Materials Advances

An open access journal publishing across the breadth of materials science

rsc.li/materials-advances

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

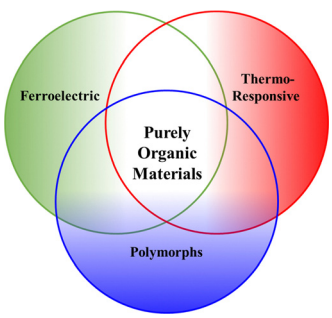
IN THIS ISSUE

ISSN 2633–5409 CODEN MAADC9 5(19) 7485–7832 (2024)

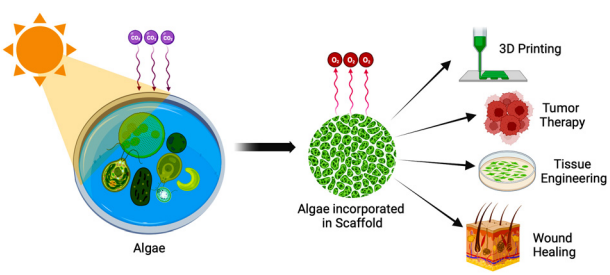
Cover
See Senentxu Lanceros-Méndez, Frank N. Crespilho *et al.*, pp. 7534–7547. Image reproduced by permission of Frank Nelson Crespilho and Thiago Bertaglia from *Mater. Adv.*, 2024, **5**, 7534. Image generated by Bria AI.

Inside cover
See Parthapratim Munshi *et al.*, pp. 7495–7515. Image reproduced by permission of Parthapratim Munshi from *Mater. Adv.*, 2024, **5**, 7495.

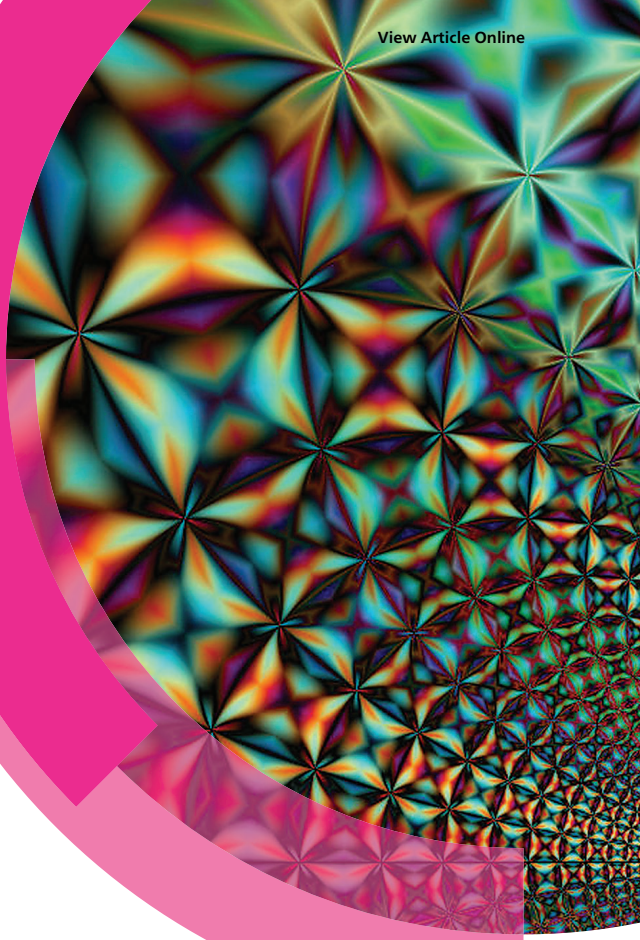
HIGHLIGHT



PERSPECTIVE



ROYAL SOCIETY OF CHEMISTRY



RSC Advances

At the heart of open access for the global chemistry community

Editor-in-chief

Russell J Cox
Leibniz Universität Hannover, Germany

We stand for:

Breadth We publish work in all areas of chemistry and reach a global readership

Affordability Low APCs, discounts and waivers make publishing open access achievable and sustainable

Quality Research to advance the chemical sciences undergoes rigorous peer review for a trusted, society-run journal

