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Supporting Information

High-temperature, high-pressure hydrothermal synthesis, crystal structure, and solid state NMR Spectroscopy of a lead borosilicate with boron-silicon mixing: $Pb_6B_2Si_8O_{25}$

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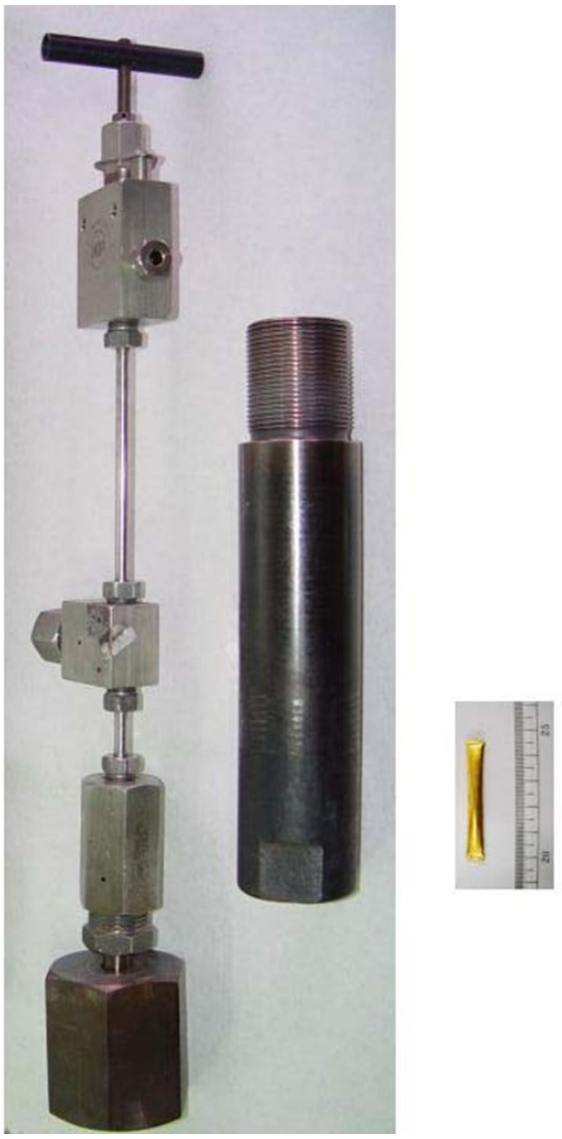
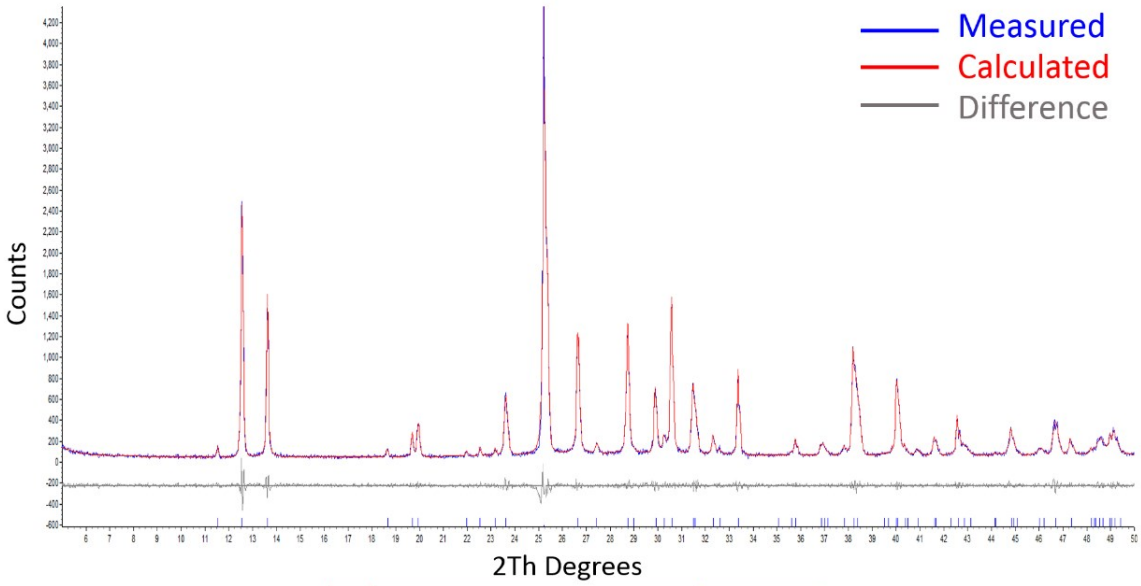
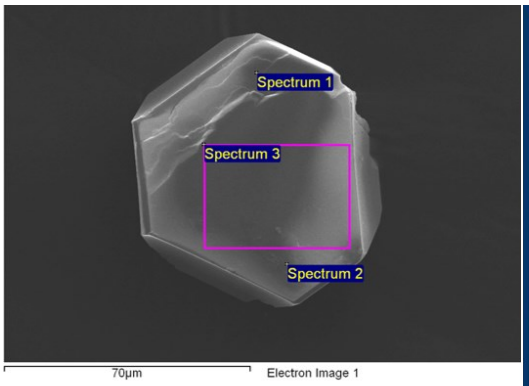


