



On the properties of aluminium doped zinc oxide thin films deposited on plastic substrates from ceramic targets

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Résumé en anglais	We report on the deposition of Al doped ZnO (AZO) thin films on unheated polyethylene terephthalate (PET) substrates by pulsed laser deposition technique using a UV excimer laser and Al ₂ O ₃ :ZnO ceramic targets (1.5 and 2 wt% Al ₂ O ₃). The deposited AZO films have been investigated by atomic force microscopy, scanning electron microscopy, X-ray diffraction, and optical spectrophotometry. Films present excellent optical and electrical properties (transmission in the visible range $T > 85\%$; resistivity at room temperature $\rho = 1.3 \times 10^{-3} \Omega \text{cm}$) as electrodes for plastic solar cells. A good correlation was found between deposition conditions (laser fluence) and structural, morphological, optical and electrical properties
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- [1] <http://okina.univ-angers.fr/mihaela.girtan/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=9388](http://okina.univ-angers.fr/publications?f[author]=9388)
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- [8] [http://okina.univ-angers.fr/publications?f\[author\]=9442](http://okina.univ-angers.fr/publications?f[author]=9442)
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