

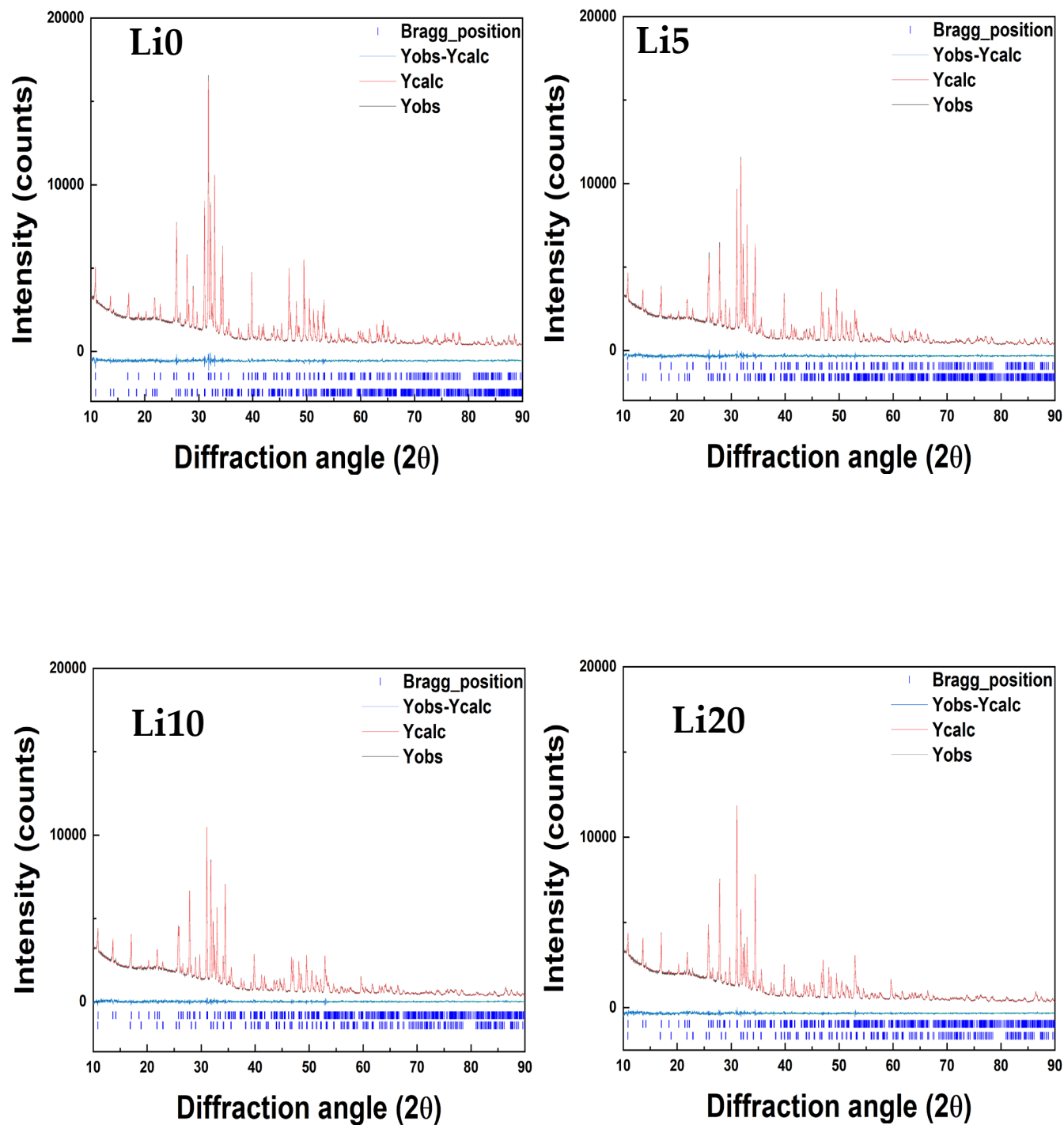
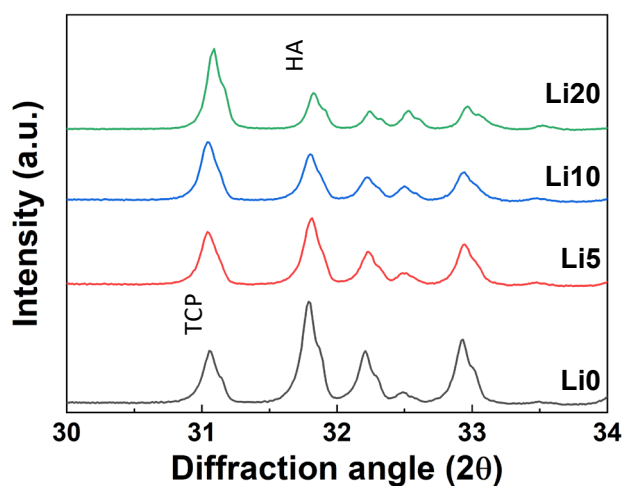
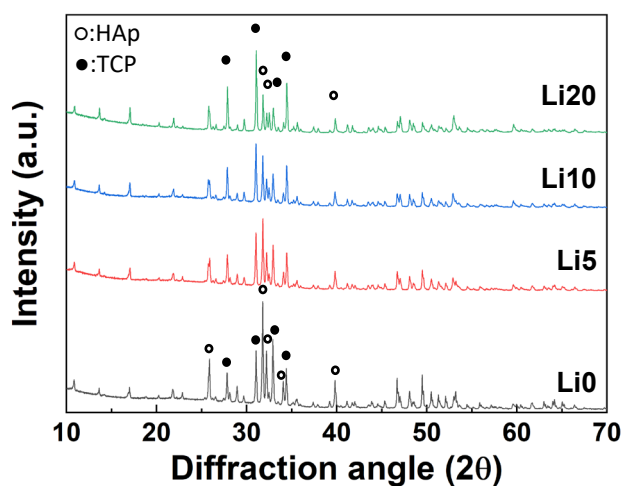
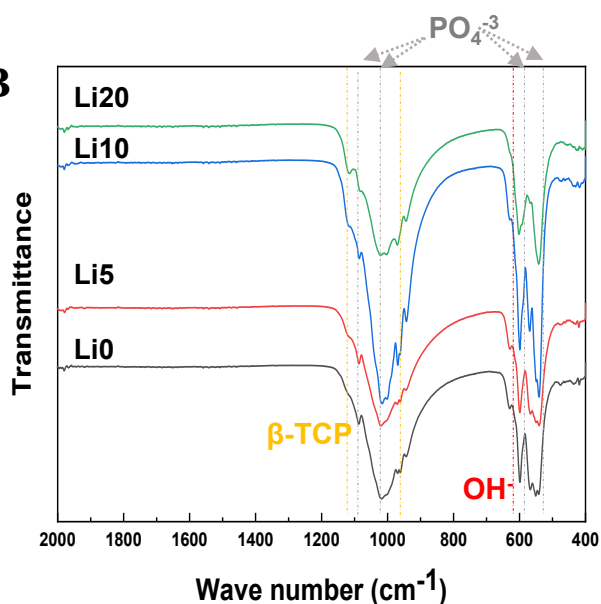


