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标题: Bulk size crystal growth and physicochemical properties of ionic organic NLO crystal of DSMOS: A potential THz emitter
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摘 要 : The growth an ionic organic nonlinear optical crystal of 4-N, N-dimethylamino-4-N-methyl-stilbazolium p-methoxybenzenesulfonate (DSMOS), one of the efficient derivatives of stilbazolium has been reported. The growth experiment is performed by a relatively simple and cost effective approach adopting the slope nucleation method coupled with slow evaporation (SNM-SE). The grown crystal has been subjected to single crystal X-ray diffraction study. The actual composition and various functional groups present in the sample are identified from nuclear magnetic resonance (NMR) and Fourier transform infrared (FT-IR) spectral studies. The thermal properties are investigated by thermogravimetric and differential scanning calorimetric (TG/DTG and DSC) techniques. The nonlinear optical, mechanical and surface properties are also reported. 
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