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A comparative RIXS study on Co2+ systems DIETER SCHMEISSER, BTU Cottbus, JONATHAN DENLINGER, Advanced Light Source — We use RIXS at the ALS BL8 to investigate systems in which Co is preferentially in the Co2+ state. The systems include Co:ZnO, Co2O3, Co doped in polypyrrole, Co-phthalocyanine films, and CoO. For all these systems we report on the XAS and RIXS data at the Co2p edge. We separate the inelastic Raman losses due to d-d excitations from valence band induced excitations. We identify and quantify the relative contributions of the d7 HS and LS states and d8L charge transfer states.

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