

# Preparation of 2D ZIF-L and Its Antibacterial and Antifouling Properties

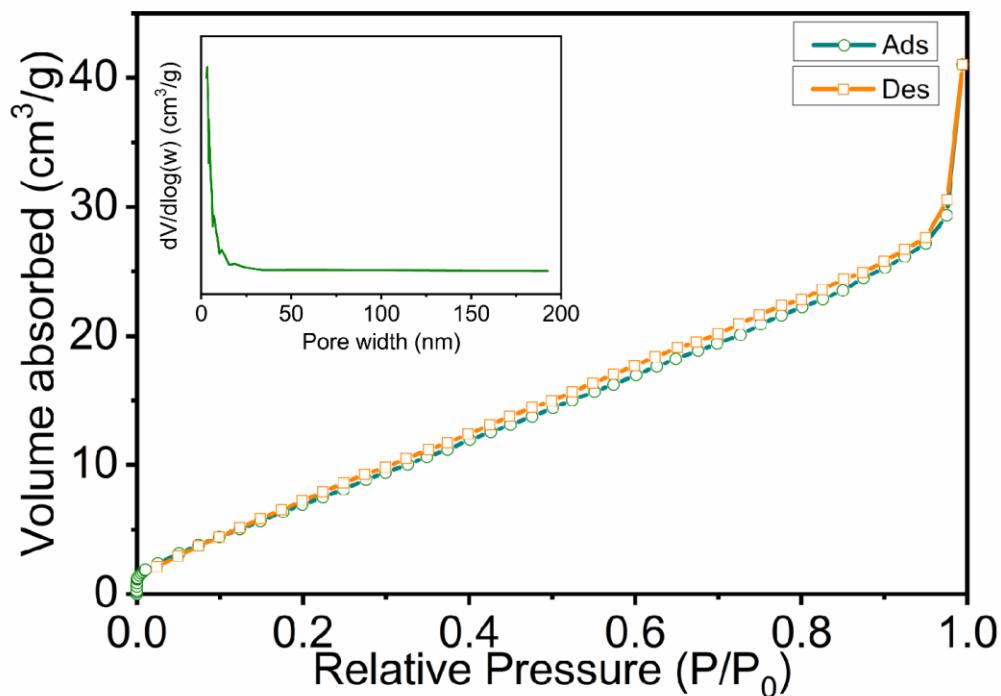
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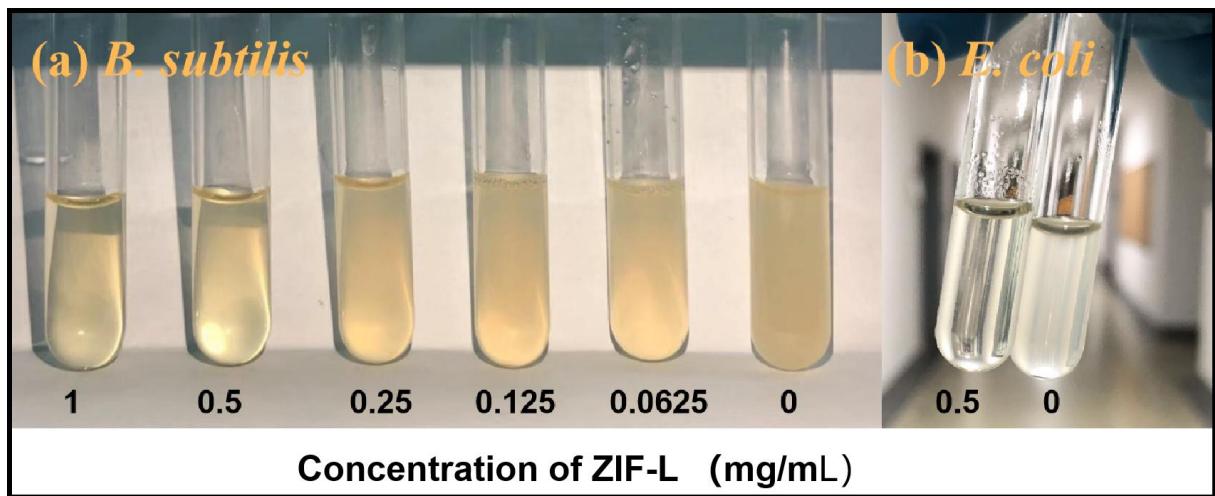
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