

Stefan J Rupitsch

List of Publications by Year in descending order

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59
papers

773
citations

471509

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552781

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59
all docs

59
docs citations

59
times ranked

549
citing authors

#	ARTICLE	IF	CITATIONS
1	Global load determination in linear guides based on the fusion of local rolling element loads determined from strain sensitive sensor groups. TM Technisches Messen, 2022, 89, 16-32.	0.7	0
2	Piezoelectric EMI Filter for Switched-Mode Power Supplies. IEEE Transactions on Power Electronics, 2021, 36, 6624-6643.	7.9	6
3	Modeling and Simulation Approaches for Piezoelectric Vibration Energy Harvesting Systems. IEEE Sensors Journal, 2021, 21, 12926-12939.	4.7	4
4	On the stiffness hysteresis of profiled rail guides. Tribology International, 2021, 160, 107019.	5.9	8
5	Simulation-Based Characterization of Mechanical Parameters and Thickness of Homogeneous Plates Using Guided Waves. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1898-1905.	3.0	4
6	Calculating the full leaky Lamb wave spectrum with exact fluid interaction. Journal of the Acoustical Society of America, 2019, 145, 3341-3350.	1.1	24
7	Classification of Sonar Targets in Air: A Neural Network Approach. Sensors, 2019, 19, 1176.	3.8	15
8	Implementation and Validation of a Two-Stage Energy Extraction Circuit for a Self Sustained Asset-Tracking System. Sensors, 2019, 19, 1330.	3.8	5
9	A matched model-based synthetic aperture focusing technique for acoustic microscopy. NDT and E International, 2019, 104, 51-57.	3.7	3
10	Piezoelektrisches Energy-Harvesting in niederfrequenter Anregungsumgebung mittels kontaktbasierter Frequency-Upconversion. TM Technisches Messen, 2018, 85, 275-290.	0.7	1
11	Finite element based system simulation for piezoelectric vibration energy harvesting devices. Journal of Intelligent Material Systems and Structures, 2018, 29, 1333-1347.	2.5	22
12	3D Scanning Acoustic Microscope for Investigation of Curved Structured Smart Material Compounds. Advanced Engineering Materials, 2018, 20, 1800409.	3.5	5
13	Development of Material-Integrated Actuator-Sensor Arrays for Obstacle Sensing. Advanced Engineering Materials, 2018, 20, 1800475.	3.5	6
14	Entwicklung und Optimierung eines piezoelektrischen Energy-Harvesting-Systems zur Energieversorgung eines G4terverfolgungssystems im Logistikbereich. TM Technisches Messen, 2018, 85, 645-657.	0.7	4
15	Simultaneous Ultrasonic Measurement of Thickness and Speed of Sound in Elastic Plates Using Coded Excitation Signals. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1744-1757.	3.0	19
16	Untersuchung analytischer und numerischer Modelle zur anwendungsspezifischen Dimensionierung eines Amplified Piezo Actuators. TM Technisches Messen, 2017, 84, 706-718.	0.7	6
17	Messsystem zur Ultraschallmikroskopie an gekr4mmten Strukturen. TM Technisches Messen, 2017, 84, 251-262.	0.7	3
18	Homogenization and characterization of piezoelectric stack actuators by means of the inverse method., 2016, , .		2

#	ARTICLE	IF	CITATIONS
19	Simulation-based characterization of piezoceramic materials. , 2016, , .		1
20	A model-based synthetic aperture focusing technique for acoustic microscopy. , 2016, , .		2
21	A spatially resolved modeling approach for piezoelectric composite structures based on finite elements. , 2016, , .		2
22	Determination of temperature dependences of material constants for lead-free (Na _{0.5} K _{0.5})NbO ₃ â€“Ba ₂ NaNb ₅ O ₁₅ piezoceramics by inverse method. Japanese Journal of Applied Physics, 2016, 55, 10TD02.	1.5	3
23	Inverse Methode zur Charakterisierung des mechanischen Frequenzverhaltens isotroper Werkstoffe. TM Technisches Messen, 2016, 83, 123-130.	0.7	4
24	Hybrid Seminumerical Simulation Scheme to Predict Transducer Outputs of Acoustic Microscopes. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 275-289.	3.0	5
25	Characterization of lead-free alkali niobate piezoceramics by the Inverse Method. , 2015, , .		0
26	Complete characterization of piezoceramic materials by means of two block-shaped test samples. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1403-1413.	3.0	54
27	Numerical and experimental study on the frequency tuning characteristics of a rotating piezoelectric energy harvester. , 2014, , .		3
28	Extraction of Spatial Ultrasonic Wave Packet Features by Exploiting a Modified Hough Transform. IEEE Sensors Journal, 2014, 14, 2389-2395.	4.7	5
29	Fibre-reinforced composite structures based on thermoplastic matrices with embedded piezoceramic modules. Smart Materials and Structures, 2014, 23, 025011.	3.5	12
30	Efficient numerical simulation of transducer outputs for acoustic microscopes. , 2014, , .		4
31	Efficient compensation of nonlinear transfer characteristics for piezoceramic actuators. , 2013, , .		3
32	Impedance-Based Temperature Sensing With Piezoceramic Devices. IEEE Sensors Journal, 2013, 13, 2442-2449.	4.7	25
33	Inverse scheme to identify the temperature dependence of electromechanical coupling factors for piezoceramics. , 2013, , .		2
34	Artifact reduction in non-destructive testing by means of complementary data fusion of x-ray computed tomography and ultrasonic pulse-echo testing. Measurement Science and Technology, 2013, 24, 125403.	2.6	12
35	Investigation of the Synthetic Aperture Focusing Technique resolution for heavy rotor forging ultrasonic inspection. , 2013, , .		2
36	Influence of the fabrication process on the functionality of piezoceramic patch transducers embedded in aluminum die castings. Smart Materials and Structures, 2012, 21, 115014.	3.5	18

