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Nanocomposite Membranes of Polydopamine/Electropositive Nanoparticles/ Polyethyleneimine for Nanofiltration

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Abstract

Nanocomposite membranes (NCMs) provide inspiration to combine the superiorities of inorganic nanomaterials and polymeric matrices for outstanding nanofiltration performance. Herein, novel NCMs have been fabricated via co-deposition of polydopamine (PDA), polyethylenimine (PEI) and electropositive gold nanoparticles (GNPs) followed by crosslinking. The GNPs distribute in the formed selective layer uniformly without obvious aggregation due to their good dispersion and compatibility with the positively charged

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