[1] Yuji Ishino, Takeshi Mizuno, Masaya Takasaki, and Daisuke Yamaguchi,“Stabilization of Magnetic Suspension System by Using Only a First-Order Reset Element without a Derivative Element” *Actuators 2019*, 8, 24; doi:10.3390/act8010024（2019）

[2] Md .Helal An NAHIYAN, Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Masayuki HARA, Daisuke YAMAGUCHI, “Modeling and Validation of Vertical Direction Force Estimation with a Three-Dimensional Force Measurement Instrument Based on a Zero-Compliance Mechanism” *Sensors 2019*, 19, 799;doi:10.3390/s19040799,（2019）

[3] Naoki Ishibashi, Takeshi Mizuno, Yuji Ishino, Masaya Takasaki, Daisuke Yamaguchi, “Development of a three-degree-of-freedom control magnetic suspension system using laterally control flux-path mechanisms” *Transactions of the JSME,* Vol.85, No.869, （2019）

[4] Syed Mamun R Rasid, Takeshi Mizuno, Yuji Ishino, Masaya Takasaki, Masayuki Hara, Daisuke Yamaguchi, “ Design and control of active vibration isolation system with an active dynamic vibration absorber operating as accelerometer” *Journal of Sound and Vibration*, Vol.438, pp.175-190, （2019）

[5] Takeshi MIZUNO, Yuji ISHINO, Hiroki KAWADA, Yoichiro HAYASHI, Masaya TAKASAKI, Masayuki HARA, and Daisuke YAMAGUCHI, “Force Measurement Using Zero-Compliance Mechanism” *SICE Journal of Control, Measurement, and System Integration,* Vol.11, No.4, pp341-348 (2018.6)

[6] Yoshinori NARISAWA, Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Masayuki HARA, Daisuke YAMAGUCHI, “Basic characteristics of a parallel magnetic suspension system controlling two-degree-of-freedom motions” *Transactions of the JSME,* Vol.84, No.861, （2018）

[7] Md .Helal An NAHIYAN, Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Masayuki HARA, Daisuke YAMAGUCHI, “ Development of Three-Dimensional Force Measurement Instrument Using Zero-Compliance Mechanism” *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.26,No.1, pp.172-177,（2018）

[8] Yuji Ishino, Takeshi Mizuno, Masaya Takasaki, Masayuki Hara, Daisuke Yamaguchi, Development of 3-DOF active controlled magnetic suspension system with common magnetic pole,（1st report : Fabrication of experimental apparatus）, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.26, No.1, pp.178-184（2018）

[9] Md .Helal An NAHIYAN, Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Masayuki HARA, Daisuke YAMAGUCHI, “Validation of multi-dimensional force measurement using zero-compliance mechanism,” *Journal of Advanced Mechanical Design, Systems, and Manufacturing*, Vol.12, No.2, 2018
Paper No.18-00008, DOI: 10.1299 / jamdsm. 2018jamdsm0038, (2018)

[10] Mhia Md. Zaglul Shahadat, Takeshi Mizuno, Yuji Ishino, Masaya Takasaki, “Active system with zero-compliance and zero-power characteristics,” *International Journal of Dynamics and Control,* https://doi.org/10.1007/s40435-018-0400-8, Published online: 06 February 2018

[11] Masaya Takasaki, Ryutaro Chida, Shota Chino, Satoshi Morishita, Yuji Ishino, Kota Hosaka, Yoshio Mita, Takeshi Mizuno, “Structure for Ultrasonic Suspension Gap Pressure Sensor,” *Sensors and Materials*, Vol. 29, No.6(2), pp. 805-816 (2017).

[12] Takeshi Mizuno, Yasuhiro Sakai, Masaya Takasaki, Yuji Ishino, Development of a wind-tunnel for spinning body using magnetic suspension, *Transactions of the Japan Society of Mechanical Engineers,* Vol. 83, No. 849, pp.16-00482 [DOI:10.1299/transjsme.16-00482] (2017) (in Japanese).

[13] Naoki Ishibashi, Takeshi Mizuno, Yuji Ishino, Masaya Takasaki, Daisuke Yamaguchi, Masayuki Hara, Rei Watanabe, Study on the delay of velocity detection and derivation of a correction formula in mass measurement using relay feedback, *Transactions of the Japan Society of Mechanical Engineers,* Vol. 83, No. 849, pp.16-00404 [DOI:10.1299/transjsme.16-00404] (2017) (in Japanese).

[14] Yoshinori NARISAWA, Takeshi MIZUNO, Masaya TAKASAKI, Masayuki HARA, Daisuke YAMAGUCHI and Yuji ISHINO, Realization of Two-degree-of-freedom Motions Control Using Parallel Magnetic Suspension, *Transactions of the Japan Society of Mechanical Engineers*, Vol. 83, No. 848, pp.16-00512 [DOI:10.1299/transjsme.16-00512] (2017) (in Japanese).

[15] Yuji ISHINO, Takeshi MIZUNO, Masaya TAKASAKI, Masayuki HARA, Daisuke YAMAGUCHI, Development of a Compact Axial Active Magnetic Bearing with a Function of Two-Tilt-Motion Control. *Actuators 2017*, Vol 6, No.14, DOI:10.3390/act6020014 (2017.6).

[16] Naoki ISHIBASHI, Takeshi MIZUNO, Yuji ISHINO, Daisuke YAMAGUCHI, Masayuki HARA, Masaya TAKASAKI, Kazuki YAMADA, The Proposal of Magnetic Suspension using Laterally Control Flux-Path Mechanism, *Actuators*, Vol.6, No.11, DOI: 10.3390/act6010011 (2017.3).

