Table S1. Results of x-ray powder diffraction analyses of some compositions in the CaO-TiO2-In_2O_3 system at 1350°C in air. (M is the phase of $In_6Ti_6CaO_{22}$.)

No	Symbol	Compositions In_2O_3	TiO_2	$CaCO_3$	Phases
M1	▲	0	1	4	$CaO+Ca_4Ti_3O_{10}$
M2	▲	0	1	3	$CaO+ Ca_4Ti_3O_{10}$
M3	▲	0	2.1	3	$CaO+ Ca_4Ti_3O_{10}$
M5	▲	0	3.0	3.5	$Ca_4Ti_3O_{10}+CaTiO_3$
M6	▲	0	4	1	$CaTiO_3 + TiO_2$
M7	▲	0.5	3	0	$TiO_2 + In_2TiO_5$
M8	▲	1.5	1	0	$In_2TiO_5 + In_2O_3$
M9	▲	1.5	0	1	$CaIn_2O_4 + In_2O_3$
M10	▲	1	0	3	$CaO+CaIn_2O_4$
N1	□	2	3	5	$CaTiO_3+CaIn_2O_4$
N2	□	3	2	5	$CaTiO_3+CaIn_2O_4$
N3	□	4	1	5	$CaTiO_3+CaIn_2O_4$
N4	□	4	3	3	$CaTiO_3+In_2O_3$
N5	□	6	2	2	$CaTiO_3+In_2O_3$
N6	□	1.5	5	3.5	$CaTiO_3+In_2TiO_5$
N7	□	3	5	2	$CaTiO_3+In_2TiO_5$
N8	□	2	5.7	2.3	$CaTiO_3$ + M
N9	□	1.5	8	0.5	TiO_2 + M
N10	□	4	5.5	0.5	In_2TiO_5 + M
O1	□	1	1	8	$CaO+Ca_4Ti_3O_{10}+CaIn_2O_4$
O2	□	1	2	7	$CaO+Ca_4Ti_3O_{10}+CaIn_2O_4$
O3	□	2	1	7	$CaO+Ca_4Ti_3O_{10}+CaIn_2O_4$
O4	□	1	3.6	5.4	$Ca_4Ti_3O_{10}+CaTiO_3+CaIn_2O_4$
O5	□	3	1.6	5.4	$CaO+Ca_4Ti_3O_{10}+CaIn_2O_4$
O6	□	2	3.43	4.57	$In_2O_3+CaTiO_3+CaIn_2O_4$
O7	□	3	3	4	$In_2O_3+CaTiO_3+CaIn_2O_4$
O8	□	4	2	4	$In_2O_3+CaTiO_3+CaIn_2O_4$
O9	□	5	2.14	2.86	$In_2O_3+CaTiO_3+CaIn_2O_4$
O10	□	6	1	3	$In_2O_3+CaTiO_3+CaIn_2O_4$
O11	□	4	4	2	$In_2O_3+CaTiO_3+In_2TiO_5$
O12	□	5	4	1	$In_2O_3+CaTiO_3+In_2TiO_5$
O13	□	6.5	3	0.5	$In_2O_3+CaTiO_3+In_2TiO_5$
O14	□	1	7	2	$TiO_2+CaTiO_3$+M
O15	□	3.5	5.5	1	$CaTiO_3+In_2TiO_5$+M
O16	□	3	5.4	4.6	$CaTiO_3+In_2TiO_5$+M
O17	□	3.5	6	0.5	$TiO_2+In_2TiO_5$+M

Table S2. Results of x-ray powder diffraction analyses of some compositions in the SrO-TiO2-In2O3 system at 1350°C in air.

No	Symbol	Compositions In_2O_3	TiO_2	$SrCO_3$	Phase identified
M1	▲	0	1	3	$SrO+Sr_2TiO_4$
M2	▲	0	2	3.5	$Sr_2TiO_4+Sr_3Ti_2O_7$
M3	▲	0	2	2.5	$Sr_3Ti_2O_7+SrTiO_3$
M4	▲	0	2	1	$SrTiO_3+TiO_2$
M5	▲	1	2	0	$TiO_2+In_2TiO_5$
M6	▲	3	2	0	$In_2TiO_5+In_2O_3$
M7	▲	3	0	2	$In_2O_3+SrIn_2O_4$
M8	▲	1	0	8	$SrO+ SrIn_2O_4$
N1	△	0.6	2.75	6	$Sr_2TiO_4+ SrIn_2O_4$
N2	△	1.7	1.7	4.9	$Sr_2TiO_4+ SrIn_2O_4$
N3	△	0.5	1	2	$Sr_3Ti_2O_7+ SrIn_2O_4$
N4	△	1.5	4	6	$Sr_3Ti_2O_7+ In_2O_3$
N5	△	5	4	6	$Sr_3Ti_2O_7+ In_2O_3$
N6	△	0.6	2	2	$SrTiO_3+ In_2O_3$
N7	△	2.5	2	2	$SrTiO_3+ In_2O_3$
N8	△	2.73	8.6	5.9	$SrTiO_3+ In_2TiO_5$
N9	△	2.2	3.8	1.6	$SrTiO_3+ In_2TiO_5$
O1	⊙	1	1	7	$SrO+ Sr_2TiO_4+ SrIn_2O_4$
O2	⊙	0.5	2	7	$SrO+ Sr_2TiO_4+ SrIn_2O_4$
O3	⊙	0.5	3	6	$Sr_2TiO_4+ Sr_3Ti_2O_7+ SrIn_2O_4$
O4	⊙	1	1	2	$Sr_3Ti_2O_7+ SrIn_2O_4+ In_2O_3$
O5	⊙	9	2	6	$Sr_3Ti_2O_7+ SrIn_2O_4+ In_2O_3$
O6	⊙	1	3.6	4.4	$In_2O_3+ Sr_3Ti_2O_7+ SrTiO_3$
O7	⊙	1.4	0.8	0.4	$In_2O_3+ SrTiO_3+ In_2TiO_5$
O8	⊙	0.45	4.2	0.9	$TiO_2+ SrTiO_3+ In_2TiO_5$

