

Supporting Information

Transparent Photovoltaic Memory Device

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+ Electronic supplementary information (ESI) available

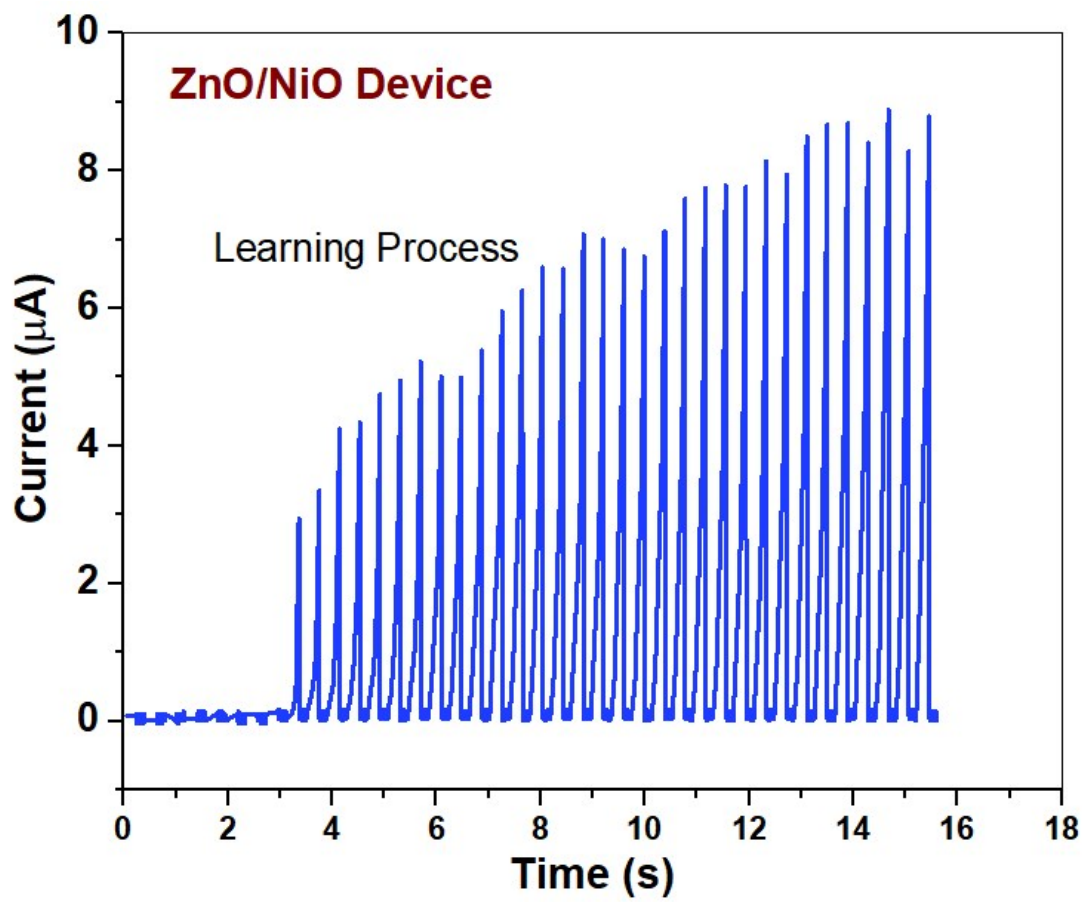


Figure S1. Retention characteristics of the device upon the application of consecutive voltage pulses of 3 V.