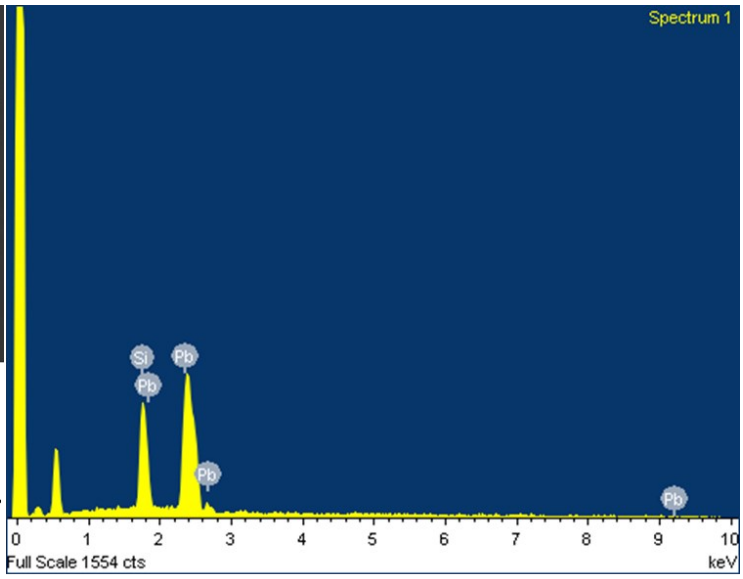
Fig. S1. The Tuttle cold-cone seal autoclave with an internal volume of 28 cm^3 (Leco Company, TemPress Research) and a sealed gold ampoule used in this research.



		Value
	GOF	1.35
	Rexp	7.52
	Rwp	10.18
	Rp	7.08
	Rexp-dash	6.58
	Rwp-dash	8.91
	Rp-dash	6.40
	Weighted Durbin Watson	1.56

Fig. S2. Pawley fit of the powder diffraction data to the structure of $Pb_6B_2Si_8O_{25}$.





Processing option : All elements analysed (Normalised)

Spectrum	In stats.	Si	Pb
Spectrum 1	Yes	62.39	37.61
Spectrum 2	Yes	62.68	37.32
Spectrum 3	Yes	63.12	36.88
Mean		62.73	37.27
Std. deviation		0.37	0.37
Max.		63.12	37.61
Min.		62.39	36.88

All results in atomic%

Figure S3. Energy dispersive X-ray spectroscopy analysis on a crystal of $Pb_6B_2Si_8O_{25}$.

