

# Phase Coexistence in $\text{NaNb}_{(1-x)}\text{Ta}_x\text{O}_3$ Materials with Enhanced Dielectric Properties <sup>†</sup>

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## Supporting Information

**Table 1** Average cationic composition of  $\text{NaNb}_{(1-x)}\text{Ta}_x\text{O}_3$  samples obtained by means of wavelength-dispersive X-ray spectroscopy

Nominal composition	%Na	%Nb	%Ta	Experimental Composition
$\text{NaNbO}_3$	19.86	80.14	-	$\text{Na}_{1.00(2)}\text{Nb}_{1.00(1)}\text{O}_y$
$\text{NaNb}_{0.9}\text{Ta}_{0.1}\text{O}_3$	18.96	67.65	14.36	$\text{Na}_{1.02(2)}\text{Nb}_{0.91(1)}\text{Ta}_{0.10(1)}\text{O}_y$
$\text{NaNb}_{0.8}\text{Ta}_{0.2}\text{O}_3$	17.78	55.37	26.84	$\text{Na}_{1.03(2)}\text{Nb}_{0.80(1)}\text{Ta}_{0.20(1)}\text{O}_y$
$\text{NaNb}_{0.7}\text{Ta}_{0.3}\text{O}_3$	16.03	45.53	38.62	$\text{Na}_{0.99(2)}\text{Nb}_{0.70(2)}\text{Ta}_{0.30(1)}\text{O}_y$
$\text{NaNb}_{0.66}\text{Ta}_{0.33}\text{O}_3$	15.86	42.38	41.03	$\text{Na}_{0.99(1)}\text{Nb}_{0.65(1)}\text{Ta}_{0.33(1)}\text{O}_y$
$\text{NaNb}_{0.6}\text{Ta}_{0.4}\text{O}_3$	15.17	36.36	47.26	$\text{Na}_{1.00(2)}\text{Nb}_{0.59(1)}\text{Ta}_{0.40(1)}\text{O}_y$
$\text{NaNb}_{0.55}\text{Ta}_{0.45}\text{O}_3$	14.75	32.93	52.13	$\text{Na}_{1.00(2)}\text{Nb}_{0.55(1)}\text{Ta}_{0.45(1)}\text{O}_y$
$\text{NaNb}_{0.5}\text{Ta}_{0.5}\text{O}_3$	14.42	29.63	56.81	$\text{Na}_{1.01(2)}\text{Nb}_{0.51(1)}\text{Ta}_{0.50(1)}\text{O}_y$
$\text{NaNb}_{0.45}\text{Ta}_{0.55}\text{O}_3$	13.81	25.26	60.21	$\text{Na}_{0.99(2)}\text{Nb}_{0.44(1)}\text{Ta}_{0.55(1)}\text{O}_y$
$\text{NaNb}_{0.4}\text{Ta}_{0.6}\text{O}_3$	13.65	22.36	64.03	$\text{Na}_{1.00(3)}\text{Nb}_{0.41(1)}\text{Ta}_{0.60(2)}\text{O}_y$
$\text{NaNb}_{0.3}\text{Ta}_{0.7}\text{O}_3$	12.78	15.43	71.39	$\text{Na}_{0.99(2)}\text{Nb}_{0.29(2)}\text{Ta}_{0.70(1)}\text{O}_y$
$\text{NaNb}_{0.2}\text{Ta}_{0.8}\text{O}_3$	12.20	9.93	77.96	$\text{Na}_{0.99(2)}\text{Nb}_{0.20(1)}\text{Ta}_{0.80(1)}\text{O}_y$
$\text{NaNb}_{0.1}\text{Ta}_{0.9}\text{O}_3$	11.65	4.31	83.96	$\text{Na}_{0.99(3)}\text{Nb}_{0.09(2)}\text{Ta}_{0.90(1)}\text{O}_y$
$\text{NaTaO}_3$	11.51	-	88.92	$\text{Na}_{1.02(2)}\text{Ta}_{1.00(1)}\text{O}_y$