Manabu Aoyagi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7512821/publications.pdf

Version: 2024-02-01

53	535	687363	713466
papers	citations	13	21
		h-index	g-index

53	53	53	197
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrasonic Motors Using Longitudinal and Bending Multimode Vibrators with Mode Coupling by Externally Additional Asymmetry or Internal Nonlinearity. Japanese Journal of Applied Physics, 1992, 31, 3077-3080.	1.5	46
2	Single Phase Drive Ultrasonic Motor Using LiNbO3Rectangular Vibrator. Japanese Journal of Applied Physics, 2008, 47, 4015-4020.	1.5	32
3	Examination of Sandwich-Type Multidegree-of-Freedom Spherical Ultrasonic Motor. Japanese Journal of Applied Physics, 2010, 49, 07HE24.	1.5	31
4	Dielectric Loss in a Piezoelectric Ceramic Transducer under High-Power Operation; Increase of Dielectric Loss and Its Influence on Transducer Efficiency. Japanese Journal of Applied Physics, 1993, 32, 2418-2421.	1.5	28
5	Simplified Equivalent Circuit of Ultrasonic Motor and Its Application to Estimation of Motor Characteristics. Japanese Journal of Applied Physics, 1995, 34, 2752-2755.	1.5	28
6	Ultrasonic Rotary Motor Using Longitudinal and Bending Multimode Vibrator with Mode Coupling Caused by External Additional Asymmetry. Japanese Journal of Applied Physics, 1993, 32, 4190-4193.	1.5	26
7	Examination of Disk-Type Multidegree-of-Freedom Ultrasonic Motor. Japanese Journal of Applied Physics, 2004, 43, 2884-2890.	1.5	26
8	High-Speed Thin Ultrasonic Spindle Motor and Its Application. Japanese Journal of Applied Physics, 2004, 43, 2873-2878.	1.5	25
9	Measuring Methods for Highâ€“Power Characteristics of Piezoelectric Materials. Materials Research Society Symposia Proceedings, 1994, 360, 15.	0.1	21
10	Piezoelectric Linear Motors for Driving Head Element of CD-ROM. Japanese Journal of Applied Physics, 1994, 33, 5365-5369.	1.5	19
11	Measurement of LiNbO3Rectangular Plate Under Large Vibration Velocity of the First Longitudinal and Second Flexural Modes. Japanese Journal of Applied Physics, 2008, 47, 4034-4040.	1.5	18
12	Simplified equivalent circuit of an ultrasonic motor and its applications. Ultrasonics, 1996, 34, 275-278.	3.9	15
13	Diagonally Symmetric Form Ultrasonic Motor Using LiNbO₃ Plate. Japanese Journal of Applied Physics, 2007, 46, 4698.	1.5	15
14	Novel Transfer Method Using Near-Field Acoustic Levitation and Its Application. Japanese Journal of Applied Physics, 2011, 50, 07HE29.	1.5	15
15	Examination of High-Torque Sandwich-Type Spherical Ultrasonic Motor Using with High-Power Multimode Annular Vibrating Stator. Actuators, 2018, 7, 8.	2.3	15
16	Development of rotary-type noncontact-synchronous ultrasonic motor. Japanese Journal of Applied Physics, 2019, 58, SGGD09.	1.5	13
17	Increase of holding force in near-field acoustic levitation of tabular object inserted between opposing vibration sources. Japanese Journal of Applied Physics, 2019, 58, SGGD11.	1.5	13
18	Study on spherical stator for multidegree-of-freedom ultrasonic motor. Japanese Journal of Applied Physics, 2016, 55, 07KE18.	1.5	12

