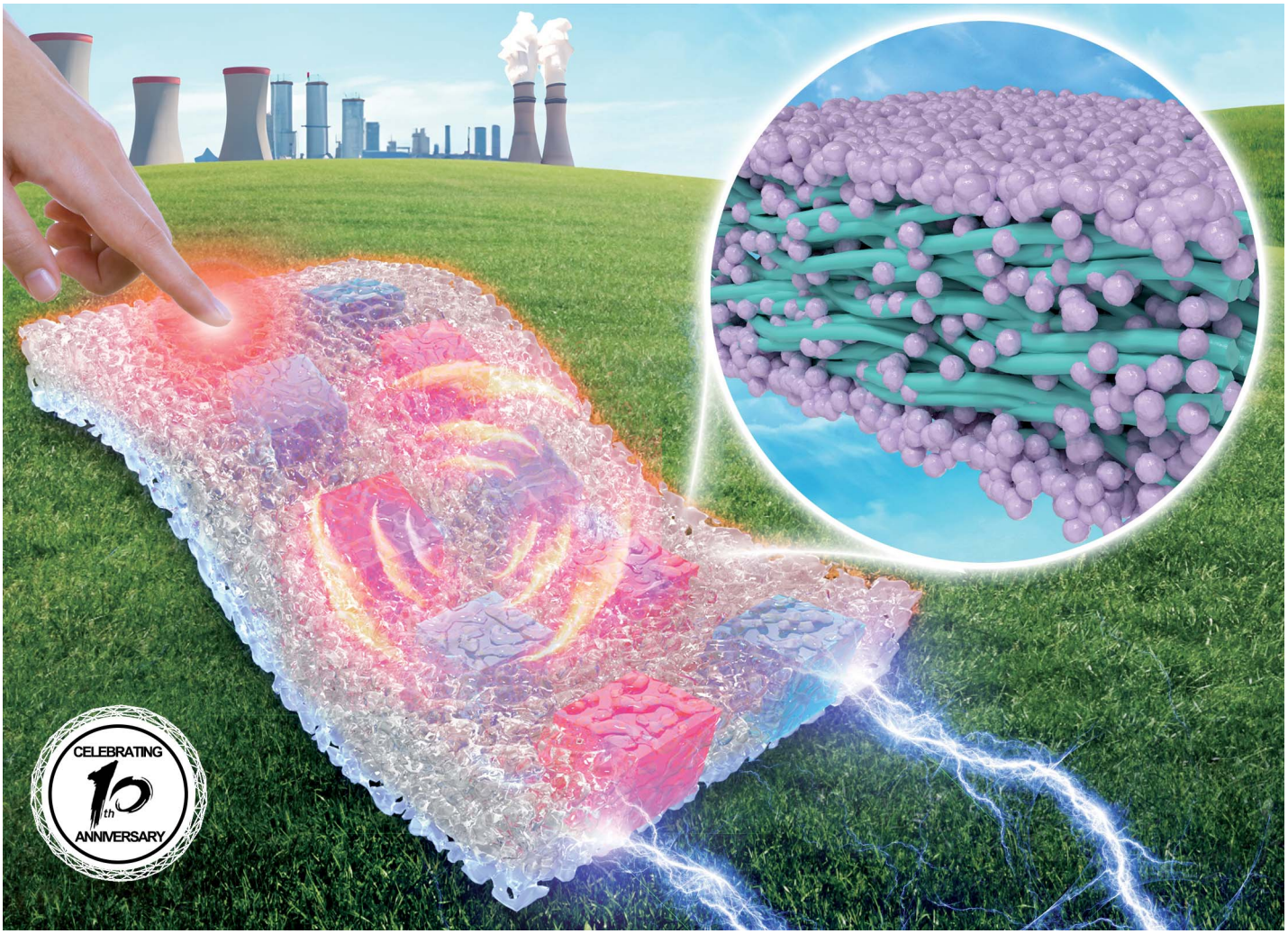
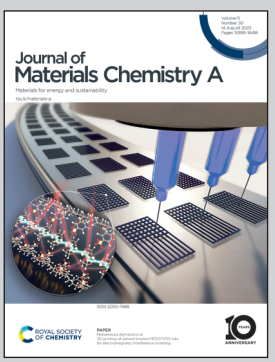


Highlighting a study on flexible inorganic/organic composite films towards conformal cross-plane thermoelectric devices in SMART Lab led by Prof. Kun Zhang from Donghua University, and co-supervised by Prof. Jianyong Ouyang from National University of Singapore.

Flexible Bi_2Te_3/PEDOT nanowire sandwich-like films towards high-performance wearable cross-plane thermoelectric generator and temperature sensor array

Flexible and mechanically robust Bi_2Te_3/PEDOT nanowire sandwich-like films are demonstrated, exhibiting a record Seebeck coefficient of 266.4 μV K^{-1} with a corresponding power factor of 740.2 μW m^{-1} K^{-2} and a z*T* value of 0.27 at room temperature. Besides, conformal film-based cross-plane thermoelectric devices with reduced number of electric leads are fabricated for cross-plane wearable thermoelectric generation and thermal mapping.

As featured in:



See Jianyong Ouyang, Kun Zhang *et al.*, *J. Mater. Chem. A*, 2023, **11**, 16039.

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