

Electronic Supplementary Information

Crystallographic data of	2a,	3a,	3b	and	3c
Compound	2a	3a	3b		3c
Empirical formula	C ₆₀ H ₉₀ Ga ₂ I ₂ N ₄ O ₂	C ₅₇ H ₁₀₇ Ga ₃ I ₂ N ₆	C ₅₈ H ₁₀₁ Ga ₃ I ₂ N ₆		C ₅₉ H ₁₀₉ Ga ₃ I ₂ N ₆ O ₂
Formular weight [$\frac{g}{mol}$]	1292.60	1339.45	1345.41		1397.48
Crystal size [mm ³]	0.434 x 0.076 x 0.044	0.227 x 0.193 x 0.071	0.416 x 0.157 x 0.137		0.519 x 0.513 x 0.506
Crystal system	triclinic	triclinic	triclinic		monoclinic
Space group	P $\bar{1}$	P $\bar{1}$	P $\bar{1}$		P 2 ₁ /n
<i>a</i> [Å]	10.847(2)	12.831(3)	12.912(3)		13.486(3)
<i>b</i> [Å]	12.842(3)	13.914(3)	16.090(3)		22.613(5)
<i>c</i> [Å]	22.349(5)	20.005(4)	16.506(3)		21.158(4)
α [°]	96.71(3)	83.48(3)	78.66(3)		90.00
β [°]	91.80(3)	83.11(3)	85.66(3)		90.95(3)
γ [°]	101.27(3)	64.33(3)	71.01(3)		90.00
<i>V</i> [Å ³]	3027.5(11)	3188.5(11)	3179.0(11)		6451(2)
<i>Z</i>	2	2	2		4
<i>D</i> _{calc} [$\frac{g}{cm^3}$]	1.418	1.395	1.406		1.439
μ (Mo K α) [$\frac{1}{mm}$]	1.952	2.264	2.272		2.244
Absorption correction	Numerical	Numerical	Numerical		Numerical
<i>T</i> _{min} / <i>T</i> _{max}	0.6121 / 0.9182	0.5944 / 0.8348	0.6213 / 0.7632		0.3763 / 0.4323
<i>F</i> (000) [e]	1324	1380	1380		2880
θ [°]	1.92 .. 26.01	1.63 .. 26.06	2.66 .. 30.59		1.99 .. 25.99
Index ranges	-13 ≤ <i>h</i> ≤ 13 -15 ≤ <i>k</i> ≤ 15 -27 ≤ <i>l</i> ≤ 27	-15 ≤ <i>h</i> ≤ 15 -17 ≤ <i>k</i> ≤ 17 -24 ≤ <i>l</i> ≤ 24	-18 ≤ <i>h</i> ≤ 18 -22 ≤ <i>k</i> ≤ 22 -23 ≤ <i>l</i> ≤ 23		-16 ≤ <i>h</i> ≤ 16 -27 ≤ <i>k</i> ≤ 27 -26 ≤ <i>l</i> ≤ 25
Reflections collected	23545	25396	38406		37090
Independent reflections	11042	11664	17618		11096
Observed refl. [<i>I</i> > 2 σ (<i>I</i>)]	3830	4596	5883		5738
Completeness of data	$\theta = 26.01^\circ$; 92.6%	$\theta = 26.06^\circ$; 92.4%	$\theta = 30.59^\circ$; 90%		$\theta = 25.99^\circ$; 87.6%
Data/restraints/parameters	11042 / 6 / 631	11664 / 0 / 578	17618 / 42 / 622		11096 / 0 / 649
Goodness of fit (<i>S</i>) on <i>F</i> ²	0.648	0.756	0.718		0.945
Final <i>R</i> indices [<i>I</i> > 2 σ (<i>I</i>)]	0.0455 0.0737	0.0558 0.1193	0.0545 0.1113		0.0763 0.1728
<i>R</i> indices (all data)	0.1546 0.0912	0.1554 0.1416	0.1697 0.1406		0.1445 0.1997
Max diff. peak/hole [$\frac{e}{\text{\AA}^3}$]	0.733/-0.843	0.959/-1.131	2.010/-1.091		1.136/-0.807
<i>w</i> ₁	0.0176	0.0550	0.0462		0.1013
CCDC reference number	811975	811977	811978		811979