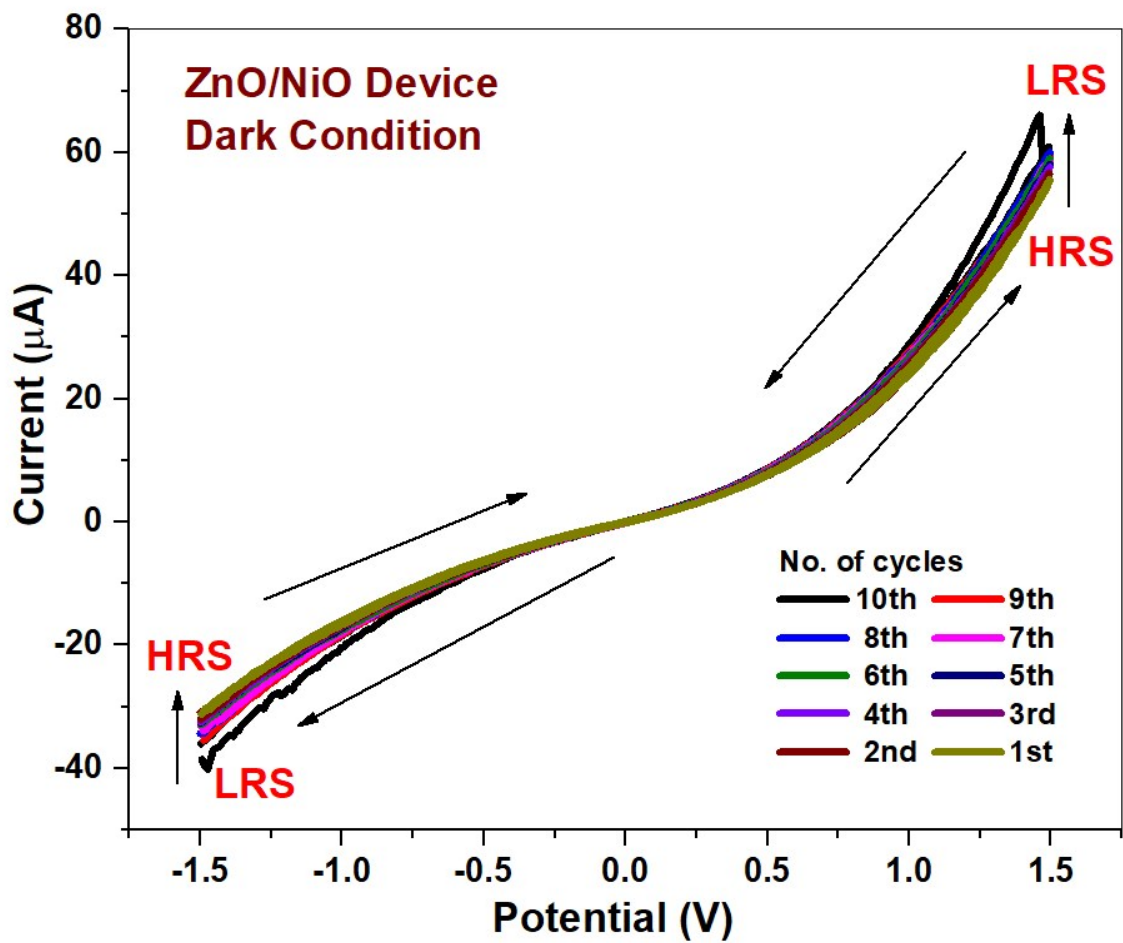


Figure S2. I-V curves of the ZnO/NiO device in dark for 10 sweeping cycles. The graph illustrates the stability of the device after 10 sweeping cycles.