Community Led by active researchers, we publish quality work from scientists at every career stage, and all countries

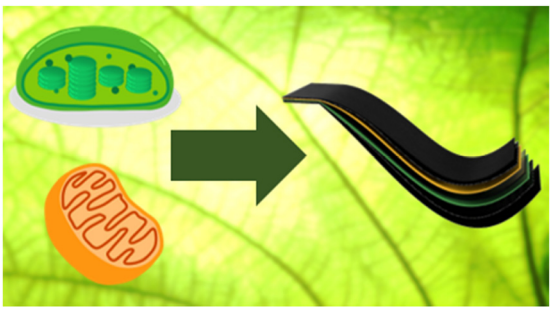
Submit your work now

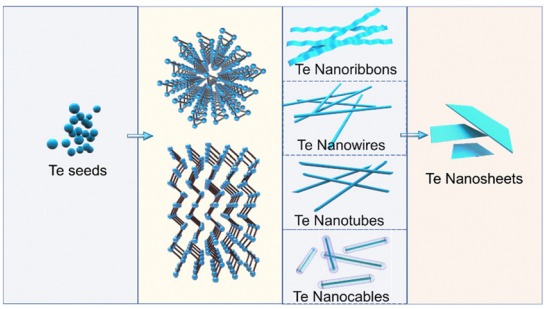
rsc.li/rsc-advances

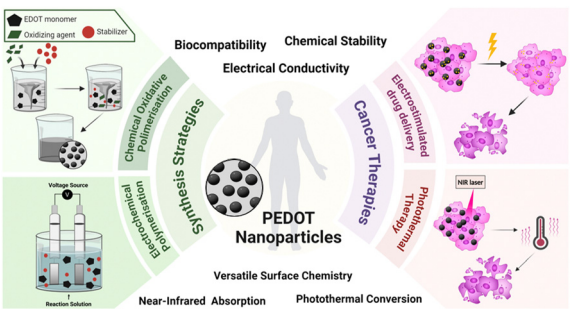
@RSC_Adv

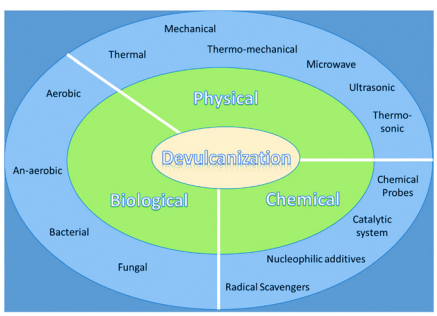
Registered charity number: 207890

REVIEWS





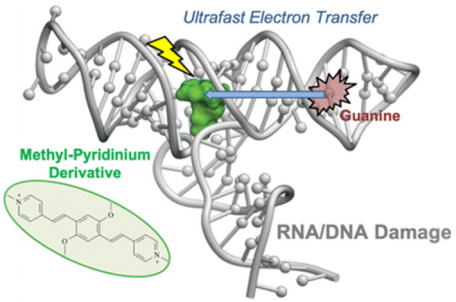


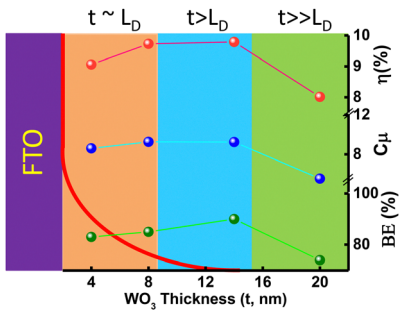


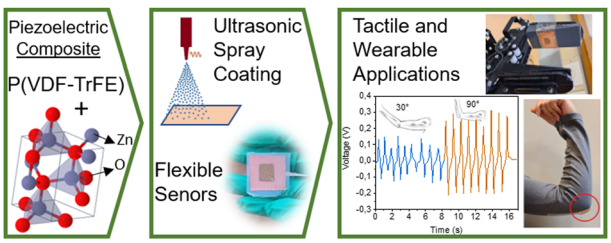
COMMUNICATIONS

PAPERS

PAPERS







PAPERS

PAPERS

PAPERS