

No. 29A-2 CsCd(NO₂)₃, Cesium cadmium trinitrite
 ($M = 383.33$)

1a	Ferroelectricity in CsCd(NO ₂) ₃ was discovered by Planta et al. in 1993.			93Pla
b	phase	II	I	93Pla
	state	F	P	
	crystal system	trigonal ^{a)}	cubic	^{a)} 79Nal
	space group	R3–C ₃ ⁴		
	Θ[K]	≈464		
	ρ = 3.932(1) · 10 ³ kg m ^{–3} at 293 K.			94Hau
	Not hygroscopic.			79Nal
2a	Crystal growth: CsCd(NO ₂) ₃ was synthesized in aqueous solution of Cs ₂ SO ₄ , CdSO ₄ and Ba(NO ₂) ₂ . After removal of the precipitated BaSO ₄ , crystals were grown by slow evaporation method or temperature-lowering method. Multi-domain crystals were obtained.			93Pla
b	Crystal form: pseudocubic macrosymmetry with dominant {100}- and {110}-faces.			93Pla
3a	Unit cell parameters: a = 5.453(2) Å, α = 90.20(2)° at RT.			79Nal
b	Z = 1 in phase II.			79Nal
	Crystal structure: perovskite-like, see			79Nal, 79Bar, 93Pla
4	Thermal expansion: Fig. 29A-2-001; somewhat different values, α = 40(2) · 10 ^{–6} K ^{–1} at T = 300 K, α = 44(2) · 10 ^{–6} K ^{–1} at T = 400 K, α = 93(5) · 10 ^{–6} K ^{–1} at T = 450 K, were reported also.			94Hau
5a	Dielectric constant: Fig. 29A-2-002, Fig. 29A-2-003.			
c	Spontaneous polarization: Fig. 29A-2-004.			
6a	Transition heat ΔQ _{II–I} was estimated to be about 1.7 · 10 ³ J mol ^{–1} from differential scanning calorimetry.			
8a	Elastic stiffness: Table 29A-2-001.			
9a	Birefringence: Fig. 29A-2-005.			
15a	Domain structure: see			93Pla, 94Hau