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Title:	Magnetic excitation spectrum of Na ₂ IrO ₃ probed with resonant inelastic x-ray scattering
Authors:	Singh, Yogesh (/jspui/browse?type=author&value=Singh%2C+Yogesh)
Keywords:	Excitations Energy x-ray scattering
Issue Date:	2013
Publisher:	American Physical Society
Citation:	Physical Review B - Condensed Matter and Materials Physics, 87(22).
Abstract:	The low energy excitations in Na ₂ IrO ₃ have been investigated using resonant inelastic x-ray scattering (RIXS). A magnetic excitation branch can be resolved, whose dispersion reaches a maximum energy of about 35 meV at the Γ point. The momentum dependence of the excitation energy is much larger along the Γ - X direction compared to that along the Γ - Y direction. The observed dispersion relation is consistent with a recent theoretical prediction based on the Heisenberg-Kitaev model. At high temperatures, we find large contributions from lattice vibrational modes to our RIXS spectra, suggesting that a strong electron-lattice coupling is present in Na ₂ IrO ₃ .
Description:	Only IISERM authors are available in the record.
URI:	https://journals.aps.org/prb/abstract/10.1103/PhysRevB.87.220407 (https://journals.aps.org/prb/abstract/10.1103/PhysRevB.87.220407) http://hdl.handle.net/123456789/2882 (http://hdl.handle.net/123456789/2882)
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