

Robust, Anti-biofouling Superhydrophobic Surface Fabricated by Immiscible Mussel Adhesive (iMglue) and Its Biomedical Applicability

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Using water-immiscibility and positively-charged characteristics of mussel adhesive (iMglue), superhydrophobic (SH) iMglue-SiO₂(TiO₂/SiO₂)₂ thin coating was successfully fabricated by solution-based electrical charge controlled layer by layer growth (ECLbL). In addition, we also developed SH/iMglue patch for tissue closure bandage by spray coating of hydrophobic SiO₂ on iMglue-covered cotton pad.