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# ACCEPTED MANUSCRIPT

## **Piezoelectric Polymers as Biomaterials for Tissue Engineering Applications**

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### **Graphical abstract**

### Highlights

Novel tissue engineering strategies can take advantage of active materials
Electrical and electromechanical cues are the most relevant ones for tissue engineering
Piezoelectric polymers can provide electrical and mechanical cues to growing tissue
Review on piezoelectric materials used for tissue engineering applications is provided
The main achievements, challenges and future needs are discussed

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