# **Department of Physics**

# **Low-dimensional magnetism and spintronic devices**

Our research focuses on various low-dimensional magnetic materials, such as magnetic thin films and nanoparticle assemblies. We also combined the magnetic materials with different functional 2D-materials to form spintronic devices for applications.

# Techniques used in study

My primary techniques are UHV-MBE, CVD-growth of 2D materials, Scanning tunneling microscope, Atomic force microscope, Magneto-optical Kerr microscope and etc.



## **Background:**

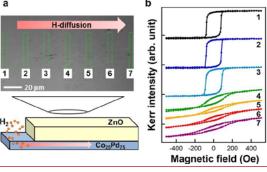
PhD in Physics, National Taiwan University

### **Funding:**

Ministry of Science and Technology



# C CCD Analyzer Polarizer LED light Sample chamber b C CCD SiO<sub>2</sub>Pd<sub>72</sub> ZnO SiO<sub>2</sub>/Si(100)



### **Publications**

- Visualizing hydrogen diffusion in magnetic film through magnetooptical Kerr effect P.-C. Chang, Y.-Y. Chang, W.-H.Wang, F.-Y. Lo, W.-C. Lin, *Communications Chemistry 2:89 (2019*).
- Height reversal after Au deposition on MoS<sub>2</sub> flakes/SiO<sub>2</sub>: thermal control of interfacial nucleation, Y.-H. Shen, C.-C. Hsu, P.-C. Chang, W.-C. Lin, Appl. Phys. Lett.114, 181601 (2019).
- Hydrogen-mediated magnetic domain formation and domain wall motion in Co<sub>30</sub>Pd<sub>70</sub> alloy films, P.-C. Chang, C.-M. Liu, C.-C. Hsu, and W.-C. Lin, Scientific Reports 8:6656 (2018)

