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Phenyl modified silica에 졸-겔 캡슐화 된 Er/PbS의 발광 특성
Luminescence properties of Er/PbS encapsulated by phenyl modified silica via Sol-Gel Process

Gyeong Guk Ham, Bok Yeop Ahn, Sang Il Seok
Avanced Materials Division, Korea Research Institute of Chemical Technology
(gyeongug@empal.com)

If rare earth ions could be activated by electrical means after introducing into an appropriate semiconductor host, it might be possible to achieve the electrically-driven optical amplifier. Futhermore, some groups report that rare earth doped semiconductor nanoparticls show the sensitized emission. In this study, we try to prepare the Er/PbS nanoparticles encaupsulated by phenyl modified silica shell via sol-gel process. Er/PbS nanoparticles were characterized by UV-Vis absorption, XRD, FT-IR and TEM etc. Finally we will present the luminescence properties of Er doped PbS nanoencapsulation.

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