

Joerg Wallaschek

List of Publications by Year in descending order

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212
papers

3,121
citations

201674

27
h-index

197818

49
g-index

220
all docs

220
docs citations

220
times ranked

1647
citing authors

#	ARTICLE	IF	CITATIONS
1	Operational Modal Analysis of an Axial Compressor Rotor and Casing System for the Online Identification of a Digital Twin. <i>Applied Mechanics</i> , 2022, 3, 244-258.	1.5	5
2	Deep Learning-Based Weld Contour and Defect Detection from Micrographs of Laser Beam Welded Semi-Finished Products. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4645.	2.5	9
3	Design of particle dampers for additive manufacturing. <i>Additive Manufacturing</i> , 2021, 38, 101752.	3.0	22
4	Influence of the ultrasonic vibration amplitude on the melt pool dynamics and the weld shape of laser beam welded EN AW-6082 utilizing a new excitation system for laser beam welding. <i>Production Engineering</i> , 2021, 15, 151-160.	2.3	14
5	A Model Reduction Method for Bladed Disks With Large Geometric Mistuning Using a Partially Reduced Intermediate System Model. <i>Journal of Engineering for Gas Turbines and Power</i> , 2021, 143, .	1.1	5
6	Equivalent Linearization of Bladed Disk Assemblies With Friction Nonlinearities Under Random Excitation. <i>Journal of Engineering for Gas Turbines and Power</i> , 2021, 143, .	1.1	0
7	Single Nodal Diameter Excitation of Turbine Blades: Experimental and Theoretical Study. <i>Journal of Engineering for Gas Turbines and Power</i> , 2021, , .	1.1	0
8	Dynamic Acoustic Levitator Based On Subwavelength Aperture Control. <i>Advanced Science</i> , 2021, 8, e2100888.	11.2	13
9	Identification of the Effect of Ultrasonic Friction Reduction in Metal-Elastomer Contacts Using a Two-Control-Loop Tribometer. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6289.	2.5	0
10	Experimental Investigation of the Rapid Fabrication of Micron and Submicron Structures on Polymers Utilizing Ultrasonic Assisted Embossing. <i>Polymers</i> , 2021, 13, 2417.	4.5	3
11	Transient abrasion on a rubber sample due to highly dynamic contact conditions. <i>Wear</i> , 2021, 477, 203848.	3.1	4
12	Influence of process-related heat accumulation of laser beam welded 1.7035 round bars on weld pool shape and weld defects. <i>Journal of Laser Applications</i> , 2021, 33, 042007.	1.7	4
13	Experimental Nonlinear Vibration Analysis of a Shrouded Bladed Disk Model on a Rotating Test Rig. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2020, , 155-163.	0.5	0
14	The extended periodic motion concept for fast limit cycle detection of self-excited systems. <i>Computers and Structures</i> , 2020, 227, 106139.	4.4	8
15	Contact mechanics and friction processes in ultrasonic wire bonding - Basic theories and experimental investigations. <i>Journal of Sound and Vibration</i> , 2020, 468, 115021.	3.9	4
16	Global detection of detached periodic solution branches of friction-damped mechanical systems. <i>Nonlinear Dynamics</i> , 2020, 99, 1841-1870.	5.2	15
17	Air-Coupled Ultrasound Time Reversal (ACU-TR) For Subwavelength Nondestructive Imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2020, 67, 651-663.	3.0	15
18	Influence of Ultrasound on Pore and Crack Formation in Laser Beam Welding of Nickel-Base Alloy Round Bars. <i>Metals</i> , 2020, 10, 1299.	2.3	7

