

Arturo Baltazar

List of Publications by Year in descending order

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33
papers

859
citations

687363

13
h-index

526287

27
g-index

34
all docs

34
docs citations

34
times ranked

615
citing authors

#	ARTICLE	IF	CITATIONS
1	On the relationship between ultrasonic and micromechanical properties of contacting rough surfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 2002, 50, 1397-1416.	4.8	148
2	Study of interfacial stiffness ratio of a rough surface in contact using a spring model. <i>Wear</i> , 2010, 268, 373-379.	3.1	98
3	Ultrasonic assessment of rough surface contact between solids from elastoplastic loading-unloading hysteresis cycle. <i>Journal of the Mechanics and Physics of Solids</i> , 2004, 52, 1911-1934.	4.8	97
4	Bayesian classification of ripening stages of tomato fruit using acoustic impact and colorimeter sensor data. <i>Computers and Electronics in Agriculture</i> , 2008, 60, 113-121.	7.7	75
5	Inverse ultrasonic determination of imperfect interfaces and bulk properties of a layer between two solids. <i>Journal of the Acoustical Society of America</i> , 2003, 114, 1424-1434.	1.1	72
6	Hysteretic linear and nonlinear acoustic responses from pressed interfaces. <i>International Journal of Solids and Structures</i> , 2006, 43, 6436-6452.	2.7	60
7	Study of wave propagation in a multiwire cable to determine structural damage. <i>NDT and E International</i> , 2010, 43, 726-732.	3.7	55
8	Active sensing and damage detection using piezoelectric zinc oxide-based nanocomposites. <i>Nanotechnology</i> , 2013, 24, 185501.	2.6	39
9	Damage detection using the signal entropy of an ultrasonic sensor network. <i>Smart Materials and Structures</i> , 2015, 24, 075008.	3.5	24
10	Quantitative ultrasonic characterization of environmental degradation of adhesive bonds. <i>Journal of Adhesion Science and Technology</i> , 2004, 18, 327-359.	2.6	22
11	A study of guided wave propagation on a plate between two solid bodies with imperfect boundary conditions. <i>International Journal of Mechanical Sciences</i> , 2012, 63, 66-73.	6.7	22
12	Force feedback controller based on fuzzy-rules emulated networks and Hertzian contact with ultrasound. <i>Mechanical Systems and Signal Processing</i> , 2012, 27, 534-550.	8.0	20
13	Pyroelectric and pyromagnetic coefficients of functionally graded multilayered multiferroic composites. <i>Acta Mechanica</i> , 2012, 223, 849-860.	2.1	19
14	Effect of methyl jasmonate on properties of intact tomato fruit monitored with destructive and nondestructive tests. <i>Journal of Food Engineering</i> , 2007, 80, 1086-1095.	5.2	14
15	Detection of damage in multiwire cables based on wavelet entropy evolution. <i>Smart Materials and Structures</i> , 2015, 24, 085036.	3.5	14
16	Vibration Analysis of a Piezoelectric Ultrasonic Atomizer to Control Atomization Rate. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8350.	2.5	14
17	Structural Health Monitoring in Cylindrical Structures Using Helical Guided Wave Propagation. <i>Physics Procedia</i> , 2015, 70, 686-689.	1.2	12
18	On the use of ultrasonic spectral analysis for the characterization of artificially degraded API 5L X52 steel pipeline welded joints. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 550, 227-234.	5.6	9

#	ARTICLE	IF	CITATIONS
19	Damage detection in ACSR cables based on ultrasonic guided waves. DYNA (Colombia), 2014, 81, 226.	0.4	9
20	Ultrasonic elastic modes in solid bars: An application of the plane wave expansion method. Journal of the Acoustical Society of America, 2010, 127, 3503-3510.	1.1	6
21	Determination of surface mechanical properties using a hertzian contact and ultrasound sensor. , 2010, , .		6
22	Characterization of Laser Generated Lamb Wave Modes after Interaction with a Thickness Reduction Discontinuity Using Ray Tracing Theory. Experimental Mechanics, 2014, 54, 743-752.	2.0	6
23	A study of chaotic searching paths for their application in an ultrasonic scanner. Engineering Applications of Artificial Intelligence, 2018, 74, 271-279.	8.1	5
24	Detection of torsional guided wave generation using macro-fiber composite transducers and basis pursuit denoising. Archive of Applied Mechanics, 2021, 91, 1945-1958.	2.2	4
25	Beamforming of ultrasonic guided waves for defect search using chaos optimization. AIP Conference Proceedings, 2019, , .	0.4	3
26	Design of a Pose and Force Controller for a Robotized Ultrasonic Probe Based on Neural Networks and Stochastic Gradient Approximation. IEEE Sensors Journal, 2021, 21, 6224-6233.	4.7	2
27	Adaptive control for lift-off effect of EMAT based on IF-THEN rules and ultrasound RMS value. , 2013, , .		1
28	Atomization Control to Improve Soft Actuation Through Vaporization. Frontiers in Robotics and AI, 2021, 8, 747440.	3.2	1
29	Optimizaci3n basados en caos para la bA'squeda de objetivos. Research in Computing Science, 2018, 147, 291-300.	0.1	1
30	Chaotic search algorithm for detection of discontinuities using guided waves and beamforming data. Measurement Science and Technology, 2021, 32, 035105.	2.6	1
31	Multi-Input Fuzzy Rules Emulated Networks with a Hertzian Contact Force Sensor. , 2011, , .		0
32	Fine Alignment and Contact Control of a Soft Semispherical Ultrasonic Probe Based on Its Frequency Signature. Journal of Nondestructive Evaluation, 2020, 39, 1.	2.4	0
33	Chaos Optimization Applied to a Beamforming Algorithm for Source Location. Lecture Notes in Computer Science, 2018, , 332-343.	1.3	0