

Template synthesis of methylammonium lead iodide in the matrix of anodic titanium dioxide *via* the direct conversion of electrodeposited elemental lead

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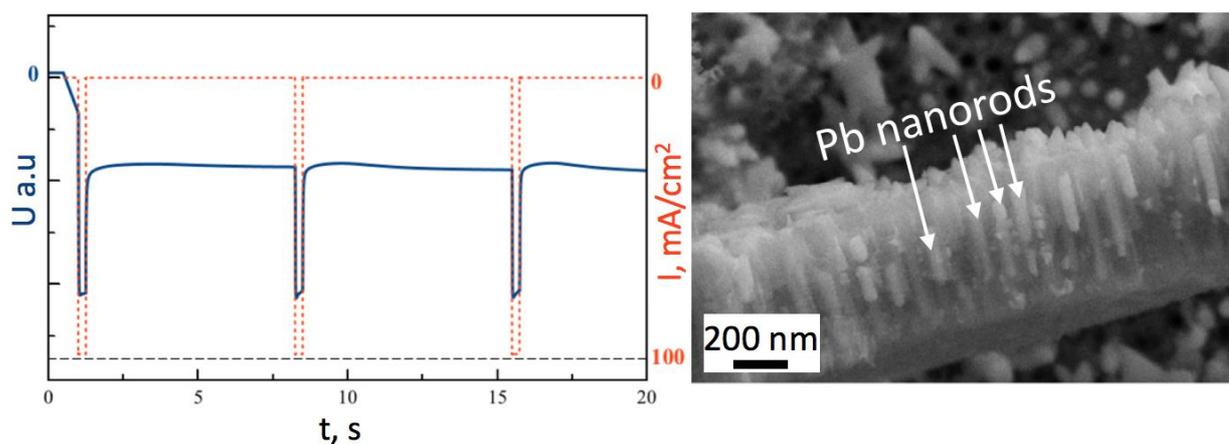


Figure S1 (Left) $I(t)$ and $U(t)$ during Pb electrodeposition into anodic TiO_2 pores and (right) SEM image of the obtained film.

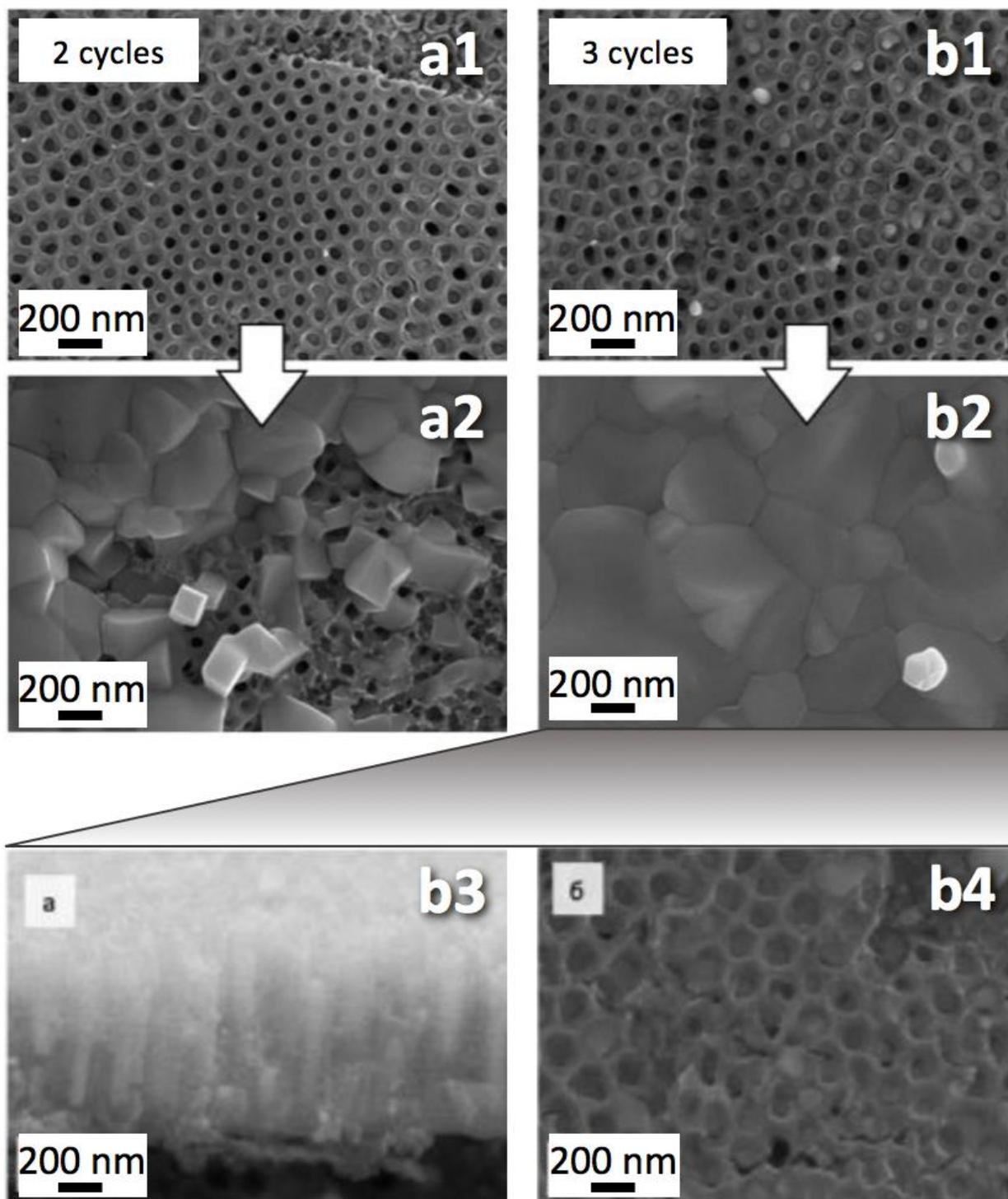


Figure S2 (*a1*) SEM image of the Pb/TiO₂ film surface after 2 cycles of electrodeposition, (*a2*) SEM image of the film after complete Pb to MeNH₃PbI₃ conversion; (*b1*) SEM image of the Pb/TiO₂ film surface after 3 cycles of electrodeposition, (*b2*) SEM of the film after complete Pb to MeNH₃PbI₃ conversion; (*b3*) backscattered electrons SEM image of this film, (*b4*) SEM image of surface of this film after the mechanical removal of the MeNH₃PbI₃ capping layer.