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19	Hyperchaos co-existing with periodic orbits in a frictional oscillator. Journal of Sound and Vibration, 2020, 472, 115203.	3.9	13
20	Measured and Simulated Forced Response of a Rotating Turbine Disk With Asymmetric and Cylindrical Underplatform Dampers. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	7
21	Modal Excitation of Circular Rotating Structures Using an Innovative Electromagnetic Device. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 153-162.	0.5	0
22	Forced Response of Nonlinear Systems Under Combined Harmonic and Random Excitation. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 65-80.	0.5	0
23	Equivalent Linearization of Bladed Disk Assemblies With Friction Nonlinearities Under Random Excitation. , 2020, , .		0
24	A Model Reduction Method for Bladed Disks With Large Geometric Mistuning Using a Partially Reduced Intermediate System Model. , 2020, , .		0
25	Investigations on the effect of different ultrasonic amplitudes and positions in the vibration distribution on the microstructure of laser beam welded stainless steel. , 2020, , .		3
26	Single Nodal Diameter Excitation of Turbine Blades: Experimental and Theoretical Study. , 2020, , .		0
27	Application of the Transfer Matrix Method for the Analysis of Lateral Vibrations of Drillstrings with Parameter Uncertainties. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 109-117.	0.5	0
28	Influence of Geometric Design Parameters Onto Vibratory Response and High-Cycle Fatigue Safety for Turbine Blades With Friction Damper. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	18
29	Self-sensing cavitation detection in ultrasound-induced acoustic cavitation. Ultrasonics, 2019, 94, 401-410.	3.9	16
30	Improving the mechanical properties of laser beam welded hybrid workpieces by deformation processing. AIP Conference Proceedings, 2019, , .	0.4	1
31	Approximate Solution of the Fokker-Planck Equation for a Multidegree of Freedom Frictionally Damped Bladed Disk Under Random Excitation. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	4
32	Surface Integrity of Laser Beam Welded Steel-Aluminium Alloy Hybrid Shafts after Turning. Metals, 2019, 9, 134.	2.3	1
33	Influence of ultrasonic amplitude and position in the vibration distribution on the microstructure of a laser beam welded aluminum alloy. Journal of Laser Applications, 2019, 31, 022402.	1.7	7
34	Quantification of the Energy Flows During Ultrasonic Wire Bonding Under Different Process Parameters. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 449-463.	4.9	6
35	Comparison of different harmonic balance based methodologies for computation of nonlinear modes of non-conservative mechanical systems. Mechanical Systems and Signal Processing, 2019, 127, 159-171.	8.0	19
36	Parameter Variation on Nonlinear Energy Sink attached to Multiple Degree of Freedom System. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900272.	0.2	0

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37	On the use of non-Gaussian models for statistical description of road micro-surface profiles. International Journal of Vehicle Systems Modelling and Testing, 2019, 13, 260.	0.1	0
38	Surface integrity of turned laser-welded hybrid shafts. Production Engineering, 2019, 13, 79-87.	2.3	2
39	Rotational Speed-Dependent Contact Formulation for Nonlinear Blade Dynamics Prediction. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	4
40	Reduced-Order Modeling of Bladed Disks Considering Small Mistuning of the Disk Sectors. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	10
41	Analysis of Contacts in Friction Damped Turbine Blades Using Dimensionless Numbers. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	6
42	Discussion of "Dynamic Modeling and Projection-Based Reduction Methods for Bladed Disks With Nonlinear Frictional and Intermittent Contact Interfaces" (Mitra, M., Epureanu, B. I., 2018, ASME Appl.)	0.0	0
43	Investigation of the joining zone of laser welded and cross wedge rolled hybrid parts. International Journal of Material Forming, 2018, 11, 829-837.	2.0	6
44	A control system for ultrasound devices utilized for inactivating E. coli in wastewater. Ultrasonics Sonochemistry, 2018, 40, 158-162.	8.2	20
45	Influence of surface form deviations on friction in mixed lubrication. Tribology International, 2018, 118, 491-499.	5.9	13
46	Capability evaluation of ultrasonic cavitation peening at different standoff distances. Ultrasonics, 2018, 84, 38-44.	3.9	23
47	Numerical analysis of intracochlear mechanical auditory stimulation using piezoelectric bending actuators. Medical and Biological Engineering and Computing, 2018, 56, 733-747.	2.8	0
48	Revealing of ultrasonic wire bonding mechanisms via metal-glass bonding. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2018, 236-237, 189-196.	3.5	10
49	Efficient structural analysis of gas turbine blades. Aircraft Engineering and Aerospace Technology, 2018, 90, 1305-1316.	1.2	4
50	Transient amplitude amplification of mistuned structures: An experimental validation. Journal of Sound and Vibration, 2018, 436, 236-252.	3.9	15
51	Numerical and Experimental Study of Shrouded Blade Dynamics Considering Variable Operating Points. , 2018, , .		3
52	Influence of Geometric Design Parameters Onto Vibratory Response and HCF Safety for Turbine Blades With Friction Damper. , 2018, , .		5
53	Laser welding of dissimilar low-alloyed steel-steel butt joints and the effects of beam position and ultrasound excitation on the microstructure. Journal of Laser Applications, 2018, 30, 032417.	1.7	6
54	Intentional Response Reduction by Harmonic Mistuning of Bladed Disks With Aerodynamic Damping. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	4

