

**MS13-2-16  $\text{Li}_2\text{IrO}_3$  and  $\text{K}_x\text{Li}_{2-x}\text{IrO}_3$  - (re)investigating magnetism-chemistry relationships in layered honeycomb iridates**

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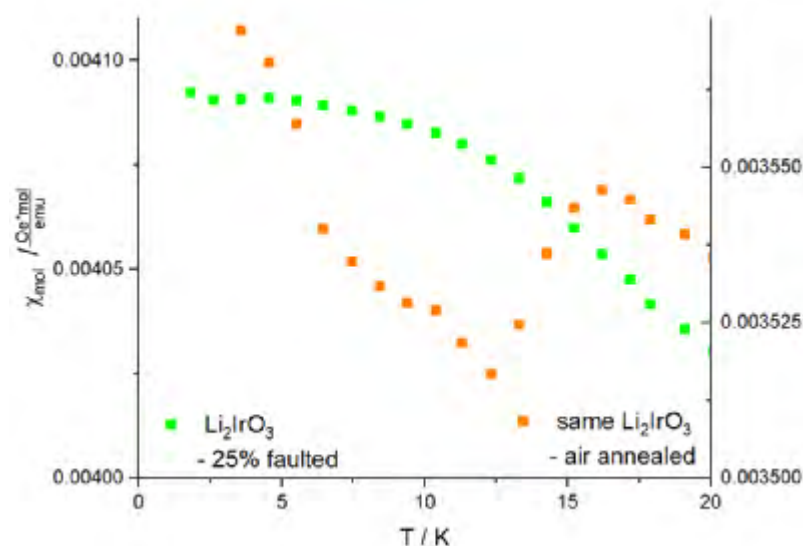
**Abstract**

The group I iridates –  $\text{A}_2\text{IrO}_3$  – are one class of exotic magnets (specifically quantum spin liquid candidates following what’s called the Kitaev model). Just like the other materials, these iridates suffer from innate defects, which in the alpha-polymorph of the Li-based compound show up most typically in the form of stacking faults. We have synthesised a range of samples with different stacking fault levels, under different atmospheres and doped with potassium - all of these show differing magnetic features.

**References**

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Influence of atmosphere on mag. susceptibility



Effect of K-doping on  $\text{Li}_2\text{IrO}_3$

