

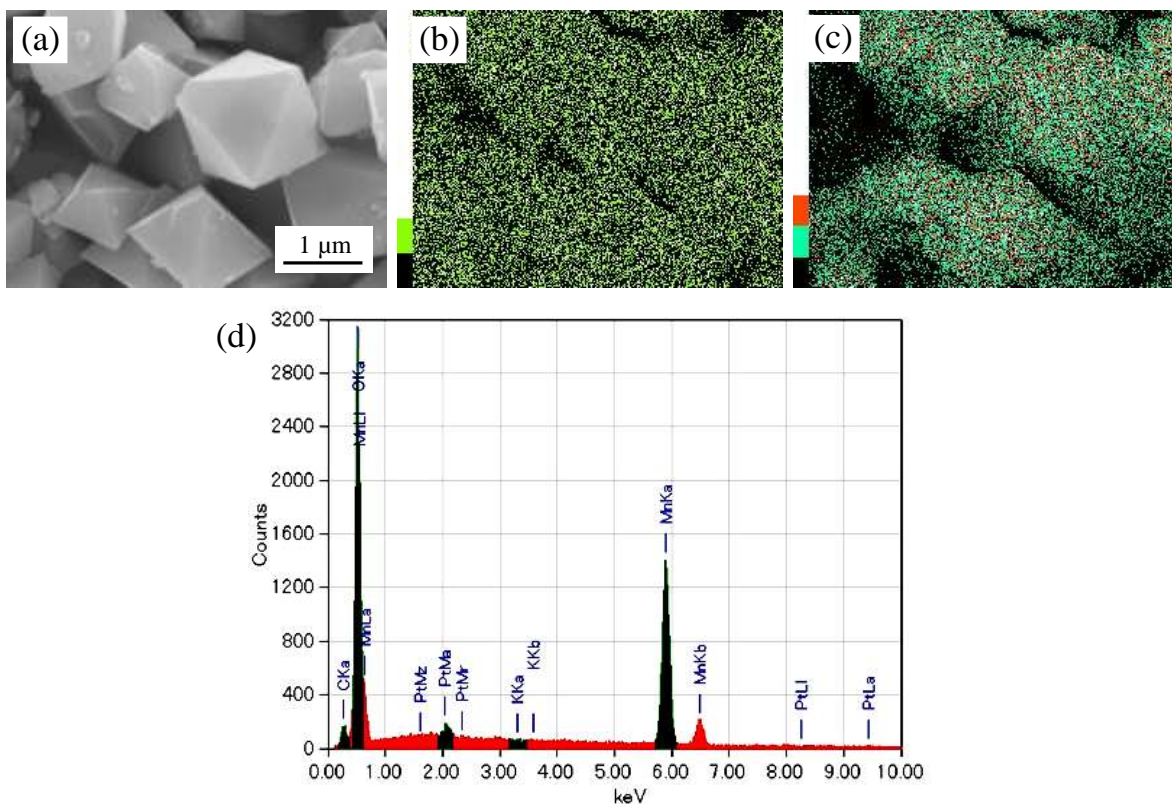
## Electronic Supplementary Information (ESI) data

run	holding temperature / °C	solute		flux		solute concentration (mol%)
		Li <sub>2</sub> CO <sub>3</sub> / g	MnCO <sub>3</sub> / g	LiCl / g	KCl / g	
1	900	0.544	3.383	6.785	3.999	10
2	900	1.191	7.413	1.898	2.272	30
3	900	1.564	9.732	1.068	1.278	50
4	900	1.806	11.238	0.528	0.632	70
5	900	1.564	9.732	-	-	(100)
6	1100	1.564	9.732	1.068	1.278	50
7	600	1.564	9.732	1.068	1.278	50
8	500	1.564	9.732	1.068	1.278	50

Supplementary Information 1

Growth conditions for obtaining Li<sub>1+x</sub>Mn<sub>2-x</sub>O<sub>4</sub> crystals.

