

No. M22 Na₃Sc₂(PO₄)₃
 ($M = 443.80$)

1a	Dielectric anomaly associated with a phase transition in $\text{Na}_3\text{Sc}_2(\text{PO}_4)_3$ was observed, and possibility of ferroelectricity was mentioned by Okonenko et al. in 1978. Collin et al. showed that among three crystal types (α -, β - and γ -type), the phase transition is only observed for α -type crystal.				78Oko 88Col
b	phase	III	II	I	88Col
	state	(F)	P		
	crystal system	monoclinic	rhombohedral	rhombohedral	
	space group	$\text{Bb} - \text{C}_s^4$			
	θ [K]	323	420		
2a	Sample preparation of α -type crystal: quick fusion of powders.				86Col
3a	Unit cell parameters: $a = 15.404(4) \text{ \AA}$, $b = 9.103(3) \text{ \AA}$, $c = 8.919(3) \text{ \AA}$, $\gamma = 123.53(2)^\circ$ at RT. Rhombohedral parameters: Table M22-001.				86Col
b	$Z = 4$ in phase III. Crystal structure: Table M22-002, Table M22-003, Table M22-004; Fig. M22-001, Fig. M22-002.				78Oko
5a	$\kappa = 4.8 \cdot 10^4$ at $T = 40^\circ \text{C}$ at 1 kHz. κ , $\tan \delta$ vs. T : see				78Oko 78Oko, 84Ste
9e	SHG: see				78Oko
11	Electrical conductivity: see				81Ste, 84Ste
16	Twin structure was observed at RT under a polarizing microscope.				78Oko