

Giovanni Improta

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6933965/publications.pdf>

Version: 2024-02-01

113
papers

2,885
citations

126901

33
h-index

233409

45
g-index

118
all docs

118
docs citations

118
times ranked

1609
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving performances of the knee replacement surgery process by applying DMAIC principles. <i>Journal of Evaluation in Clinical Practice</i> , 2017, 23, 1401-1407.	1.8	85
2	The application of Lean Six Sigma methodology to reduce the risk of healthcare-associated infections in surgery departments. <i>Journal of Evaluation in Clinical Practice</i> , 2017, 23, 530-539.	1.8	77
3	Machine learning analysis of MRI-derived texture features to predict placenta accreta spectrum in patients with placenta previa. <i>Magnetic Resonance Imaging</i> , 2019, 64, 71-76.	1.8	73
4	Prediction of Tumor Grade and Nodal Status in Oropharyngeal and Oral Cavity Squamous-cell Carcinoma Using a Radiomic Approach. <i>Anticancer Research</i> , 2020, 40, 271-280.	1.1	73
5	Preliminary focus on the mechanical and antibacterial activity of a PMMA-based bone cement loaded with gold nanoparticles. <i>Bioactive Materials</i> , 2017, 2, 156-161.	15.6	70
6	Lean thinking to improve emergency department throughput at AORN Cardarelli hospital. <i>BMC Health Services Research</i> , 2018, 18, 914.	2.2	67
7	Lean Six Sigma Approach for Reducing Length of Hospital Stay for Patients with Femur Fracture in a University Hospital. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 2843.	2.6	66
8	Lean Six Sigma: a new approach to the management of patients undergoing prosthetic hip replacement surgery. <i>Journal of Evaluation in Clinical Practice</i> , 2015, 21, 662-672.	1.8	64
9	Analytic Hierarchy Process (AHP) in Dynamic Configuration as a Tool for Health Technology Assessment (HTA): The Case of Biosensing Optoelectronics in Oncology. <i>International Journal of Information Technology and Decision Making</i> , 2019, 18, 1533-1550.	3.9	60
10	Lean Six Sigma in healthcare. <i>TQM Journal</i> , 2019, 31, 526-540.	3.3	59
11	Use of the AHP methodology in system dynamics: Modelling and simulation for health technology assessments to determine the correct prosthesis choice for hernia diseases. <i>Mathematical Biosciences</i> , 2018, 299, 19-27.	1.9	58
12	Agile Six Sigma in Healthcare: Case Study at Santobono Pediatric Hospital. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 1052.	2.6	57
13	Fuzzy logic-based clinical decision support system for the evaluation of renal function in post-transplant Patients. <i>Journal of Evaluation in Clinical Practice</i> , 2020, 26, 1224-1234.	1.8	56
14	Using gait analysis parameters to classify Parkinsonism: A data mining approach. <i>Computer Methods and Programs in Biomedicine</i> , 2019, 180, 105033.	4.7	54
15	Health technology assessment (HTA) of optoelectronic biosensors for oncology by analytic hierarchy process (AHP) and Likert scale. <i>BMC Medical Research Methodology</i> , 2019, 19, 140.	3.1	53
16	Reducing the risk of healthcare-associated infections through Lean Six Sigma: The case of the medicine areas at the Federico II University Hospital in Naples (Italy). <i>Journal of Evaluation in Clinical Practice</i> , 2018, 24, 338-346.	1.8	51
17	Frequency and Time Domain Analysis of Foetal Heart Rate Variability with Traditional Indexes: A Critical Survey. <i>Computational and Mathematical Methods in Medicine</i> , 2016, 2016, 1-12.	1.3	49
18	Long-term clinical results and MRI changes after autologous chondrocyte implantation in the knee of young and active middle aged patients. <i>Journal of Orthopaedics and Traumatology</i> , 2016, 17, 55-62.	2.3	48