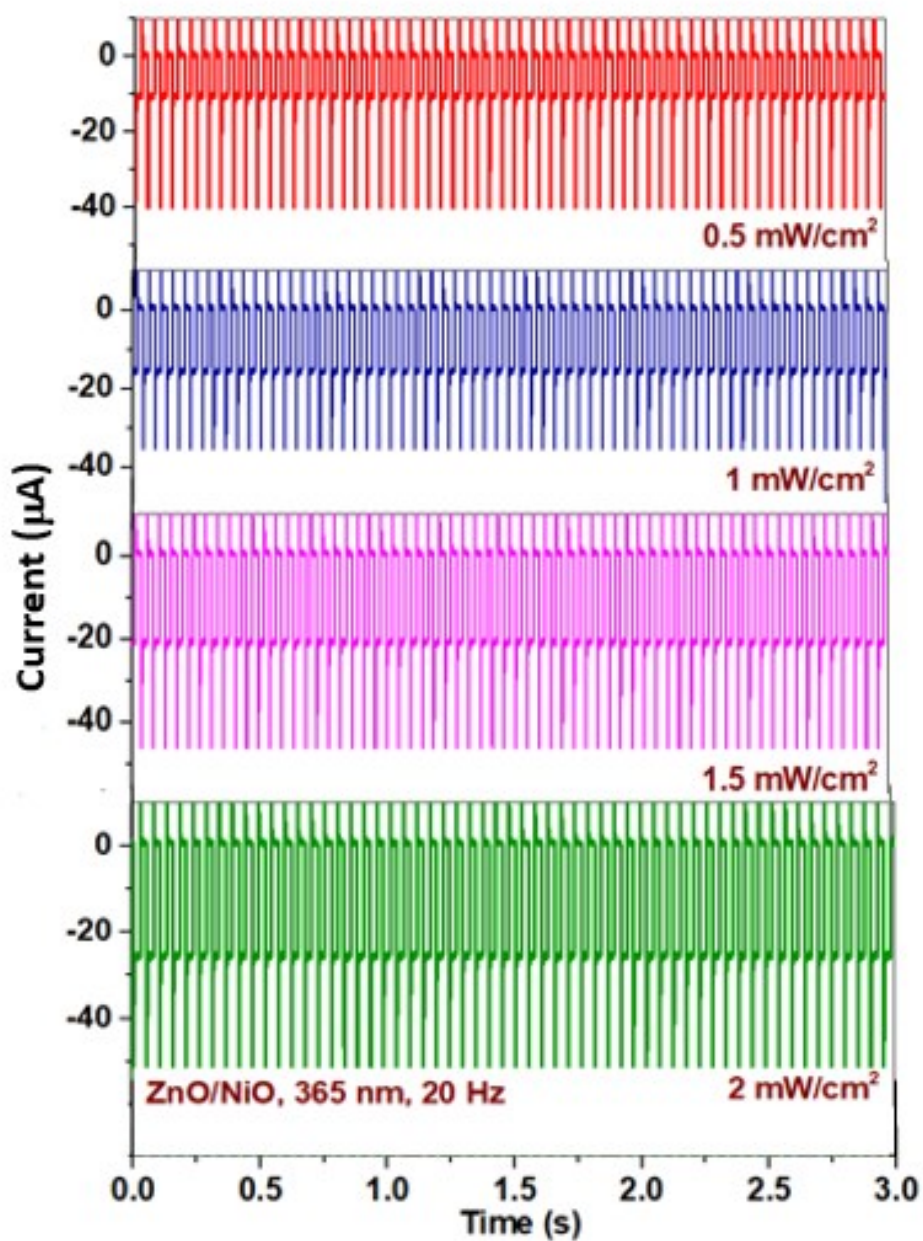


Figure S3. Receptive behavior of the device with varying intensity of UV light as a function of time. The device maintained a constant output response until the UV light radiation was removed, which shows its stable receptive behavior.

