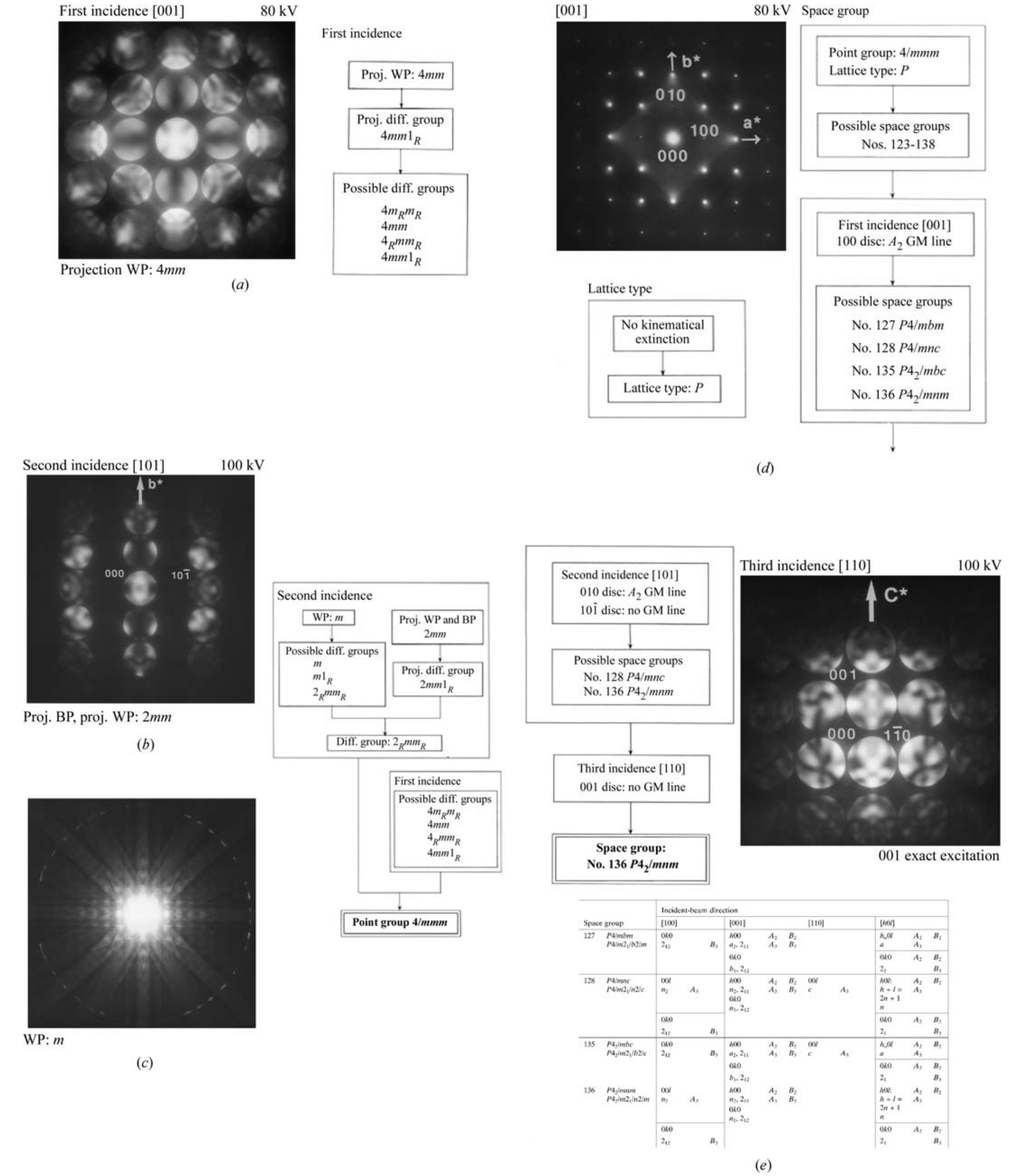

Space group		[100]	[001]	[110]	[h0l]
127	P4/mbm P4/m2₁/b2/m	0k0 2_{12} B_3	h00 A_2 B_2 a_2, 2_{11} A_3 B_3 0k0 b_1, 2_{12}		h_o0l A_2 B_2 a A_3 0k0 A_2 B_2 2_1 B_3
128	P4/mnc P4/m2₁/n2/c	00l n_2 A_3 0k0 2_{12} B_3	h00 A_2 B_2 n_2, 2_{11} A_3 B_3 0k0 n_1, 2_{12}	00l c A_3	h0l: A_2 B_2 h + l = 2n + 1 A_3 n 0k0 A_2 B_2 2_1 B_3
135	$P4_2$/mbc $P4_2$/m2₁/b2/c	0k0 2_{12} B_3	h00 A_2 B_2 a_2, 2_{11} A_3 B_3 0k0 b_1, 2_{12}	00l c A_3	h_o0l A_2 B_2 a A_3 0k0 A_2 B_2 2_1 B_3
136	$P4_2$/mnm $P4_2$/m2₁/n2/m	00l n_2 A_3 0k0 2_{12} B_3	h00 A_2 B_2 n_2, 2_{11} A_3 B_3 0k0 n_1, 2_{12}		h0l: A_2 B_2 h + l = 2n + 1 A_3 n 0k0 A_2 B_2 2_1 B_3

Fig. 2.5.3.15. CBED patterns of rutile. The procedures for identifying the symmetry are also shown. (*a*) [001] incidence at 80 kV: the projection (proj.) WP shows symmetry 4*mm*. (*b*, *c*) [101] incidence at 100 kV: the projection BP and projection WP show symmetry 2*mm* and the WP shows symmetry *m* (the point group is 4/*mmm*). (*d*) Spot diffraction pattern showing no extinction caused by the lattice type (lattice type *P*). (*e*) Near-[110] incidence at 100 kV to excite exactly the 001 reflection: no extinction lines in the 001 disc (space group $P4_2/mnm$).

c direction. Later, some corrections to the tables were made by Yamamoto *et al.* (1985). The analysis of incommensurately modulated crystals using (3 + 1)-dimensional space groups has become familiar in the field of X-ray structure analysis.

Fung *et al.* (1980) applied the CBED method to the study of incommensurately modulated transition-metal dichalcogenides. Steeds *et al.* (1985) applied the LACBED method (Tanaka *et al.*, 1980) to the study of incommensurately modulated crystals of $NiGe_{1-x}P_x$. Tanaka *et al.* (1988, pp. 74–81) examined the symmetries of the incommensurate and fundamental reflections appearing in the CBED patterns obtained from the incommensurately modulated crystals of $Sr_2Nb_2O_7$ and Mo_8O_{23}. Terauchi &