#	ARTICLE	IF	CITATIONS
19	Cost-Effectiveness and Budget Impact of Emicizumab Prophylaxis in Haemophilia A Patients with Inhibitors. <i>Thrombosis and Haemostasis</i> , 2020, 120, 216-228.	3.4	48
20	Classifying the type of delivery from cardiocographic signals: A machine learning approach. <i>Computer Methods and Programs in Biomedicine</i> , 2020, 196, 105712.	4.7	47
21	A Further Analysis on Ti6Al4V Lattice Structures Manufactured by Selective Laser Melting. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-9.	1.9	42
22	The use of MSAP reveals epigenetic diversity of the invasive clonal populations of <i>Arundo donax</i> L.. <i>PLoS ONE</i> , 2019, 14, e0215096.	2.5	42
23	Fast track surgery for knee replacement surgery: a lean six sigma approach. <i>TQM Journal</i> , 2020, 32, 461-474.	3.3	42
24	A Simulation Approach for Agile Production Logic Implementation in a Hospital Emergency Unit. <i>Communications in Computer and Information Science</i> , 2015, , 623-634.	0.5	41
25	Genetic characterization, micropropagation, and potential use for arsenic phytoremediation of <i>Dittrichia viscosa</i> (L.) Greuter. <i>Ecotoxicology and Environmental Safety</i> , 2018, 148, 675-683.	6.0	41
26	The application of six sigma to reduce the pre-operative length of hospital stay at the hospital Antonio Cardarelli. <i>International Journal of Lean Six Sigma</i> , 2019, 11, 555-576.	3.3	39
27	Software for computerised analysis of cardiocographic traces. <i>Computer Methods and Programs in Biomedicine</i> , 2016, 124, 121-137.	4.7	38
28	Lean Six Sigma approach to reduce LOS through a diagnostic-therapeutic-assistance path at A.O.R.N. A. Cardarelli. <i>TQM Journal</i> , 2019, 31, 657-672.	3.3	38
29	Combination Design of Time-Dependent Magnetic Field and Magnetic Nanocomposites to Guide Cell Behavior. <i>Nanomaterials</i> , 2020, 10, 577.	4.1	38
30	Application of data mining in a cohort of Italian subjects undergoing myocardial perfusion imaging at an academic medical center. <i>Computer Methods and Programs in Biomedicine</i> , 2020, 189, 105343.	4.7	37
31	MRI Radiomics for the Prediction of Fuhrman Grade in Clear Cell Renal Cell Carcinoma: a Machine Learning Exploratory Study. <i>Journal of Digital Imaging</i> , 2020, 33, 879-887.	2.9	36
32	EEG-based measurement system for monitoring student engagement in learning 4.0. <i>Scientific Reports</i> , 2022, 12, 5857.	3.3	36
33	Effects of Zinc Pollution and Compost Amendment on the Root Microbiome of a Metal Tolerant Poplar Clone. <i>Frontiers in Microbiology</i> , 2020, 11, 1677.	3.5	35
34	Implementation and validation of a new method to model voluntary departures from emergency departments. <i>Mathematical Biosciences and Engineering</i> , 2021, 18, 253-273.	1.9	35
35	Symbolic dynamic and frequency analysis in foetal monitoring. , 2014, , .		34
36	Using fuzzy logic for improving clinical daily-care of \hat{I}^2 -thalassemia patients. , 2017, , .		32