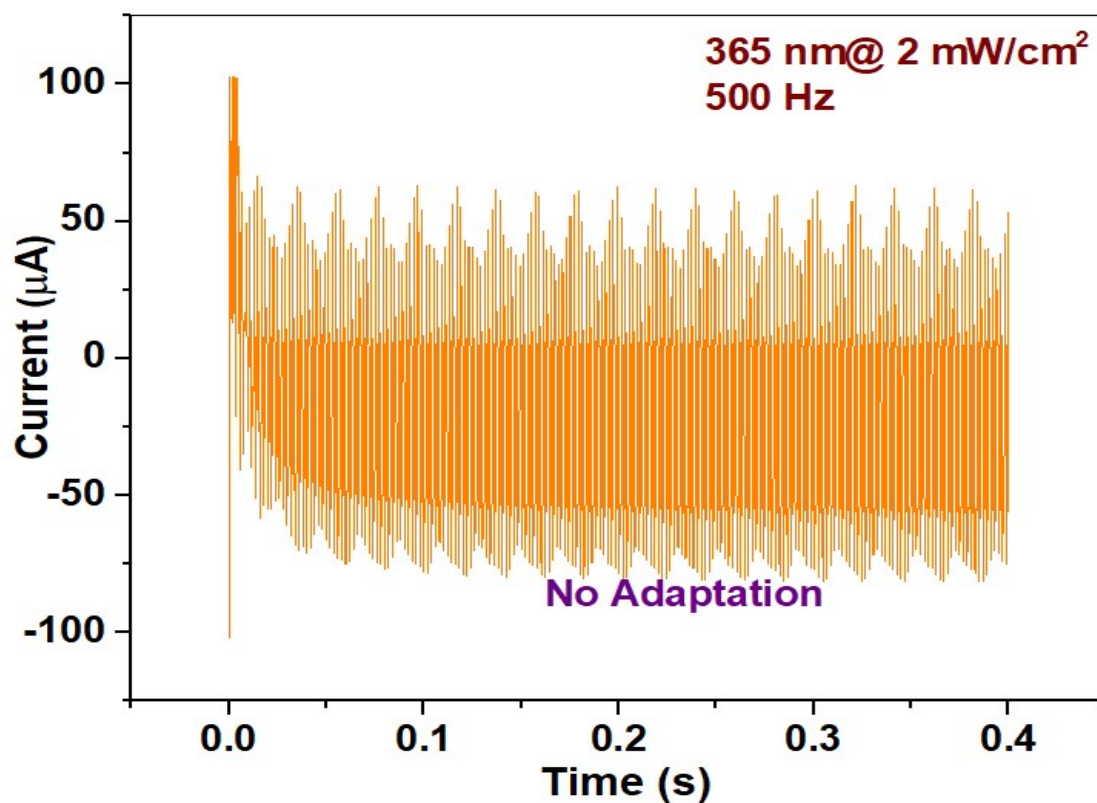


Figure S4. Current–time plot showing no adaptation feature of the device, behaving as a nociceptor for the incoming UV light. The photoresponse increased for a certain intensity of UV light and then saturated.

