

Large-Scale Assembly of Colloidal Particles

Hongta Yang

Associate Professor

Department of Chemical Engineering

National Chung Hsing University

Taichung, Taiwan

Photonic crystals can be sources of brilliant reflected colors arising from Bragg optical diffraction. A variety of methods have been developed to create photonic crystals. However, most of current technologies are only favorable for laboratory-scale production. This presentation reviews three scalable coating technologies for assembling highly ordered colloidal crystal-polymer composites, colloidal crystals, and macroporous polymer membranes. The applications, including anti-reflection coatings, vapor detection, superhydrophobic coatings, are also introduced.



楊宏達副教授

Degrees

- 2008 ~ 2011：美國佛羅里達大學化學工程學系博士
- 2006 ~ 2008：美國喬治亞理工學院造紙科學與工程學系碩士
- 2004 ~ 2006：美國紐澤西理工學院化學工程學系碩士
- 1997 ~ 2001：國立台灣大學化學工程學系學士

Professional Experiences

- 2016 - 2018：國立中興大學化學工程學系副教授 兼 教學資源暨發展中心主任
- 2013 - 2016：國立中興大學化學工程學系助理教授
- 2011 - 2012：美國佛羅里達大學化學工程學系博士後研究