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55	Combined Airfoil and Snubber Design Optimization of Turbine Blades With Respect to Friction Damping. Journal of Turbomachinery, 2018, 140, .	1.7	1
56	A Taylor Series Expansion Approach for Nonlinear Blade Forced Response Prediction Considering Variable Rotational Speed. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	5
57	On the Interaction of Multiple Traveling Wave Modes in the Flutter Vibrations of Friction-Damped Tuned Bladed Disks. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	13
58	A review on the mechanisms of ultrasonic wedge-wedge bonding. Journal of Materials Processing Technology, 2017, 245, 241-258.	6.3	43
59	Experimental Study on Performance Enhancement of a Piezoelectric Vibration Energy Harvester by applying Self-Resonating Behavior. Energy Harvesting and Systems, 2017, 4, 131-136.	2.7	12
60	Effect of different standoff distance and driving current on transducer during ultrasonic cavitation peening. Sensors and Actuators A: Physical, 2017, 261, 274-279.	4.1	19
61	Aerodynamical and Structural Analysis of Operationally Used Turbine Blades. Procedia CIRP, 2017, 59, 77-82.	1.9	10
62	Toward understanding the self-adaptive dynamics of a harmonically forced beam with a sliding mass. Archive of Applied Mechanics, 2017, 87, 699-720.	2.2	19
63	Nodal Diameter-Dependent Modal Damping Method for Nonlinear Blade Dynamics Prediction Considering Variable Rotational Speed. , 2017, , .		3
64	Modeling of ultrasonic processes utilizing a generic software framework. IOP Conference Series: Materials Science and Engineering, 2017, 211, 012014.	0.6	0
65	Modelling friction characteristics in turbine blade vibrations using a fourier series expansion of a real friction hysteresis. Procedia Engineering, 2017, 199, 669-674.	1.2	2
66	Analysis of the wire/substrate interface during ultrasonic bonding process. , 2017, , .		1
67	Influences on the ultrasonic transmission behavior of wood based materials. , 2017, , .		1
68	Influences on the ultrasonic transmission behavior of wood based materials. , 2017, , .		0
69	A rod type linear ultrasonic motor utilizing longitudinal traveling waves: proof of concept. Smart Materials and Structures, 2017, 26, 085013.	3.5	26
70	Investigation of Snow Milling Mechanics to Optimize Winter Tire Traction. Tire Science and Technology, 2017, 45, 162-174.	0.4	4
71	Reduced Order Modeling of Mistuned Bladed Disks considering Aerodynamic Coupling and Mode Family Interaction. , 2017, , .		3
72	On the Interaction of Multiple Traveling Wave Modes in the Flutter Vibrations of Friction-Damped Tuned Bladed Disks. , 2016, , .		5