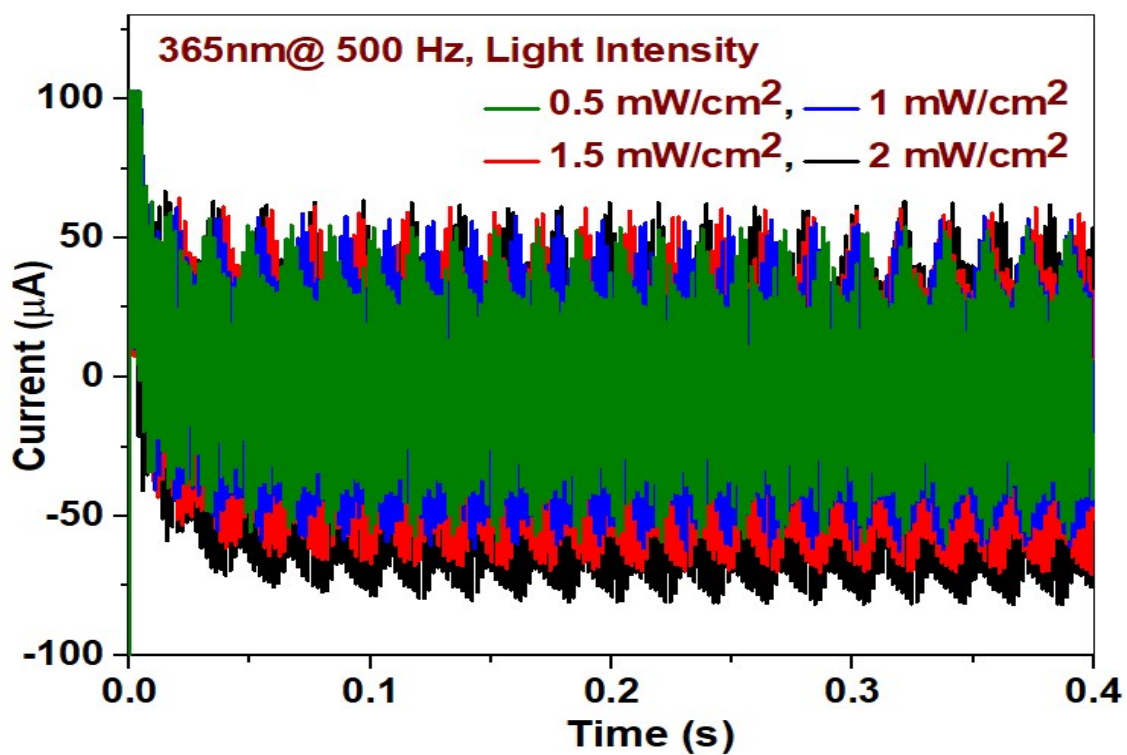


Figure S5. The current–time plot shows the nociceptor behavior of the device with varying intensity of UV light. The photoresponse of the device increased with the intensity of the incoming radiation.

