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Title:	Evolution of magnetism in Ru doped Na <sub>2</sub> IrO <sub>3</sub>
Authors:	Mehlawat, K. (/jspui/browse?type=author&value=Mehlawat%2C+K.) Singh, Yogesh (/jspui/browse?type=author&value=Singh%2C+Yogesh)
Keywords:	Synthesized Honeycomb Crystalline samples Iridate material
Issue Date:	2016
Publisher:	American Institute of Physics
Citation:	AIP Conference Proceedings, 1731.
Abstract:	We synthesized Ru doped single crystalline samples of the honeycomb iridate material Na <sub>2</sub> IrO <sub>3</sub> and studied their magnetic properties using AC and DC magnetic susceptibility. The parent compound Na <sub>2</sub> IrO <sub>3</sub> is a spin orbit driven Mott insulator with long range order below T <sub>N</sub> = 15 K. We find that even smallest substitution of Ru changes the antiferromagnetic long range order state to a spin glass like state indicating the fragile nature of magnetism in Na <sub>2</sub> IrO <sub>3</sub> . We track the freezing temperature T <sub>g</sub> as a function of Ru concentration and the shift of T <sub>g</sub> with frequency f of the ac modulation in AC susceptibility which is found to be very different from canonical spin-glasses like Cu-Mn.
URI:	<a href="https://aip.scitation.org/doi/10.1063/1.4948202">https://aip.scitation.org/doi/10.1063/1.4948202</a> ( <a href="https://aip.scitation.org/doi/10.1063/1.4948202">https://aip.scitation.org/doi/10.1063/1.4948202</a> ) <a href="http://hdl.handle.net/123456789/2604">http://hdl.handle.net/123456789/2604</a> ( <a href="http://hdl.handle.net/123456789/2604">http://hdl.handle.net/123456789/2604</a> )
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