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73	Determination of optimal excitation patterns for local mechanical inner ear stimulation using a physiologically-based model. Biomedical Microdevices, 2016, 18, 36.	2.8	1
74	Historical development of IWPMA: 10 years of research on piezoelectric materials and actuators. Archive of Applied Mechanics, 2016, 86, 1693-1695.	2.2	1
75	A Self-Resonant System - Experimental Investigations of Boundary and Operating Conditions. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 253-254.	0.2	4
76	Modal interaction in ultrasonic welding block sonotrodes induced by the mistuning of the material properties. Journal of Sound and Vibration, 2016, 381, 1-13.	3.9	5
77	A Method to Reduce the Energy Localization in Mistuned Bladed Disks by Application-Specific Blade Pattern Arrangement. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	11
78	A Taylor Series Expansion Approach for Nonlinear Blade Forced Response Prediction Considering Variable Rotational Speed. , 2016, , .		3
79	FORCED RESPONSE OF SHROUDED BLADES WITH VARIABLE OPERATING POINTS. , 2016, , .		0
80	A New Test Rig for Experimental Studies of Drillstring Vibrations. SPE Drilling and Completion, 2015, 30, 119-128.	1.6	13
81	Transient amplification of maximum vibration amplitudes. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 47-48.	0.2	3
82	Frequency veering and mode degeneration of a rectangular disc. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 175-176.	0.2	0
83	Evaluation of a Finite Element Approach for Damping Determination. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 201-202.	0.2	0
84	The Vibrational Behavior of Coupled Bladed Disks with Variable Rotational Speed. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 255-256.	0.2	0
85	Transient Amplitude Amplification of Mistuned Blisks. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	1.1	13
86	A Method to Reduce the Energy Localization in Mistuned Bladed Disks by Application-Specific Blade Pattern Arrangement. , 2015, , .		1
87	Harmonic Mistuning of Blisks. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 641-642.	0.2	0
88	Model and Method for a Time-Efficient Analysis of Lateral Drillstring Dynamics. , 2015, , .		3
89	Real-Time Observation of Interface Relative Motion during Ultrasonic Wedge-Wedge Bonding Process. International Symposium on Microelectronics, 2015, 2015, 000419-000424.	0.0	3
90	Dämpfung der Störerschwingungen beim Scherschneiden. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2015, 110, 18-22.	0.3	0

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91	Comparison of Two Widely-Used Frequency-Time Domain Contact Models for the Vibration Simulation of Shrouded Turbine Blades. , 2014, , .		5
92	Dynamics of Bladed Disks With Frictional Coupling and Alternate Mistuning Pattern. , 2014, , .		2
93	On the computation of the slow dynamics of nonlinear modes of mechanical systems. Mechanical Systems and Signal Processing, 2014, 42, 71-87.	8.0	30
94	Reliability optimization of friction-damped systems using nonlinear modes. Journal of Sound and Vibration, 2014, 333, 2699-2712.	3.9	42
95	Implementation of low-kurtosis pseudo-random excitations to compensate for the effects of nonlinearity on damping estimation by the half-power method. Journal of Sound and Vibration, 2014, 333, 1011-1023.	3.9	3
96	Dynamic Behavior of a Mistuned Air Turbine: Comparison Between Simulations and Measurements. , 2014, , .		3
97	Influential Parameters on Structural Damping Values of Turbine Blades. , 2014, , .		1
98	A Framework for the Computational Dynamic Analysis of Coupled Structures Using Nonlinear Modes. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 45-53.	0.5	0
99	A high-order harmonic balance method for systems with distinct states. Journal of Sound and Vibration, 2013, 332, 5476-5488.	3.9	41
100	A method for nonlinear modal analysis and synthesis: Application to harmonically forced and self-excited mechanical systems. Journal of Sound and Vibration, 2013, 332, 6798-6814.	3.9	81
101	Tyre tread-block friction: modelling, simulation and experimental validation. Vehicle System Dynamics, 2013, 51, 1017-1026.	3.7	19
102	Improved piezoelectric switch shunt damping technique using negative capacitance. Journal of Sound and Vibration, 2013, 332, 7-16.	3.9	31
103	Vibration damping with shunted piezoceramics: Fundamentals and technical applications. Mechanical Systems and Signal Processing, 2013, 36, 36-52.	8.0	44
104	On the maximum damping performance of piezoelectric switching techniques. Journal of Intelligent Material Systems and Structures, 2013, 24, 717-728.	2.5	16
105	An ultrasonic levitation journal bearing able to control spindle center position. Mechanical Systems and Signal Processing, 2013, 36, 168-181.	8.0	57
106	Beam model for tyre tread block dynamics. International Journal of Vehicle Noise and Vibration, 2013, 9, 312.	0.1	0
107	An Adaptive Tuned Mass Damper Using Friction Bars. , 2013, , .		0
108	Reduced Order Modeling Based on Complex Nonlinear Modal Analysis and Its Application to Bladed Disks With Shroud Contact. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	1.1	38

