



Showcasing research from Professor Kirillov's laboratory, Instituto Superior Técnico, University of Lisbon, Portugal.

Sulfonyldibenzoate coordination polymers as bioactive dopants for polysaccharide films with antibacterial and antibiofilm properties

Biopolymer-Bacteria Interfaces: Where Biopolymers Battle Bacteria. Antimicrobial silver(I) and copper(II) coordination polymers were assembled and used as dopants for hybrid biopolymer films based on agarose or potato starch, which feature varying rates of degradability and silver/copper release. The obtained biopolymer films revealed a remarkable antibacterial and biofilm inhibition activity. This study extends the application of coordination compounds as components of hybrid functional materials with antimicrobial properties and prospective biomedical relevance. An interface of polysaccharide biopolymer and its antibacterial action is shown on the cover.

As featured in:



See Alexander M. Kirillov *et al.*,
RSC Appl. Interfaces, 2024, 1, 98.