[17] Hiroaki SHINADA, Yuji ISHINO, Daisuke YAMAGUCHI, Masayuki HARA, Masaya TAKASAKI, Takeshi MIZUNO, Pump using ultrasonic transducer and opposing surface (1st report : observation of pump effect), *Transactions of the Japan Society of Mechanical Engineers*, Vol.83, No.845, DOI: 10.1299/transjsme.16-00278 (2017) (in Japanese).

[18] Shahajada Mahmudul Hasan, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Masayuki Hara, Daisuke Yamaguchi, Design and Fabrication of an Enlarged Wind Tunnel System for Spinning Body Using Magnetic Suspension, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.24, No.3, pp.264-270 (2016).

[19] Shahajada Mahmudul Hasan, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Electromagnetic Analysis in Magnetic Suspension Mechanism of a Wind Tunnel for Spinning Body, *International Journal of Applied Electromagnetics and Mechanics*, 52, pp.231-241, DOI 10.3233/JAE-162077, IOS Press (2016).

[20] Asief JAVED, Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Masayuki HARA, Daisuke YAMAGUCHI, Proposal of Lateral Vibration Control Based on Force Detection in Magnetic Suspension System, *International Journal of Applied Electromagnetics and Mechanics*, 52, pp.223-229, DOI 10.3233/JAE-162064, IOS Press (2016).

[21] Ryo TAMON, Masaya TAKASAKI and Takeshi MIZUNO, Surface Acoustic Wave Excitation Using a Pulse Wave, *International Journal of Automation and Technology*, Vol.10, No.4, pp.564-573 (2016.7).

[22] Masaya TAKASAKI, Hiroyuki KOTANI and Takeshi MIZUNO, "Excitation of Surface Acoustic Wave on a Glass Substrate Using a $LiNbO_3$ Piece, *International Journal of Automation and Technology*, Vol.10, No.4, pp.574-583 (2016.7).

[23] Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Controllability and Observability of Parallel Magnetic Suspension Systems, *Asian Journal of Control*, Vol.18, No. 4, pp. 1313–1327 (2016.7)

[24] Takeshi MIZUNO, Tomohiro AKIYAMA, Masaya TAKASAKI, Yuji ISHINO, Application of Frequency-Following Servocompensator to Unbalance Compensation in Gyro with Flexures Gimbal, *IEEE/ASME Transactions on Mechatronics*, Vol.21, No.2, pp.1151-1159 (2016.4)

[25] Takeshi MIZUNO, Kei TAKAHASHI, Yuji ISHINO and Masaya TAKASAKI, Novel AC Magnetic Suspension Using Magnetic Resonant Coupling, *Mechanical Engineering Journal*, Vol.3, No.2 (2016).

[26] Tomoyuki KORIKAWA, Yuji ISHINO, Masaya TAKASAKI and Takeshi MIZUNO, Mass Measurement Using the Fixed-Point of a Spring-mass System with a Dynamic Vibration Absorber and an Inertial-mass Vibrator," *Mechanical Engineering Journal*, Vol.2, No.5 (2015.10)

[27] Yuji ISHINO, Masaya TAKASAKI, Takeshi MIZUNO, Fabrication of Non-Contact Carrier System Using Solar Magnetic Suspension, *Mechanical Engineering Journal*, Vol.2, No.4, pp.15-00143 (2015.8).

[28] Keisuke IIDA, Yoshinori NARISAWA, Yuji ISHINO, Masaya TAKASAKI, and Takeshi MIZUNO, Realization of Diamagnetic Levitation of Column-shaped Graphite, *Mechanical Engineering Journal*, Vol.2, No.3, pp.1-9 (2015.6).

[29] Takeshi Mizuno, Tomohiro Akiyama, Masaya Takasaki, Yuji Ishino, Development of a Rotary Gyro with Hybrid Suspension, *Journal of the Japan Society for Precision Engineering*, Vol.81, No.4, pp.356-362 (2015) (in Japanese).

[30] Mhia Md. Zaglul Shahadat, Takeshi Mizuno, Yuji Ishino and Masaya Takasaki, Active Vibration Isolation using Negative Stiffness and Displacement Cancellation Controls: Comparison based on Vibration Isolation Performance, *Control Engineering Practice*, Vol.37, pp.55-66 (2015.4)

[31] Tomohiro Akiyama, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Kyousuke Obara, Development of a totally active magnetically suspended gyro, *Journal of Mechatronics*, vol.24, issue.8, pp.1059-1070 (2014.12).

[32] Mhia Md. Zaglul Shahadat, Takeshi Mizuno, Yuji Ishino and Masaya Takasaki, Effect of Nonlinearity Caused by Friction on a Negative Stiffness Control System, *IEEE Transactions on Control Systems Technology*, Vol.22, No.4, pp.1385-1395 (2014.7).

[33] Tomohiro Akiyama, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Application of Unbalance Compensation to a Rotary Gyro with Hybrid Suspension, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.22, No.2, pp.220-225 (2014) (in Japanese).

[34] Takeshi Mizuno, Daisuke Sekine, Masaya Takasaki, Yuji Ishino, Force Measurement Using Double Series Magnetic Suspension, *Transactions of the Japan Society of Mechanical Engineers*, Vol.80, No.814, DR0163, [DOI: 10.1299/transjsme.2014dr0163] (2014) (in Japanese).

[35] Yoshinori Narisawa, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Zero-power Control of Double Parallel Magnetic Suspension System with Parallel Connected Coils, *Transactions of the Japan Society of Mechanical Engineers*, Vol.80, No.813, DR0126, [DOI: 10.1299/transjsme.2014dr0126] (2014) (in Japanese).

[36] Yuji ISHINO, Takeshi MIZUNO, Masaya TAKASAKI, Fabrication of Power Saving Solar Magnetic Suspension System, *Journal of System Design and Dynamics*, Vol. 7 , No. 4, pp. 528-538 (2013.12).

