
台灣大學應用力學研究所
演 講 公 告

主 講 人：蕭惠心助理教授
臺灣師範大學光電工程研究所

講 題：奈米科技之美—從表面電漿到超穎介面

主 持 人：許聿翔副教授

時 間：109年3月16日（星期一）下午2時20分開始

地 點：台灣大學應用力學研究所國際會議廳

☆☆ 歡迎聽講，敬請張貼 ☆☆

奈米科技之美—從表面電漿到超穎介面

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Abstract

Plasmonic nanostructures with their unique ability in localizing electromagnetic fields into small volumes have led to a great diversity of applications. We have utilized various designs to study plasmonic thermal emitters, surface-enhanced Raman scattering substrate, light absorption in photovoltaics, nonlinear frequency conversion, etc. In addition to strong field confinement, those nano-scatterers are capable of manipulating the phase response of the scattering light, which provides additional degree of freedom to accomplish polarization control and wavefront shaping. This leads to the field of metasurfaces developing various resonant mechanisms to achieve a phase coverage ranging from 0 to 2π . These metasurfaces are applied to demonstrate ultrathin and lightweight optical meta-devices such as achromatic meta-lenses and versatile polarization converters.