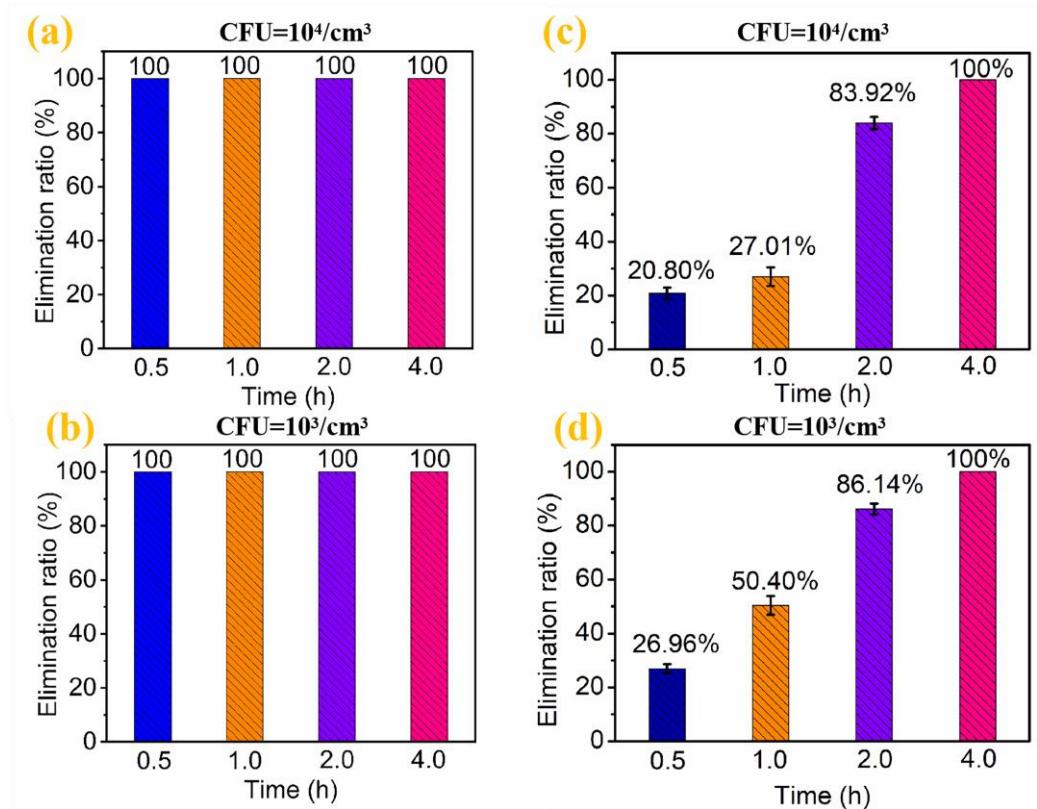
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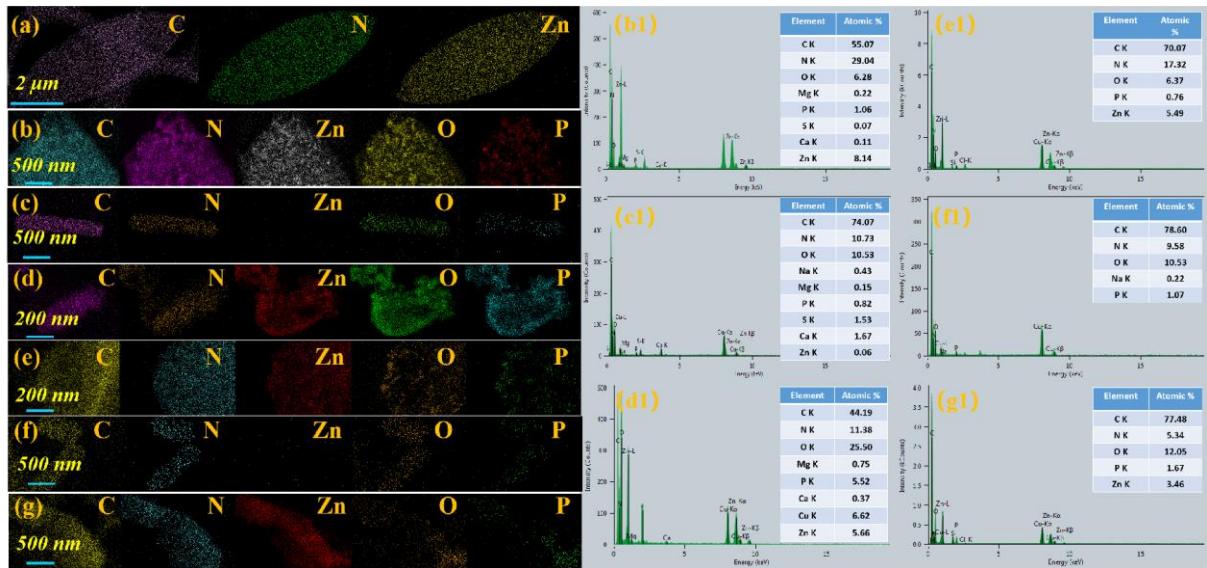
**Figure S1:** N<sub>2</sub> adsorption-desorption isotherms and its pore-size distribution curve (inset) of ZIF-L.



