

Antifouling properties of electrospun polymer coatings induced by surface morphology

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June 18th 2022, Pisa



This project has received funding from the Bio Based Industries Joint Undertaking (JU) under grant agreement No 837863. The JU receives support from the European Union's Horizon 2020 research and innovation programme and the Bio Based Industries Consortium.





Bio-based Industries Consortium



Introduction





On any given day:



1/26long-term care facilities

residents have at least

one HAI.

130 000 residents have at least one HAI.





1/3 bacteria



/15 hospital patients have at least one HAI.

98 000

patients have at least one HAI.



Images and data from European Centre for disease prevention and control (ECDC)

Introduction



Physical antifouling repulsion

Electrospinning setup











2nd generation coatings – bacteria adhesion assay





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- The morphology of a surface can affect its antifouling properties
- Cassie-Baxter regime
- Surface with geometric features with dimension comparable to the microrganims
- Image and statistical procedure to evaluate wettability



Thanks for your attention !