WIZARDS OF SCIENCE

Physics

LIM KEAN PAH

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EXPERTISE MATERIALS SCIENCE/MAGNETIC MATERIALS



Dr. Lim Kean Pah is a senior researcher at Superconductor and Thin Film Laboratory, Department Of Physics, Universiti Putra Malaysia, UPM Serdang. His major research area is on material science including physics condensed matter and magnetic material having magnetoresistive effect. His research focus is in manganese based compound and GMR magnetic alloy. He has contributed more than 30 papers. Major sponsors of his research include ScienceFund, RUGS and FRGS.

Current research interests:

Manganites compound

Manganites provoskite compound having colossal magnetoresistive(MR) effect had been widely study due to their potential application as magnetic sensing element. In polycrystalline compound, intrinsic and extrinsic magnetoresistance are believed mainly contributed by the core and shell of the manganites grain. Their properties can be alter via structure modification, doping or addition. In our lab, various research work has been carried to improve the MR effect.

Nanoscience (manganites)

One of the most exciting research field in nanosize rare-earth manganites perovskite is to induce new and peculiar phenomena such as the low-field magnetoresistance (LFMR) which is believed to be due to the spin dependent-tunneling scattering via nature or artificial grain boundaries. In our lab, synthesis of nanosize and nanocomposites of manganites using wet-chemical method has been carried out to investigate the effect of nature or artificial grain boundaries.

Thin Films (manganites and GMR granular)

In our lab, granular films having giant magnetoresistance and manganites film having colossal magnetoresistance thin film have been fabricated via Pulsed Laser Ablation Deposition and RF/DC Magnetron Sputtering Techniques.

LINK TO POSTGRADUATE FIELD OF STUDY:

ADDITIONAL INFORMATION: