【심포지움-포토닉스 01】

Cuurrent Topics in Nano-Photonics

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In this talk, we would like to introduce current research topics in nano-photonics. We first introduce the definition of nano-photonics, and then show that the quantum-well laser diode is the most well established nano-photonic device. We will next discuss the difference between nano-photonics and nano-optics. As currently most interested research field, two important aspects of the quantum dot laser diode will be demonstrated. After this topics, we will disclose various aspect of photonic crystals, the importance of theoretical calculations in these topics will be demonstrated. As a final example, the quantum structure based solar cells will be discussed.