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# Advanced Fabrication and Properties of Hybrid Polyethylene Terephthalate Fiber - Silica Aerogels from Plastic Bottle Waste

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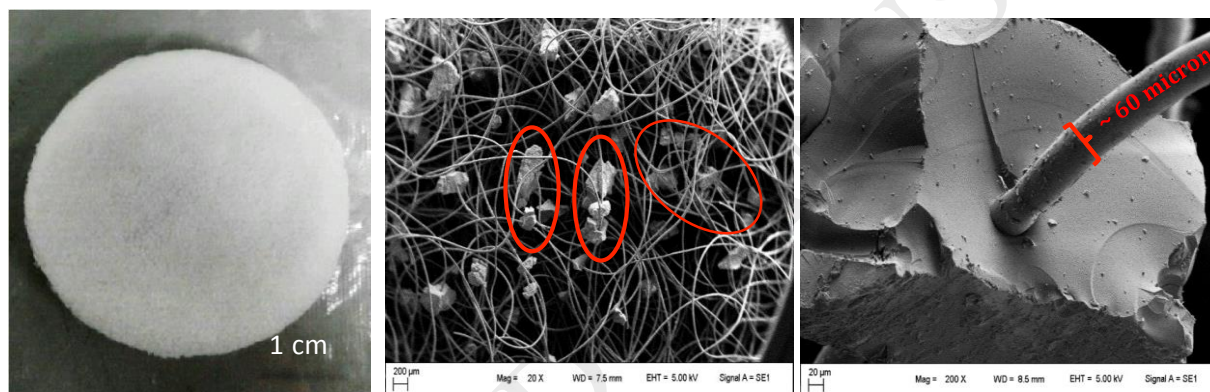
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## GRAPHIC ABSTRACT



## HIGHLIGHTS

- rPET-silica aerogels are successfully developed from plastic bottle waste
- Ultra-low thermal conductivity and high thermal stability
- Very low compressive Young's Modulus and very soft
- Fabrication method can be scaled up for industrial applications

## Abstract

Recycled polyethylene terephthalate (rPET) fiber - silica aerogels are successfully developed from rPET fibers obtained from PET plastic bottle waste and tetraethoxysilane (TEOS). The rPET -

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