[37] Takeshi MIZUNO, Masaya TAKASAKI, Yuji ISHINO, Multiple Magnetic Suspension Systems (1st report: Basic Concepts and Theorems), *Journal of System Design and Dynamics*, Vol.7, No.2, pp.242-253 (2013.6).

[38] Atsushi Takabayashi, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Development of Flux-Path Control Magnetic Suspension System Using Flux Concentration, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.79, No.801, pp1483-1494 (2013) (in Japanese).

[39] Yuji Ishino, Takeshi Mizuno, Masaya Takasaki, Fabrication of Power Saving Solar Magnetic Suspension System, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.79, No.800, pp1056-1065 (2013) (in Japanese).

[40] Takada, H., Tamon, R., Takasaki, M., Mizuno, T., Stylus-Based Tele-Touch System Using a Surface Acoustic Wave Tactile Display, *International Journal of Intelligent Mechatronics and Robotics*, 2(4), pp.41-57, October-December 2012 (2012.12).

[41] Kato, T., Mizuno, T., Ishino, Y., Takasaki, M., Double Electrostatic Suspension System Using Variable Capacitor, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.20, No.4, pp.675-682 (2012.12)

[42] Kato, T., Mizuno, T., Ishino, Y., Takasaki, M., Self-Sensing Control of Electrostatic Suspension Using Variable Capacitor, *Journal of System Design and Dynamics*, Vol.6, No.5, pp.729-739 (2012.12)

[43] Shahadat, Mhia M. Z., Mizuno T., Ishino Y., Takasaki M., Improvement of Transient Characteristics of Negative Stiffness Control System by Feedforward Control, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.20, No.3, pp.619-625 (2012.9)

[44] Tamon, R., Takasaki, M., Mizuno, T., Generation of Drawing Sensation by Surface Acoustic Wave Tactile Display on Graphics Tablet, *SICE Journal of Control, Measurement, and System Integration*, Vol.5, No.4, pp242-248 (2012 7)

[45] Obara, K., Mizuno, T., Ishino, Y., Takasaki, M., Application of Unbalance Compensation to Totally Active Magnetically Suspended Gyro, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.20, No.2, pp446-452 (2012.6)

[46] Nishimura, K., Mizuno, T., Takasaki, M., Ishino, Y., Realization of Voltage-controlled Double Parallel Magnetic Suspension System, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.20, No.2, pp342-348 (2012.6)

[47] Yuya Ishikawa, Mitsuru Nakamura, Masaya Takasaki, Mai Takashima, Naoto Ohtake, Takeshi Mizuno: Surface Acoustic Wave Linear Motor Using Segment-Structured Diamond-Like Carbon Films on Contact Surface (3rd Report: Method Using Sacrificial Layers for Generating S-DLC Films and Driving Experiment), *Journal of the Japan Society for Precision Engineering*, Vol.78, No.8, pp695-699 (2012) (in Japanese).

[48] Yamamoto, S., Ishino, Y., Takasaki, M., Mizuno, T., Mass Measurement Using the Fixed Point of a Spring-Mass System with a Dynamic Vibration Absorber, *Journal of System Design and Dynamics*, Vol.6, No.3, pp241-250 (2012.6)

[49] Masaya Takasaki, Takanori Endo, Takeshi Mizuno, Ultrasonic Dewatering in Minute Holes (1st Report: Observation of Dewatering Phenomenon), *Journal of the Japan Society for Precision Engineering*,Vol.78, NO.4, pp.338-342 (2012) (in Japanese).

[50] Shota Chino, Yasuhiro Kato, Yuji Ishino, Masaya Takasaki, Takeshi Mizuno, Actuation Force Characteristics of Non-contact Ultrasonic Suspension Mechanism for Minute Object (1st Report: Fabrication of Actuation Force Measurement Mechanism and Obtain of Actuation Force Characteristics), *Journal of the Japan Society for Precision Engineering*, Vol.78, No.4, pp.332-337(2012) (in Japanese).

[51] Takeshi Mizuno, Yasuhiro Sakai, Masaya Takasaki, Yuji Ishino, Development of Flux-Path Control Module with a Single Actuator, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.20, No.1, pp.294-299 (2012) (in Japanese).

[52] Nishimura, K., Mizuno, T., Ishino, Y., Takasaki, M., Sakai, Y., Two-Axis Magnetic Suspension System with Dual Variable Flux-Path Units, *Journal of System Design and Dynamics*, Vol.5, No.6, pp1226-1237 (2011).

[53] Mizuno, T., Maruyama, Y., Takasaki, M., Ishino, Y., Oshiba, Y., Series- Type Multiple Magnetic Suspension System, *Journal of System Design and Dynamics*, Vol.5, No.5, pp.1017-1029 (2011.8).

[54] Shahadat, M. Md. Z., Mizuno, T., Ishino, Y., Takasaki, M., Development of Three- Axis Active Vibration Isolator Using Displacement Cancellation Technique, *Journal of System Design and Dynamics*, Vol.5, No.5, pp1077-1093 (2011.8).

[55] Hoque, Md., E., Mizuno, T., Takasaki, M., Ishino, Y., Application of Feedforward Control to A Vibration Isolation System Using Negative Stiffness Suspension, *Journal of System Design and Dynamics*, Vol.5, No.5, pp777-788 (2011.7).

[56] Mizuno, T., Sakurada, T., Ishino, Y., Takasaki, M., Zero-Power Control of Parallel Magnetic Suspension Systems, *Journal of System Design and Dynamics*, Vol.5, No.5, pp765-776 (2011.7).

[57] Takumi Sakurada, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Multiple Magnetic Suspension Systems (2nd report: Realization of Double Parallel Magnetic Suspension), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.77, No.779, pp.2684-2694 (2011) (in Japanese).

[58] Mizuno, T., Development of Mass Measurement Devices for Zero-Gravity Experiments, *Applied Mechanics and Materials*, Vol.36, pp.21-30 (2010).

[59] Kato, Y., Mizuno, T., Takagi, H., Ishino, Y. and Takasaki, M., Experimental Study on Microassembly by Using Liquid Surface Tension, *SICE Journal of Control, Measurement, and System Integration*, SICE, JCMSI, Vol.3, No.5, pp.309-314 (2010.09).

[60] Mizuno, T., Kato, T. and Takasaki, M., Proposal and Fundamental Properties of Parallel Electrostatic Suspension Systems, *SICE Journal of Control, Measurement, and System Integration*, SICE, JCMSI, Vol.3, No.5, pp.346-351 (2010.09).

[61] Mitsuru Nakamura, Hiroyuki Kotani, Yousuke Fujii, Masaya Takasaki, Naoto Ohtake, Takeshi Mizuno, Surface Acoustic Wave Linear Motor Using Segment-Structured Diamond-Like Carbon Films on Contact Surface (2nd Report: Introduction of Segment-Structured Chromium/Diamond-Like Carbon Film), *Journal of the Japan Society for Precision Engineering*, Vol.76, No.7, pp.786-790 (2010) (in Japanese).

[62] Hoque, Md., E., Mizuno, T., Kishita, D., Takasaki, M. and Ishino, Y., Development of an Active Vibration Isolation System Using Linearized Zero-Power Control With Weight Support Springs, *Journal of Vibration and Acoustics*, Vol.132, No.4, pp. 041006-1-041006-9 (2010.08).

[63] Yutaka Maruyama, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Development of 3-DOF Active Control Type Magnetically Suspended Gyro, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.76, No.766, pp.53-59 (2010) (in Japanese).

[64] Hoque, Md., E., Mizuno, T., Ishino, Y., and Takasaki, M., A Six-Axis Hybrid Vibration Isolation System Using Active Zero-Power Control Supported by Passive Weight Support Mechanism, *Journal of Sound and Vibration*, Vol.329, Issue 17, pp.3417-3430 (2010.04).

[65] Mizuno, T., Furushima, T., Ishino, Y., and Takasaki, M., Realization of a Zero-compliance System by Using Displacement Cancellation Control, *Journal of Vibration and Control*, Vol.16, No.4, pp.585-599 (2010.04).

[66] Yuji Ishino, Takeshi Mizuno, Masaya Takasaki, Increasing the Load Capacity of Magnetic Suspension by a Stiffness Switching Control, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.76, No.762, pp.189-195 (2010) (in Japanese).

[67] Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Multiple Magnetic Suspension Systems (1st Report: Basic Concepts and Theorems), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.76, No.761, pp.76-83 (2010) (in Japanese).

[68] Tetsuya Haga, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Yasuhiro Kato, Micro-Assembly Using Liquid Surface Tension (2nd Report: Study on Working Fluids), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.76, No.761, pp.69-75 (2010) (in Japanese).

[69] Eirich, M., Ishino, Y., Takasaki, M. and Mizuno, T., Two-Dimensional Inverted Pendulum Using Repulsive Magnetic Levitation, *Journal of Automatisierungstechnik*, Vol. 58, Issue 1, pp.49-53 (2010.01).

[70] Maruyama, Y., Mizuno, T., Takasaki, M., Ishino, Y. and Kameno, H., Extension of Measurement Bandwidth in an AMB-based Gyroscopic Sensor, *Mechatronics*, Vol.19, No.8, pp.1261-1268 (2009).

[71] Kato, T., Tsukada, S., Ishino, Y., Takasaki, M., and Mizuno, T., Electrostatic Suspension Using Variable Capacitors, *Journal of System Design and Dynamics*, Vol.3, No.4, pp.617-626 (2009.07).

[72] Maruyama, Y., Mizuno, T., Takasaki, M., Ishino, Y., Kameno H., and Kubo A., Application of Rotor Unbalance Compensation to an AMB-Based Gyroscopic Sensor, *Journal of System Design and Dynamics*, Vol.3, No.4, pp.572-583 (2009.07).

[73] Yuji Ishino, Takeshi Mizuno, Masaya Takasaki, Stiffness Control by a Local Current Feedback in Magnetic Suspension Systems, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.75, No.754, pp.1763-1769 (2009) (in Japanese).

[74] Yutaka Maruyama, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Hironori Kameno, Atsushi Kubo, Study on Control System for Active Magnetic Bearing Considering Motions of Stator, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.75, No.753, pp.1389-1396 (2009) (in Japanese).

[75] Hiroyuki Kotani, Masaya Takasaki, Takeshi Mizuno, Friction Control using Surface Acoustic Wave and Its Application, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.17, No.1, pp.90-95 (2009) (in Japanese).

[76] Furutachi, M., Inaba, S., Ishino, Y., Takasaki, M. and Mizuno, T., Three-Dimensional Force Measurement and Control of a Flux-Path Control Magnetic Suspension, *Journal of System Design and Dynamics*, Vol.2, No.6, pp.1239-1249 (2008.12).

[77] Hiroyuki Kotani, Yousuke Fujii, Masaya Takasaki, Yusuke Adachi, Yuichi Aoki, Naoto Ohtake, Takeshi Mizuno, Surface Acoustic Wave Linear Motor Using Segment-Structured Diamond-Like Carbon Films on Contact Surface (1st Report: Deposition on Driving Surface and Driving Experiment), *Journal of the Japan Society for Precision Engineering*, Vol. 74, No.7, pp.724-729 (2008) (in Japanese).

[78] Kotani, H., Takasaki, M., Ishino, Y., and Mizuno, T., Ultra Low-Velocity Control of a Surface Acoustic Wave Linear Motor, *Journal of System Design and Dynamics*, Vol.2, No.2, pp.497-506 (2008.05).

[79] Munehiro Furutachi, Shunsuke Inaba, Yuji Ishino, Masaya Takasaki, Takeshi Mizuno, Study on the Basic Characteristics of Flux-Path Control Magnetic Suspension and Realization of Levitation, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.74, No.741, pp.1185-1191 (2008) (in Japanese).