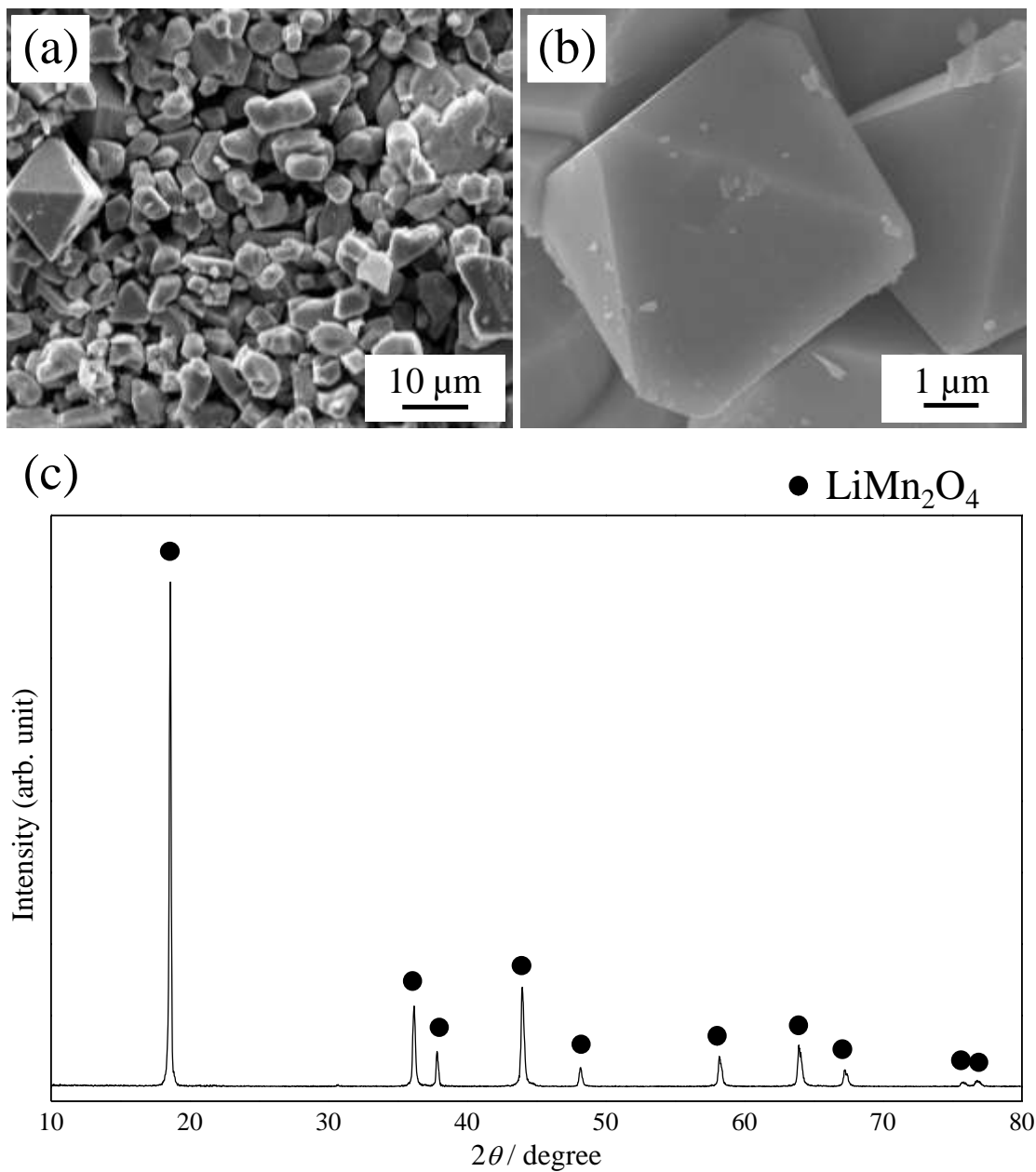
## Electronic Supplementary Information (ESI) data



Supplementary Information 2

EDS analyses of  $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$  crystals provided as (a) a gray image, (b) a Mn mapping image, (c) an O mapping image, and (d) the corresponding spectra.

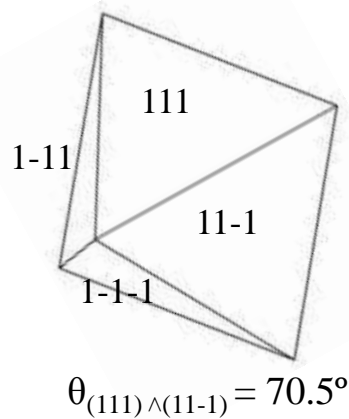
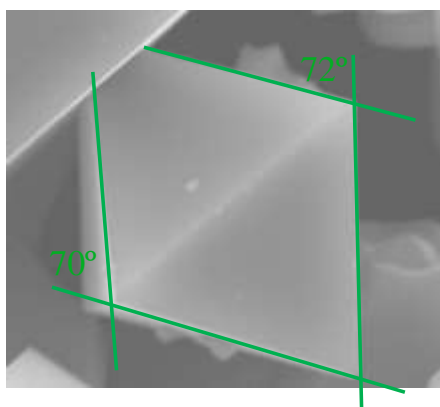
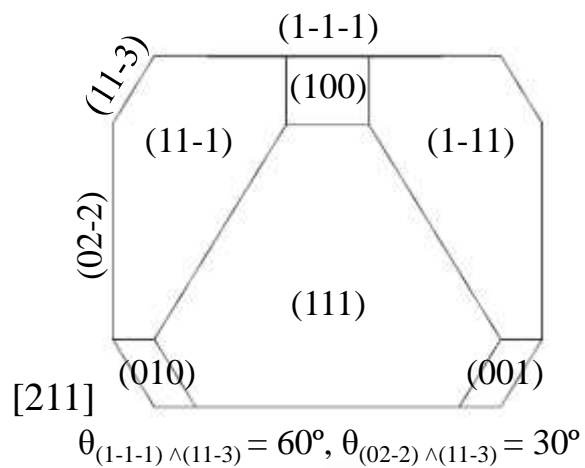
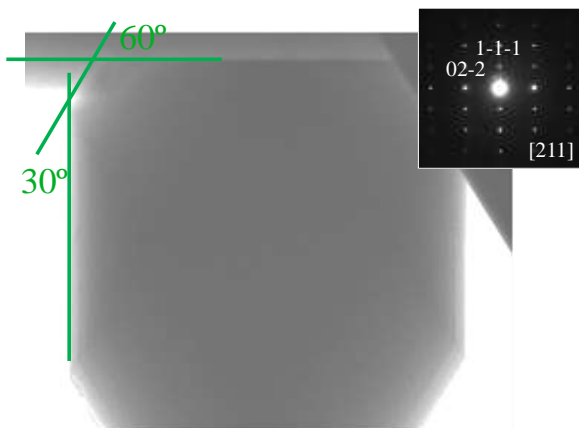
## Electronic Supplementary Information (ESI) data



Supplementary Information 3

(a, b) SEM images and (c) XRD profiles of  $\text{LiMn}_2\text{O}_4$  crystals grown at 50 mol% and 1100  $^\circ\text{C}$ .

## Electronic Supplementary Information (ESI) data



Supplementary Information 4

Crystal shape of the typical flux-grown  $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$  crystal.