

## **RSC Applied Interfaces**



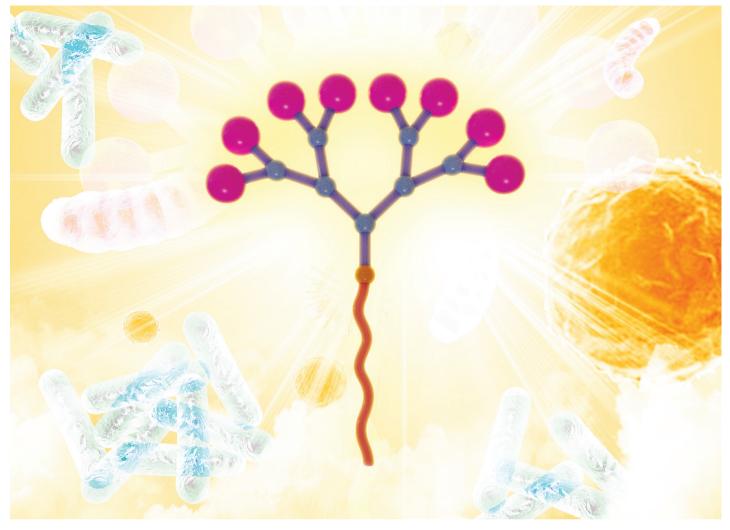
## Interfacial and surface research with an applied focus

Interdisciplinary and open access

rsc.li/RSCApplInter

Fundamental questions Elemental answers

Registered charity number: 207890



Showcasing research from Dr Ling PENG's team at Centre Interdisciplinaire de Nanoscience de Marseille, Aix-Marseille University, CNRS, France.

Amphiphilic dendrimers against antibiotic resistance: light at the end of the tunnel?

Amphiphilic dendrimers are becoming a promising solution for antibiotic resistance. These innovative paradigms mimic antimicrobial peptides to achieve strong antibacterial activity while possessing robust stability and a low risk of resistance. The key to their success lies in their exquisite amphiphilicity, which enables them to effectively target bacteria while minimizing harmful effects. By carefully adjusting the dendrimer chemistry, the hydrophobicity-hydrophilicity balance of amphiphilic dendrimers can be precisely finetuned for optimal performance in achieving excellent antibacterial activity and selectivity.