[80] Hiroshi Takagi, Takeshi Mizuno, Masaya Takasaki, Yuji Ishino, Basic Study on Microassembly Using Surface Tension (1st Report: Principle and Basic Experiments), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.74, No.741, pp.1317-1321 (2008) (in Japanese).

[81] Mizuno, T., Adachi, T, Takasaki, M. and Ishino, Y., Mass Measurement System Using Relay Feedback with Hysteresis, *Journal of System Design and Dynamics*, Vol.2, No.1, pp.188-196 (2008.03).

[82] Maruyama, Y., Mizuno, T., Takasaki, M., Ishino, Y., Ishigami, T. and Kameno, H., An Application of Active Magnetic Bearing to Gyroscopic and Inertial Sensors, *Journal of System Design and Dynamics*, Vol.2, No.1, pp.155-164 (2008.03).

[83] Mizuno, T., Hirai, Y., Ishino, Y. and Takasaki, M., Flux-Path Control Magnetic Suspension Systen Using Voice Coil Motors, *Journal of System Design and Dynamics*, Vol.1, No.2, pp.147-158 (2007.05).

[84] Maruyama, Y., Takasaki, M., Kutami, T., and Mizuno, T., Application of Ultrasonic Dental Scaler for Diagnosis, *Journal of System Design and Dynamics*, Vol.1, No.2, pp.192-199 (2007.05).

[85] Mizuno, T., Takeuchi, M., Takasaki, M. and Ishino, Y., Mass Measurement Using a System Containing an On-Off Relay with Dead Zone, *Trans. of the Society of Instrument and Control Engineers*, Vol.E-5, No.1, 11/16 (2006).

[86] Masaya Takasaki, Takaaki Nara, Toshiro Higuchi, Takeshi Mizuno, A Tactile Display Using Progressive Surface Acoustic Wave, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.72, No.724, pp.3886-3891 (2006) (in Japanese).

[87] Takeshi Mizuno, Hiroshi Hoshino, Masaya Takasaki, Yuji Ishino, Proposal and Basic Experimental Study of Flux Path Control Magnetic Suspension, *Journal of the Japan Society of Applied Electromagnetics and Mechanics* ,Vol.14, No.3, pp.346-352(2006). (in Japanese).

[88] Hiroyuki Kotani, Masaya Takasaki, Yuji Ishino, Takeshi Mizuno, Velocity Control of Surface Acoustic Wave Linear Motor Using PWM, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.72, No 722, pp.3236-3241 (2006) (in Japanese).

[89] Mizuno, T., Takasaki, M., Kishita, D. and Hirakawa, K., Vibration Isolation System Combining Zero-Power Magnetic Suspension with Springs, *Control Engineering Practice*, Vol.15, No.2, pp 187-196 (2006.10).

[90] Takeshi Mizuno, Yuzo Hirai, Yuji Ishino, Masaya Takasaki, Flux Path Control Magnetic Suspension (Development of a System Using Voice Coil Motors), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.72, No.721, pp.2869-2876 (2006) (in Japanese).

[91] Yutaka Maruyama, Masaya Takasaki, Tomonori Kutami, Takeshi Mizuno, Development of Ultrasonic Dental Scaler with a Diagnosis Function, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.72, No.721, pp.2727-2731 (2006) (in Japanese).

[92] Hoque, Md. E., Mizuno, T., Takasaki, M. and Ishino, Y., A Nonlinear Compensator of Zero-Power Magnetic Suspension for Zero-Compliance to Direct Disturbance, *Trans. the Society of Instrument and Control Engineering*, Vol.42, No.9, pp.1008-1016 (2006.09)

[93] Hoque, Md. E., Takasaki, M., Ishino, Y., Suzuki, H. and Mizuno, T., An Active Microvibration Isolator with Zero-Power Controlled Magnetic Suspension Technology, *JSME International Journal*, Series C, Vol.49, No.3, pp.719-726 (2006.09).

[94] Hoque, Md. E.,Takasaki, M., Ishino, Y. and Mizuno, T., Development of a Three-Axis Active Vibration Isolator Using Zero-Power Control, *IEEE/ASME Transactions on Mechatronics*, Vol.11, No.4, pp.462-470 (2006.08).

[95] Masaya Takasaki, Hiroyuki Kotani, Takeshi Endo, Takaaki Nara, Takeshi Mizuno, Active Type Surface Acoustic Wave Tactile Display, *Transactions of the Society of Instrument and Control Engineers*, Vol.42, No.4, pp.327-333 (2006) (in Japanese).

[96] Takeshi Mizuno, Daisuke Kishita, Masaya Takasaki, Yuji Ishino, Vibration Isolation System Using Zero-Power Magnetic Suspension (2nd Report: Introduction of Weight Support Mechanism), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.72, No.715, pp.714-722 (2006) (in Japanese).

[97] Takeshi Mizuno, Daisuke Kishita, Masaya Takasaki, Yuji Ishino, PM-Biased AC Magnetic Suspension with Energy Transfer Function, *Journal of the Japan Society of Applied Electromagnetics and Mechanics*, Vol.13, No.4, pp.322-327 (2005) (in Japanese).

[98] Takeshi Mizuno, Masato Murashita, Masaya Takasaki, Yuji Ishino, Pneumatic Active Vibration Isolation Systems Using Negative Stiffness, *Transactions of the Society of Instrument and Control Engineers*, Vol.41, No.8, pp.676-684 (2005) (in Japanese).

[99] Mizuno, T., Hirasawa, Y., Takasaki, M. and Ishino, Y., Self-Sensing Magnetic Suspension Using an H-bridge Type Hysteresis Amplifier Operating in Two Quadrants, *Trans. the Society of Instrument and Control Engineering*, Vol.41, No.5, pp.459-465 (2005.5).

