

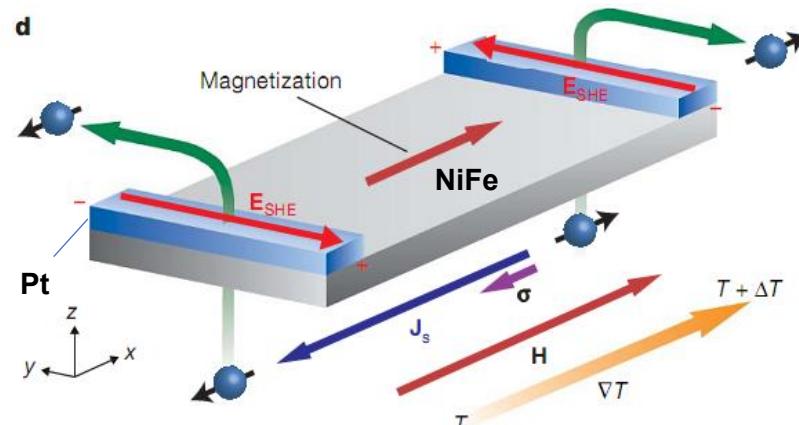
# Transport Magnetic Proximity Effects in Pt

Jing Li

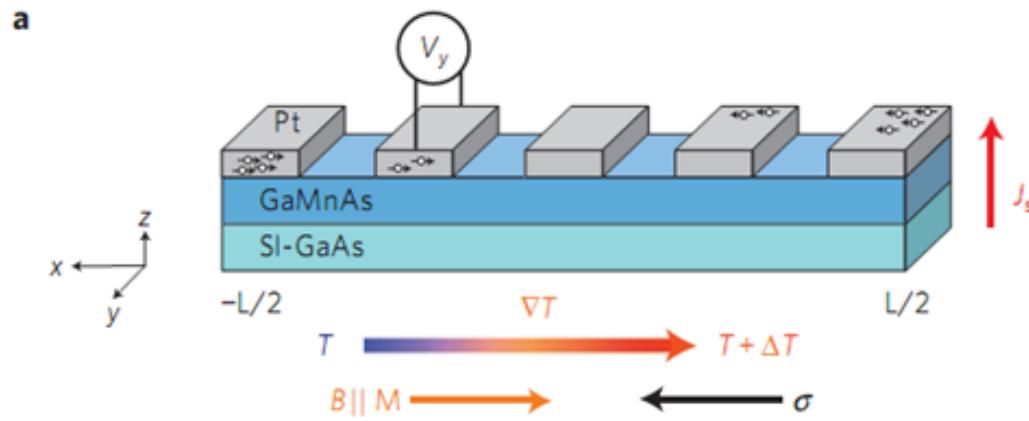
Ferro Thin Film Lab

06/26/2020

## Review of previous talks

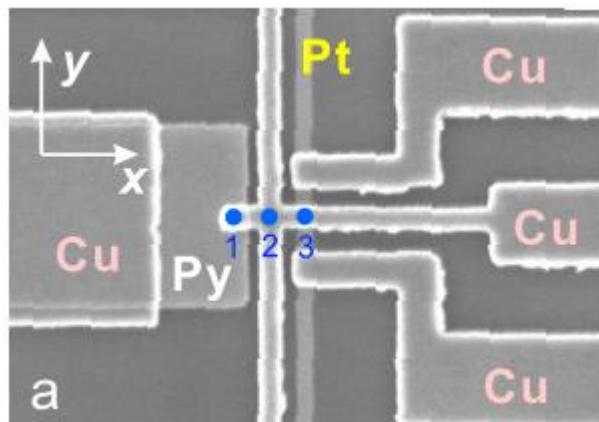


K. Uchida, et al, Nature 455, 778 (2008)



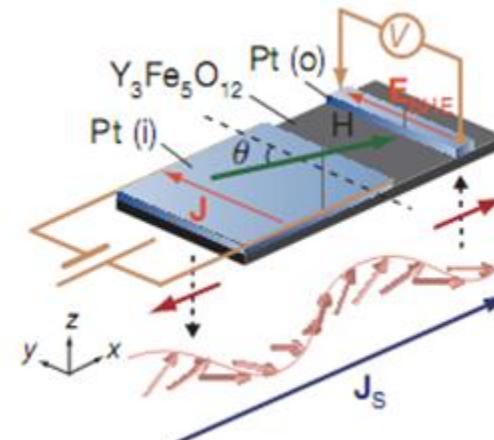
C. M. Jaworski, et al, Nature Mater. 9, 898 (2010)