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109	Transient amplitude behavior analysis of nonlinear power ultrasonic transducers with application to ultrasonic squeeze film levitation. Journal of Intelligent Material Systems and Structures, 2013, 24, 745-752.	2.5	3
110	A hybrid ultrasonic squeeze film and magnetic levitation actuator for machine guideways. , 2013, , .		1
111	Investigation of Alternate Mistuned Turbine Blades Non-Linear Coupled by Underplatform Dampers. , 2013, , .		5
112	Reduced Order Modeling Based on Complex Nonlinear Modal Analysis and its Application to Bladed Disks With Shroud Contact. , 2013, , .		6
113	Eddy Current Damper for Turbine Blading: Electromagnetic Finite Element Analysis and Measurement Results. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	1.1	17
114	Optimization of a passive piezoelectric damper for a viscously damped main system. , 2012, , .		1
115	Multiharmonic Analysis and Design of Shroud Friction Joints of Bladed Disks Subject to Microslip. , 2012, , .		8
116	On Blade Damping Technology Using Passive Piezoelectric Dampers. , 2012, , .		4
117	Investigations on the Amplitude-Dependent Damping Behavior of Superelastic Shape Memory Alloys. , 2012, , .		2
118	Modeling Contact Dynamics of Vanes With Adjustable Upstream Flow Angles. , 2012, , .		0
119	Modeling of a Vibration-Based Piezomagnetoelastic Energy Harvesting System by Using the Duffing Equation. , 2012, , .		1
120	Robust Design of Friction Interfaces of Bladed Disks With Respect to Parameter Uncertainties. , 2012, , .		9
121	Bandbreitensteigerung von piezoelektrischen Energy Harvesting Systemen durch MagnetkrÄfte. Automatisierungstechnik, 2012, 60, 384-391.	0.8	1
122	Alternate Mistuning of Turbine Bladings Coupled by Underplatform Dampers. , 2012, , .		0
123	Transient Resonance Passage With Respect to Friction. , 2012, , .		3
124	Autonomous vehicle front lighting systems. International Journal of Vehicle Autonomous Systems, 2012, 10, 256.	0.2	1
125	An Experimental Method for the Phase Controlled Frequency Response Measurement of Nonlinear Vibration Systems. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 253-254.	0.2	8
126	Optimization of bond transducer vibrations using active and semiactive control. Proceedings of SPIE, 2012, , .	0.8	0

