Anti-reflection Haze Film for Optoelectronic Devices
防反射自塑型霧度薄膜以改善光電器件性能

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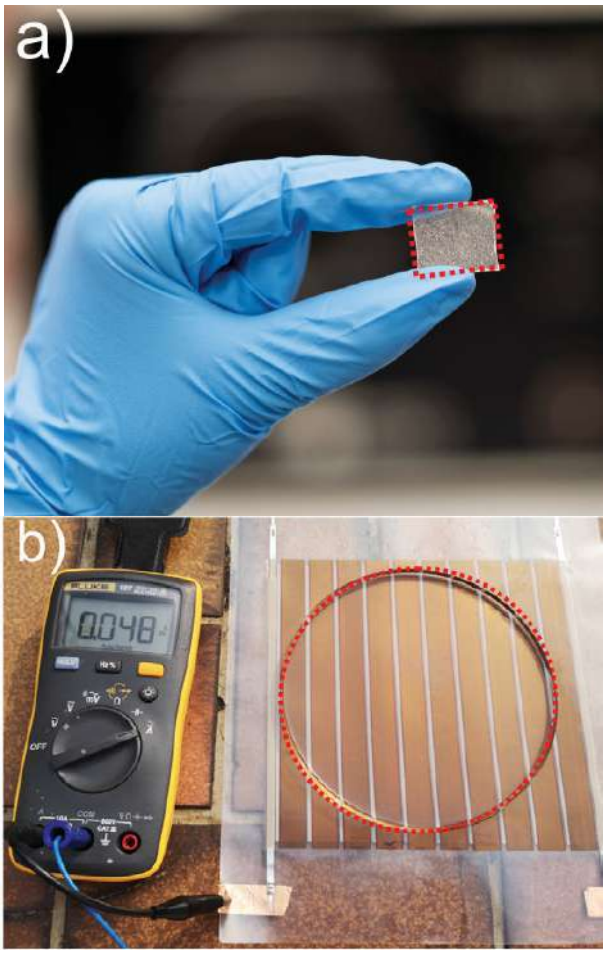
Special features 技術特點

- ***Low cost, simplifies fabrication process and multifunctional for optoelectronic devices*** 成本低、製造簡單、多項功能
- ***Haze film shows significant anti-reflection effect and can be easily adjusted for different applications*** 顯著的防反射效果



Traditional manufacturing of anti-reflection coating require complicated lithography process. Moreover, major light absorption loss is caused from the insufficient thickness of the absorbers.

The development of self-formed haze film improves the performance of optoelectronic devices by elongating the optical path, and anti-reflection effect. The substrate of the haze film is commercially available polydimethylsiloxane (PDMS), which is cheap, flexible and highly transparent. The haze film is obtained by curing the mixture of PDMS pre-polymer, curing agent and a polymeric additive.

This technology is good for photodetectors or displays, the anti-reflection effect improves the sensitivity of the detector, or enhances the brightness of the screen. For photovoltaics, the haze film enhances the power conversion efficiency significantly.

理大研發嶄新自塑型霧度薄膜的製造工藝，通過延長光路和增透效果以改善光電器件之性能。與傳統製造工藝相比，成本較為低，增透效果較強，更可調節透射率來適用於不同的應用上。此技術有助提高光電探測器的靈敏度、增強顯示螢幕的亮度、提高光伏器件之效率。

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