Supplementary Information

Line-scanning Brillouin microscopy for rapid non-invasive mechanical imaging

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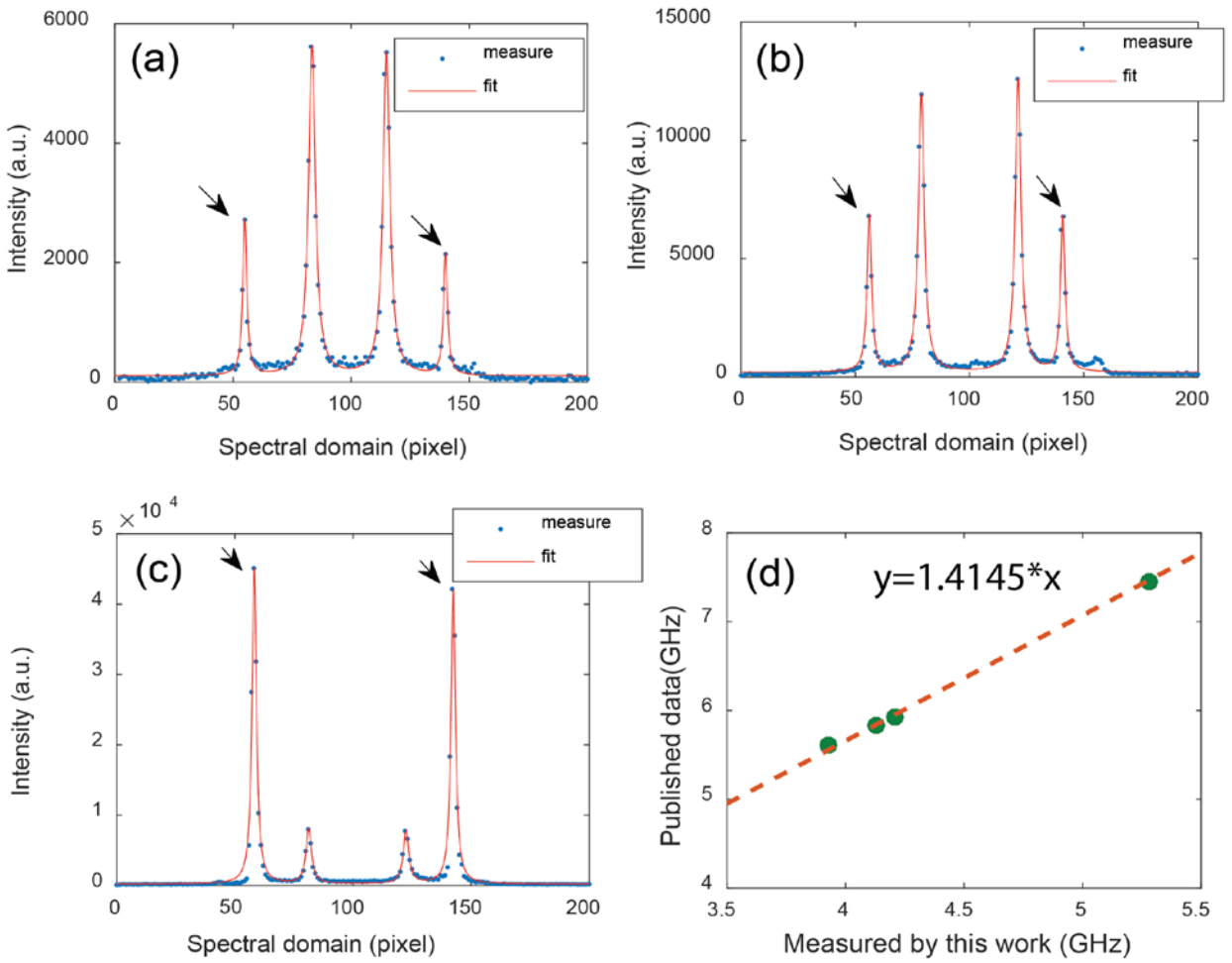

Supplementary Figure S1. Measured Brillouin frequency shifts of (a) deionized water, (b) ethanol, and (c) acetone by line-scanning Brillouin microscopy are 5.28 GHz, 4.13 GHz, and 4.21 GHz, respectively. The arrows indicate the Rayleigh peaks; the peaks in between Rayleigh signals are Brillouin peaks. We compared these results (plus methanol from main text) with published data[1-4] measured at 180-degree geometry, and showed an excellent correlation between published data and our measurements (R =0.99). The linear relationship with slope of $\sqrt{2}$ is due to the expected difference of scattering geometries (i.e., 180-degree vs 90-degree).

Reference

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3. Iglesias, M. et al. Thermodynamic Properties of the Ternary Mixture Acetone +Methanol + Ethanol at 298.15 K. *J. Chem. Eng. Data*. **43**, 776-780 (1998).
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