With funding from the National Science Foundation and Chevron, researchers at the Univ. of California, Berkeley (UC-Berkeley), led by Ali Javey, have developed a highly sensitive, low-power gas-sensing platform that is based on a silicon chemical-sensitive field-effect transistor (CS-FET). This platform has demonstrated a large responsivity — with a nearly two orders of magnitude change in sensor current baseline — that ensures high-fidelity signal readout. In addition, the platform has very low limits of detection and fast response times (<20 sec). These metrics are critical for meeting workplace regulations

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