

SUPPORTING INFORMATION

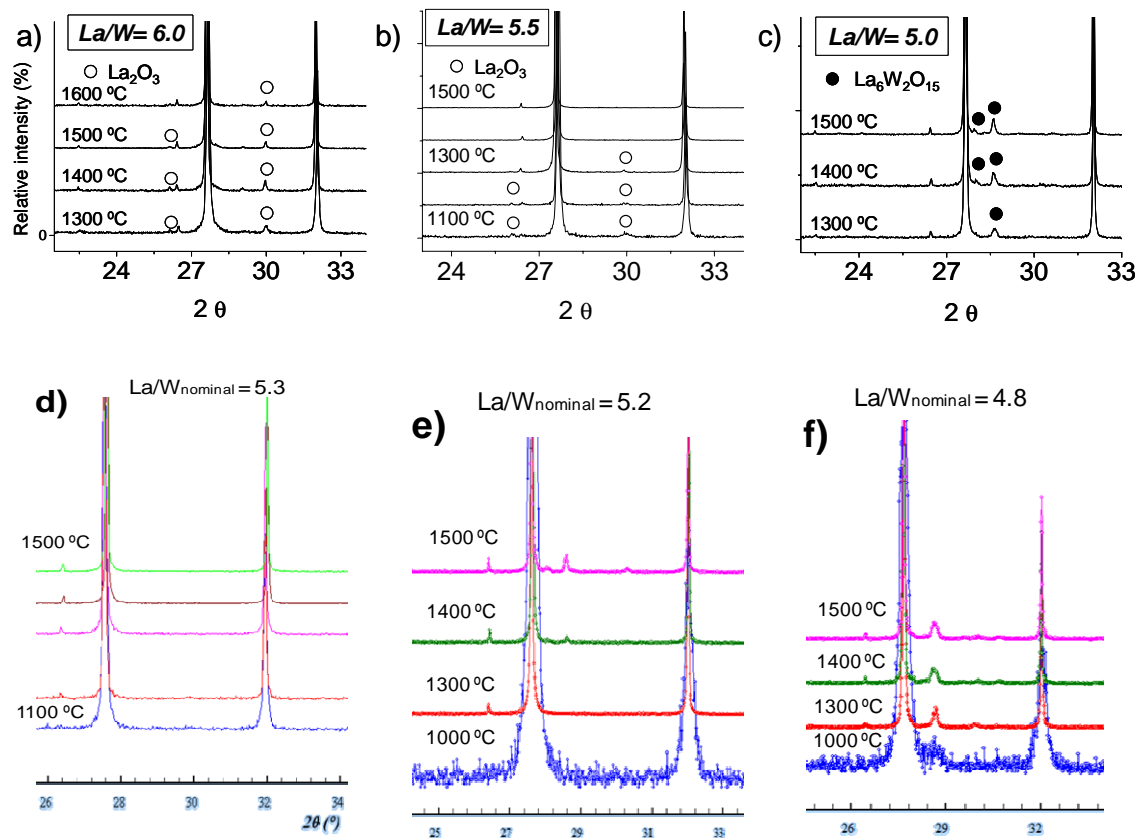


Figure A. Evolution of the PXRD patterns with temperature on a selected area of different nominal La/W ratio compositions: **a)** $La/W=6.0$, **b)** $La/W=5.5$, **c)** $La/W=5.0$, **d)** $La/W=5.3$, **e)** $La/W=5.2$, and **f)** $La/W=4.8$.

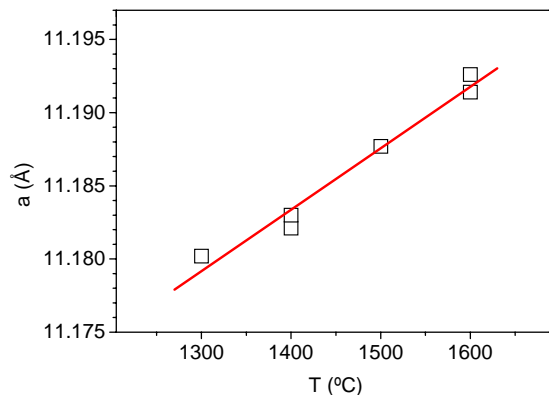


Figure B. Variation of the lattice cell parameter of LaWO₆₀ (La/W nominal ratio = 6) with temperature. Since the lattice parameter increases with temperature, it may be followed by the trend that more La may be incorporated in the structure as the temperature is increased.

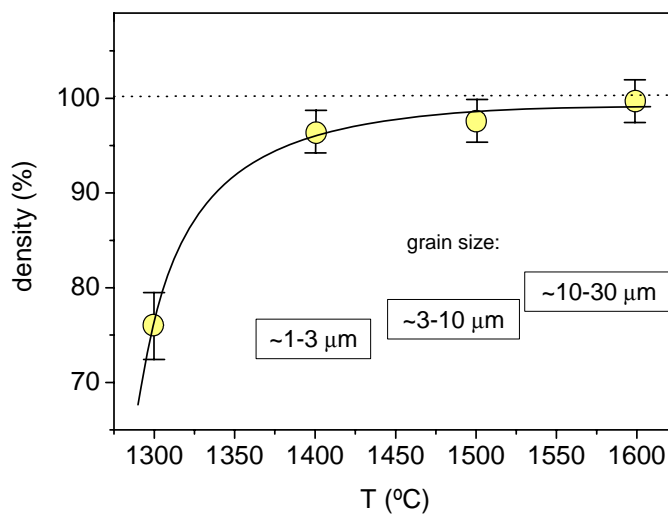


Figure C. Density of the ceramic pellets obtained after sintering during 2h at different temperatures. The error bars reflect both the inaccuracy due to measuring sample dimensions and differences among specimens. The average grain sizes after each sintering temperature is also shown.

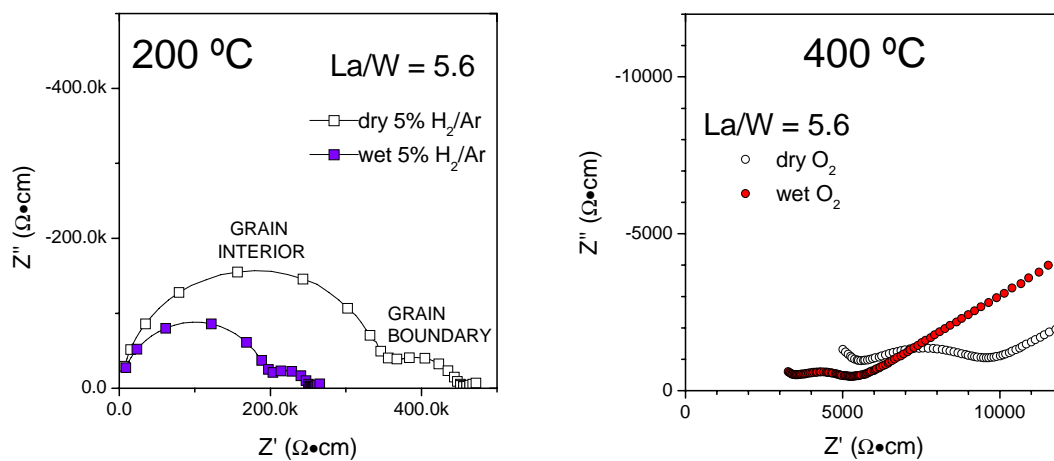


Figure D. Additional Nyquist plots for LWO56 pellets sintered at 1400 °C.