

Supporting Information

**Pressure–Temperature Driven Phase Transition and Optoelectronic Improvement
in Lead-Free Hybrid Perovskite MASnI₃**

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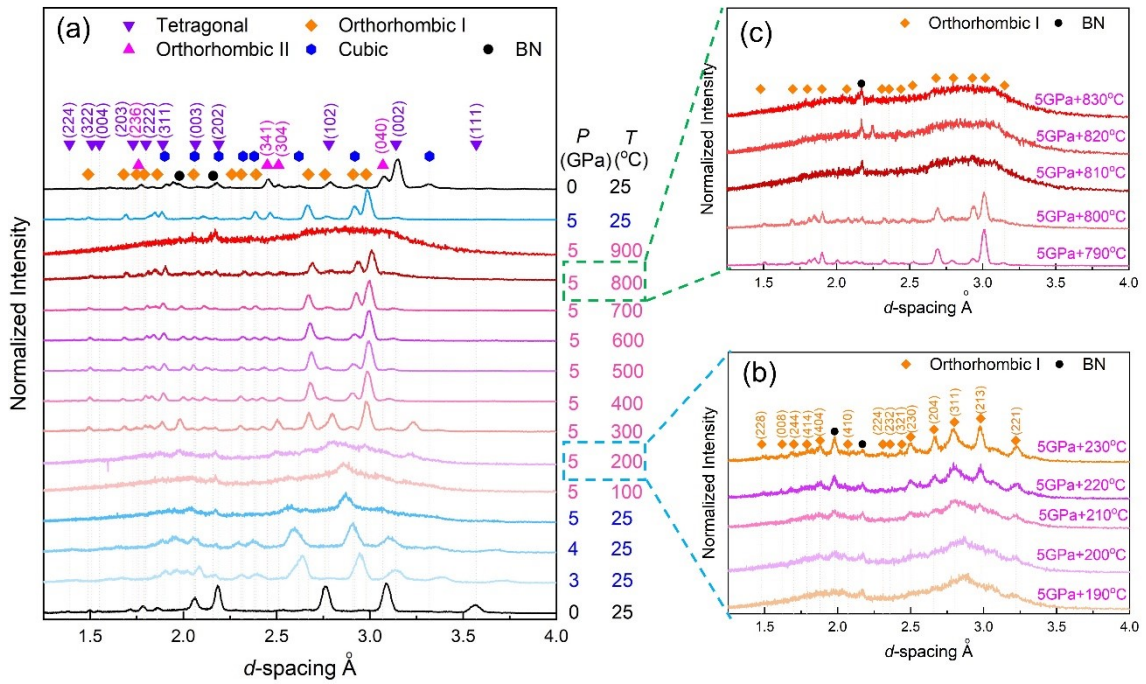


Fig. S1 X-ray profiles of MASnI_3 under processing under high-pressure and high-temperature conditions. *In situ* X-ray acquisition was performed under applied pressure to 5 GPa, during heating to 900 °C and after cooling to room temperature. X-ray profiles before loading and after loading are also included.

