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High performance biodegradable semiconductor devices

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ABSTRACT

A brief review of recent progress and a description of new advances in materials for bioresorbable semiconductor devices capture the current status of a class of a technology known as transient electronics. A summary of options in materials and devices illustrates some of the possibilities. Studies of the kinetics of silicon hydrolysis in various aqueous solutions, taken together with toxicity tests on live animal models, suggest potential for realistic use in biomedical implants and environmental monitors.