[100] Mizuno, T., Takeuchi, M., Takasaki, M. and Ishino, Y., Mass Measurement Using a System Containing an On-Off Relay with Dead Zone, *Trans. the Society of Instrument and Control Engineering*, Vol.41, No.1, pp.1-6 (2005.1).

[101] Mizuno, T. and Suzuki, H., Application of Frequency-Following Servocompensator to Tracking Control, *Control Engineering Practice*, Vol.13, No.2, pp.205-211 (2005.2)

[102] Mizuno, T., Toumiya, T. and Takasaki, M., Vibration Isolation System Using Negative Stiffness, *JSME International Journal*, Series C, Vol.46, No.3, pp.807-812 (2003.9).

[103] Mizuno, T. and Aizawa, M., Repulsive Magnetic Bearing Using a Piezoelectric Actuator for Stabilization, *JSME International Journal*, Series C, Vol.46, No.2, pp.378-384 (2003.6).

[104] Mizuno, T. and Aizawa, M., Repulsive Magnetic Bearing Stabilized by the Motion Control of Magnets with a Piezoelectric Actuator, *Journal of Applied Electromagnetics and Mechanics*, Vol. 13, pp.155-162 (2002.12).

[105] Mizuno, T. and Takemori, Y., A Transfer-Function Approach to the Analysis and Design of Zero-Power Controllers for Magnetic Suspension System, *Electrical Engineering in Japan*, Vol.141, No.2, pp.67-75 (2002.11).

[106] Takeshi Mizuno, Mitsunori Aizawa, Yuji Ishino, Repulsive Magnetic Bearing Using the Motion Control of Permanent Magnets by a Piezoelectric Actuator, *Transactions of the Japan Society of Mechanical Engineers, Series C*, Vol.68, No.674, pp.2941-2948 (2002) (in Japanese).

[107] Takeshi Mizuno, Ryoichi Yoshitomi, Vibration Isolation System Using Zero-Power Magnetic Suspension (1st Report: Principles and Basic Experiments), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.68, No.673pp.2599-2604 (2002) (in Japanese).

[108] Takeshi Mizuno, Shinsuke Sato, Yuji Ishino, Vibration-Type Mass Measurement System with an Undamped Dynamic Vibration Absorber, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol. 68, No.665, pp.37-43 (2002) (in Japanese).

[109] Takeshi Mizuno, Yuichiro Takemori, Analysis and Design of Zero-Power Magnetic Suspension Systems by Transfer Function Approach, *IEEJ Transactions on Industry Applications*, Vol.121, No.9, pp.933-940 (2001) (in Japanese)

[110] Mizuno, T., Analysis on the Fundamental Properties of Active Magnetic Bearing Control Systems by a Transfer Function Approach, *JSME International Journal*, Series C, Vol.44, No.2, pp.367-373(2001.6).

[111] Mizuno, T. and Araki, K., Mass Measurement Using a Dynamic Vibration Absorber under Weightless Conditions, *Transactions of the Society of Instrument and Control Engineers*, Volume E, No.1, pp. 230-237 (2001)

[112] Takeshi Mizuno, Jun Minowa, Mass Measurement Based on the Law of Conservation of Momentum (Mass Measurement System Using Electromagnetic Impulsive Force), *Transactions of the Society of Instrument and Control Engineers*, Vol.36, No.12, pp.1059-1066 (2000) (in Japanese).

[113] Mizuno, T. and Hara, Y., Active Stabilization of a Repulsive Magnetic Bearing Using the Motion Control of Permanent Magnets, *JSME International Journal*, Series C, Vol.43, No.3, pp.632-637(2000.9).

[114] Mizuno, T. and Ishino, Y., Development of a Hysteresis Amplifier with an H-bridge Drive for Self-Sensing Magnetic Suspension , *Journal of Robotics and Mechatronics*, Vol.12, No.3, pp.218-223 (2000.9).

[115] Takeshi Mizuno, Takeshi Negishi, Development of a Mass Measurement System with an Active Dynamic Vibration Absorber, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.65, No.638, pp.4019-4024 (1999) (in Japanese).

[116] Takeshi Mizuno, A Transfer Function Approach to Active Magnetic Bearing Control Systems, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.65, No.637, pp. 3507-3514 (1999) (in Japanese).

[117] Takeshi Mizuno, Takeshi Negishi, Mass Measurement Using a Dynamic Vibration Absorber, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.65, No.636, pp.3122-3128 (1999) (in Japanese).

[118] Mizuno, T., Namiki, H. and Araki, K., Counter-Interfaced Digital Control of Self-Sensing Magnetic Suspension Systems with Hysteresis Amplifiers, *JSME International Journal*, Series C, Vol.42 (1), pp.71-78 (1999).

[119] Kim Myung-Soo, Toshiro Higuchi, Takeshi Mizuno, Hiroki Hara, Development of Non-circular Fine Boring Machine with a Magnetic Bearing Spindle, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.65, No.629, pp.179-184 (1999) (in Japanese).

[120] Mizuno, T., Ishii, T. and Araki, K., Self-sensing Magnetic Suspension Using Hysteresis Amplifiers, *Control Engineering Practice*, Vol.6, No.9, pp.1133-1140 (1998).

[121] Takeshi Mizuno, Hideki Sekiguchi, Kenji Araki, Repulsive Magnetic Bearing Using Motion Control of Permanent Magnets (Stabilization in the Axial Direction), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.64, No.628, pp.4717-4722 (1998) (in Japanese).

[122] Mizuno, T. and Araki, K., Active Dynamic Vibration Absorber with Automatic Frequency-Tracking Performance, *JSME International Journal*, Series C, Vol.41 (3), pp.378-383 (1998.9).

