Suggestions for Future work:

We have studied and analysed

Our study reveals that the mixed crystals of binary and ternary chalcopyrite semiconductors would be of growing importance in different modern scientific applications like heterojunction solar cells and LED for optical communications and nonlinear laser devices because of their inherent tailoring behavior of variety of opto-electronic properties. The refractive index and its dispersion in mixed crystal is one of such important property that would break through the window of transparency and provide a wide range of tuning in nonlinear frequency mixing and in optical up-conversion under critical phase matching situations. Therefore without attaching much effort and time on many crystals simultaneously one can concentrate on developing a suitable material with proper concentrations relevant to specific device requirement. The work on this line is in progress in our group and we believe that this will definitely add to the future scientific works.