#	ARTICLE	IF	CITATIONS
37	Regression Models to Study the Total LOS Related to Valvuloplasty. International Journal of Environmental Research and Public Health, 2022, 19, 3117.	2.6	32
38	Agreement between Opal and G-Walk Wearable Inertial Systems in Gait Analysis on Normal and Pathological Subjects. , 2019, 2019, 3286-3289.		31
39	Air quality biomonitoring through Olea europaea L.: The study case of "Land of pyres" Chemosphere, 2021, 282, 131052.	8.2	31
40	HTA (Health Technology Assessment): A Means to Reach Governance Goals and to Guide Health Politics on the Topic of Clinical Risk Management. IFMBE Proceedings, 2009, , 166-169.	0.3	30
41	A Hybrid Analytic Hierarchy Process and Likert Scale Approach for the Quality Assessment of Medical Education Programs. Mathematics, 2022, 10, 1426.	2.2	30
42	Postoperative complications after removal of pleomorphic adenoma from the parotid gland: A long-term follow up of 297 patients from 2002 to 2016 and a review of publications. British Journal of Oral and Maxillofacial Surgery, 2019, 57, 998-1002.	0.8	29
43	Is It Possible to Predict the Length of Stay of Patients Undergoing Hip-Replacement Surgery?. International Journal of Environmental Research and Public Health, 2022, 19, 6219.	2.6	28
44	Multiple regression model to analyze the total LOS for patients undergoing laparoscopic appendectomy. BMC Medical Informatics and Decision Making, 2022, 22, .	3.0	27
45	A health technology assessment between two pharmacological therapies through Six Sigma: the case study of bone cancer. TQM Journal, 2020, 32, 1507-1524.	3.3	26
46	Machine Learning and Lean Six Sigma to Assess How COVID-19 Has Changed the Patient Management of the Complex Operative Unit of Neurology and Stroke Unit: A Single Center Study. International Journal of Environmental Research and Public Health, 2022, 19, 5215.	2.6	26
47	Efficacy of Machine Learning in Predicting the Kind of Delivery by Cardiotocography. IFMBE Proceedings, 2020, , 793-799.	0.3	25
48	Predictive Analysis of Healthcare-Associated Blood Stream Infections in the Neonatal Intensive Care Unit Using Artificial Intelligence: A Single Center Study. International Journal of Environmental Research and Public Health, 2022, 19, 2498.	2.6	25
49	An Innovative Contribution to Health Technology Assessment. Studies in Computational Intelligence, 2012, , 127-131.	0.9	24
50	Improving Prosthetic Selection and Predicting BMD from Biometric Measurements in Patients Receiving Total Hip Arthroplasty. Diagnostics, 2020, 10, 815.	2.6	23
51	Management of the Diabetic Patient in the Diagnostic Care Pathway. IFMBE Proceedings, 2021, , 784-792.	0.3	23
52	Application of DMAIC Cycle and Modeling as Tools for Health Technology Assessment in a University Hospital. Journal of Healthcare Engineering, 2021, 2021, 1-11.	1.9	22
53	Efficiency measures of emergency departments: an Italian systematic literature review. BMJ Open Quality, 2021, 10, e001058.	1.1	22
54	A Six Sigma DMAIC methodology as a support tool for Health Technology Assessment of two antibiotics. Mathematical Biosciences and Engineering, 2021, 18, 3469-3490.	1.9	22

#	ARTICLE	IF	CITATIONS
55	Improving Healthcare Using Cognitive Computing Based Software: An Application in Emergency Situation. Lecture Notes in Computer Science, 2012, , 477-490.	1.3	22
56	Machine learning models for the prediction of acuity and variability of eye-positioning using features extracted from oculography. Health and Technology, 2020, 10, 961-968.	3.6	21
57	Feasibility of Machine Learning in Predicting Features Related to Congenital Nystagmus. IFMBE Proceedings, 2020, , 907-913.	0.3	21
58	Early neutropenia with thrombocytopenia following alemtuzumab treatment for multiple sclerosis: case report and review of literature. Clinical Neurology and Neurosurgery, 2018, 175, 134-136.	1.4	20
59	Machine learning can detect the presence of Mild cognitive impairment in patients affected by Parkinson's Disease. , 2020, , .		20
60	Classifying Different Stages of Parkinson's Disease Through Random Forests. IFMBE Proceedings, 2020, , 1155-1162.	0.3	20
61	Evaluation of Medical Training Courses Satisfaction: Qualitative Analysis and Analytic Hierarchy Process. IFMBE Proceedings, 2021, , 518-526.	0.3	20
62	Application of the Lean Six Sigma approach to the study of the LOS of patients who undergo laparoscopic cholecystectomy at the San Giovanni di Dio and Ruggi d'Aragona University Hospital. , 2021, , .		20
63	DMAIC Approach for the Reduction of Healthcare-Associated Infections in the Neonatal Intensive Care Unit of the University Hospital of Naples "Federico II". IFMBE Proceedings, 2021, , 414-423.	0.3	20
64	Machine Learning and Regression Analysis to Model the Length of Hospital Stay in Patients with Femur Fracture. Bioengineering, 2022, 9, 172.	3.5	19
65	A Clinical Decision Support System based on fuzzy rules and classification algorithms for monitoring the physiological parameters of type-2 diabetic patients. Mathematical Biosciences and Engineering, 2021, 18, 2654-2674.	1.9	18
66	Distinguishing Functional from Non-functional Pituitary Macroadenomas with a Machine Learning Analysis. IFMBE Proceedings, 2020, , 1822-1829.	0.3	18
67	Application of Supply Chain Management at Drugs Flow in an Italian Hospital District. Journal of Physics: Conference Series, 2021, 1828, 012081.	0.4	17
68	Implementation of lean practices to reduce healthcare associated infections. International Journal of Healthcare Technology and Management, 2020, 18, 51.	0.1	17
69	Modelling the hospital length of stay for patients undergoing laparoscopic cholecystectomy through a multiple regression model. , 2021, , .		16
70	A novel approach to estimate the upper limb reaching movement in three-dimensional space. Informatics in Medicine Unlocked, 2019, 15, 100155.	3.4	15
71	Is It Possible to Predict Cardiac Death?. IFMBE Proceedings, 2020, , 847-854.	0.3	15
72	Assessment of proteinuria level in nephrology patients using a machine learning approach. , 2021, , .		15