[123] Takeshi Mizuno, Hirotaka Namiki, Kenji Araki, Counter-Interfaced Digital Control Using a Counter of Self-Sensing Magnetic Suspension with Hysteresis Amplifiers, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.64, No.618, pp.523-529 (1998) (in Japanese).

[124] Takeshi Mizuno, Kenji Araki, Active Dynamic Vibration Absorber with Automatic Frequency-Tracking Performance, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.63, No.612, pp.2616-2621 (1997) (in Japanese).

[125] Mizuno, T., Bleuler, H., Tanaka, H., Hashimoto, H., Harashima, F. and Ueyama, H., Industrial Application of Position Sensorless Active Magnetic Bearings, *Electrical Engineering in Japan*, Vol.117, No.5, pp.124-133 (1996).

[126] Mizuno, T., Araki,K. and Bleuler, H., Stability Analysis of Self-Sensing Magnetic Bearing Controllers, *IEEE Trans. on Control Systems Technology*, Vol.4, No.5, pp.572-579 (1996).

[127] Takeshi Mizuno, Kenji Araki, Mass Measurement Using a Dynamic Vibration Absorber under Weightless Condition, *Transactions of the Society of Instrument and Control Engineers*, Vol.32, No.8, pp.1145-1151 (1996) (in Japanese).

[128] Takeshi Mizuno, Toshihiro Ishii, Kenji Araki, Self-Sensing Magnetic Suspension Using Hysteresis Amplifiers, *Transactions of the Society of Instrument and Control Engineers*, Vol.32, No.7, pp.1043-1050 (1996) (in Japanese).

[129] Takeshi Mizuno, Kazuya Kitajima, Kenji Araki, Balancing Machine with Active Dynamic Vibration Absorbers (Experimental Measurements Using Periodic Learning Control), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.62. No.594, pp.510-515 (1996) (in Japanese).

[130] Takeshi Mizuno, Hannes Bleuler, Hiroaki Tanaka, Hideki Hashimoto, Fumio Harashima, Hirochika Ueyama, An Industrial Application of Position Sensorless Active Magnetic Bearings, *IEEJ Transactions on Industry Applications*, Vol.116, No.1, pp.35-41 (1996) (in Japanese).

[131] Takeshi Mizuno, Taihei Ouchi, Yuji Ishino, Kenji Araki, Repulsive Magnetic Levitation Systems Using Motion Control of Magnets, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.61, No.589, pp.3587-3592 (1995) (in Japanese).

[132] Mizuno, T. and Bleuler, H., Self-Sensing Magnetic Bearing Control System Design Using the Geometric Approach, *Control Engineering Practice*, Vol.3, No.7, pp.925-932 (1995).

[133] Mizuno, T., Moriya, M. and Araki, K., Robust Disturbance Cancellation in an Active Dynamic Vibration Absorber System, *Control Engineering Practice*, Vol.3, No.6, pp.773-781 (1995).

[134] Takeshi Mizuno, Toshihiro Ishii, Kenji Araki, Application of Phase-Locked Loops to Magnetic Suspension Systems, *IEEJ Transactions on Industry Applications*, Vol.115, No.3, pp.287-293 (1995) (in Japanese).

[135] Takeshi Mizuno, Kazuya Kitajima, Kenji Araki, Balancing Machine Using Dynamic Vibration Absorber (Measurement with an Undamped Dynamic Vibration Absorber), *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.61, No.582, pp.519-524 (1995) (in Japanese).

[136] Yiping Tang, Kenji Araki Takeshi Mizuno, Development of a Voice-Controlled Support Instrument Friendly to Nurses (2nd Report: Intelligent Actuator), *Journal of the Japan Hydraulics & Pneumatics Society*, Vol.26, No.3, pp.350-356 (1995) (in Japanese).

[137] Kenji Araki, Yiping Tang, Takeshi Mizuno, Development of a Voice-Controlled Support Instrument Friendly for Nurses (1st Report: Man-machine Interface), *Journal of the Japan Hydraulics & Pneumatics Society*, Vol.26, No.2, pp.214-220 (1995) (in Japanese).

[138] Bleuler, H., Gaehler, C., Herzog, R., Larsonneur, R., Mizuno, T., Siegwart, R. and Woo, S. J., Application of Digital Signal Processors for Industrial Magnetic Bearings, *IEEE Trans. on Control Systems Technology*, Vol.2, No.4, pp.280-289 (1994).

[139] Mizuno, T., Phase-Locked Loops for the Stabilization of Active Magnetic Suspensions, *JSME International Journal*, Series C, Vol.37 (3), pp.499-503 (1994).

[140] Takeshi Mizuno, Mitsuhiro Moriya, Kenji Araki, Design of Active Dynamic Vibration Absorber Systems with Multiple Absorption Frequencies, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.60, No.577, pp.3000-3005 (1994) (in Japanese).

[141] Mizuno, T. and Araki, K., Control System Design of a Dynamic Vibration Absorber with an Electromagnetic Servomechanism, *Mechanical Systems and Signal Processing*, Vol.7(4), pp.293-306 (1993).

[142] Toshiro Higuchi, Koukichi Ikeda, Koichi Oka, Takeshi Mizuno, Damping Control of Stepping Motors Using Feedback of Back EMF, *Journal of the Japan Society for Precision Engineering*, Vol.59, No.1, pp.83-88 (1993) (in Japanese).

[143] Mizuno, T. and Higuchi, T., Control of Magnetic Bearings Using the Observer for Unbalance, *Electrical Engineering in Japan*, Vol.112, pp.95-104 (1992).

[144] Takeshi Mizuno, Mitsuhiro Moriya, Kenji Araki, Output Regulation in an Active Dynamic Vibration Absorber System with an Electromagnetic Servomechanism, *Transactions of the Japan Society of Mechanical Engineers*, Series C, Vol.58, No.556, pp.3523-3530 (1992) (in Japanese).

