

Electronic Supplementary Information

Fast Formation of Superhydrophobic Octadecylphosphonic Acid (ODPA) Coating for Self-cleaning and Oil/Water Separation †

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This Supplementary Information section contains:

Video 1. “Water-removing” type oil/water separation: Straightforward oxidation of a copper substrate produces an underwater superoleophobic mesh. Water can selectively penetrate through the mesh whereas oil (petroleum ether) is blocked.

Video 2. “Oil-removing” type oil/water separation: Due to the fast formation of a phosphonate coating on the alkaline-oxidized mesh, the as-prepared mesh can be used for oil/water separation while oil (petroleum ether) can selectively penetrate through the mesh whereas water is blocked.