Table 3 X-ray powder diffraction data of $Ti_6In_6CaO_{22}$.

h k_1 l k_2	d(obs)/ Å	d(cal)/Å	*hkl* (commensurate)	Intensity
0 0 1 0	6.0317	6.0338	0 0 1	21.0
1 1 0 -1	3.9792	3.9801	1 11 0	0.6
1 1 -1 –1	3.7209	3.7224	1 11 -1	1.5
0 0 2 0	3.0166	3.0168	0 0 2	54.3
2 0 -1 0	2.9351	2.9384	2 0 -1	4.9
1 1 0 0	2.9304	2.9296	1 18 0	5.7
1 1 -1 0	2.8226	2.8221	1 18 -1	100.0
2 0 0 1	2.6893	2.6910	2 7 0	1.7
2 0 -2 0	2.4891	2.4893	2 0 -2	22.5
1 1 1 0	2.4809	2.4814	1 18 1	28.1
1 1 -2 0	2.2966	2.2969	1 18 -2	25.1
1 1 0 1	2.2602	2.2606	1 25 0	0.9
1 1 -1 1	2.2091	2.2101	1 25 -1	1.1
1 1 1 1	2.0346	2.0346	1 25 1	1.1
2 0 -3 0	1.9538	1.9542	2 0 -3	3.3
1 1 2 0	1.9490	1.9490	1 18 2	4.7
3 1 -1 -1	1.8708	1.8708	3 11 -1	2.9
1 1 -3 0	1.8000	1.8005	1 18 -3	37.0
2 0 -2 1	1.7631	1.7632	2 7 2	1.1
3 1 -1 0	1.7172	1.7172	3 18 -1	24.2
0 2 0 0	1.7130	1.7128	0 36 0	11.9
3 1 -2 0	1.6518	1.6524	3 18 -2	4.9
0 2 1 0	1.6482	1.6477	0 36 1	2.2
3 1 1 -1	1.5886	1.5886	3 11 1	1.7
2 0 -4 0	1.5477	1.5480	2 0 -4	8.6
1 1 3 0	1.5449	1.5449	1 18 3	12.6
0 0 4 0	1.5086	1.5084	0 0 4	4.7
3 1 -3 0	1.4930	1.4935	3 18 -3	8.9
3 1 1 0	1.4913	1.4912	3 18 1	9.5
4 0 -2 0	1.4694	1.4692	4 0 -2	2.9
2 2 0 0	1.4644	1.4648	2 36 0	5.8
4 0 -2 1	1.4493	1.4492	4 7 -2	1.0
1 1 -4 0	1.4395	1.4399	1 18 -4	1.7
2 2 -2 0	1.4111	1.4112	2 36 -2	4.4
4 0 0 1	1.3954	1.3952	4 7 0	0.8
4 0 -3 0	1.3777	1.3776	4 0 -3	1.5
2 2 1 0	1.3726	1.3731	2 36 1	2.2
3 1 2 0	1.3049	1.3048	3 18 2	0.5
4 0 1 0	1.2884	1.2889	4 0 1	1.3
1 1 4 0	1.2603	1.2602	1 18 4	1.9
4 0 -4 0	1.2450	1.2446	4 0 -4	2.4
2 2 2 0	1.2404	1.2407	2 36 2	4.1

1 1 -5 0	1.1858	1.1859	1 18 -5	2.8
3 1 3 -1	1.1736	1.1732	3 11 3	0.6
2 2 -4 0	1.1483	1.1485	2 36 -4	4.5
3 1 -5 0	1.1342	1.1343	3 18 -5	3.1
3 1 3 0	1.1322	1.1323	3 18 3	4.8
5 1 -2 0	1.1219	1.1220	5 18 -2	1.0
5 1 -1 0	1.1149	1.1151	5 18 -1	2.9
4 2 0 0	1.0893	1.0892	4 36 0	1.6
5 1 0 0	1.0736	1.0735	5 18 0	1.8
1 1 5 0	1.0569	1.0568	1 18 5	1.9
5 1 1 -1	1.0349	1.0348	5 11 1	0.6
2 2 -5 0	1.0161	1.0161	2 36 -5	1.0
4 2 -4 0	1.0066	1.0065	4 36 -4	3.0
1 3 -1 0	0.9893	0.9894	1 54 -1	1.3
3 1 4 0	0.9865	0.9865	3 18 4	1.2
4 0 -6 0	0.9768	0.9769	4 0 -6	1.1
2 2 4 0	0.9746	0.9745	2 36 4	1.0
3 3 -3 0	0.9404	0.9404	3 54 -3	1.5
2 2 -6 0	0.9003	0.9003	2 36 -6	1.8