## **Supplementary Information**

## Bulk crystal growth and characterization of non-centrosymmetric Single crystal CaTa<sub>4</sub>O<sub>11</sub>

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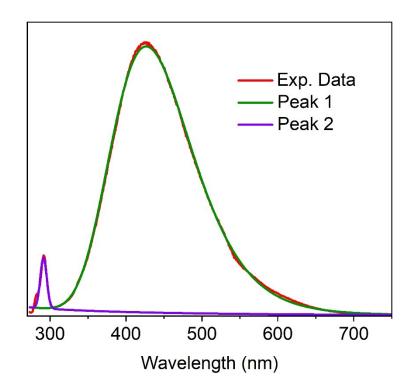


Fig. S1 The fitted PL emission spectrum of  $CaTa_4O_{11}$  single crystals.