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127	Modeling Aspects of Nonlinear Energy Harvesting for Increased Bandwidth. , 2012, , .		2
128	Investigation of Friction Mechanisms of Siped Tire Tread Blocks on Snowy and Icy Surfaces. Tire Science and Technology, 2012, 40, 1-24.	0.4	27
129	The Influence of Blade Properties on the Forced Response of Mistuned Bladed Disks. , 2011, , .		3
130	A standing wave acoustic levitation system for large planar objects. Archive of Applied Mechanics, 2011, 81, 123-139.	2.2	52
131	Ultrasonic-assisted machining of stone. Production Engineering, 2011, 5, 587-594.	2.3	14
132	Theoretical and Experimental Investigations of Piezoelectrically Excited Travelling Waves in Cylindrical Tubes. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 641-642.	0.2	0
133	A review: The control strategies of synchronized switching damping technique. , 2011, , .		1
134	Kinematic Model for Ultrasonic-Assisted Manufacturing of Bore Holes with Undefined Cutting Edges. Advanced Materials Research, 2011, 223, 794-803.	0.3	2
135	Optimized switching algorithm for synchronized switch damping for multimodal excitation. , 2010, , .		3
136	Eddy Current Damping: A Concept Study for Steam Turbine Blading. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	16
137	Multiharmonic Forced Response Analysis of a Turbine Blading Coupled by Nonlinear Contact Forces. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	77
138	Automated measurement system for mechanical characterization of soft tissues and phantoms. , 2010, , .		1
139	Parametric studies on the harvested energy of piezoelectric switching techniques. Smart Materials and Structures, 2010, 19, 025001.	3.5	8
140	2B14 Efficient Modeling of the Damping Performance of Piezoelectric Switching Techniques using Harmonic Balance Method. The Proceedings of the Symposium on the Motion and Vibration Control, 2010, 2010, _2B14-1_- _2B14-10_.	0.0	1
141	Prestressing Piezoelectric Actuators Using Superelastic Shape Memory Alloys. Journal of the Korean Physical Society, 2010, 57, 889-891.	0.7	2
142	2B13 Damping of cyclic bladed disks utilizing a piezoelectric switching technique. The Proceedings of the Symposium on the Motion and Vibration Control, 2010, 2010, _2B13-1_- _2B13-9_.	0.0	0
143	Design and modeling of a novel squeeze film journal bearing. , 2009, , .		0
144	Theoretical and experimental treatment of standing wave type motors contact behavior. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
145	Piezoelectric self-sensing system for tactile intraoperative brain tumor delineation in neurosurgery. , 2009, 2009, 737-40.		9
146	Experimental investigations of ultrasonic levitation in a machine tool spindle system. , 2009, , .		3
147	Piezoelectric Equivalent Circuit Models. , 2009, , 107-128.		9
148	Active and semiactive vibration damping of turbine blades with piezoceramics. , 2009, , .		8
149	Mechanical model of a mistuned 2DOF-structure coupled by viscous damping. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 237-238.	0.2	0
150	Design and experimental investigations of high power piezoelectric transducers for a novel squeeze film journal bearing. , 2009, , .		6
151	Vibration damping with piezoceramics shunted to negative capacitance networks. , 2009, , .		8
152	Modelling of shunted piezoceramic actuators with substructure techniques and application to a bladed disk model. , 2009, , .		1
153	Precise calculation of piezoelectric switching techniques for vibration damping. , 2009, , .		2
154	Ultrasonic deep hole drilling in electrolytic copper ECu 57. CIRP Annals - Manufacturing Technology, 2008, 57, 53-56.	3.6	39
155	Driving concepts for bundled ultrasonic linear motors. Journal of Electroceramics, 2008, 20, 153-158.	2.0	5
156	Piezoelectric actuator design for ultrasonically assisted deep hole drilling. Journal of Electroceramics, 2008, 20, 187-192.	2.0	7
157	Power output estimation and experimental validation for piezoelectric energy harvesting systems. Journal of Electroceramics, 2008, 20, 203-208.	2.0	33
158	Fundamental experiments as benchmark problems for modeling ultrasonic micro-impact processes. Journal of Electroceramics, 2008, 20, 209-214.	2.0	8
159	Tactile tissue characterisation by piezoelectric systems. Journal of Electroceramics, 2008, 20, 237-241.	2.0	12
160	Development of a biomedical tissue differentiation system using piezoelectric actuators. , 2008, , .		7
161	Analytical and experimental investigation of the frequency ratio and switching law for piezoelectric switching techniques. Smart Materials and Structures, 2008, 17, 035003.	3.5	22
162	Sensoren und Aktoren. , 2008, , 665-706.		0

