

Supporting Information

Growth of Oriented Single Crystalline La-Doped TiO₂ Nanorod Arrays Electrode and Investigation of Optoelectronic Properties for Enhanced Photoelectrochemical Activity

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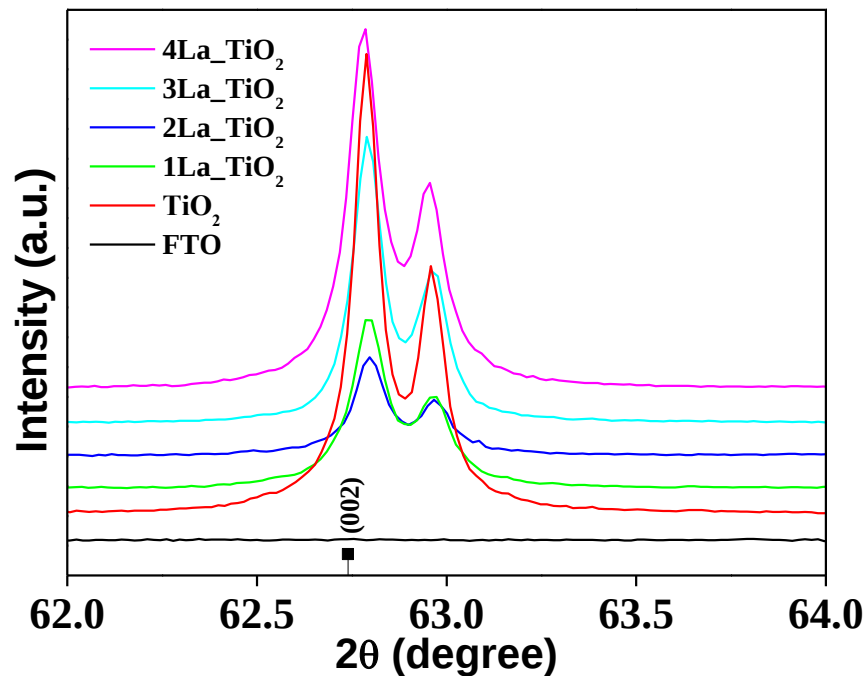


Figure S1: Zoom view of the XRD patterns of pure TiO₂ and La-doped TiO₂ nanorods with various amounts of doping. 1La-TiO₂, 2La-TiO₂, 3La-TiO₂ and 4La-TiO₂ denote the samples where the added amount of La(NO₃)₃·6H₂O was 1, 2, 3 and 4 mol% with respect to molar concentration of TBOT.

Table S1. Structural properties of La-doped TiO₂ nanorods (NR) grown on FTO substrate

Samples	NR average diameter (nm)	NR average length (nm)	NR average density (μm ⁻²)
1La -TiO ₂	199	2.2	12
2La -TiO ₂	131	2.3	9
3La -TiO ₂	271	2.4	6
4La -TiO ₂	400	2.2	2

Table S2. EDAX Analysis

Samples	Lanthanum content (atomic %)
1La -TiO ₂	0.93
2La -TiO ₂	1.37
3La -TiO ₂	2.21
4La -TiO ₂	3.78