

## Supporting Information

### Mixed-Valent Ce Disrupts Magnetic Ordering in $\text{CeFe}_2\text{Ga}_8$

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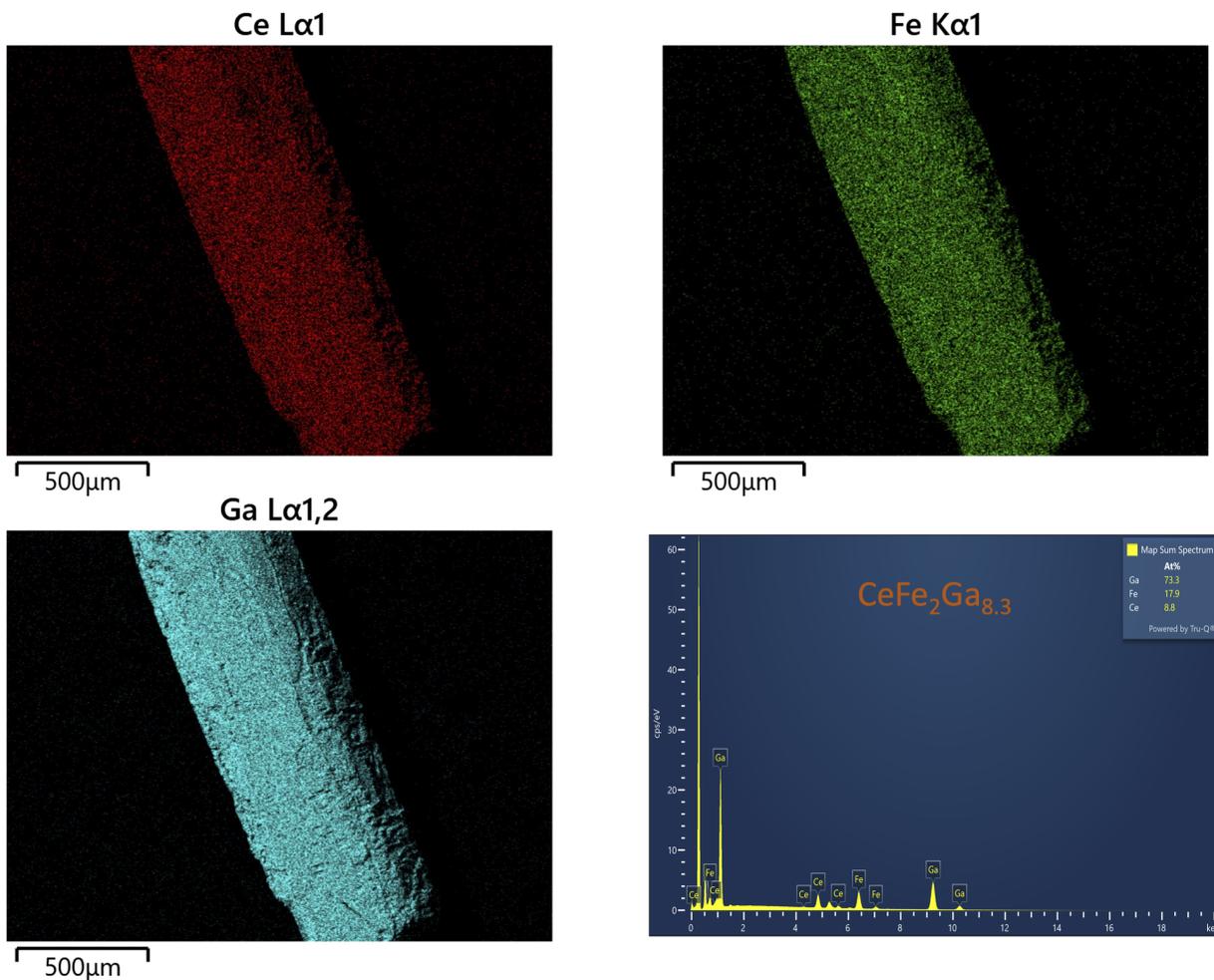
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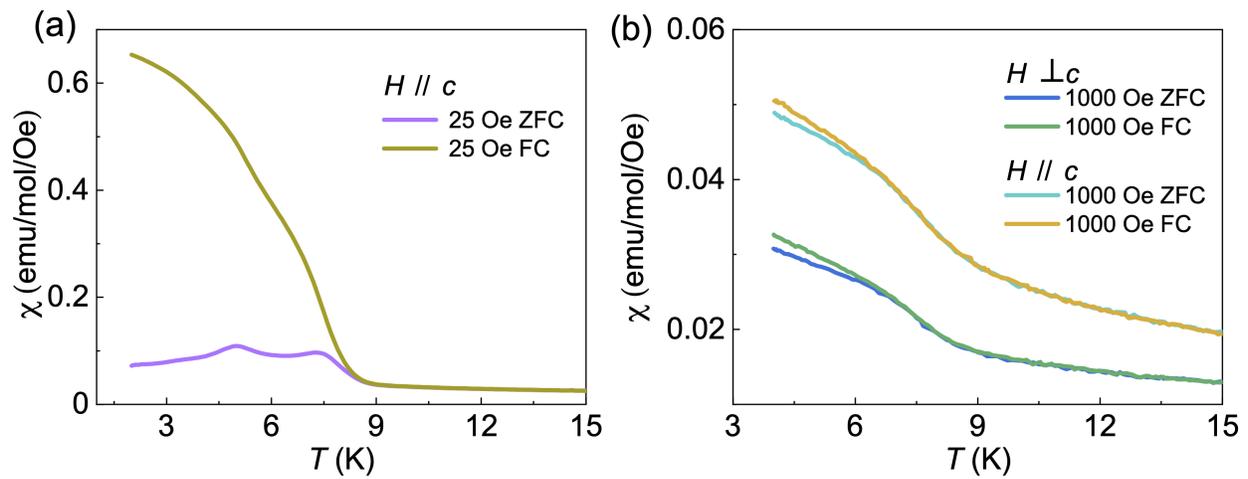
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# 1 Energy Dispersive Spectroscopy (EDS) of $\text{CeFe}_2\text{Ga}_8$



**Figure S1.**EDS analysis of  $\text{CeFe}_2\text{Ga}_8$  single crystal: elemental mapping showing homogeneous distribution of Ce (red), Fe (green), and Ga (cyan) across the crystal surface, with corresponding EDX spectrum showing characteristic peaks for all three elements. The compositional analysis yields  $\text{CeFe}_2\text{Ga}_{8.3}$ , confirming the expected stoichiometry.

## 2 ZFC-FC measurements of $\text{CeFe}_2\text{Ga}_8$ at 25 and 1000 Oe



**Figure S2.** Magnetic susceptibility measurements at 25 and 1000 Oe, highlighting the ZFC-FC divergence at both fields.