### ISHE detection of spin current



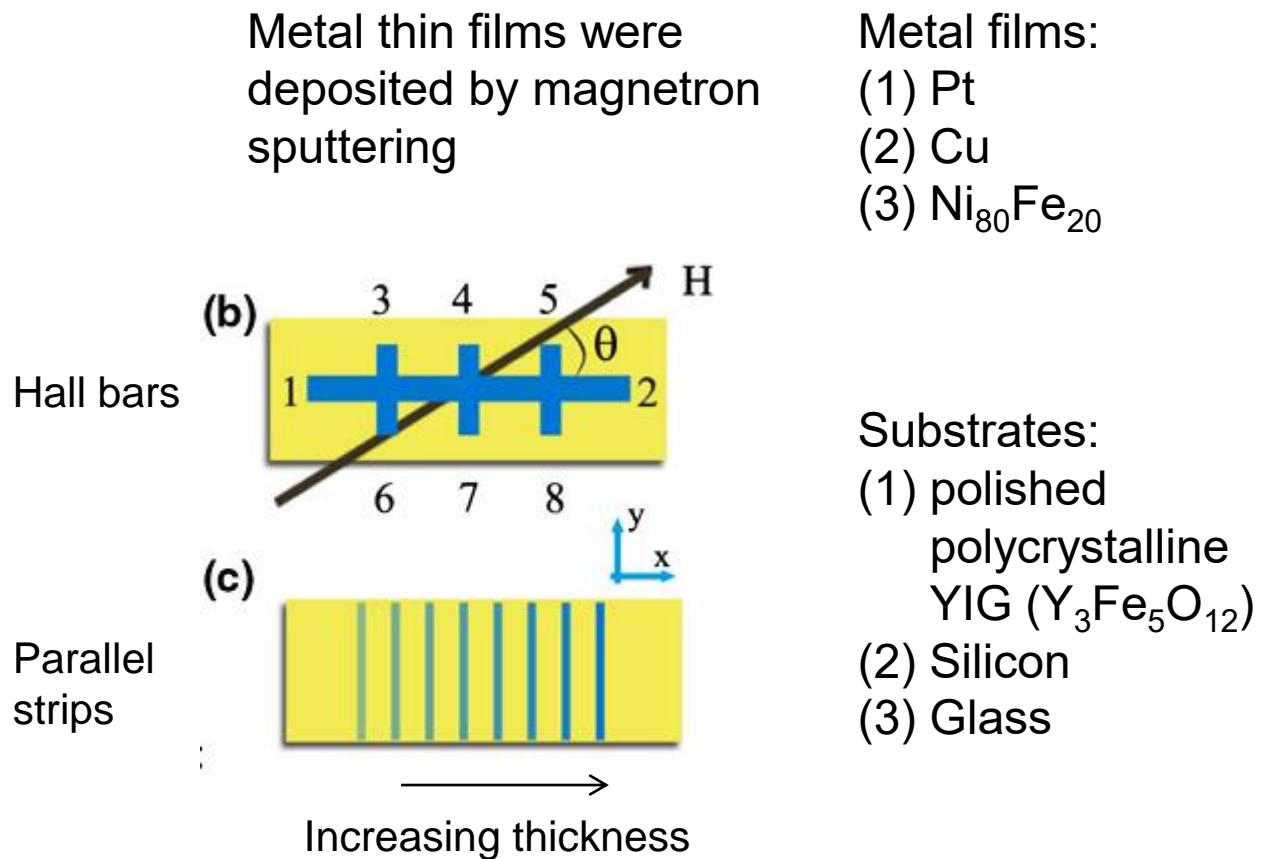
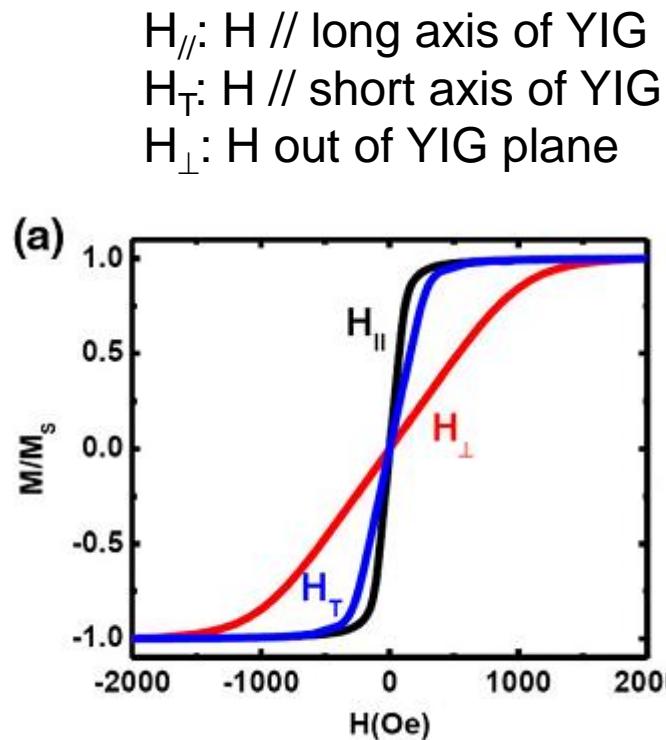
T. Kimura, et al, PRL 98, 156601 (2007)