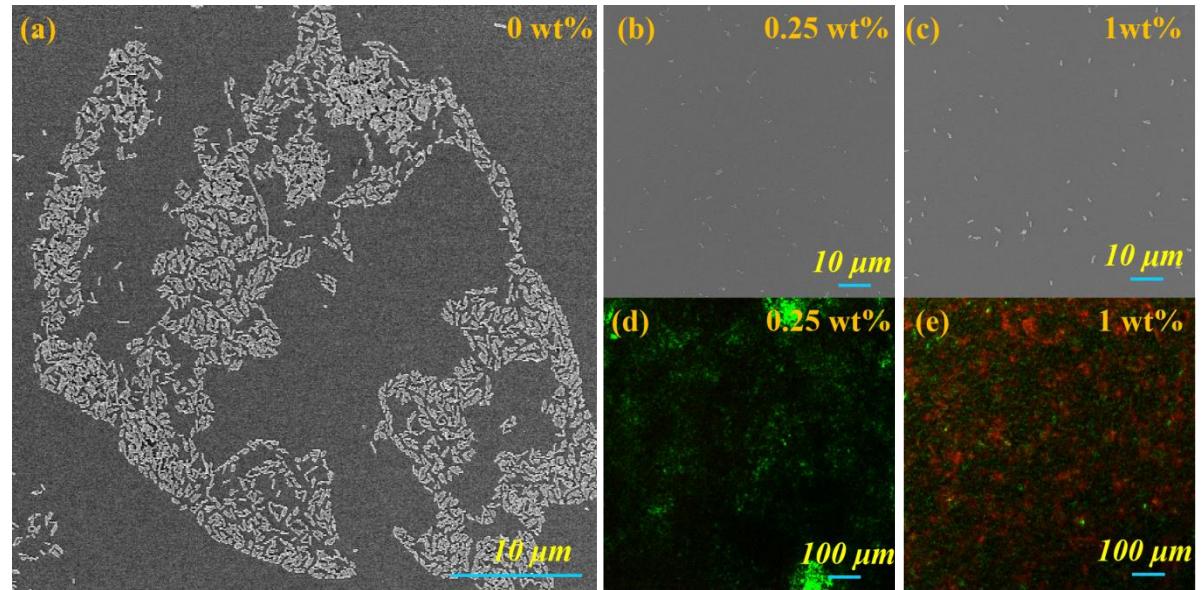
**Figure S2:** The images showing MIC measurement results.



**Figure S3:** (a) the elimination ratio of the ZIF-L toward *Bacillus subtilis* ( $\text{CFU}=10^4/\text{cm}^3$ ), (b) the elimination ratio of the ZIF-L toward *Bacillus subtilis* ( $\text{CFU}=10^3/\text{cm}^3$ ), (c) the elimination ratio of the ZIF-L toward *Escherichia coli* ( $\text{CFU}=10^4/\text{cm}^3$ ), (d) the elimination ratio of the ZIF-L toward *Escherichia coli* ( $\text{CFU}=10^3/\text{cm}^3$ ).



**Figure S4:** Surface element analysis of the (a) ZIF-L, (b, b1) ZIF-L after resistance to *Bacillus subtilis*, (c, c1) *Bacillus subtilis*, (d, d1) *Bacillus subtilis* after antibacterial treatment.(e, e1) ZIF-L after resistance to *Escherichia coli*, (f, f1) *Escherichia coli*, (g, g1) *Escherichia coli* after antibacterial treatment



**Figure S5:** The SEM morphology (**a**: 0 wt%, **b**: 0.25 wt%, **c**: 1 wt%) and live/dead cell staining (**d**: 0.25 wt%, **e**: 1 wt%) of *Escherichia coli* after touching ZIF-L/epoxy composites with different contents of ZIF-L.