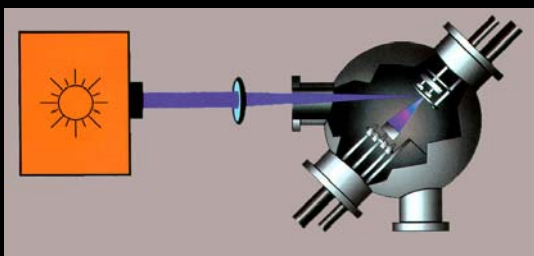


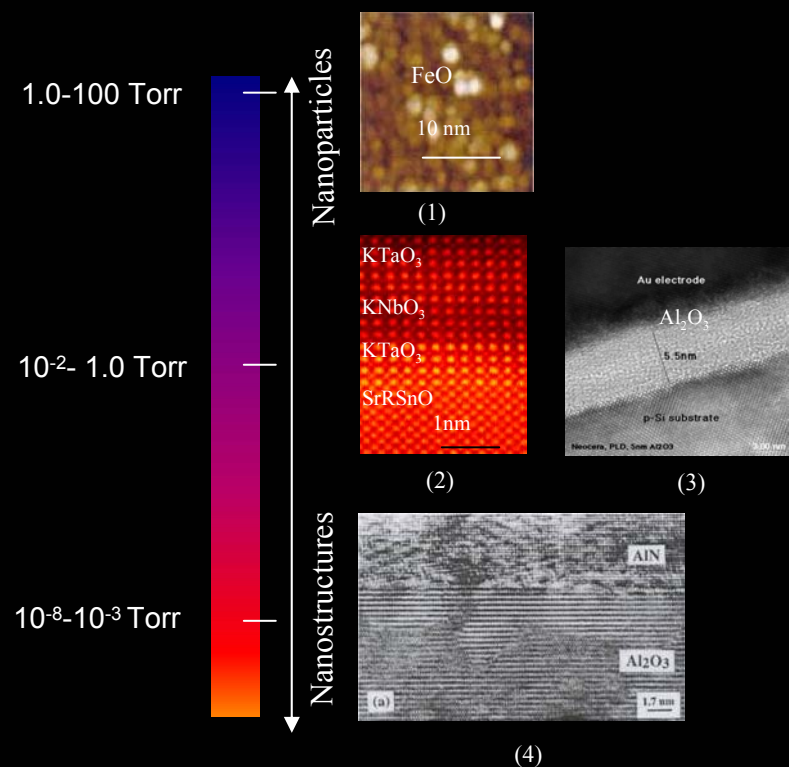
Pulsed Laser Deposition

A versatile method for synthesizing nanoscale heterostructures and nanoparticles

Pulsed Laser Deposition (PLD) is a versatile thin film deposition technique. The uniqueness of PLD is that the energy source (pulsed laser) is outside the deposition chamber (see schematic). This facilitates a large dynamic range of operating pressures (10^{-10} Torr to 100 Torr) during material synthesis. By controlling the deposition pressure and temperature a variety of nanostructures and nanoparticles can be synthesized with unique functionalities. In addition, PLD is a 'digital' technique and provides process control ($\text{\AA}/\text{pulse}$) at the nano scale.



Neocera offers standard and custom PLD systems and components for nano-materials R&D. Our applications group will assist you in meeting with your requirements.



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