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^{17}O and ^{59}Co NMR Studies of Strongly Correlated Electrons in Na_xCoO_2

TAKASHI IMAI, McMaster University

The anomalous electronic properties of triangular-lattice system Na_xCoO_2 has been attracting strong interest over the last several years since the discovery of superconductivity in hydrated $Na_{1/3}CoO_2{\cdot}_{4/3}[H_2O]$. The electronic phase diagram of these materials is quite rich, as the physical properties depend very strongly on Na concentration. Here we report our ^{17}O and ^{59}Co NMR studies of the local electronic properties and low-frequency spin dynamics in these materials for a variety of Na concentrations [1,2].

[1] F.L. Ning, T. Imai, B.W. Statt, and F.C. Chou, PRL 93 (2004) 237201.
[2] F.L. Ning and T. Imai, PRL 94 (2005) 227004.