#	Article	IF	Citations
19	Impedance-type equivalent circuits of the piezoelectric vibrator for applications to ultrasonic motors and actuators.. Journal of the Acoustical Society of Japan (E), 1993, 14, 235-242.	0.1	10
20	Novel Transfer Method Using Near-Field Acoustic Levitation and Its Application. Japanese Journal of Applied Physics, 2011, 50, 07HE29.	1.5	9
21	Single-Resonance Longitudinal and Torsional Vibrator Combination-Type Motor: Improvement of Motor Characteristics. Japanese Journal of Applied Physics, 1994, 33, 3075-3080.	1.5	8
22	Hybrid Ultrasonic Actuator for Force-Feedback Interface. Japanese Journal of Applied Physics, 2008, 47, 4265-4270.	1.5	8
23	Design and Characteristics of Mode-Coupling LiNbO3Ultrasonic Motor Depended on Width-to-Length Ratio of the Stator Vibrator. Japanese Journal of Applied Physics, 2010, 49, 07HE26.	1.5	8
24	Development of electromagnetic and piezoelectric hybrid actuator system. Sensors and Actuators A: Physical, 2013, 200, 155-161.	4.1	8
25	Development of a multi-drive-mode piezoelectric linear actuator with parallel-arrangement dual stator. Precision Engineering, 2022, 77, 127-140.	3.4	8
26	Rod-Type Ultrasonic Motor Using Two Degenerate Second Flexural Vibration Modes and Characteristic Consideration Using Its Equivalent Circuit Expression. Japanese Journal of Applied Physics, 1995, 34, 5292-5297.	1.5	7
27	Ultrasonic Motors Using Longitudinal and Torsional Modes of a Rod Vibrator. Japanese Journal of Applied Physics, 1990, 29, 188.	1.5	6
28	Ultrasonic Motor Using a Large-Diameter Torsional Vibrator with Slant Slits. Japanese Journal of Applied Physics, 1995, 34, 2707-2710.	1.5	6
29	Measurement of Holding Force and Transportation Force Acting on Tabular Object in Near-Field Acoustic Levitation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 1508-1514.	3.0	6
30	Stepping Drive of Self-Oscillation-Type Ultrasonic Motor. Japanese Journal of Applied Physics, 1994, 33, 5374-5377.	1.5	5
31	Transient Response Characteristics of a Same-Phase Drive-Type Ultrasonic Motor. Japanese Journal of Applied Physics, 1994, 33, 5370-5373.	1.5	5
32	Spurious-Mode Control of Same-Phase Drive-Type Ultrasonic Motor. Japanese Journal of Applied Physics, 2002, 41, 3252-3258.	1.5	5
33	Dynamic characteristic analysis of nonresonance-type ultrasonic actuator using electronic circuit simulator. Japanese Journal of Applied Physics, 2015, 54, 07HE14.	1.5	5
34	Waveform of Driving Pulse Train to Prevent Metallic Sound of Ultrasonic Motors. Japanese Journal of Applied Physics, 1993, 32, 2408-2411.	1.5	4
35	Development of a Novel Rotor-Embedded-Type Multidegree-of-Freedom Spherical Ultrasonic Motor. Journal of Robotics and Mechatronics, 2012, 24, 876-883.	1.0	4
36	Excitation of an Asymmetric Displacement without Residual Vibration and its Application to Construct a Piezoelectric Actuator. Japanese Journal of Applied Physics, 1992, 31, 257.	1.5	4

#	Article	IF	Citations
37	Study on Multidegree-of-Freedom Ultrasonic Motor Using Vibration Mode Rotation of Metal Spherical Stator. Actuators, 2022, 11, 27.	2.3	4
38	Piezoelectric actuators driven by the saw-tooth-like motion of a stator. Ultrasonics, 1996, 34, 279-282.	3.9	3
39	Development of a novel rotor-embedded-type multidegree-of-freedom spherical ultrasonic motor. , 2011, , .		3
40	Ultrasonic motor based on coupled longitudinalâ€bending vibrations of a diagonally symmetric piezoelectric ceramic plate. Electronics and Communications in Japan, 1996, 79, 60-67.	0.2	2
41	Experimental Attempts for Deep Insertion in Ultrasonically Forced Insertion Process. Japanese Journal of Applied Physics, 2011, 50, 07HE22.	1.5	2
42	Stress Analysis of Contact Surface in Ultrasonically Forced Insertion Process. Japanese Journal of Applied Physics, 2012, 51, 07GE08.	1.5	2
43	Examination of Hemispherical Shell Stator for Lightweight Spherical Ultrasonic Motor. International Journal of Automation Technology, 2022, 16, 478-487.	1.0	2
44	Self-Oscillated Ultrasonic Stepping Motor with Function of Angular Displacement Self-Correction: Nonaxisymmetric ((2,1))-Mode Thin Disk Motor. Japanese Journal of Applied Physics, 1994, 33, 3054-3057.	1.5	1
45	New designed longitudinal and torsional vibrator combination-type ultrasonic motor. Ferroelectrics, 1999, 232, 241-246.	0.6	1
46	1A2-F07 Development and application of hybrid actuator system(Robotics & Mechatronics in Hyper) Tj ETQq0 0 0 rgBT /Overlock 1 2011, 2011, _1A2-F07_1-_1A2-F07_4.	0.0	1
47	Characteristics of Ultrasonic Motor Driven by Pulse Train in Trapezoid Form. Japanese Journal of Applied Physics, 1993, 32, 4194-4197.	1.5	0
48	Finite element simulation of slant cantilever beam and approximate equation formula of its resonance frequency.. Journal of the Acoustical Society of Japan (E), 1996, 17, 55-63.	0.1	0
49	Development of 2-DOF Hybrid Actuator System. Key Engineering Materials, 2012, 523-524, 733-738.	0.4	0
50	Stress Analysis of Contact Surface in Ultrasonically Forced Insertion Process. Japanese Journal of Applied Physics, 2012, 51, 07GE08.	1.5	0
51	Prototype and estimation an ultrasonic motor using a transmission rod with a stator vibrator and a rotor at the both ends. , 2012, , .		0
52	Novel Thin-Type High-Speed Ultrasonic Motors and Gyro-Moment Motors. , 2010, , 203-218.		0
53	Inspection of Rotor and Stator Vibration of the Ultrasonic Motor Using Longitudinal and Torsional Vibrations. Japanese Journal of Applied Physics, 1992, 31, 251.	1.5	0