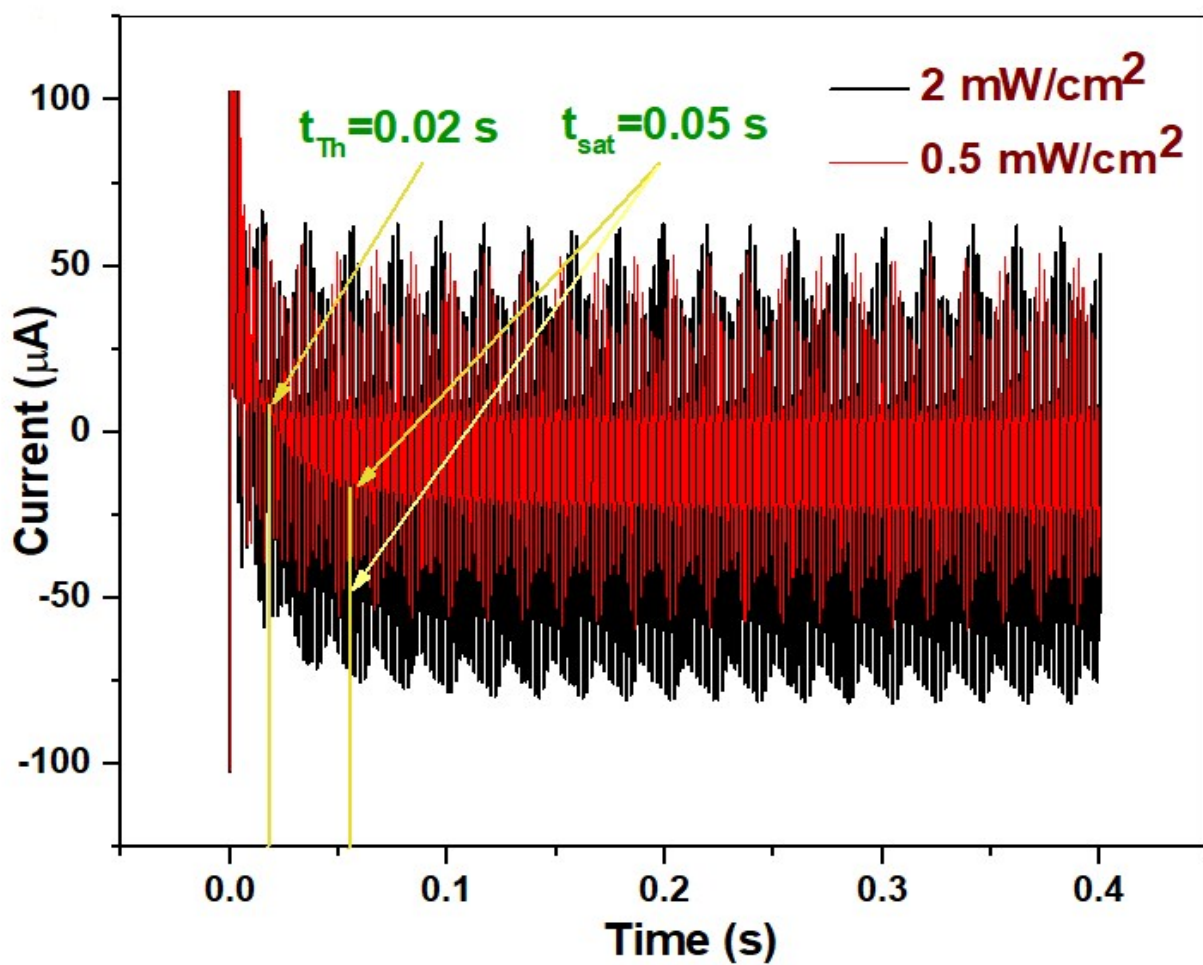


Figure S6. Threshold and saturation characteristics of the device. The threshold and saturation time of the device were the same for low- and high-intensity signals, which shows the harsh response of the device to noxious stimuli.