[145] Toshiro Higuchi, Manabu Otsuka, Takeshi Mizuno, Tohru Ide, Applications of Periodic Learning Control in Magnetic Bearings for Suppression of Whirling Motion and Reduction of Housing Vibration, *IEEJ Transactions on Industry Applications*, Vol.111, No.11, pp.981-987 (1991) (in Japanese).

[146] Toshiro Higuchi, Koukichi Ikeda, Takeshi Mizuno, Load Torque Detection of Stepping Motors by

Using Back EMF, *Journal of the Japan Society for Precision Engineering*, Vol.57, No.6, pp.1091-1096 (1991) (in Japanese).

[147] Takeshi Mizuno, Toshiro Higuchi, Control of Magnetic Bearings Using the Observer for Unbalance, *IEEJ Transactions on Industry Applications*, Vol.110, No.8, pp.917-924 (1990) (in Japanese).

[148] Takeshi Mizuno, Masaki Wada, Makio Mizuno, Friction and Wear Test Apparatus with Electromagnetic Servo Load Mechanism, *Journal of the Japan Society for Precision Engineering*, Vol.56, No.7, pp.1292-1298 (1990) (in Japanese).

[149] Takeshi Mizuno, Kenji Araki, Design Using Output Regulation Theory and Analysis on Vibrational Characteristics of an Active Dynamic Absorber System, *Transactions of the Society of Instrument and Control Engineers*, Vol.26, No.6, pp.692-697 (1990) (in Japanese).

[150] Toshiro Higuchi, Takeshi Mizuno, Manabu Otsuka, Compensation for Mass Imbalance Using Periodic Learning Control Method in Magnetic Bearing System, *Transactions of the Institute of Systems, Control and Information Engineers*, Vol.3, No.5, pp.147-153 (1990) (in Japanese).

[151] Takeshi Mizuno, Output Regulation in Active Dynamic Vibration Absorber Systems, *Transactions of the Society of Instrument and Control Engineers*, Vol.24, No.4, pp.405-406 (1988) (in Japanese).

[152] Mizuno, T. and Higuchi, T., Error Analysis of Observer for Unbalance Forces in Magnetic Bearing System, *Electrical Engineering in Japan*, Vol.108, No.4, pp.120-125 (1988).

[153] Takeshi Mizuno, Toshiro Higuchi, Error Analysis of Observer for Unbalance Forces in Magnetic Bearing System, *IEEJ Transactions on Industry Applications*, Vol.108, No.7, pp.653-657 (1988) (in Japanese).

[154] Takeshi Mizuno, Toshiro Higuchi, Noboru Aikawa, Analysis on Response of Magnetic Bearing System to External Forces (Comparison between Optimal Regulator System and Independently Controlled System), *Journal of the Japan Society for Precision Engineering*, Vol.53, No.7, pp.1097-1103 (1987) (in Japanese).

[155] Toshiro Higuchi, Takeshi Mizuno, An Apparatus of Magnetic Bearing Composed by Units Experimental Study on Compensation for Unbalance, *Journal of the Japan Society for Precision Engineering*, Vol.53, No.6, pp.908-914 (1987) (in Japanese).

[156] Toshiro Higuchi, Takeshi Mizuno, Hideki Kawakatsu, Atsushi Horikoshi, Magnetic Suspension and Positioning by a Linear Stepping Motor, *IEEJ Transactions on Industry Applications*, Vol.107, No.1, pp.50-56 (1987) (in Japanese).

[157] Takeshi Mizuno, Toshiro Higuchi, Research on Magnetic Bearing Control Systems (Compensation for Unbalance Using Exogenous Signals Synchronized with Rotation), *Systems and Control*, Vol.30, No.8, pp.512-520 (1986) (in Japanese).

[158] Higuchi, T. and Mizuno, T., Stabilization of Permanent-Magnet Step Motor by Use of a Viscously Coupled Inertial Damper, *Bulletin of the Japan Society of precision Engineering*, Vo.20, No.4, pp.258-263 (1986).

[159] Takeshi Mizuno, Toshiro Higuchi, Compensation for Unbalance in Magnetic Bearing Systems, *Transactions of the Society of Instrument and Control Engineers*, Vol.20, No.12, pp.1095-1101 (1984) (in Japanese).

[160] Toshiro Higuchi, Takeshi Mizuno, Noboru Aikawa, Experimental Study of Magnetic Bearing Control Systems by an Instrument with Gyro Mechanism, *Journal of the Japan Society for Precision Engineering*, Vol.50, No.9, pp.1439-1444 (1984) (in Japanese).

[161] Toshiro Higuchi, Takeshi Mizuno, Analysis of Mid-frequency Resonance Phenomenon in Permanent-

Magnet Step Motors, *Journal of the Japan Society for Precision Engineering*, Vol.50, No.2, pp.389-393 (1984) (in Japanese).

[162] Takeshi Mizuno, Toshiro Higuchi, Noboru Aikawa, Control System Design for Totally Active DC-Type Magnetic Bearings (Relationship between Structures of Feedback Compensator and Dynamics of the Controlled System), *Transactions of the Society of Instrument and Control Engineers*, Vol.19, No.12, pp.1004-1010 (1983) (in Japanese).

[163] Takeshi Mizuno, Toshiro Higuchi, Stabilization of Permanent-Magnet Step Motors by Use of Viscously Coupled Inertial Dampers, *Journal of the Japan Society for Precision Engineering*, Vol.49, No.2, pp.216-221 (1983) (in Japanese).

[164] Toshiro Higuchi, Takeshi Mizuno, Control System Design for Totally Active DC-Type Magnetic Bearings (Structures of the Optimal Regulator for Systems with Gyroscopic Coupling), *Transactions of the Society of Instrument and Control Engineers*, Vol.18, No.5, pp.507-513 (1982) (in Japanese).