

# Matthias Hunstig

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4829638/publications.pdf>

Version: 2024-02-01

27

papers

475

citations

1040056

9

h-index

1058476

14

g-index

28

all docs

28

docs citations

28

times ranked

384

citing authors

#	ARTICLE	IF	CITATIONS
1	Piezoelectric Inertia Motors—A Critical Review of History, Concepts, Design, Applications, and Perspectives. <i>Actuators</i> , 2017, 6, 7.	2.3	98
2	Frequency tuning of piezoelectric energy harvesters by magnetic force. <i>Smart Materials and Structures</i> , 2012, 21, 035019.	3.5	84
3	Stick-slip and slip-slip operation of piezoelectric inertia drives. Part I: Ideal excitation. <i>Sensors and Actuators A: Physical</i> , 2013, 200, 90-100.	4.1	78
4	Enhanced energy harvesting using multiple piezoelectric elements: Theory and experiments. <i>Sensors and Actuators A: Physical</i> , 2013, 200, 138-146.	4.1	50
5	Stick-slip and slip-slip operation of piezoelectric inertia drives—Part II: Frequency-limited excitation. <i>Sensors and Actuators A: Physical</i> , 2013, 200, 79-89.	4.1	27
6	Modelling the friction contact in an inertia motor. <i>Journal of Intelligent Material Systems and Structures</i> , 2013, 24, 1380-1391.	2.5	21
7	Analytical determination of characteristic frequencies and equivalent circuit parameters of a piezoelectric bimorph. <i>Journal of Intelligent Material Systems and Structures</i> , 2012, 23, 15-23.	2.5	20
8	High-velocity operation of piezoelectric inertia motors: experimental validation. <i>Archive of Applied Mechanics</i> , 2016, 86, 1733-1741.	2.2	14
9	Modeling of the stick-slip effect in heavy copper wire bonding to determine and reduce tool wear., 2015, , .		12
10	Using complex multi-dimensional vibration trajectories in ultrasonic bonding and welding. <i>Sensors and Actuators A: Physical</i> , 2019, 295, 653-662.	4.1	12
11	Increasing the power of piezoelectric energy harvesters by magnetic stiffening. <i>Journal of Intelligent Material Systems and Structures</i> , 2013, 24, 1332-1342.	2.5	9
12	Drive Signals for Maximizing the Velocity of Piezoelectric Inertia Motors. <i>Journal of the Korean Physical Society</i> , 2010, 57, 938-941.	0.7	9
13	Experimental and Numerical Simulation Study of Pre-deformed Heavy Copper Wire Wedge Bonds. <i>International Symposium on Microelectronics</i> , 2014, 2014, 000289-000294.	0.0	9
14	Modeling and simulation of the ultrasonic wire bonding process. , 2015, , .		7
15	Reliable Manufacturing of Heavy Copper Wire Bonds Using Online Parameter Adaptation. , 2016, , .		6
16	Numerical and statistical investigation of weld formation in a novel two-dimensional copper-copper bonding process. , 2018, , .		5
17	Experimental investigations on the impact of bond process parameters in two-dimensional ultrasonic copper bonding. , 2018, , .		4
18	Validated simulation of the ultrasonic wire bonding process. , 2016, , .		3

#	ARTICLE	IF	CITATIONS
19	Micro wear modeling in copper wire wedge bonding., 2016,,.	3	
20	Parameter Identification and Model Validation for the Piezoelectric Actuator in an Inertia Motor. Journal of the Korean Physical Society, 2010, 57, 952-954.	0.7	3
21	Intelligent Production of Wire Bonds using Multi-Objective Optimization – Insights, Opportunities and Challenges. International Symposium on Microelectronics, 2018, 2018, 000572-000577.	0.0	1
22	An efficient simulation technique for high-frequency piezoelectric inertia motors., 2012,,.	0	
23	Multi-dimensional Ultrasonic Copper Bonding – New Challenges for Tool Design. International Symposium on Microelectronics, 2017, 2017, 000438-000443.	0.0	0
24	Modellbildung für das Ultraschall-Drahtbonden. Intelligente Technische Systeme, Lösungen Aus Dem Spitzencluster It's OWL, 2019,, 17-44.	0.4	0
25	Grundlagen des Ultraschall-Drahtbondens. Intelligente Technische Systeme, Lösungen Aus Dem Spitzencluster It's OWL, 2019,, 5-15.	0.4	0
26	Mehrzieloptimierung und Verhaltensanpassung am Bondautomaten. Intelligente Technische Systeme, Lösungen Aus Dem Spitzencluster It's OWL, 2019,, 53-64.	0.4	0
27	Simulation und Validierung des Bondprozesses. Intelligente Technische Systeme, Lösungen Aus Dem Spitzencluster It's OWL, 2019,, 45-51.	0.4	0