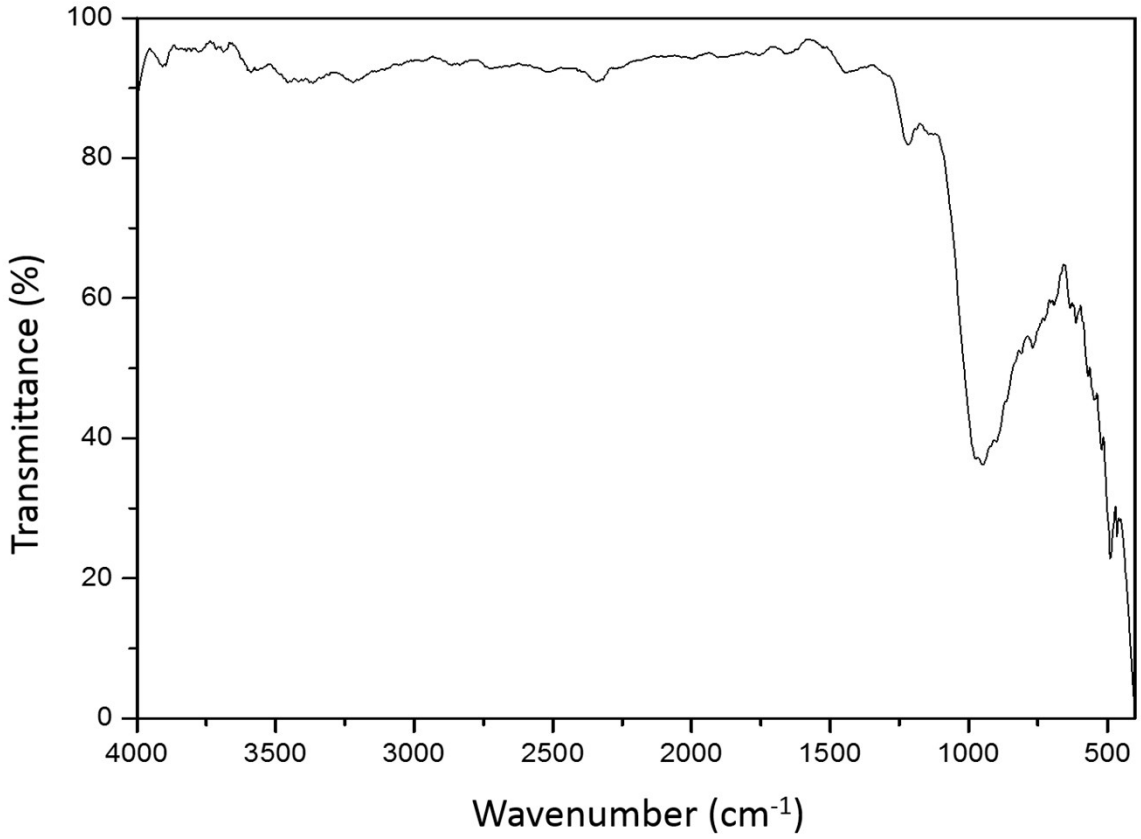


Fig. S4. The infrared spectrum of $Pb_6B_2Si_8O_{25}$ (KBr method).

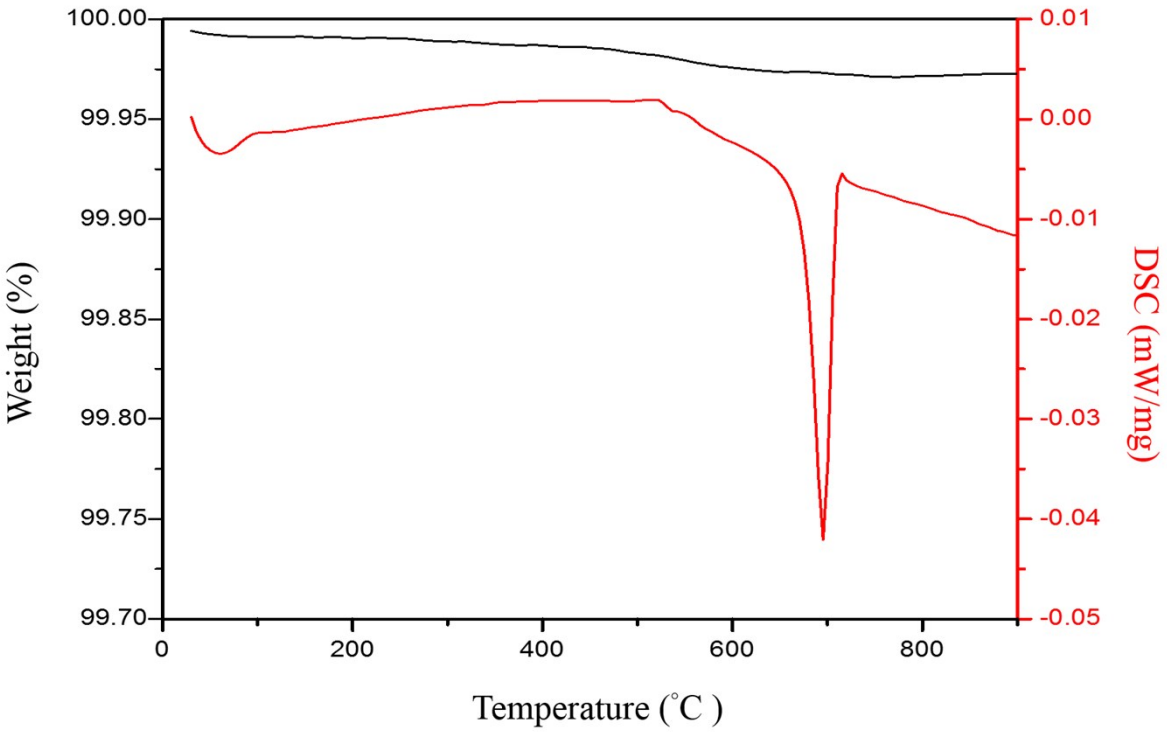


Fig. S5. TGA and DSC data for $Pb_6B_2Si_8O_{25}$. The sample was heated from 30 to 900 °C at 5 °C/min under flowing argon.