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163	On Set-oriented Numerical Methods for Global Analysis of Non-smooth Mechanical Systems. JVC/Journal of Vibration and Control, 2007, 13, 1393-1405.	2.6	10
164	Towards vehicle trajectory planning for collision avoidance based on elastic bands. International Journal of Vehicle Autonomous Systems, 2007, 5, 28.	0.2	13
165	Design method for piezoelectric bending generators in energy harvesting systems. , 2007, , .		4
166	On Intelligent Adaptive Vehicle Front-Lighting Assistance Systems. , 2007, , .		7
167	Modelling approaches for an ultrasonic percussion drill. Journal of Sound and Vibration, 2007, 308, 405-417.	3.9	48
168	Resonant vibrating sensors for tactile tissue differentiation. Journal of Sound and Vibration, 2007, 308, 441-446.	3.9	25
169	Results of an Industry Survey on the Application of Dependability Oriented Design Methods. , 2007, , 175-184.		3
170	Model-based design of piezoelectric energy harvesting systems. , 2006, 6169, 45.		13
171	Piezoelectric transducer design via multiobjective optimization. Ultrasonics, 2006, 44, e747-e752.	3.9	26
172	The Use of Shape Memory Alloy Wires in Actuators. Solid State Phenomena, 2006, 113, 195-198.	0.3	11
173	A Methodology for Automatically Deriving Simple Electromechanical Equivalent Models from FEM-Models. Solid State Phenomena, 2006, 113, 1-6.	0.3	0
174	Self Configuration of a Novel Miniature Ultrasonic Linear Motor. Solid State Phenomena, 2006, 113, 167-172.	0.3	0
175	A system for powder transport based on piezoelectrically excited ultrasonic progressive waves. Materials Chemistry and Physics, 2005, 90, 378-380.	4.0	51
176	On Automatic Collision Avoidance Systems. , 2005, , .		17
177	The effect of tangential elasticity of the contact layer between stator and rotor in travelling wave ultrasonic motors. International Journal of Non-Linear Mechanics, 2003, 38, 143-159.	2.6	66
178	Derivation and validation of a mathematical model for traveling wave ultrasonic motors. Smart Materials and Structures, 2002, 11, 565-574.	3.5	32
179	Lifetime observer: an application of mechatronics in vehicle technology. International Journal of Vehicle Design, 2002, 28, 121.	0.3	11
180	The effect of friction reduction in presence of ultrasonic vibrations and its relevance to travelling wave ultrasonic motors. Ultrasonics, 2002, 40, 379-383.	3.9	159

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181	Sliding friction in the presence of ultrasonic oscillations: superposition of longitudinal oscillations. <i>Archive of Applied Mechanics</i> , 2001, 71, 549-554.	2.2	128
182	The Application of a Lifetime Observer in Vehicle Technology. <i>Key Engineering Materials</i> , 2001, 204-205, 153-162.	0.4	1
183	<title>Reduction of friction using piezoelectrically excited ultrasonic vibrations</title>. , 2001, 4331, 302.		20
184	Survey of the present state of the art of piezoelectric linear motors. <i>Ultrasonics</i> , 2000, 38, 37-40.	3.9	135
185	A piezoelectrically driven wire feeding system for high performance wedge-wedge-bonding machines. <i>Mechatronics</i> , 1999, 9, 757-767.	3.3	28
186	A test method to investigate the tribological behaviour of friction materials under ultrasonic fretting conditions. <i>Tribotest Journal: Tribology and Lubrication in Practice</i> , 1999, 6, 1-16.	0.7	4
187	<title>Piezoelectrical wire feeding system for micropositioning in bonding machines</title>. , 1999, , .		3
188	Theoretical and experimental studies of a piezoelectric ultrasonic linear motor with respect to damping and nonlinear material behaviour. <i>Ultrasonics</i> , 1998, 36, 103-109.	3.9	28
189	Friction and wear behaviour of polymer/steel and alumina/alumina under high-frequency fretting conditions. <i>Wear</i> , 1998, 216, 97-105.	3.1	60
190	Contact mechanics of piezoelectric ultrasonic motors. <i>Smart Materials and Structures</i> , 1998, 7, 369-381.	3.5	199
191	A piezoelectrically driven wire feeding system for high performance wedge-wedge-bonding machines. , 1998, , 147-152.		2
192	A development strategy for mechatronic systems based on functional and geometrical modelling techniques. , 1998, , 861-866.		0
193	Pantograph/Catenary Dynamics and Control. <i>Vehicle System Dynamics</i> , 1997, 28, 159-195.	3.7	161
194	Dynamics and Control of Piezoelectric Ultrasonic Motors. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1997, 30, 273-278.	0.4	0
195	Finite Element Models for the Piezoelectric Actuation in Ultrasonic Traveling Wave Motors. <i>Journal of Intelligent Material Systems and Structures</i> , 1996, 7, 157-161.	2.5	12
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