

CORRIGENDUM

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Corrigendum: Photovoltage field-effect transistors

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It has been brought to our attention that there exist other examples, besides those of references 18 and 19 cited in this Letter, of field effect transistors with light-activated gates^{1,2}. These additional works use InAs quantum dots on top of GaAs:AlGaAs heterostructures. The InAs photogate, upon illumination, transfers photocharge on the GaAs:AlGaAs channel surface; the resulting dipole moment then modulates the conductivity of the transistor, bending the surface energy levels. In contrast, our Letter reports colloidal quantum dots that photomodulate a junction field effect transistor silicon channel. The development of surface chemistry ensures that the silicon channel is indeed modulated by the photovoltage of the colloidal quantum dot instead of being unresponsive owing to self-pinning; the colloidal quantum dot photogate directly modulates the width of the depletion region in the bulk of the channel. The original Letter has not been corrected online.

1. Aqua, T., Naaman, R., Aharoni, A., Banin, U. & Paltiel, Y. Hybrid nanocrystals-organic-semiconductor light sensor. *Appl. Phys. Lett.* **92**, 223112 (2008).
2. Neubauer, A., Yochelis, S., Amit, Y., Banin, U. & Paltiel, Y. Highly sensitive room temperature infrared hybrid organic-nanocrystal detector. *Sens. Actuators A* **229**, 166–171 (2015).