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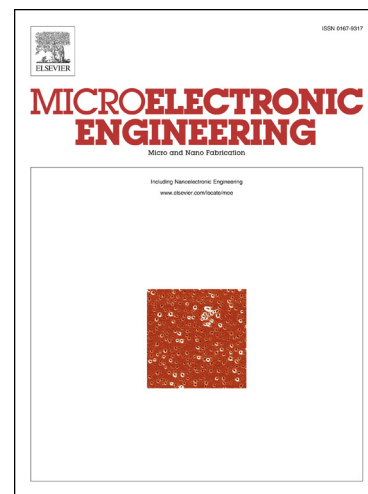
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**The role of metal/metal oxide/organic anode interfaces in efficiency and stability of bulk heterojunction organic photodetectors**

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**Abstract**

We demonstrate a transition metal oxide based hole extraction layer approach to improve the efficiency, dark current and time stability of organic photodetectors (OPDs). A significant increase in device efficiency and over two orders of magnitude lower dark current at a bias voltage of -0.5 V were obtained in OPDs based on the poly(3-hexylthiophene) (P3HT) and [6,6]-phenyl-C71 butyric acid methyl ester (PC<sub>71</sub>BM) bulk heterojunctions (BHJ). This was achieved by introducing an under-stoichiometric tungsten oxide layer, after optimizing its

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