Durable Inorganic Metal Oxide Layer Achieved Using Seeded-sonochemical Deposition Method
種晶聲化學金屬氧化物層

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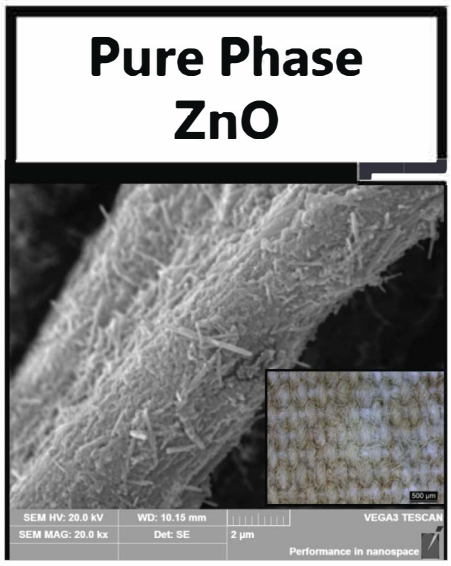
TechConnect INNOVATION AWARD 2019

Special features 技術特點

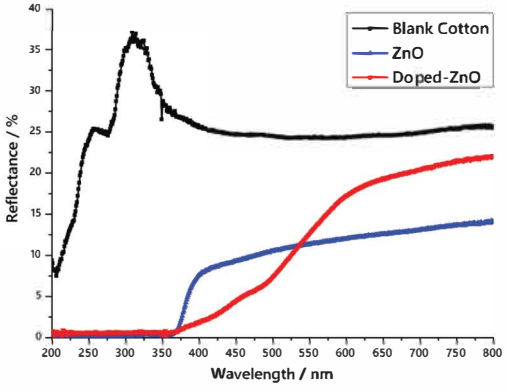
- *Requires no external heating*
  不需外在加熱
- *Occurs in ambient air and atmospheric pressure*
  在常溫及普通氣壓環境下製備



Currently known techniques for over-coating inorganic metal oxide layer requires high temperature, low pressure and specialized gaseous environments procedures.

Seeded-sonochemical deposition method utilizes the presence of small seeding layers in order to direct a more durable overcoating inorganic metal oxide layer, which is a faster method and can occurs in room temperature environment. As a result, pure products can be obtained in high quality with cheaper and more efficient process. Functional clothing and glazing apparel are some areas that can utilize this method.

耐用及具功能性的服裝越來越普及，利用金屬氧化物可製成具防水和抗濕功能的衣服。現時將無機金屬氧化物外塗在織物上的生產程序需要高溫、低壓和特殊氣體環境。理大團隊研發出種晶聲化學沉積法，利用小如"種子"的金屬氧化物製成一層耐用及與織物更融合的塗層以增強其耐洗性。此技術的製備環境只需常溫及普通氣壓，比傳統方法較為簡易和快捷。



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