

Precise size separation of water-soluble red-to-near-infrared-luminescent silicon quantum dots by gel electrophoresis

Minoru Fujii, Akiko Minami and Hiroshi Sugimoto

Department of Electrical and Electronic Engineering, Kobe University, 657-8501 Kobe, Japan

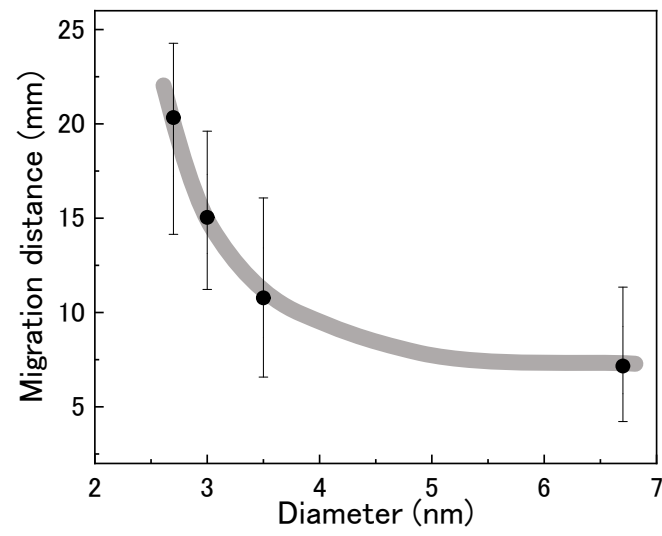


Figure S1 Relation between migration distance and average diameter of HBP samples.

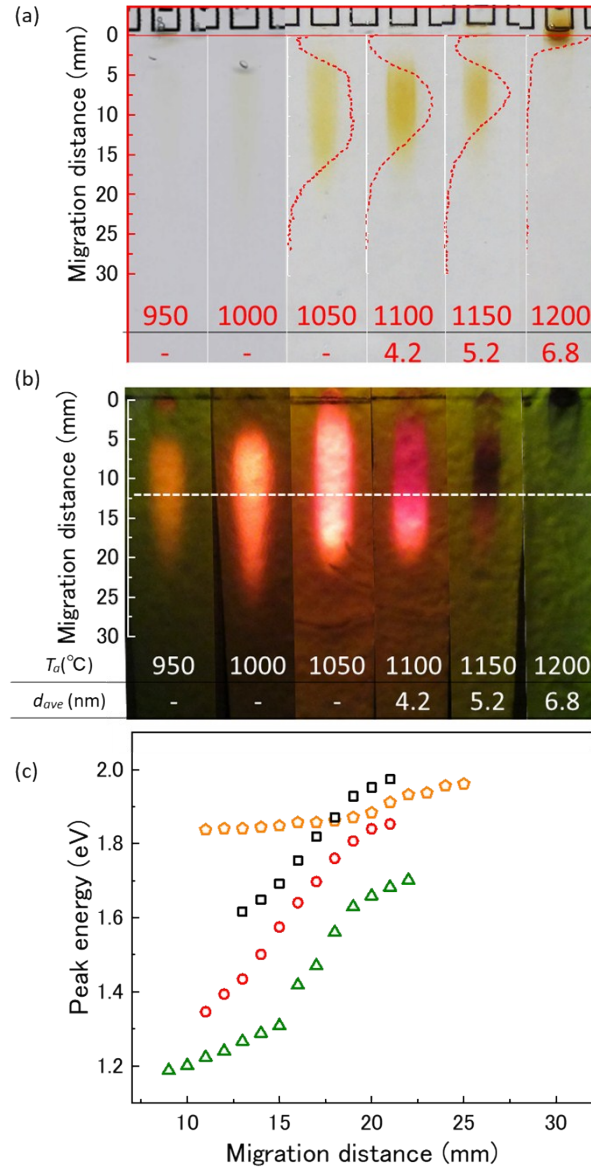


Figure S2 (a) Electrophoresis of Si QDs (LBP). The growth temperature (T_a) is changed from 950°C to 1200°C. (b) Luminescence image of the gel. (c) PL peak energy as a function of migration distance.

