



Figure 11. The PNP double-junction PPD with the completely depleted N region and the floating N+ storage region has an excellent quantum efficiency (QE) for the blue light. The floating-surface N+P single-junction-type photodiode has no surface electric field, where the photogenerated electron and hole pairs do not move and eventually they recombine with each other, resulting in a poor QE for the short-wave blue-light