Bioresorbable Materials and Their Application in Electronics

Bioresorbable electronics that can dissolve away in aqueous environment and generate biological safe products offers revolutionary solutions to replace current built-to-last electronics predominantly used in implanted devices and electronic gadgets. Its contribution involves reducing risk of surgical complications by minimizing number of surgery and preventing production of electronic waste by allowing rapid device recycling. This Element presents bioresorbable materials (e.g. metals, polymers, inorganic compounds, and semiconductors) that have been used to construct electronic devices and analyzes their unique dissolution behaviors and biological effects. These materials are combined to yield representative devices including passive and active components and functional systems.

BIORESORBABLE MATERIALS AND THEIR APPLICATION IN ELECTRONICS

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ELEMENTS OF FLEXIBLE AND LARGE-AREA ELECTRONICS

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