#	ARTICLE	IF	CITATIONS
73	Strategies for the design of additively manufactured nanocomposite scaffolds for hard tissue regeneration. <i>Acta IMEKO (2012)</i> , 2020, 9, 53.	0.7	14
74	Remission of early persistent cladribine-induced neutropenia after filgrastim therapy in a patient with Relapsing - Remitting Multiple Sclerosis. <i>Multiple Sclerosis and Related Disorders</i> , 2020, 43, 102151.	2.0	13
75	Malignant tumours of the parotid gland: management of the neck (including the clinically negative) <i>Tj ETQq1 1 0.784314 rgBT /Overlaid</i>	0.8	12
76	Additive manufacturing and technical strategies for improving outcomes in breast reconstructive surgery. <i>Acta IMEKO (2012)</i> , 2020, 9, 74.	0.7	12
77	Novel concepts and strategies in skull base reconstruction after endoscopic endonasal surgery. <i>Acta IMEKO (2012)</i> , 2020, 9, 67.	0.7	11
78	A Fuzzy Inference System for the Assessment of Indoor Air Quality in an Operating Room to Prevent Surgical Site Infection. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 3533.	2.6	11
79	Computerized Cardiocography: A Software to Generate Synthetic Signals. <i>Journal of Health & Medical Informatics</i> , 2014, 05, .	0.2	10
80	Health technology assessment through Six Sigma Methodology to assess cemented and uncemented prostheses in total hip arthroplasty. <i>European Journal of Translational Myology</i> , 2021, 31, .	1.7	10
81	Use of machine learning to predict abandonment rates in an emergency department. , 2021, , .		10
82	Studying length of stay in the Emergency Department of A.O.R.N. "Antonio Cardarelli" of Naples. , 2021, , .		10
83	Postoperative Management of Zygomatic Arch Fractures: In-House Rapid Prototyping System for the Manufacture of Protective Facial Shields. <i>Journal of Craniofacial Surgery</i> , 2019, 30, 2057-2060.	0.7	9
84	From 3D Hierarchical Scaffolds for Tissue Engineering to Advanced Hydrogel-Based and Complex Devices for in situ Cell or Drug Release. <i>Procedia CIRP</i> , 2016, 49, 72-75.	1.9	8
85	Symbolic dynamics in cardiocographic monitoring. , 2013, , .		7
86	Classifying patients affected by Parkinson's disease into freezers or non-freezers through machine learning. , 2020, , .		7
87	Implementation of lean practices to reduce healthcare associated infections. <i>International Journal of Healthcare Technology and Management</i> , 2020, 18, 51.	0.1	7
88	Skull base reconstruction after endoscopic endonasal surgery: new strategies for raising the dam. , 2019, , .		6
89	Reverse Engineering and Additive Manufacturing towards the design of 3D advanced scaffolds for hard tissue regeneration. , 2019, , .		6
90	Soft Transducer for Patient's Vitals Telemonitoring with Deep Learning-Based Personalized Anomaly Detection. <i>Sensors</i> , 2022, 22, 536.	3.8	6

