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(57) Abstract :

In case of plain ZnO nanoparticles, the recombination tendency with photo generated carriers is very fast which make them less effective in sterilization application. The pure Zno particles are also less efficient for catalytic applications. The effectiveness of ZnO based nano particles as photo catalyst can be improved by doping different metal. Thus ZnO based cadmium nano-wool has been sono-chemically synthesized using ultrasonic wave at 250 w, 10 KHz for 5 hours form a probe sonicator. The approximate size of cadmium-ZnO nano wool is <200 nm. The as synthesized cadmium-ZnO nano-wool are then characterized by SEM & TEM for surface morphology and particle size and EDAX for elemental analysis. The result suggests that cadmium- ZnO nano wools can easily be synthesized by ultrasonic waves.

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