Fig. S1. Rietveld refinement results

A



B



C

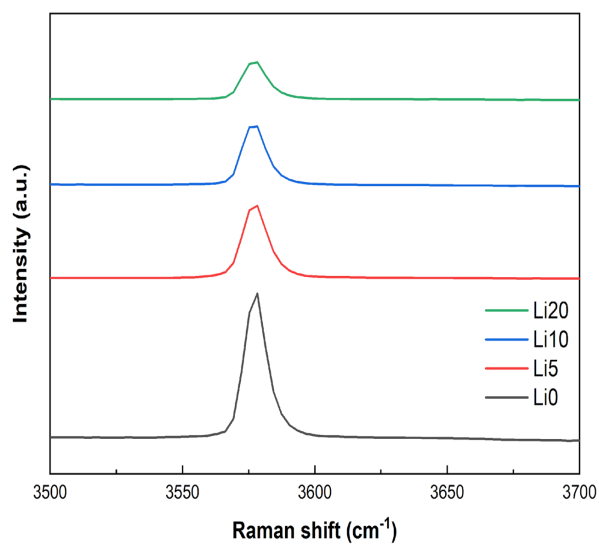
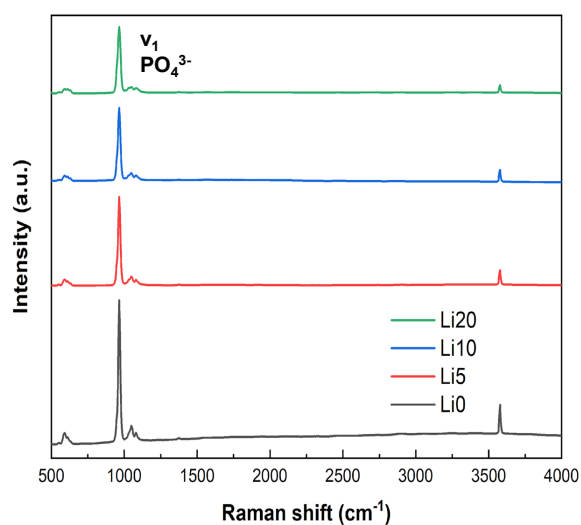


Figure S2. (A) XRD patterns, (B) FTIR spectra and (C) Raman spectra for the Li-BCP samples extracted after immersion in α -MEM solution for 1 day, respectively.

Table S1. The reliability factors of Li-BCP in the Rietveld refinement

Sample	Li (mol%)	Reliability factors	Bragg R-factor factors
		$R_p/R_{wp}/R_{exp}/\chi^2$	HAp/TCP
Li0	0	3.33/4.31/3.30/1.70	4.98/ 7.75
Li5	5	2.59/3.39/2.86/1.40	2.67/3.69
Li10	10	2.49/3.26/2.87/1.29	2.71/3.19
Li20	20	2.55/3.33/2.89/1.33	2.68/3.48

Table S2. The occupancy of lithium ion in β -TCP structure with different lithium contents

Site occupancy	Ca(1)		Ca(4)	
	Ca	Li	Ca	Li
Li0	1	-	0.692(17)	-
Li5	1	-	0.425(14)	0.469(14)
Li10	1	-	0.339(13)	0.661(13)
Li20	0.953(11)	0.047(11)	0.358(9)	0.642(9)