Density of $NaAlSi_2O_6$ Melt at High Pressure and Temperature Measured by In-Situ X-ray Microtomography

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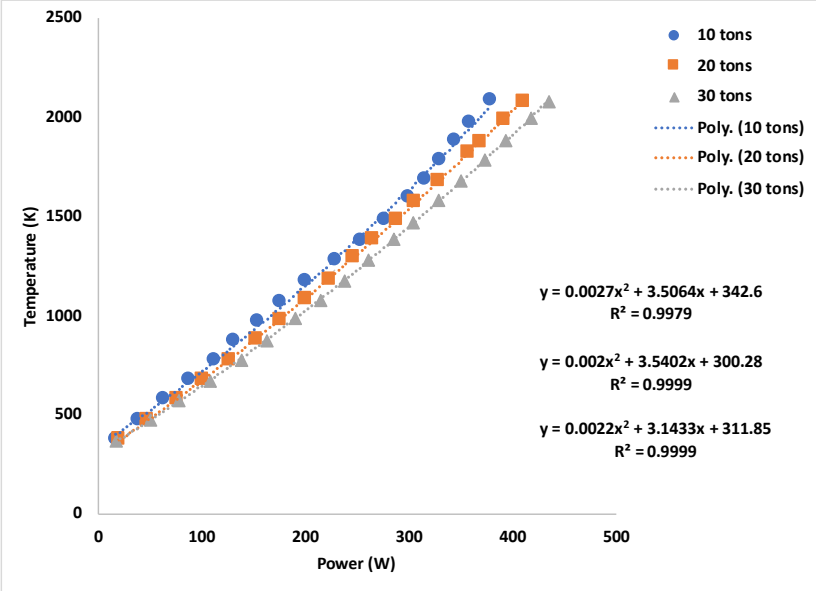

Figure S1. Temperature-power relationships calibrated at different loads for the PE cell assembly used for tomographic measurements on silicate melts.

