

Article

Structural, vertical growth, and electrical conductivity properties of time-dependent electrodeposited Anatase-Rutile nanostructured thin films

Structural, 3D morphological, and electrical conductivity properties of electrodeposited TiO₂ thin films.

Table S1. Calculated Rietveld refinement results for XRD measurements performed on electrodeposited TiO₂ thin films.

Parameters	Electrodeposition time				
	2s	4s	6s	8s	10s
Crystal system	Tetragonal	Tetragonal	Tetragonal	Tetragonal	Tetragonal
Space group	I 41/a m d	I 41/a m d	I 41/a m d	I 41/a m d	I 41/a m d
a (Å)	3.79	3.77	3.71	3.79	3.79
c (Å)	9.52	9.45	9.54	9.53	9.53
Phase (%)	78.20	75.70	76.20	79.8	82.10
Crystallite size Anatase (nm)	13.07	12.97	12.55	14.39	15.09
Crystal system	Tetragonal	Tetragonal	Tetragonal	Tetragonal	Tetragonal
Space group	P 42/m a m	P 42/m a m	P 42/m a m	P 42/m a m	P 42/m a m
a (Å)	4.59	4,566	4.59	4,594	4,593
c (Å)	2.96	3,052	2.96	2,962	2,961
Phase (%)	8.50	7.40	16.00	13,0	11,9
Crystallite size Rutile (nm)	11,32	12,82	12,44	12,08	10,19
Crystal system	Cubic	Cubic	Cubic	Cubic	Cubic
Space group	I a -3	I a -3	I a -3	I a -3	I a -3
a (Å)	10.22	10,19	10.22	10.22	10.22
Phase (%)	13.30	17.00	7.80	6.20	6.10
R _{exp}	7.50	8.30	9.60	8.70	7.20
R _{wp}	12.30	11.7	13.50	15.20	10.30