3.1	76
7	Estimation of Pleural Effusion Volume through Chest Ultrasound: Validation of Two Multiplanar Models. <i>Ultrasound in Medicine and Biology</i> , 2020, 46, 1960-1967.	0.7	2
8	Non-Contact Monitoring of Breathing Pattern and Respiratory Rate via RGB Signal Measurement. <i>Sensors</i> , 2019, 19, 2758.	2.1	65
9	Comparison of two methods for estimating respiratory waveforms from videos without contact. , 2019, , .		12
10	Contact-Based Methods for Measuring Respiratory Rate. <i>Sensors</i> , 2019, 19, 908.	2.1	259
11	Validation of a Wearable Device and an Algorithm for Respiratory Monitoring During Exercise. <i>IEEE Sensors Journal</i> , 2019, 19, 4652-4659.	2.4	21
12	1983-P: WNT Pathway and Bone Fragility in Postmenopausal Women with Type 2 Diabetes. <i>Diabetes</i> , 2019, 68, .	0.3	0
13	Feasibility of EUS-guided Nd:YAG laser ablation of unresectable pancreatic adenocarcinoma. <i>Gastrointestinal Endoscopy</i> , 2018, 88, 168-174.e1.	0.5	73
14	Contactless Monitoring of Breathing Patterns and Respiratory Rate at the Pit of the Neck: A Single Camera Approach. <i>Journal of Sensors</i> , 2018, 2018, 1-13.	0.6	80
15	Analysys of Measurement Methods for Static Magnetic Field Uniformity Assessment in Clinical Magnetic Resonance Imaging. , 2018, , .		0
16	Measurement system based on RGB camera signal for contactless breathing pattern and respiratory rate monitoring. , 2018, , .		19
17	Influence of the length of lead lines on the response of a variable orifice meter: analysis of sensitivity and settling time. , 2018, , .		2
18	Comparison of marker models for the analysis of the volume variation and thoracoabdominal motion pattern in untrained and trained participants. <i>Journal of Biomechanics</i> , 2018, 76, 247-252.	0.9	14

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19	A Novel Method to Compute Breathing Volumes via Motion Capture Systems: Design and Experimental Trials. <i>Journal of Applied Biomechanics</i> , 2017, 33, 361-365.	0.3	18
20	Optoelectronic Plethysmography in Clinical Practice and Research: A Review. <i>Respiration</i> , 2017, 93, 339-354.	1.2	70
21	Analysis of breathing via optoelectronic systems: comparison of four methods for computing breathing volumes and thoraco-abdominal motion pattern. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 1678-1689.	0.9	20
22	Optoelectronic Plethysmography Characterises Thoracic Excursion In The Evaluation Of Dysfunctional Breathing (DB). <i>Medicine and Science in Sports and Exercise</i> , 2017, 49, 653.	0.2	1
23	Optical measurement of breathing: Algorithm volume calibration and preliminary validation on healthy trained subjects. , 2016, 2016, 2153-2156.		7
24	Intra-tissue pressure measurement during laser ablation with fiber-optic extrinsic Fabry-Perot sensor. , 2016, , .		1
25	A novel tool and procedure for in-situ volumetric calibration of motion capture systems for breathing analysis. , 2016, 2016, 5797-5800.		1
26	Ultrasound estimation of pleural effusion in geriatric patients. , 2016, , .		3
27	270 EUS-Guided Nd:YAG Laser Ablation of Locally Advanced Pancreatic Adenocarcinoma: Feasibility and Safety Study. <i>Gastrointestinal Endoscopy</i> , 2016, 83, AB135.	0.5	3
28	Estimation of optical properties of neuroendocrine pancreas tumor with double-integrating-sphere system and inverse Monte Carlo model. <i>Lasers in Medical Science</i> , 2016, 31, 1041-1050.	1.0	8
29	Fibre optic sensors for temperature and pressure monitoring in laser ablation: experiments on ex-vivo animal model. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
30	Fiber Bragg grating sensors for spatially resolved measurements in ex-vivo pancreatic laser ablation. , 2016, , .		1
31	Influence of fiber Bragg grating length on temperature measurements in laser-irradiated organs. , 2016, , .		2
32	Feasibility assessment of magnetic resonance-thermometry on pancreas undergoing laser ablation: Sensitivity analysis of three sequences. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 80, 21-28.	2.5	8
33	Optoelectronic plethysmography (OEP) in the assessment of dysfunctional breathing (DB) in athletes. , 2016, , .		3
34	Feasibility assessment of CT-based thermometry for temperature monitoring during thermal procedure: Influence of ROI size and scan setting on metrological properties. , 2015, 2015, 7893-6.		3
35	Magnetic Resonance-compatible needle-like probe based on Bragg grating technology for measuring temperature during Laser Ablation. , 2015, 2015, 1287-90.		10
