A Series of 3D Porous Sodium-Lanthanide-Oxalate Framework

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A series of isomorphous lanthanide metal organic framework, [NaLn(μ-OH)(ox)1.5]·2H2O [Ln = Gd, Tb, Dy, Er, ox = oxalate] were obtained under hydrothermal conditions. All compounds crystallize in the tetragonal I4/m space group and present 3D open frameworks consist of [Ln4(μ3-OH)4] cluster units and Na(I) ions linked by bridging ox ligands. Furthermore, the photoluminescent properties of compound Tb3+ and magnetic properties of compounds Gd3+ and Dy3+ were also investigated.

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