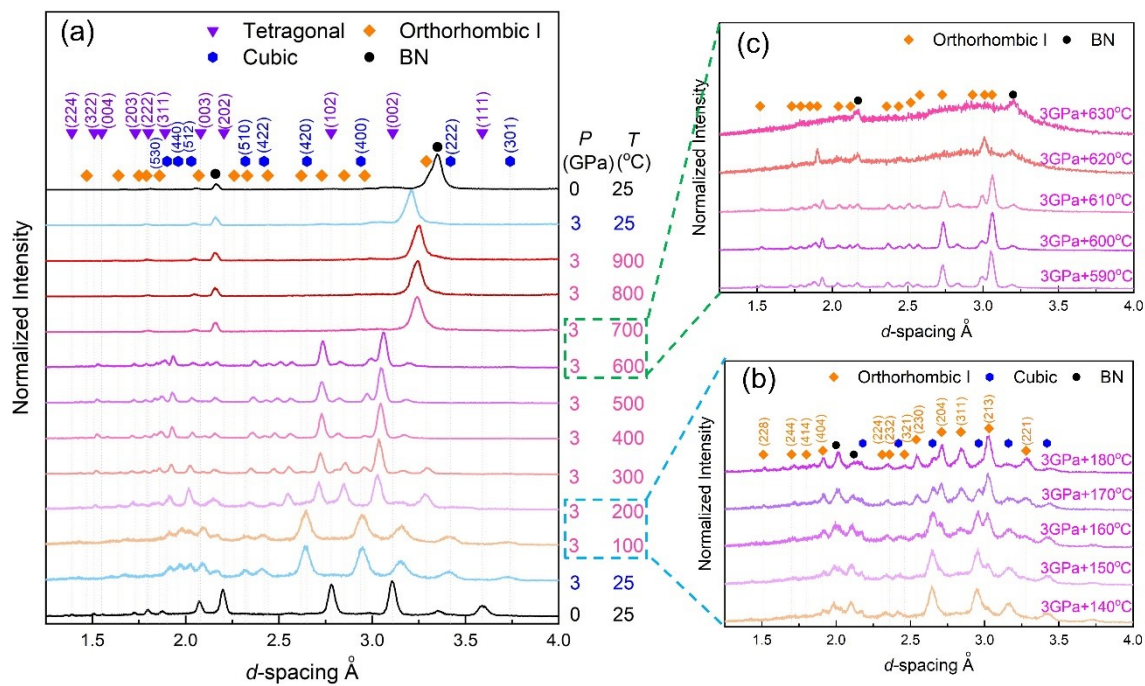


Fig. S2 X-ray profiles of MASnI_3 under processing under high-pressure and high-temperature conditions. *In situ* X-ray acquisition was performed under applied pressure to 3 GPa, during heating to 900 °C and after cooling to room temperature. X-ray profiles before loading and after loading are also included.

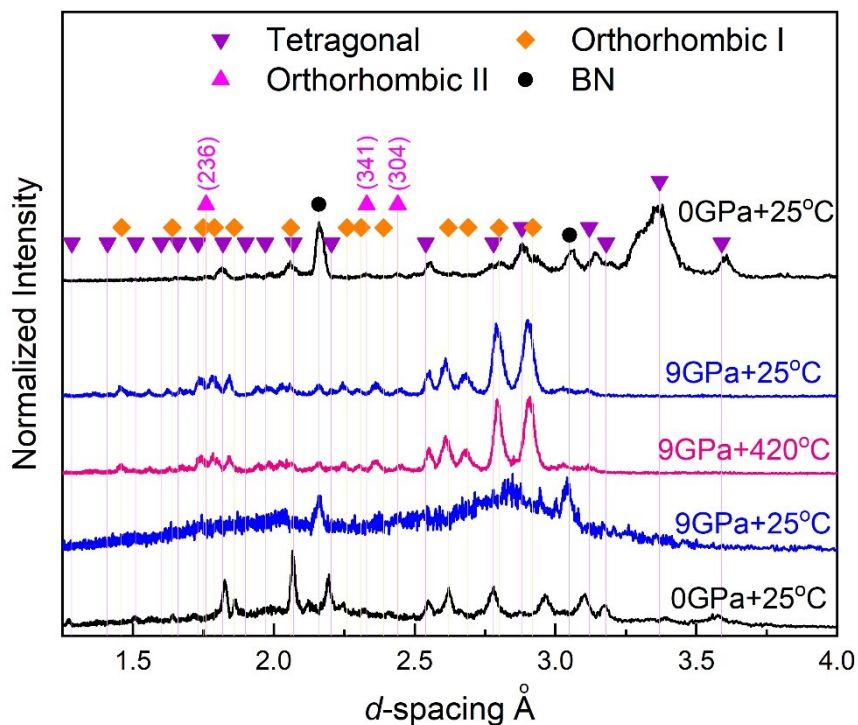


Fig. S3 X-ray profiles of MASnI₃ under processing under high-pressure and high-temperature conditions. *In situ* X-ray acquisition was performed under applied pressure to 9 GPa, during heating to 420 °C and after cooling to room temperature. X-ray profiles before loading and after loading are also included.