

18

Radiative Properties of a Quantum Dot in a Dielectric Shell*

© K.K. Pukhov

Prokhorov General Physics Institute of the Russian Academy of Sciences,
119991 Moscow, Russia

e-mail: pukhov@lst.gpi.ru

Received July 6, 2018

Based on the quantum mechanics and quantum electrodynamics, the general analytical expression is derived for the probability of the spontaneous electric-dipole transition in the semiconductor quantum dot (QD) inside the subwavelength core-shell nanoparticle (NP) embedded in a dielectric medium.

DOI: 10.21883/OS.2018.11.46829.219-18

* International Conference „PCNSPA 2018 — Photonic Colloidal Nanostructures: Synthesis, Properties, and Applications“, Saint Petersburg, Russia, June 4–8, 2018.

Полный текст статьи опубликован в английской версии журнала.