

National Research Council Canada

Publications from October 2023 to October 2025:

1. Stephan, M., Bouchard, A., Hodges, T., Green, R., Koukoulas, T. and Wu, L., "Long-term aging study of a silicon nitride nanomechanical resonator", IEEE Sensors, Volume 25, Issue: 13, pp 24377-24386, 2025.
2. Doyon-D'Amour, F., Stalder, C., Hodges, T., Stephan, M., Wu, L., Koukoulas, T., Leahy, S. and St-Gelais, R., "Vibration Sensitivity of One-Port and Two-Port MEMS Microphones", IEEE Sensors, 24 (18), pp 28625 – 28633, 2024.
3. Koukoulas, T., Wu, L., Hodges, T., Montesdeoca Hof, I., Bracho Maganda, Q., Gonzalez, M. and St-Gelais, R., "Overview on the effects of accelerometer characteristics and optical interferometer configurations for low frequency vibration calibration", Proceedings of the 31st International Congress on Sound and Vibration, South Korea, 2025.
4. Wu, L., Montesdeoca Hof, I., Koukoulas, T., Hodges, T. and St-Gelais, R., "A transfer standard ultrasound transducer", Proceedings of the 31st International Congress on Sound and Vibration, South Korea, 2025.
5. Wu, L., Koukoulas, T., Green, R., Parks, H., Hodges, T. and St-Gelais, R., "Accelerometer self-noise measurements using local earth gravity", Proceedings of the 31st International Congress on Sound and Vibration, South Korea, 2025.
6. Hodges, T., Koukoulas, T., Wu, L. and St-Gelais, R., "Optical assessment of acoustic pressures based on approximately circular dimensional geometric interference", Proceedings of the 31st International Congress on Sound and Vibration, South Korea, 2025.
7. Koukoulas, T., Cho, W.-H., Saba, F., Paesante, D., Schiavi, A., Durando, G., Prato, A. and Wu, L., "Cross-comparison of the optical and acoustical calibration methods for microphones based on microelectromechanical system technologies", Proceedings of Inter-Noise 2024, Nantes, France, 2024.
8. Hodges, T., Koukoulas, T., St-Gelais, R., Wu, L., Doyon-D'Amour, F. and Stephan, M., "On the optical efficiency of collecting scattered radiation or telescopically imaging the measurement area in acoustic pressure evaluations", Proceedings of Inter-Noise 2024, Nantes, France, 2024.
9. Koukoulas, T., Wu, L., Hodges, T., St-Gelais, R., Doyon-D'Amour, F. and Stephan, M., "Optical interferometry implementation considerations for sinusoidal low frequency accelerometer measurements and calibrations", Proceedings of Inter-Noise 2024, Nantes, France, 2024.

10. Hodges, T., Wu, L., Koukoulas, T., Doyon-D'Amour, F., Stephan, M. St-Gelais, R.,
"On the acceptance limits for short-term level fluctuation of sound calibrators",
Proceedings of Inter-Noise 2024, Nantes, France, 2024.