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Elaboration of ZnO nanowire arrays and their applications on green energy and environment

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Abstract Zinc oxide (ZnO) is one of the most promising semiconductor materials for large applications, such as nanogenerator of electricity, photovoltaic cells or chemical sensors. We use the electrochemical and hydrothermal methods – both at low temperature and low cost methods, for the ZnO nanowire arrays. The control of different elaboration parameters leads to obtain the homogeneous nanowire arrays with an excellent crystallinity and a reasonable aspect ratio. Some applications based on the ZnO nanowire arrays will be presented, such as nanogenerator of electricity due to the piezoelectric properties of ZnO, solar cells using the ZnO as n-type transparent

时间：4月19日（星期四）15:00—16:40

地点：北京大学物理大楼中212教室