$$E_{\text{SHE}} = D_{\text{ISHE}} J_s \times \sigma$$

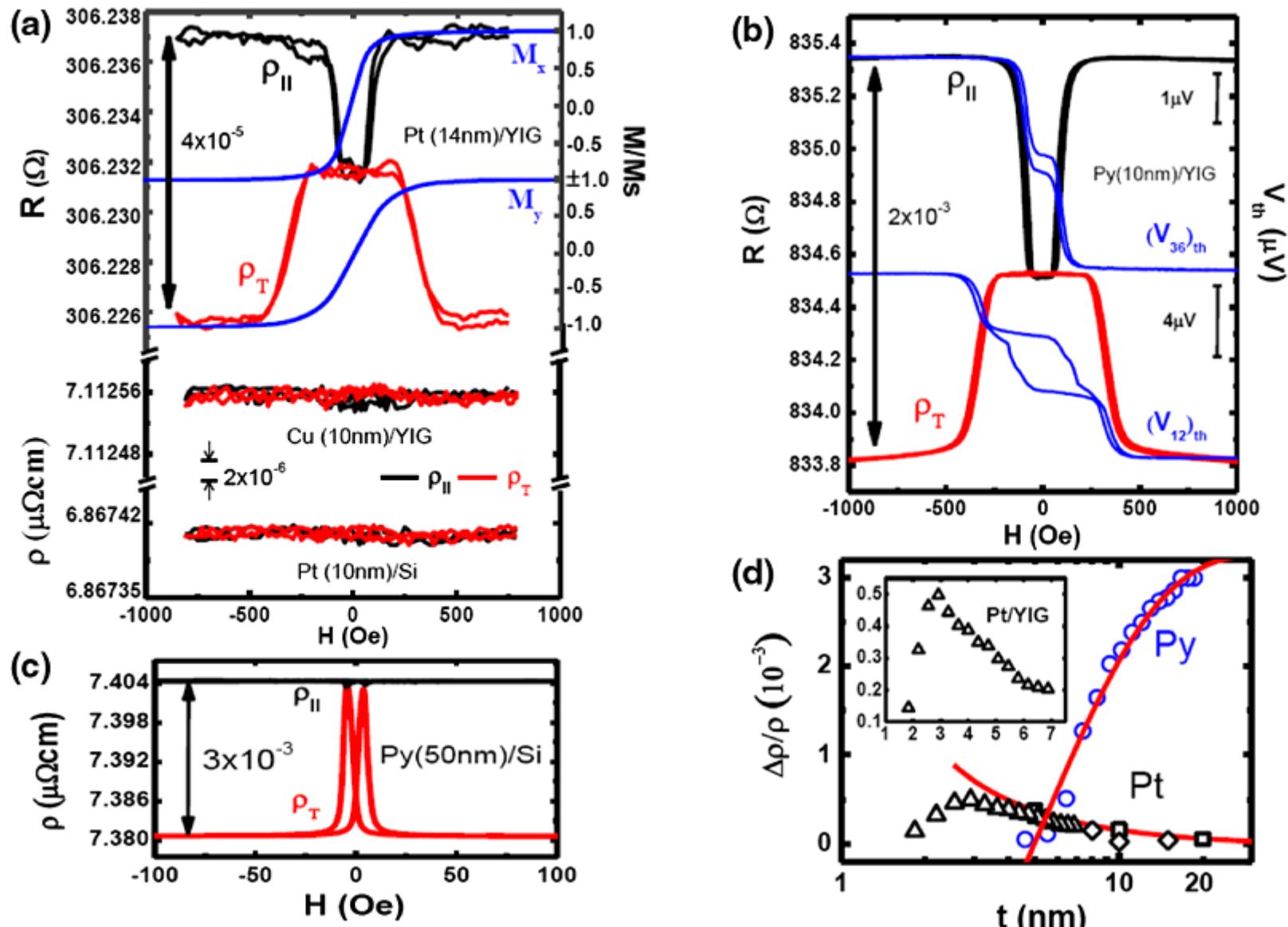


Y. Kajiwara, et al, Nature 