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Crosslinked polybenzoxazine coatings with hierarchical surface structures from a

biomimicking process exhibiting high robustness and anticorrosion performance

Susan Zachariah, Tsai-Wei Chuo, and Ying-Ling Liu*

Department of Chemical Engineering, National Tsing Hua University, #101, Sec. 2, Kuang-

Fu Road, Hsinchu 30013, Taiwan.

* Corresponding author: Professor Ying-Ling Liu, E-mail: liuyl@mx.nthu.edu.tw; Tel: +886-

3-5711450; Fax: +886-3-5715408.

Highlights

- 1. Crosslinked polybenzoxazine coatings with hierarchical surface structures are prepared.
- 2. Biomimicking processes are performed using lotus leaves and xanthosoma sagittifolium leaves based templates.
- 3. A robust and highly efficient single-component anticorrosion coating is demonstrated with polybenzoxazine.
- 4. The anticorrosion coating shows an extremely high protection efficiency of 99.93%.

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