

Low-temperature Annealing Effects on Properties of Tin-doped Zinc Oxide Thin Films in Perovskite Solar Cells

Monday, 21 May 2018 16:15 (15 minutes)

In this study, effects of low-temperature annealing on properties of tin-doped zinc oxide (TZO) thin were investigated. TZO film prepared by a sol-gel method is employed as an electron transport material in perovskite solar cells. After Sn doping, optical properties of the thin films changes. Different temperature annealing affects also surface morphology of the films. Since surface morphology changes, grains size of the upper perovskite layer also shows variation. Finally, the preliminary results indicate that the TZO films can be prepared at low-temperature process. The property of perovskite solar cells will be presented.

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Session Classification: A5: Nanoscale and Surface

Track Classification: Surface, Interface and Thin Film