

## Successful Synthesis of Nest-like Nanoporous ZnO Films by Pulsed Laser Deposition

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### Abstract

We report on the growth of high quality nest-like nanoporous ZnO films on FTO substrates. The nest-like ZnO films were grown by pulsed laser deposition technique under an oxygen pressure background. Prior to the growth, deposition of a very thin seed layer of ZnO on the substrate showed to be essential in determination of the final morphology of the film. Effect of different growth parameters on the morphology and structure of the films have been investigated. SEM observation of the films showed that they are denser than previously reported films with similar morphology [1-3], which makes them very promising as photoanodes in dye-sensitized solar cells.

### References

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