**SUPPLEMENTARY MATERIAL**



Figure 1: SEM image of Li4Ti4.95Al0.05O12.



Figure 2: EDS image of Li4Ti4.95Al0.05O12 indicated aluminium (left) and titanium (right) detected.



Figure 3: EDS spectrum of Li4Ti4.95Al0.05O12 indicating presence of aluminium and titanium.



Figure 4: SEM image of Li4Ti4.95Mg0.05O12.



Figure 5: EDS image of Li4Ti4.95Mg0.05O12 indicated magnesium (left) and titanium (right) detected.



Figure 6: EDS spectrum of Li4Ti4.95Mg0.05O12 indicating presence of magnesium and titanium.



Figure 7: SEM image of Li4Ti4.95Ni0.05O12.



Figure 8: EDS image of Li4Ti4.95Ni0.05O12 indicated nickel (left) and titanium (right) detected.



Figure 9: EDS spectrum of Li4Ti4.95Ni0.05O12 indicating presence of nickel and titanium.



Figure 10: SEM image of Li4Ti4.95Co0.05O12.



Figure 11: EDS image of Li4Ti4.95Co0.05O12 indicated cobalt (left) and titanium (right) detected.



Figure 12: EDS spectrum of Li4Ti4.95Co0.05O12 indicating presence of cobalt and titanium.