36	Evaluation of optoelectronic Plethysmography accuracy and precision in recording displacements during quiet breathing simulation. , 2015, 2015, 1291-4.		9

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37	Estimation of anisotropy coefficient of swine pancreas, liver and muscle at 1064Ånm based on goniometric technique. Journal of Biophotonics, 2015, 8, 422-428.	1.1	12
38	Feedforward Neural Network for Force Coding of an MRI-Compatible Tactile Sensor Array Based on Fiber Bragg Grating. Journal of Sensors, 2015, 2015, 1-9.	0.6	33
39	Metrological properties evaluation of a chest wall simulator during simulated quiet breathing. , 2015, , .		4
40	MRI-thermometry on ex vivo swine liver: Preliminary trials to assess the sensitivity of two sequences. , 2015, , .		0
41	Design and characterization of a measurement system for monitoring pressure exerted by bronchial blockers: In vitro trials. , 2015, 2015, 1691-4.		6
42	Goniometric measurement for the estimation of anisotropy coefficient of human and animal pancreas. , 2015, 2015, 1283-6.		2
43	Thermocouples for temperature monitoring during pancreatic laser ablation: Analysis of the measurement error. , 2015, , .		2
44	A Needlelike Probe for Temperature Monitoring During Laser Ablation Based on Fiber Bragg Grating: Manufacturing and Characterization. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.4	46
45	Magnetic resonance-based thermometry during laser ablation on ex-vivo swine pancreas and liver. Medical Engineering and Physics, 2015, 37, 631-641.	0.8	35
46	Temperature monitoring during Laser Ablation by FBG sensors encapsulated within a metallic needle: Experiments on healthy swine tissue. , 2015, , .		1
47	Microfabricated Tactile Sensors for Biomedical Applications: A Review. Biosensors, 2014, 4, 422-448.	2.3	88
48	Design and development of a rheometer for biological fluids of limited availability. Review of Scientific Instruments, 2014, 85, 105105.	0.6	6
49	Estimation of anisotropy coefficient and total attenuation of swine liver at 850 nm based on a goniometric technique: Influence of sample thickness. , 2014, 2014, 5332-5.		1
50	Measurement of condensed water mass during mechanical ventilation with heated wire humidifiers: Experiments with and without pre-warming. , 2014, 2014, 2135-8.		2
51	Estimation of liver iron concentration by dual energy CT images: Influence of X-ray energy on sensitivity. , 2014, 2014, 5129-32.		2
52	Development and characterization of a Fibre Bragg Grating temperature probe for medical Laser Ablation therapy. , 2014, , .		2
53	Non-invasive cardiac output evaluation in postoperative cardiac surgery patients, using a new prolonged expiration-based technique. Journal of Clinical Monitoring and Computing, 2014, 28, 625-632.	0.7	2
54	CT-based thermometry: An overview. International Journal of Hyperthermia, 2014, 30, 219-227.	1.1	104

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55	Temperature monitoring and lesion volume estimation during double-applicator laser-induced thermotherapy in ex vivo swine pancreas: a preliminary study. <i>Lasers in Medical Science</i> , 2014, 29, 607-614.	1.0	44
56	Influence of FBC sensors length on temperature measures in laser-irradiated pancreas: Theoretical and experimental evaluation. , 2013, 2013, 3737-40.		5
57	An orifice meter for bidirectional air flow measurements: Influence of gas thermo-hygrometric content on static response and bidirectionality. <i>Flow Measurement and Instrumentation</i> , 2013, 34, 105-112.	1.0	16
58	Techniques for temperature monitoring during laser-induced thermotherapy: An overview. <i>International Journal of Hyperthermia</i> , 2013, 29, 609-619.	1.1	185
59	Calibration and Uncertainty Evaluation Using Monte Carlo Method of a Simple 2D Sound Localization System. <i>IEEE Sensors Journal</i> , 2013, 13, 3312-3318.	2.4	12
60	Monitoring of temperature increase and tissue vaporization during laser interstitial thermotherapy of ex vivo swine liver by computed tomography. , 2013, 2013, 378-81.		7
61	Performances of heated humidifiers in mechanical ventilation: A preliminary intra-breath analysis. , 2013, 2013, 934-7.		3
62	US-guided application of Nd:YAG laser in porcine pancreatic tissue: an ex vivo study and numerical simulation. <i>Gastrointestinal Endoscopy</i> , 2013, 78, 750-755.	0.5	45
63	Stature estimation from scapular measurements by CT scan evaluation in an Italian population. <i>Legal Medicine</i> , 2013, 15, 202-208.	0.6	53
