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To study the structural and magnetic properties of calcium titanate CaTiO_3 nanoparticles

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Calcium titanate with perovskite structure material is one of the best materials because of its magnetic properties. The structure and composition of calcium titanate sample is synthesized by sol-gel method. CaTiO_3 sample is prepared by sol-gel method exhibited the excellent magnetic properties as compare to samples prepared by hydrothermal and solid state method. The calcium titanate sample was characterized by X-ray Diffractometer, Vibrating sample magnetometer, Scanning electron microscope, Fourier transform infrared spectrometer, Raman spectra. The samples prepared by this technique were orthorhombic calcium titanate and OH functional group was detected. Due to its good magnetic properties CaTiO_3 used in devices, LEDs, biosensor and other electronics.

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