

Electronic Supplementary information

**Surface Modified  $\text{Li}_4\text{Ti}_5\text{O}_{12}$  by Paper Templated Approach for  
Enhanced Interfacial  $\text{Li}^+$  Charge Transfer in Li-Ion Batteries**

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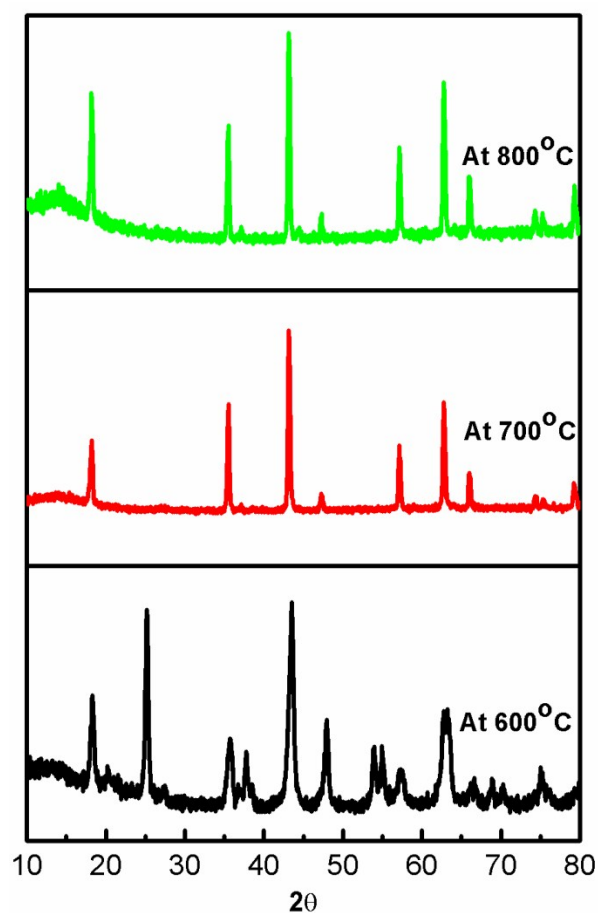
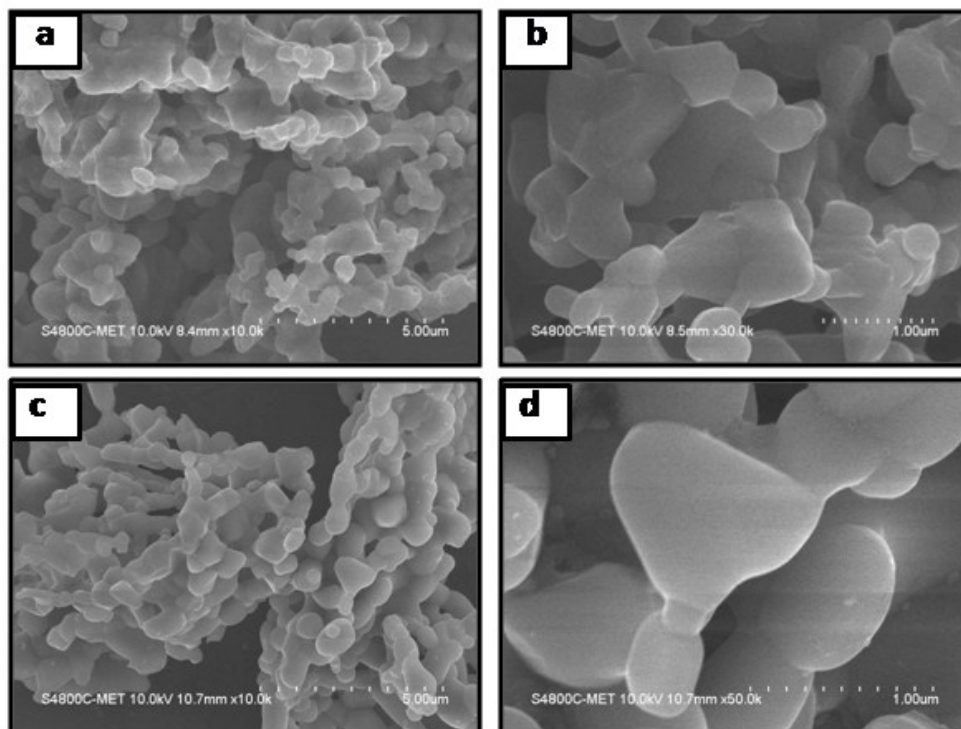


Figure S1 . XRD patterns of  $\text{Li}_4\text{Ti}_5\text{O}_{12}$  samples at 600°, 700° and 800°

**Table S1.** The compounds name with respect to the ref code of XRD

No.	Ref. Code	Compound Name	Chemical Formula		Matched by	Rel. Int. [%]
				2θ		
1	00-024-0646	Lithium Oxalate	$C_2 Li_2 O_4$	18.3329	00-049-1433	44.87
2	00-049-1433	Titanium Oxide	$Ti O_2$	20.3195	00-024-0646; 00-049-1433	6.51
3	01-071-1168	Titanium Oxide	$Ti O_2$	25.1814	01-071-1168	93.94
				27.3529	00-024-0646	5.89
				35.8154	00-024-0646	32.85
				37.78	00-024-0646; 00-049-1433; 01-071-1168	28.54
				43.573	00-024-0646	100
				47.9478	00-024-0646; 01-071-1168	47.11
				53.9195	00-024-0646; 01-071-1168	26.9
				54.9439	00-024-0646; 01-071-1168	27.75
				57.2933	00-024-0646; 00-049-1433	17.29
				62.682	00-024-0646; 01-071-1168	45.68
				63.3618	00-024-0646	44.63
				66.4664	00-024-0646; 00-049-1433	6.53
				68.8655	00-024-0646; 01-071-1168	9.8
				70.2284	00-024-0646; 01-071-1168	8.48
				75.2523	00-049-1433; 01-071-1168	14.24



**Figure S2. FESEM images of (a) LTS1 and (b) LTS3 at low and high magnifications**