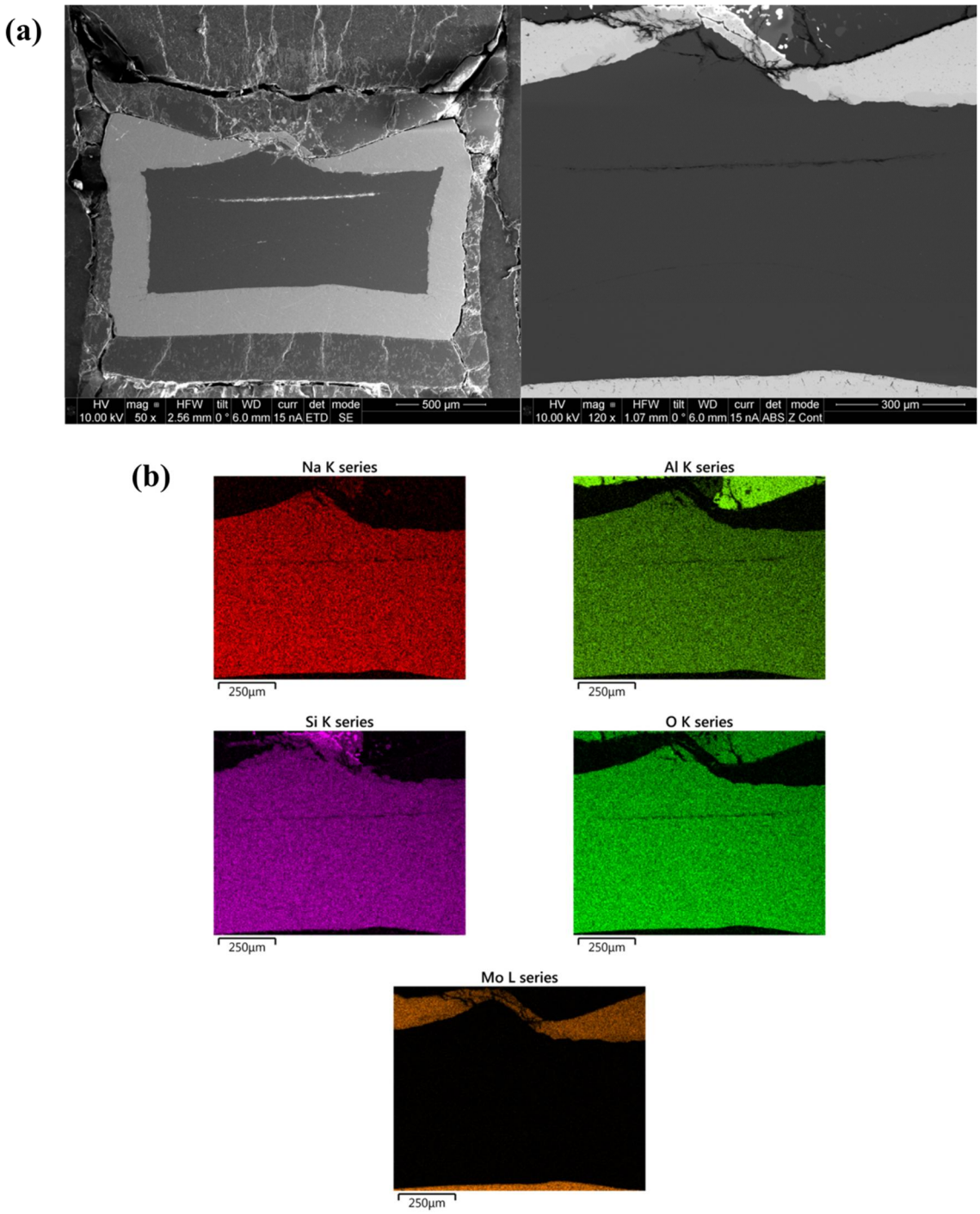

Figure S2. (**a**) Secondary electron (SE) image (left) and backscattered electron (BSE) image (right) of the quenched sample. (**b**) Composition mapping of the quenched sample.

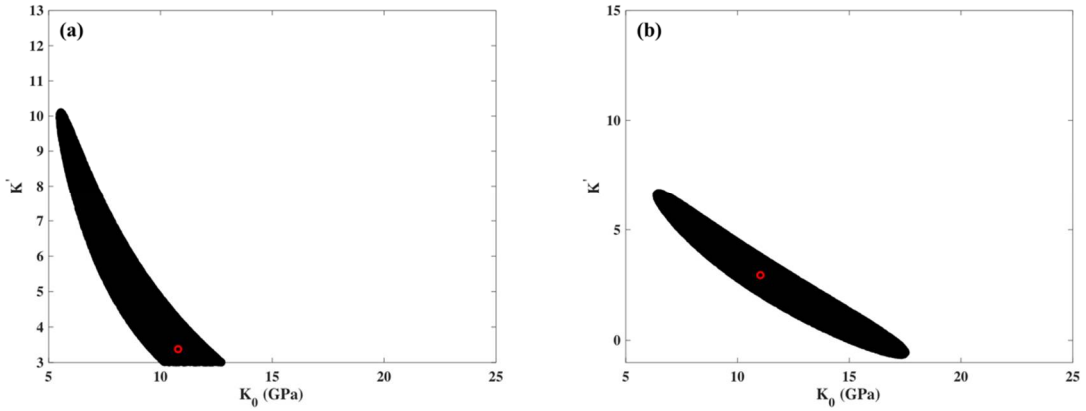

Figure S3. (**a**) Correlations between fitted K_0 and K' using Birch-Murnaghan equation of state (EOS) in the parameter space of 5 to 25 GPa for K_0 and 3 to 13 for K'. Birch-Murnaghan EOS fails at $K' < 3$. See discussions in the main text. (**b**) Correlations between fitted K_0 and K' using Murnaghan EOS in the parameter spaces of 5 to 25 GPa for K_0 and −1 to 15 for K'. Red circles indicate the best-fit values.

Table S1. Compositions of the quenched sample measured by EDS (atomic %).

	At%
Si	19.31
Na	9.67
Al	10.41
O	60.61
Mo	0