Publication list of Acoustics, Ultrasound and Vibration at NMIJ / AIST

【From November 2021 to September 2023】

Acoustic standards

[1] H. Takahashi, K. Hirano, K. Yamada, “Practical calibration method of airborne ultrasound measurement systems by using acoustic calibrator”, Inter-noise 2022 (2022.8)

[2] H. Takahashi, K. Yamada, R. Horiuchi, “Physical quantities of sound and expanding demands for noise measurement”, Handbook of Metrology and Application, Springer, (2023.1)

[3] H. Takahashi, “Need for international standards to evaluate airborne ultrasound emitted by high-intensity ultrasonic equipment”, Inter-noise 2023 (2023.8)

Ultrasonic standards

[1] Y. Chiba, S. Umemura, M. Yoshioka, Improvement of extrapolating frequency response of hydrophone sensitivity using numerical simulation that assumes materials and construction of hydrophone for measuring instantaneous acoustic pressure of diagnostic ultrasound, Jpn. J. Appl. Phys. 61, p. 066502 (2022)

[2] T. Uchida, Ultrasonic power measurement using radiation force balance method with absorbing target for high ultrasonic power, The 43rd Symposium on Ultrasonic Electronics, 1Pb2-4 (2022.11)

Vibration and acceleration standards

[1] W. Kokuyama, T. Shimoda, H. Nozato, “Primary accelerometer calibration with two-axis automatic positioning stage”, Measurement **204**, 112044 (2022).

[2] T. Shimoda, W. Kokuyama, H. Nozato, “Traceable calibration of a broadband seismometer down to 5 mHz”, Measurement Science and Technology **33**, 125021 (2022).

[3] T. Shimoda, W. Kokuyama, H. Nozato, “Precise sinusoidal signal extraction from noisy waveform in vibration calibration”, Metrologia **59**, 035010 (2022).

[4] T. Shimoda, W. Kokuyama, H. Nozato, “Primary microvibration standards down to 10−3 m s−2 at low frequency”, Measurement Science and Technology **34**, 095003 (2023).