**Abstract**

Interesting properties of perovskite materials such as very stable in structure, Ferroelecticity and high dielectric constant are attracted to study for electronic device applications. In this work, we have considered Strontium Manganate (SrMnO3) and Strontium Titanate (SrTiO3) structures to tune the perovskite in the Micro Strip Patch Antenna Application. Various Synthetic Techniques were used to prepare the material. In the current work, we synthesized SrMnO3 and SrTiO3 using combustion method by taking Sr(NO3)3, (C4H6MnO4.4H2O) and citric acid (for SrMnO3), and Sr(NO3)3 , TiO2 and citric acid ( for SrTiO3) as the starting precursors. The formation of the prepared material was confirmed through X-ray diffraction (XRD). From the XRD analysis, it is found that SrMnO3 has the Hexagonal Crystal Structure and the SrTiO3 has the Cubic Crystal Structure. In addition, we have calculated the crystallinity, crystallite size, lattice constants and cell volume to confirm the structural information of the considered material. Surface morphology of the sample clearly depicts the uniform formation of clusters of nano particles. FTIR analysis shows the presence of the metal oxygen (M – O) bonds. The Perovskite are highly Efficient and Adundance. The Cost of the Raw materials and Fabrication was low. The Perovskite band gap can be tuned by the chemical subsititution for the high energy performances in future.