



許經菱 副教授
CHING-LING HSU
物理系副教授
奈米科技中心副主任

電話：03-2653212
傳真：03-2653299
E-mail：chsu@phys.cycu.edu.tw

經歷

台灣大學 凝態科學研究中心 博士後研究
私立中原大學 物理學系 助理教授

現職

物理系副教授
奈米科技中心副主任

專長

表面物理(Surface Physics)
奈米顯微(Nanoscience)

研究領域

1. 成長低維度之奈米級材料樣品（奈米粒子及薄膜等）(Synthesis of low dimensional nanoscale materials (nanoparticles and nanofilms))

2. 運用原子力顯微鏡（AFM）及電性分析等方法，研究奈米結構之特性(Study of nanostructures with AFM and electrical measurements)

可能之應用

由奈米粒子所自組成的奈米薄膜，其新穎的物理特性可望運用在電子元件、化學催化、氣體感測、溫度量測等方面(Novel characteristics of self-assembled nanofilms lead to possible applications, including electrical devices, chemical catalysis, gas sensing, temperature measurements and etc)

個人研究成果 (Selected paper 5 篇)

1. Woei Wu Pai, Ching-Ling Hsu, M. C. Lin, K. C. Lin, and T. B. Tang (2004, Mar.) *Structural relaxation of adlayers in the presence of adsorbate-induced reconstruction: C60/Cu(111)*, Phys. Rev. B 69, 125405-1-7 (SCI).

2. Ching-Ling Hsu and Woei Wu Pai (2003, Dec.) *Aperiodic incommensurate phase of a C60 monolayer on Ag(100)*, Phys. Rev. B 68, 245414-1-12 (SCI).

3. Ching-Ling Hsu, E. F. McCullen, and R. G. Tobin (2003, Sep.) *Unusual adsorption kinetics of formic acid on Cu(100) studied by dc resistance and nonresonant infrared reflectance changes*, Surf. Sci. 542, 120-128 (SCI).

4. Woei Wu Pai and Ching-Ling Hsu (2003, Sep.) *Ordering of an incommensurate molecular layer with adsorbate-induced reconstruction: C60/Ag(100)*, Phys. Rev. B 68, 121403-1-4 (SCI).

5. Ching-Ling Hsu, E. F. McCullen, and R. G. Tobin (2000, Jan.) *Evidence for an adsorbate-dependent mechanism for surface resistivity: Formic acid, oxygen and CO on Cu(100)*, Chem. Phys. Lett. 316, 336-342 (SCI).