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Photovoltaic properties of novel titanium oxide nanotubes EU-GEN PANAITESCU<sup>1</sup>, CHRISTIAAN RICHTER<sup>2</sup>, LATIKA MENON<sup>3</sup>, Northeastern University — Ultrafast synthesis of high aspect ratio titania nanotubes by anodization in chloride ions containing solutions has been reported and furthermore optimized by our group. We are presenting in this paper the results of relative measurements on photovoltaic properties of the chloride nanotubes samples sensitized with ruthenium dye N3, comparing them with samples obtained by other anodization methods, and with anatase nanopowders. Photoresponse parameters like short circuit current, open circuit voltage, maximum power and overall conversion efficiency have been measured under simulated solar radiation. Preliminary results on absolute measurements on dye sensitized solar cells employing these samples will also be presented.

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