

GHz Ultrasonic and Brillouin scattering in a Diamond Anvils Cell

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Advances in GHz ultrasonic technology have made it possible to make elastic wave measurements in a diamond anvils cell (DAC). This new technique is a powerful method to explore fundamental problems in earth physics and material science because of the faculties of the DAC to withstand extreme conditions. Combining GHz ultrasonic, Brillouin scattering method, and DAC, we can investigate elastic properties of mantle minerals at the corresponding pressure and temperature condition at the deep mantle.

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