Erratum to: Improving near-infrared quantum-dot light-emitting diodes to mimic synaptic plasticity (vol 62, issue 10, page 1470, 2019)

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In the version of the article originally published in the volume 62, issue 10, 2019 of *Sci. China Mater.* (page 1470–1478, <https://doi.org/10.1007/s40843-019-9437-9>), wrong images of Figs 3 and 4 were used. The corrected version appears below: the units of the *x*-axes in Fig. 3h, the inset of Fig. 4a, and Fig. 4b, d should be h, s, s, and s, respectively.

Figure 3 (a) Schematic diagram and (b) flat-band energy-level diagram of a NIR QLED based on Si QDs with a PFN interlayer. (c) *J*–*V* curves for NIR QLEDs based on Si QDs with P3HT, P3HT/PFN and the traditional HTL of poly-TPD. (d) *J*–*V* curves for an electron-only device and hole-only devices with P3HT, P3HT/PFN and poly-TPD. (e) EQE versus current density and (f) power efficiency versus voltage for NIR QLEDs based on Si QDs with P3HT, P3HT/PFN and poly-TPD. (g) PL decay curves of Si QDs with P3HT, P3HT/PFN and poly-TPD. (h) Stability of QLEDs with P3HT, P3HT/PFN and poly-TPD working at a driving voltage of ~5 V.

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Figure 4 (a) Decay of the EL from a synaptic device stimulated by a 4 V electrical spike with a duration of 1 ms. The electrical spike and the corresponding optical power of the EL are shown in the inset. (b) Optical power of a synaptic device induced by two successive electrical spikes. (c) Dependence of the PPF index on Δt for 4 V electrical spikes. (d) Optical power of a synaptic device stimulated by from two to thirty times of 4 V electrical spikes. Image recognition depictions for a synaptic device stimulated by 2, 5, 10, and 20 successive electrical spikes are shown in (e–h).