

FIGURE S1. Crystal structure of (a) topaz-F and (b) topaz-OH depicted as a polyhedral model. Figures were created with a free software VESTA (Momma and Izumi 2011) by using structural parameters determined by Ulian and Valdrè (2017).

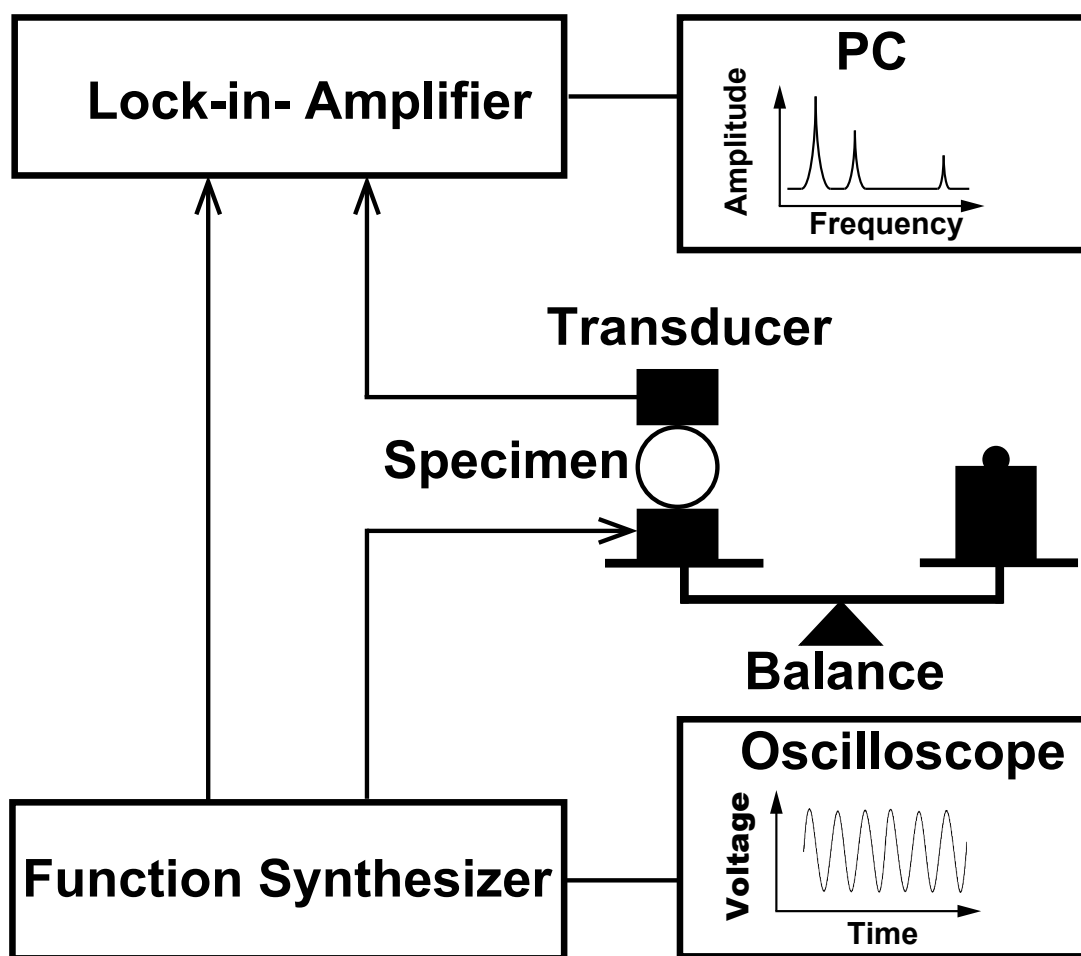


FIGURE S2. A schematic diagram of the measurement system.

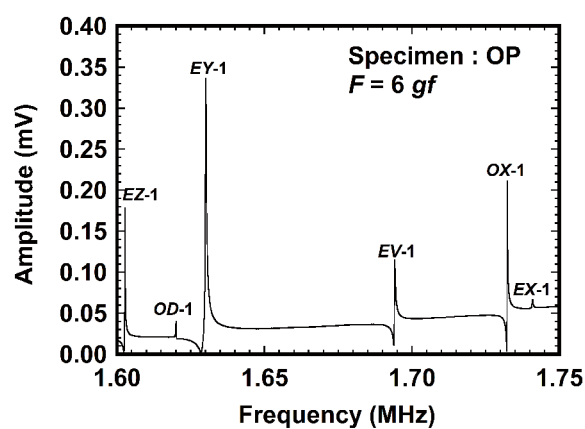


FIGURE S3. A typical resonance spectrum of the specimen OP for the specimen holding force of 6 gf. The vibration modes are explained in Table S2.

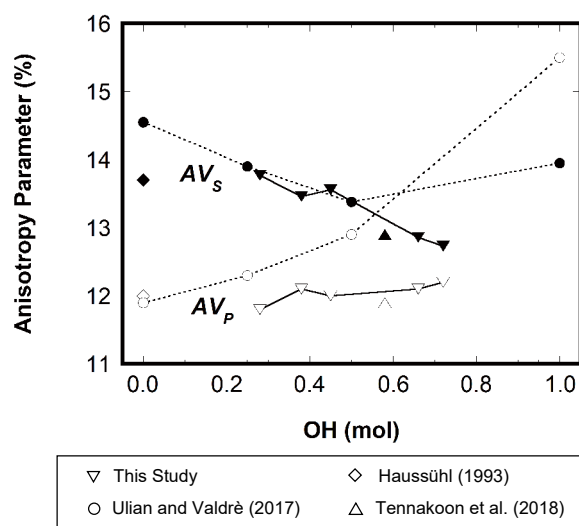


FIGURE S4. Anisotropy parameters, AV_p and AV_s are shown as a function of OH molar content. The values reported in Tennakoon et al. (2018) and those calculated from the reported elastic constants (Haussühl 1993; Ulian and Valdrè 2017) are also shown for comparison. The open and solid symbols are for AV_p and AV_s , respectively.