

Rietveld Refinement of the Crystal Structure of the Novel Compound $\text{Ir}_4\text{Ga}_{11}$

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The binary Ir-Ga system is rich in phases, several with large unit cells and complex structures. The crystal structure of the novel compound $\text{Ir}_4\text{Ga}_{11}$ has been determined from high resolution synchrotron powder diffraction data from the ID31 beamline at ESRF in Grenoble. The space group is *Imam* with $a = 12.80562(4)$ Å, $b = 9.25303(3)$ Å and $c = 8.02187(3)$ Å.

Keywords: intermetallics compounds crystal structure, Rietveld structural refinement, synchrotron powder diffraction