Superconductivity and Magnetism in the Ruthenocuprates

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Abstract - The ruthenocuprates are high temperature superconductors, which have raised a substantial interest due to the simultaneous presence of the transition metal magnetism and superconductivity. The compounds represent a complex and experimentally challenging research arena, with interesting recent experimental developments. Without striving for completeness, the author reviews some key properties of RuSr₂RECu₂O₈, RuSr₂RE_{2-x}Ce_xCu₂O_{10-y}, and of few derivative compounds of the ruthenocuprate family.

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