64	An algorithm to improve the estimation accuracy of a non-invasive method for cardiac output measurement based on prolonged expiration. , 2013, 2013, 1823-6.		1
65	Experimental assessment of CT-based thermometry during laser ablation of porcine pancreas. <i>Physics in Medicine and Biology</i> , 2013, 58, 5705-5716.	1.6	66
66	Mechanical ventilation with heated humidifiers: measurements of condensed water mass within the breathing circuit according to ventilatory settings. <i>Physiological Measurement</i> , 2013, 34, 813-821.	1.2	17
67	A high sensitivity fiber optic macro-bend based gas flow rate transducer for low flow rates: Theory, working principle, and static calibration. <i>Review of Scientific Instruments</i> , 2013, 84, 024301.	0.6	30
68	Design of fiber optic applicators for laser interstitial thermotherapy: Theoretical evaluation of thermal outcomes. , 2013, 2013, 3733-6.		7
69	Ecological Sucking Monitoring of Newborns. <i>IEEE Sensors Journal</i> , 2013, 13, 4561-4568.	2.4	18
70	A micro opto-mechanical displacement sensor based on micro-diffraction gratings: Design and characterization. , 2013, 2013, 4714-7.		3
71	Accuracy evaluation of dynamic volume measurements performed by opto-electronic plethysmograph, by using a pulmonary simulator. , 2013, 2013, 930-3.		4
72	Facial Nerve Outcome after Vestibular Schwannoma Surgery: Our Experience. <i>Skull Base</i> , 2012, 21, e8-e8.	0.4	0

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73	Force and pressure distribution using Macintosh and GlideScope laryngoscopes in normal and difficult airways: a manikin study. <i>British Journal of Anaesthesia</i> , 2012, 108, 146-151.	1.5	62
74	Facial Nerve Outcome after Vestibular Schwannoma Surgery: Our Experience. <i>Journal of Neurological Surgery, Part B: Skull Base</i> , 2012, 73, 021-027.	0.4	50
75	Design and experimental characterization of a gas flow generator to calibrate flow meters for neonatal ventilation. , 2012, , .		1
76	Cardiac output estimation in mechanically ventilated patients: A comparison between prolonged expiration method and thermodilution. , 2012, 2012, 2708-11.		2
77	A micromachined intensity-modulated fiber optic sensor for strain measurements: Working principle and static calibration. , 2012, 2012, 5790-3.		6
78	Force and pressure distribution using Macintosh and GlideScope laryngoscopes. <i>British Journal of Anaesthesia</i> , 2012, 108, 698.	1.5	3
79	A novel control strategy to improve the performances of heated wire humidifiers in artificial neonatal ventilation. <i>Physiological Measurement</i> , 2012, 33, 1199-1211.	1.2	16
80	Micromachined Flow Sensors in Biomedical Applications. <i>Micromachines</i> , 2012, 3, 225-243.	1.4	91
81	Determination of stature from skeletal and skull measurements by CT scan evaluation. <i>Forensic Science International</i> , 2012, 222, 398.e1-398.e9.	1.3	46
82	Theoretical assessment of principal factors influencing laser interstitial thermotherapy outcomes on pancreas. , 2012, 2012, 5687-90.		10
83	Sa1513 US-Guided Nd:YAG Laser Ablation in Porcine Pancreatic Tissue: an Ex Vivo Study and Numerical Simulation. <i>Gastrointestinal Endoscopy</i> , 2012, 75, AB187.	0.5	3
84	Sa1541 EUS-Guided Nd:YAG Laser Ablation of Normal Pancreatic Tissue: A Survival Study in Porcine Model. <i>Gastrointestinal Endoscopy</i> , 2012, 75, AB195-AB196.	0.5	1
85	Linearity dependence on oxygen fraction and gas temperature of a novel Fleisch pneumotachograph for neonatal ventilation at low flow rates. <i>Measurement: Journal of the International Measurement Confederation</i> , 2012, 45, 2064-2071.	2.5	15
86	Theoretical Analysis and Experimental Evaluation of Laser-Induced Interstitial Thermotherapy in Ex Vivo Porcine Pancreas. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 2958-2964.	2.5	130
87	Non-invasive Estimation of Cardiac Output in Mechanically Ventilated Patients: A Prolonged Expiration Method. <i>Annals of Biomedical Engineering</i> , 2012, 40, 1777-1789.	1.3	4
88	A new methodology for intra-breath control of mechanical ventilation. <i>Medical Engineering and Physics</i> , 2012, 34, 256-260.	0.8	1
89	Uncertainty evaluation of a calibration method for metabolic analyzer in mechanical ventilation. , 2011, , .		3
90	Laser Interstitial Thermotherapy for pancreatic tumor ablation: Theoretical model and experimental validation. , 2011, 2011, 5585-8.		26

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91	EUS-guided Nd:YAG laser ablation of a hepatocellular carcinoma in the caudate lobe. <i>Gastrointestinal Endoscopy</i> , 2011, 73, 632-636.	0.5	52
92	An open-loop controlled active lung simulator for preterm infants. <i>Medical Engineering and Physics</i> , 2011, 33, 47-55.	0.8	12
93	An optical fiber based flow transducer for infant ventilation: Measurement principle and calibration. , 2011, , .		7
94	Influence of ventilatory settings on indirect calorimetry in mechanically ventilated patients. , 2011, 2011, 1245-8.		3
95	A novel target-type low pressure drop bidirectional optoelectronic air flow sensor for infant artificial ventilation: Measurement principle and static calibration. <i>Review of Scientific Instruments</i> , 2011, 82, 024301.	0.6	27
96	Gas pre-warming for improving performances of heated humidifiers in neonatal ventilation. , 2011, 2011, 1205-8.		6
97	Mathematical model and minimal measurement system for optimal control of heated humidifiers in neonatal ventilation. <i>Medical Engineering and Physics</i> , 2010, 32, 475-481.	0.8	15
98	Proportional mechanical ventilation through PWM driven on/off solenoid valve. , 2010, 2010, 1222-5.		7
99	Evaluation of pulmonary rehabilitation after lung resection through opto-electronic plethysmography. , 2010, 2010, 2481-4.		3
100	EUS-guided Nd:YAG laser ablation of normal pancreatic tissue: a pilot study in a pig model. <i>Gastrointestinal Endoscopy</i> , 2010, 72, 358-363.	0.5	84
101	Static forces variation and pressure distribution in laryngoscopy performed by straight and curved blades. , 2009, 2009, 865-8.		3
102	Design and evaluation of a methodology to perform personalized visual biofeedback for reducing respiratory amplitude in radiation treatment. <i>Medical Physics</i> , 2009, 36, 1467-1472.	1.6	16
103	Influence of gas temperature on the performances of a low dead space capillary type pneumotachograph for neonatal ventilation. , 2009, 2009, 1226-9.		4
104	A preliminary efficacy evaluation performed by opto-electronic plethysmography of asymmetric respiratory rehabilitation. , 2009, 2009, 849-52.		11
105	A transistor based air flow transducer for thermohygrometric control of neonatal ventilatory applications. <i>Review of Scientific Instruments</i> , 2008, 79, 104301.	0.6	18
106	Linear Model and Algorithm to Automatically Estimate the Pressure Limit of Pressure Controlled Ventilation for Delivering a Target Tidal Volume. <i>Journal of Clinical Monitoring and Computing</i> , 2006, 20, 1-10.	0.7	5
107	Theoretical model and design of a device to reduce the influence of environmental factors on refractive surgery outcomes. , 2006, 2006, 343-6.		14
108	Experimental evaluation of errors in the measurement of respiratory parameters of the newborn performed by a continuous flow neonatal ventilator. <i>Journal of Medical Engineering and Technology</i> , 2006, 30, 31-40.	0.8	20

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109	The influence of flow rate on breathing circuit compliance and tidal volume delivered to patients in mechanical ventilation. <i>Physiological Measurement</i> , 2006, 27, 23-33.	1.2	14
110	Circuit compliance compensation in lung protective ventilation. , 2006, 2006, 5603-6.		11
111	Theoretical model and design of a device to reduce the influence of environmental factors on refractive surgery outcomes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006, , .	0.5	0
112	Biological effects of exposure to magnetic resonance imaging: an overview. <i>BioMedical Engineering OnLine</i> , 2004, 3, 11.	1.3	114
113	Experimental Analysis of the Airway Circuit Effects on Breathing Pattern Generated by Neonatal Pulmonary Ventilators. <i>Journal of Clinical Engineering</i> , 2004, 29, 134-137.	0.1	5
114	A novel preterm respiratory mechanics active simulator to test the performances of neonatal pulmonary ventilators. <i>Review of Scientific Instruments</i> , 2002, 73, 2411-2416.	0.6	10
115	Reliability Analysis of Non-Parametric Statistical Tests for the Evaluation of Linear Drift in Experimental Data. <i>Strain</i> , 2001, 37, 67-72.	1.4	2
116	On the robust utilization of non-parametric tests for evaluation of combined cyclical and monotonic drift. <i>Measurement Science and Technology</i> , 2001, 12, 1439-1444.	1.4	8
117	A Novel Methodology for the Experimental Evaluation of Pulmonary Ventilator Performance Drift. <i>Journal of Clinical Engineering</i> , 1997, 22, 163-170.	0.1	6
118	Design Criteria for a Mechatronic Handle for Measuring Visco-Elastic Properties of the Human Arm. , 0, , .		0
119	Optical-Fiber Measurement Systems for Medical Applications. , 0, , .		26