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Synthesis of High Transparency Thin Films of Zno by Sol-gel Method KYLA HUBAND, Bowling Green State Univ, JIANFENG JI, Washington Stat Univ, FARIDA SELIM, Bowling Green State Univ — Synthesis of high transparency thin films of ZnO is of great technological importance as ZnO offers tremendous advantages as transparent conductor for solar cells and display systems. In this work, thin films of ZnO are synthesized using the sol-gel method and spin coating technique and characterized by XRD and optical spectroscopy measurements. The films exhibit excellent transparency. Comparison will be made between these films and high quality ZnO single crystals grown by chemical vapor transport (CVT). Funding was provided by the National Science Foundation (DMR1359523 grant).

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