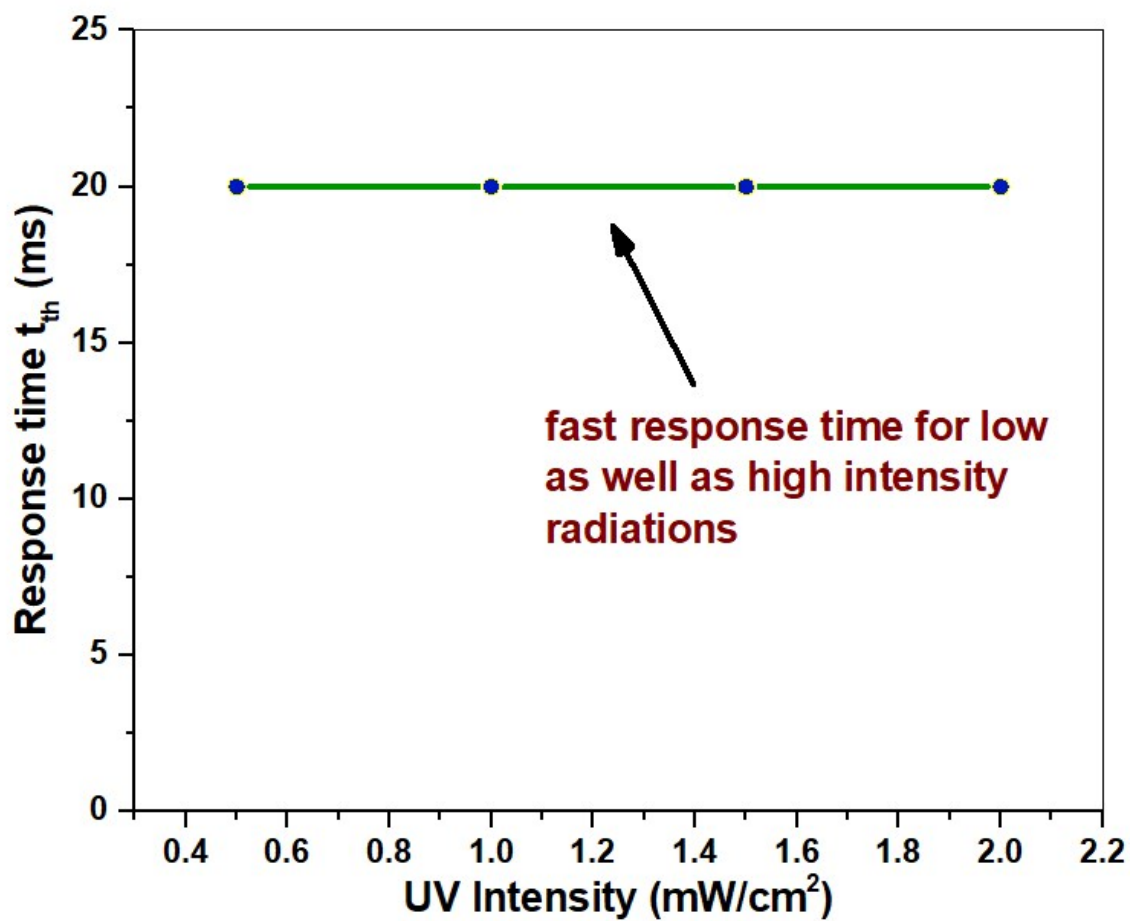


Figure S7. Response time of the device. It was the same for low- and high-intensity signals, which shows its harsh response to noxious stimuli.

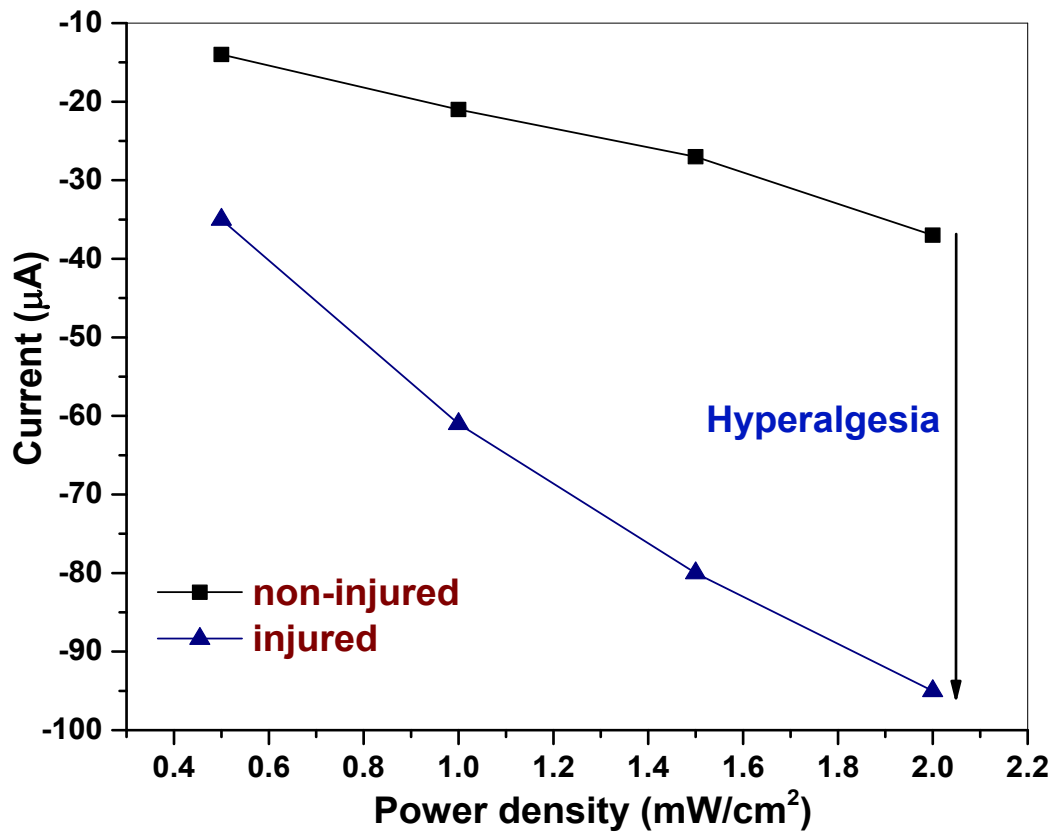


Figure S8. Device exhibiting Hyperalgesia property of the nociceptor which highlights how the damaged tissue enhanced the response even for low light illumination.