464, 262-267 (2010)

## Measurement setup

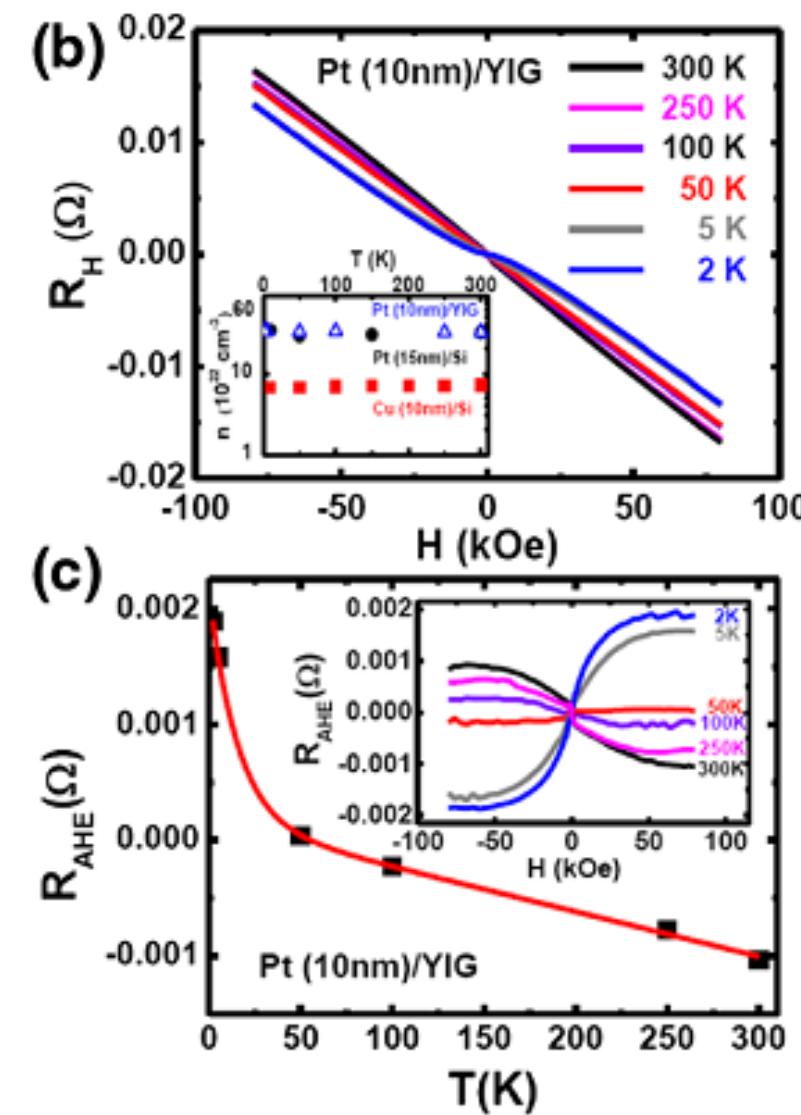
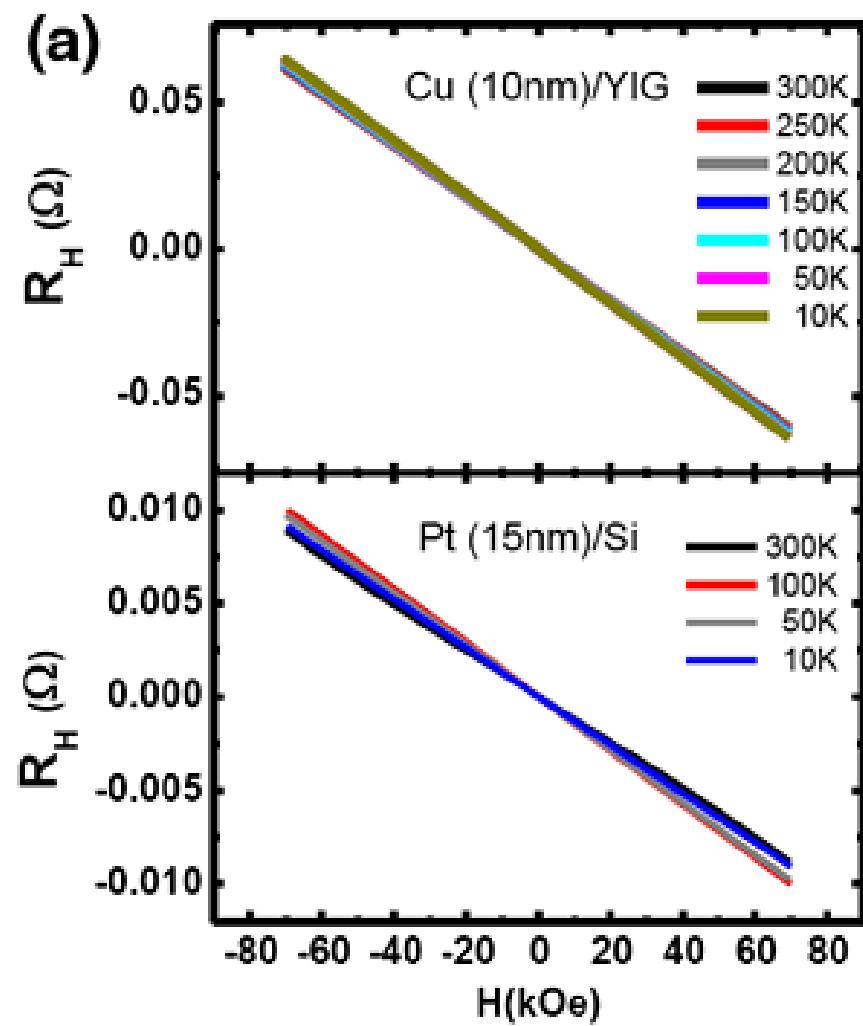


# AMR measurement



$$\rho = \rho_T + (\rho_{||} - \rho_T) \cos^2 \theta$$

# AHE measurement



## SMR measurement

