

National Research Council Canada

Publications 2022 – 2023

1. Bouchard, A., Hodges, T., Stephan, M., Wu, L., Koukoulas, T., Green, R. and St-Gelais, R., "Localized thermal gradients on-chip by radiative cooling of silicon nitride nanomechanical resonators", *Applied Thermal Engineering*, 229, 120561, 2023.
2. Wu, L. and Koukoulas, T., "A precision sound pressure level measurement system", *Proceedings of Inter-Noise 2023, Japan*, 2023.
3. Wu, L. and Koukoulas, T., "On the test method for short-term level fluctuation of sound calibrators", *Proceedings of Inter-Noise 2023, Japan*, 2023.
4. Hanes, P., "Towards a revised international standard for personal sound exposure meters," *Proceedings of Inter-Noise 2023, Japan*, 2023.
5. Wu, L., Koukoulas, T. and Green, R., "Calibration of charge amplifiers using metrological grade analog-to-digital converters", *Proceedings of the 28th International Congress on Sound and Vibration, Czech Republic*, 2023.
6. Stephan, M., Bouchard, A., Hodges, T., Wu, L., Koukoulas, T., Green, R. and St-Gelais, R., "135 days of aging measurement on a silicon nitride nanomechanical resonator", *Proceedings of Frontiers of Nanomechanical Systems, The Netherlands*, 2023.
7. Koukoulas, T., "The acoustic Pa and traceability to fundamental constants", *International Journal of Acoustics and Vibration*, 27 (4), pp 324-325, 2022.
8. Wu, L. and Green, R., "A fast measurement system using time-sharing method," *Proceedings of the 24th International Congress on Acoustics, 24–28 October, 2022*.
9. Koukoulas, T., Munro, K., Cho, W.-H., Bouchard, A., Nelanuthala, S., El-Sayed, M., St-Gelais, R., Wu, L., Green, R., Hodges, T. and Stephan, M., "Measurement considerations and challenges on infrasound sensing using a combined acoustic wave and optical approach", *Proceedings of the 28th International Congress on Sound and Vibration, Singapore*, 2022.
10. He, L.-B., Feng, X.-J., Koukoulas, T., Zhang, Z. and Yang, P., "System considerations in the optical measurement of free-field sound pressure by forward scattering collection configuration", *Proceedings of the 28th International Congress on Sound and Vibration, Singapore*, 2022.
11. Wu, L., Koukoulas, T. and Green, R., "A transfer standard accelerometer", *Proceedings of the 28th International Congress on Sound and Vibration, Singapore*, 2022.
12. Bouchard, A., Hodges, T., Stephan, M., Wu, L., Koukoulas, T., Green, R. and St-Gelais, R., "Radiative cooling of a silicon nitride nanomechanical resonator", *Proceedings of Photonics North 2022, Niagara Falls, Canada*, 2022.
13. Hodges, T., Wu, L., Mu, G., Snell, N., Bouchard, A., Stephan, M., Huang, H., Koukoulas, T., Green, R. and St-Gelais, R., "Characterization of mass-loaded silicon nitride on-chip resonators for traceable sensing of low amplitude acceleration", *Proceedings of 2022 IEEE International Symposium on Inertial Sensors and Systems, Avignon, France*, 2022.