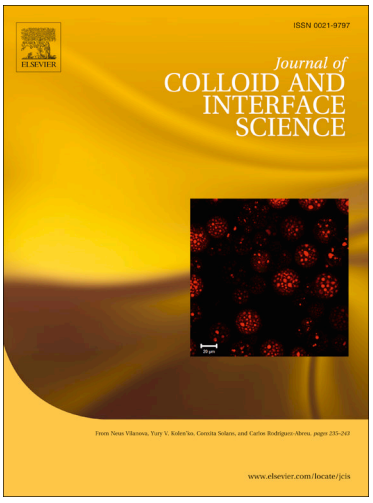

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From dead leaves to sustainable organic resistive switching memory

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ABSTRACT

An environmental-friendly, sustainable, pollution-free, biodegradable, flexible and wearable electronic device hold advanced potential applications. Here, an organic resistive switching memory device with Ag/Leaves/Ti/PET structure on a flexible polyethylene terephthalate (PET) substrate was fabricated for the first time. We observed an obvious resistive switching memory characteristic with large switching resistance ratio and stable cycle performance at room temperature. This work demonstrates that leaves, a useless waste, can be properly treated to make useful devices. Furthermore, the as-fabricated devices can be degraded naturally without damage to the environment.

Keywords: Dead leaves; Organic; Flexible; Resistive switching; Memory device.

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