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An experimental setup for analysis of weak photoluminescence in the near-infrared spectral region*

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In this paper, we describe the experimental setup for analysis of spectral and kinetic photoluminescence parameters in near-infrared spectral region. The setup allows to carry out photoluminescence (PL) measurements in a spectral range of 900–1700 nm, temporal range of 1 ns–100 μ s, and temperature range of 77–400 K. The performance of the setup is demonstrated with PL spectra and decay curves obtained for lead sulfide quantum dots monolayer and highly diluted lead sulfide quantum dots solution.

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