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37	Determination of Dynamic Material Properties of Silicone Rubber Using One-Point Measurements and Finite Element Simulations. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 3031-3038.	4.7	27
38	Contactless Functionality Inspection of Flat-Panel-Display Pixels and Thin-Film Transistors by Capacitive Coupling. IEEE Transactions on Electron Devices, 2012, 59, 3411-3418.	3.0	0
39	Ultrasonic defect detection in multi-material, axis-symmetric devices with an improved synthetic aperture focusing technique (SAFT). , 2012, , .		4
40	Simultaneous determination of speed of sound and sample thickness utilizing coded excitation. , 2012, , .		5
41	A reliability study of light refractive tomography utilized for noninvasive measurement of ultrasound pressure fields. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 915-927.	3.0	12
42	A generalized Preisach approach for piezoceramic materials incorporating uniaxial compressive stress. Sensors and Actuators A: Physical, 2012, 186, 223-229.	4.1	21
43	Reliable modeling of piezoceramic materials utilized in sensors and actuators. Acta Mechanica, 2012, 223, 1809-1821.	2.1	33
44	Enhancement of the inverse method enabling the material parameter identification for piezoceramics. , 2011, , .		6
45	3D-analysis of bending-type transducers for distance measurement applications. , 2011, , .		0
46	Variation of Material Parameters for The Thickness Extensional Mode of Piezoceramic Discs in Case of Mechanical Loading. Procedia Engineering, 2011, 25, 1441-1444.	1.2	7
47	Ultrasound transducers based on ferroelectret materials. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 69-80.	2.9	40
48	A modified Preisach hysteresis operator for the modeling of temperature dependent magnetic material behavior. Journal of Applied Physics, 2011, 109, 07D338.	2.5	23
49	Modeling and measurement of creep- and rate-dependent hysteresis in ferroelectric actuators. Sensors and Actuators A: Physical, 2011, 172, 245-252.	4.1	50
50	Contactless Inspection of Flat-Panel Displays and Detector Panels by Capacitive Coupling. IEEE Transactions on Electron Devices, 2011, 58, 3453-3462.	3.0	8
51	Iteration Methods to Precisely Locate Edges of Hot Objects Using Simple Infrared-Sensing Elements. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 268-274.	4.7	3
52	Simulation based estimation of dynamic mechanical properties for viscoelastic materials used for vocal fold models. Journal of Sound and Vibration, 2011, 330, 4447-4459.	3.9	39
53	A Preisach-based hysteresis model for magnetic and ferroelectric hysteresis. Applied Physics A: Materials Science and Processing, 2010, 100, 425-430.	2.3	45
54	Identification procedure for real and imaginary material parameters of piezoceramic materials. , 2010, , .		4

#	ARTICLE	IF	CITATIONS
55	Estimation of material parameters for piezoelectric actuators using electrical and mechanical quantities. , 2009, , .		9
56	Inverse Method to estimate material parameters for piezoceramic disc actuators. Applied Physics A: Materials Science and Processing, 2009, 97, 735-740.	2.3	83
57	Estimation of the surface normal velocity of high frequency ultrasound transducers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 225-235.	3.0	18
58	Verfahren zur Erhöhung der Ärtlichen Auflörsung bei synthetisch fokussierten Ultraschalltransducern (A Method to Increase the Spatial Resolution of Synthetically Focussed) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 61		
59	Acoustic Microscopy Technique to Precisely Locate Layer Delamination. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 1429-1434.	4.7	40