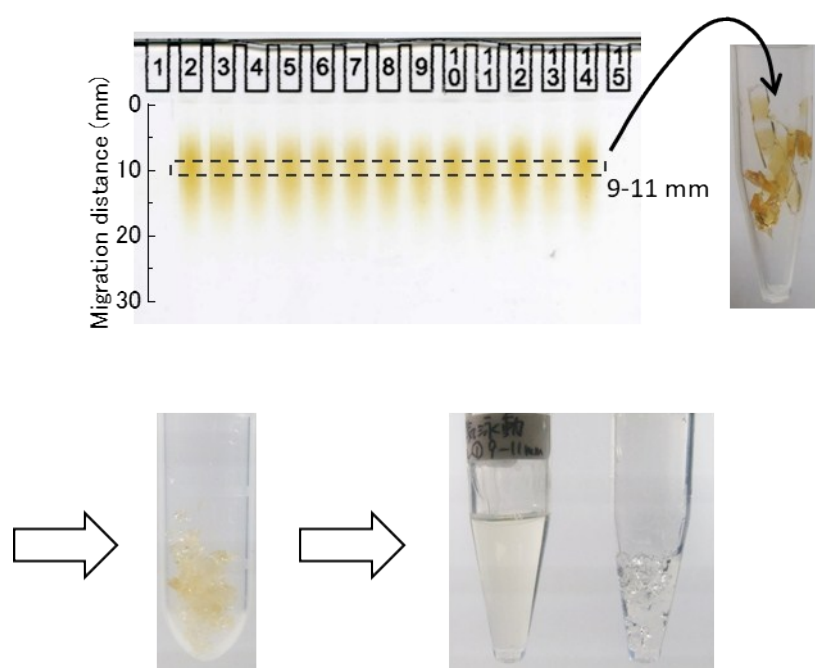


Figure S3 Procedure for the preparation of TEM samples.

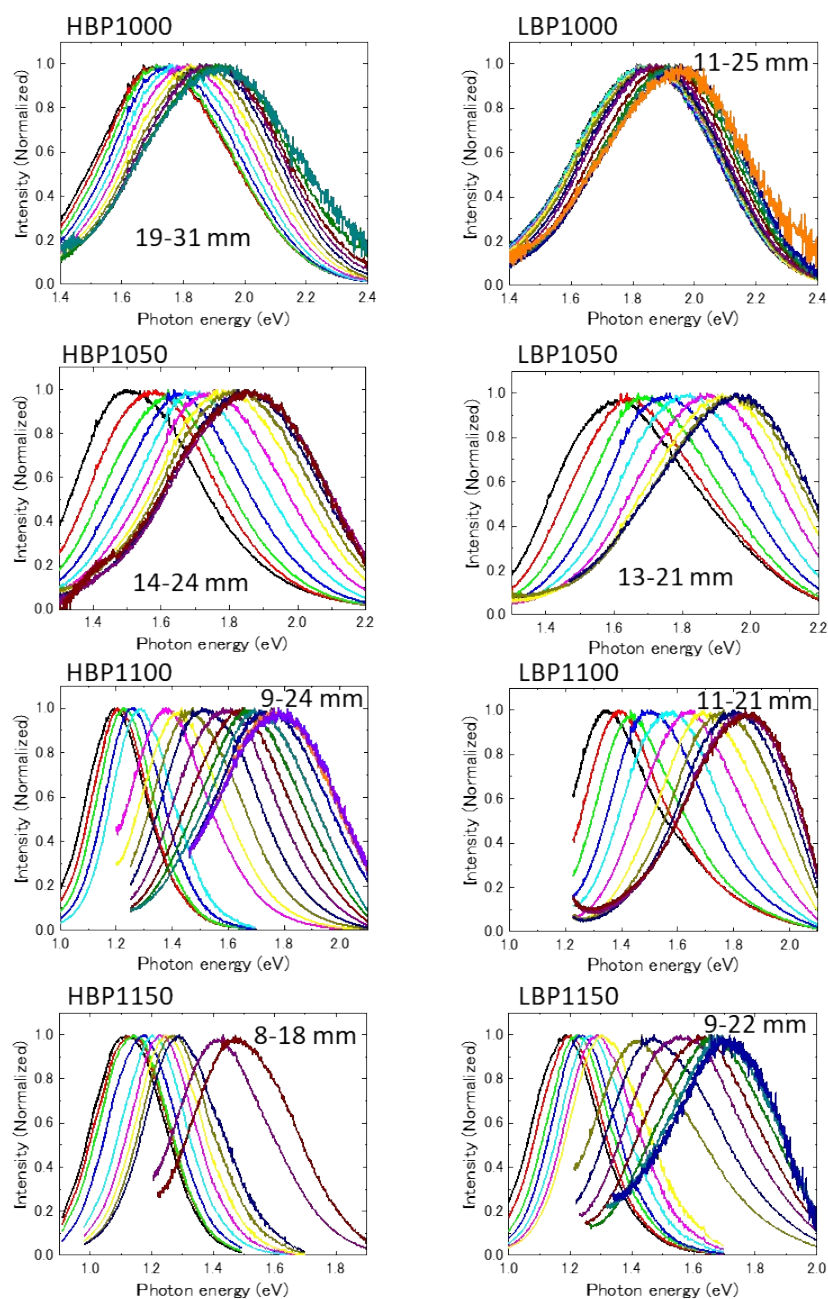


Figure S4 PL spectra of HBP and LBP samples grown at different temperatures measured at different migration distances. The migration distance ranges are shown in the graphs.