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Low Cost Preparation of Nano-cellulose Ultrathin Transparent Paper TIANLEI ZHOU, HYUNG WOO CHOI, GHASSAN JABBOUR, Univ of Nevada - Reno — We will present a low cost fabrication approach to ultrathin transparent paper based on blade coating of nano-cellulose. Depending on experimental and process conditions, an unprecedented thickness of 800 nm fully transparent paper (visible range) can be made. By tuning the process parameters, the optical transparency can be manipulated to suit a given application. For example, the substrate can be made with high haze which is suitable for certain lighting and display applications. Impact and other potential application of our approach will be highlighted as well.

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