

NUSNNI - Physics Seminar

Seminar Title: Research progress of wide band gap semiconductor and Ge quantum dot growth in NSRL

Speaker : Professor Xu Pengshou
National Synchrotron Radiation Laboratory, University of Science & Technology of China

Date: 16 August 2005, Tuesday

Time: 3:00pm - 4:00pm

Venue: Physics Conference Room, S13-M01-15, Faculty of Science

Seminar contents:

1. SRPES study on sulfur passivation of GaAs and oxidation of SiC
2. PED study on polarity of GaN surface
3. First principle calculations of electron structure and optical properties of SiC and ZnO
4. Study on Ge quantum dot growth with MBE

Resume:

Xu Pengshou, as a professor, works in National Synchrotron Radiation Laboratory (NSRL), University of Science and Technology of China. From 1985 to 1986, he worked in Brookhaven National Laboratory in U.S.A. as a visiting scholar. From 1987 to 1991, he was in charge of setting up the photoelectron spectroscopy beam line and experimental station in NSRL. From 1992 to 1997, he is in charge of operation of photoelectron spectroscopy beam line and experimental station in NSRL. From 1998 to 2004, he is in charge of setting up surface physics experimental station of Phase II Project in NSRL. His research work is mainly in synchrotron radiation application of surface and material science. He has got or taken part in many projects supported by National Nature Science Foundation of China and State Education Commission Foundation for Ph.D training. He has done a lot of research in the fields of interface of metal and semiconductor, semiconductor heterojunction, passivation of semiconductor surface, magnetic ultrathin film, wide band gap semiconductor and semiconductor quantum dot. He has published more than one hundred papers. Due to his achievement, he was awarded the 1st class of Science and Technology Progress Prize by Academy of Sciences of China in 1992 and the Vacuum Science and Technology Achievement Prize by the Vacuum Society of China in 1995.