#	ARTICLE	IF	CITATIONS
91	Prognostic decision support using symbolic dynamics in CTG monitoring. <i>Studies in Health Technology and Informatics</i> , 2013, 186, 140-4.	0.3	6
92	Investigation of factors increasing waiting times in the Emergency Departments of "San Giovanni di Dio e Ruggi d'Aragona" Hospital through machine learning. , 2021, , .		6
93	Use of regression models to predict glomerular filtration rate in kidney transplanted patients. , 2021, , .		6
94	Health Technology Assessment: An Essential Approach to Guide Clinical Governance Choices on Risk Management. , 0, , .		5
95	Effect of Topical Antiinflammatory Drugs on Mechanical Behavior of Rabbit Cornea. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2017, 15, 142-148.	1.6	5
96	Analyzing the Role of Magnetic Features in Additive Manufactured Scaffolds for Enhanced Bone Tissue Regeneration. <i>Macromolecular Symposia</i> , 2021, 396, 2000314.	0.7	5
97	Analysis of voluntary departures from the Emergency Department of the hospital AORN "A. Cardarelli", 2021, , .		5
98	Ecotype-Level Genetic Biodiversity of Five Italian Traditional Crops. <i>Scientifica</i> , 2019, 2019, 1-14.	1.7	4
99	Additive manufacturing and tissue engineering to improve outcomes in breast reconstructive surgery. , 2019, , .		4
100	Health technology assessment through the six sigma approach in abdominoplasty: Scalpel vs electrosurgery. <i>Medical Engineering and Physics</i> , 2021, 93, 27-34.	1.7	4
101	A Lean Six Sigma approach to improve the Emergency Department of University Hospital "San Giovanni di Dio e Ruggi d'Aragona", 2021, , .		4
102	A Health Technology Assessment in Maxillofacial Cancer Surgery by Using the Six Sigma Methodology. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 9846.	2.6	3
103	Resolution Resampling of Ultrasound Images in Placenta Previa Patients: Influence on Radiomics Data Reliability and Usefulness for Machine Learning. <i>IFMBE Proceedings</i> , 2021, , 1011-1018.	0.3	3
104	Comparing Two Approaches for Thyroidectomy: A Health Technology Assessment through DMAIC Cycle. <i>Healthcare (Switzerland)</i> , 2022, 10, 124.	2.0	3
105	Overcrowding in emergency department: a comparison between indexes. , 2021, , .		3
106	A Comparative Study of Different Administrations of Nebulized Hyaluronic Acid After Endoscopic Endonasal Surgery for Chronic Rhinosinusitis. <i>Indian Journal of Otolaryngology and Head and Neck Surgery</i> , 2022, 74, 1037-1043.	0.9	2
107	Instrumentation for Motor Imagery-based Brain Computer Interfaces relying on dry electrodes: a functional analysis. , 2020, , .		2
108	Digital Innovation in Healthcare: A Device with A Method for Monitoring, Managing and Preventing the Risk of Chronic Polypathological Patients. <i>Translational Medicine @ UniSa</i> , 2020, 21, 61-64.	0.5	2

#	ARTICLE	IF	CITATIONS
109	Appropriate admission in Covid-19 era: the case study of the C.O.U. Neurology and Stroke Unit. , 2021, , .		2
110	A quantitative analysis of muscular co-activation on EMG signals in spastic patients treated with Botulinum toxin. , 2020, , .		1
111	The Use of Six Sigma to Assess Two Protheses for Immediate Breast Reconstruction. IFMBE Proceedings, 2021, , 1112-1120.	0.3	1
112	Foot and ankle measurements on cone beam weightbearing computed tomography. Journal of Biological Regulators and Homeostatic Agents, 2020, 34, 23-32. ADVANCES IN MUSCULOSKELETAL DISEASES AND IN.	0.7	1
113	Cost Minimization Analysis of Radiofrequency Compared to Laser Thermal Ablation in Patients with Hepatocellular Carcinoma. Farmeconomia E Percorsi Terapeutici, 2019, 20, .	0.1	0