

Select Publications of NIST in Acoustics and Acceleration: 2016-2021

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J. R. Pratt, S. Schlamming, F. Seifert and D. B. Newell, “Verification of an *in situ* calibrated optomechanical accelerometer for use as a strong ground motion seismic reference”, *Metrologia*, Vol. 58, 055005, (2021). doi: 10.1088/1681-7575/ac1402

M. Gaitan, I. Lopez and J. Geist, “Reduction of calibration comparison uncertainty due to mounting for 3-axis accelerometers using the intrinsic properties model”, *Metrologia*, Vol 58, 035006, (2021). doi: 10.1088/1681-7575/abeccf

F. Zhou, Y. Bao, R. Madugani, D. A. Long, J. J. Gorman, and T. W. LeBrun,” Broadband thermomechanically limited sensing with an optomechanical accelerometer”, *Optica*, Vol. 8, pp. 350-356, (2021). doi: 10.1364/optica.413117

D. Long, B. Reschovsky, F. Zhou, Y. Bao, T. LeBrun and J. Gorman, “Electro-optic frequency combs for rapid interrogation in cavity optomechanics”, *Optics Letters*, Vol. 46, pp 645-648, (2021). doi:10.1364/OL.405299

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M. Afridi, J. Geist and M. Gaitan, “Shock measurements based on pendulum excitation and laser Doppler velocimetry: primary calibration by SI-traceable distance measurements”, *Journal of Research of the National Institute of Standards and Technology*, Vol. 125, pp 1-13, (2020). doi: 10.6028/jres.125.011

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J. D. Rezac, A. Dienstfrey, N. Vlajic, A. Chijioke and P. D. Hale, “Generalized source-conditions and uncertainty bounds for deconvolution problems”, *Journal of Physics: Conference Series*, 1065, 212025 (2018).

J. Geist, M. Y. Afridi, C. D. McGray and M. Gaitan, “Gravity-based characterization of three-axis accelerometers in terms of intrinsic accelerometer parameters”, *Journal of Research of National Institute of Standards and Technology*, Vol. 122, (2017). doi: 10.6028/jres.122.032

R. P. Wagner and S. E. Fick, “Pressure reciprocity calibration of a MEMS microphone”, *Journal of the Acoustical Society of America*, Vol. 142, No. 3, pp. EL251-EL257, (2017). doi: 10.1121/1.5000326

B. F. Payne, R. A. Allen and C. E. Hood,” Improvements in accelerometer calibration at NIST using digital vibrometry”, *Proceedings of the 87th Shock and Vibration Symposium, New Orleans, LA, US, October 2016*. (2017).

Y. Bao, F. Guzmán Cervantes, A. Balijepalli, John R. Lawall, J. M. Taylor, T. W. LeBrun and J. Gorman, "An optomechanical accelerometer with a high-finesse hemispherical optical cavity", *IEEE International Symposium on Inertial Sensors and Systems*, (2016). doi: 10.1109/ISISS.2016.7435556

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