Fabian N Murrieta-Rico

List of Publications by Year
in descending order

48 papers	406 citations	933447 10 h-index	839539 18 g-index
48 all docs	48 docs citations	48 times ranked	227 citing authors

#	Article	IF	Citations
1	Mobile robot vision system using continuous laser scanning for industrial application. Industrial Robot, 2016, 43, 360-369.	2.1	62
2	Exact laser beam positioning for measurement of vegetation vitality. Industrial Robot, 2017, 44, 532-541.	2.1	46
3	Pulse width influence in fast frequency measurements using rational approximations. Measurement: Journal of the International Measurement Confederation, 2016, 86, 67-78.	5.0	26
4	Mathematical Modelling of molecular adsorption in zeolite coated frequency domain sensors. IFAC-PapersOnLine, 2015, 48, 41-46.	0.9	22
5	Continuous 3D scanning mode using servomotors instead of stepping motors in dynamic laser triangulation. , 2015, , .		19
6	Optimization of pulse width for frequency measurement by the method of rational approximations principle. Measurement: Journal of the International Measurement Confederation, 2018, 125, 463-470.	5.0	14
7	The effect of chemical composition on the properties of LTA zeolite: A theoretical study. Computational Materials Science, 2021, 196, 110557.	3.0	14
8	Constraints definition and application optimization based on geometric analysis of the frequency measurement method by pulse coincidence. Measurement: Journal of the International Measurement Confederation, 2018, 126, 184-193.	5.0	13
9	Frequency Domain Sensors and Frequency Measurement Techniques. Applied Mechanics and Materials, 2015, 756, 575-584.	0.2	12
10	Facile Zinc Oxide Nanoparticle Green Synthesis Using Citrus reticulata Extract for Use in Optoelectronic Sensors. IEEE Sensors Journal, 2021, 21, 11275-11282.	4.7	12
11	Evaluation of electrochemical properties of zinc oxide based semiconductor nanoparticles biosynthesized with Mentha spicata for optoelectronic applications. Materials Letters, 2020, 275, 128101.	2.6	12
12	Resolution improvement of accelerometers measurement for drones in agricultural applications. , 2016, , .		11
13	Non-intrusive Tracking of Patients with Dementia Using a Wireless Sensor Network. , 2013, , .		10
14	A New Approach to Measurement of Frequency Shifts Using the Principle of Rational Approximations. Metrology and Measurement Systems, 2017, 24, 45-56.	1.4	10
15	Local Structures of Two-Dimensional Zeolitesâ€”Mordenite and ZSM-5â€”Probed by Multinuclear NMR. Molecules, 2020, 25, 4678.	3.8	10
16	Acceleration measurement improvement by application of novel frequency measurement technique for FDS based INS. , 2014, , .		9
17	QCM modified with FAU zeolite nanostructures for analysis of temperature induced adsorbed mass changes. Measurement: Journal of the International Measurement Confederation, 2021, 172, 108935.	5.0	9
18	Application of Fast Frequency Shift Measurement Method for INS in Navigation of Drones. , 2018, , .		8

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19	Effect of phase in fast frequency measurements for sensors embedded in robotic systems. International Journal of Advanced Robotic Systems, 2019, 16, 172988141986972.	2.1	7
20	Aluminum distribution in mordenite-zeolite framework: A new outlook based on density functional theory calculations. Journal of Solid State Chemistry, 2022, 306, 122725.	2.9	7
21	Frequency Shifts Estimation for Sensors Based on Optoelectronic Oscillators. IEEE Sensors Journal, 2021, 21, 11283-11290.	4.7	6
22	Prospects for Further Development of Face Masks to Minimize Pandemics Functionalization of Textile Materials with Biocide Inorganic Nanoparticles: A Review. IEEE Latin America Transactions, 2021, 19, 1010-1023.	1.6	6
23	Basic Aspects in the Application of QCMs as Sensors: A Tutorial. IEEE Sensors Journal, 2022, 22, 10163-10172.	4.7	6
24	Frequency domain automotive sensors: Resolution improvement by novel principle of rational approximation. , 2010, , .		5
25	Rational approximations principle for frequency shifts measurement in frequency domain sensors. , 2015, , .		5
26	Theoretical study of the effect of isomorphous substitution by $$hbox {Al}^{3+}$$ and/or $$hbox {Fe}^{3+}$$ cations to tetrahedral positions in the framework of a zeolite with erionite topology. Journal of Materials Science, 2019, 54, 13190-13199.	3.7	5
27	Defining the Final Angular Position of DC Motor shaft using a Trapezoidal Trajectory Profile. , 2019, , .		5
28	Evaluation of naturally synthesized ZnO for sensing applications using EIS. Materials Today: Proceedings, 2021, 47, 1676-1681.	1.8	4
29	Stereoscopic Vision Systems in Machine Vision, Models, and Applications. , 2020, , 241-265.		4
30	Instability measurement in time-frequency references used on autonomous navigation systems. , 2015, , .		3
31	High resolution measurement of physical variables change for INS. , 2016, , .		3
32	Experimental analysis of measurement process for a QCM using the pulse coincidence method. , 2019, , .		3
33	Application of the Principle of Rational Approximations for Measuring Dynamic Frequency Values Generated by an IMU. Advances in Computational Intelligence and Robotics Book Series, 2020, , 26-51.	0.4	3
34	Accuracy improvement of vision system for mobile robot navigation by finding the energetic center of laser signal. , 2014, , .		2
35	Online SHM Optical Scanning Data Exchange. , 2016, , .		2
36	Reduction of Angular Position Error of a Machine Vision System Using the Digital Controller LM629. , 2018, , .		2

#	Article	IF	Citations
37	Phase effect in frequency measurements of a quartz crystal using the pulse coincidence principle. , 2020, , .		2
38	Applications of Quartz Crystal Microbalances Modified With Metal Organic Frameworks. Advances in Chemical and Materials Engineering Book Series, 2021, , 56-73.	0.3	2
39	Outlier mining of a vision sensing databasefor SVM regression improvement. , 2015, , .		1
40	High resolution measurement of water levels in optical components. , 2016, , .		1
41	Zeolite-Based Optical Detectors. Advances in Computational Intelligence and Robotics Book Series, 2019, , 1-16.	0.4	1
42	Digital Control Theory Application and Signal Processing in a Laser Scanning System Applied for Mobile Robotics. Advances in Computational Intelligence and Robotics Book Series, 2020, , 215-265.	0.4	1
43	Zeolites with quantum dots as functional materials: current trends and perspectives for optical devices. , 2021, , .		1
44	Two-Parameter Pressure and Temperature Measuring Transducer Based on a Voltage-Controlled MEMS-Elements. , 2018, , .		0
45	Analysis of Spatial Localization Trough Frequency Counting for Accelerometers Embedded in INS. , 2019, , .		0
46	Advances in Laser Scanners. Advances in Computational Intelligence and Robotics Book Series, 2021, , 37-70.	0.4	0
47	Optoelectronic Devices Fusion in Machine Vision Applications. Advances in Computational Intelligence and Robotics Book Series, 2021, , 1-36.	0.4	0
48	Full-State Control of Rotary Pendulum Using LQR Controller. Advances in IT Standards and Standardization Research Series, 2022, , 75-117.	0.2	0