$Au_7P_{10}I$	*hP*18	(189) *P*-62*m* – ihgeca

$Au_7P_{10}I$ [1]
Structural features: P forms infinite puckered layers with 12-membered rings; Au at the centers of the 12-rings (trigonal coordination) and between the layers (approximately linear coordination).

Binnewies M. (1978) [1]
Au_7IP_{10}
a = 0.6173, c = 1.1107 nm, c/a = 1.799, V = 0.3665 nm^3, Z = 1

site	Wyck.	sym.	x	y	z	occ.	atomic environment
P1	6*i*	..*m*	0.373	0	0.302		tetrahedron P_2Au_2
P2	4*h*	3..	$^1/_3$	$^2/_3$	0.206		tetrahedron P_3Au
Au3	3*g*	*m*2*m*	0.494	0	$^1/_2$		non-colinear P_2
Au4	2*e*	3.*m*	0	0	0.2761		non-coplanar triangle P_3
Au5	2*c*	-6..	$^1/_3$	$^2/_3$	0		colinear P_2
I6	1*a*	-62*m*	0	0	0		colinear Au_2

Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.060

References: [1] Binnewies M. (1978), Z. Naturforsch. B 33, 570-571.