Table 1. Crystal and Structure Refinement parameters for compounds **1**, **3**, and **4**.

Parameters	**1**	**3**	**4**
Empirical formula	$C_{27}H_{33}N_2PSi$	$C_{27}H_{45}N_3Si$	$C_{21}H_{37}N_3Si$
Formula Weight	444.61	439.75	359.63
Crystal system	triclinic	monoclinic	monoclinic
Space group	$P\bar{1}$	$P2_1/c$	$C2/c$
Unit cell dimensions	a = 8.384 (3) Å	a = 15.040 (4) Å	a = 27.820 (2) Å
	b = 9.073 (3) Å	b = 11.542 (4) Å	b = 8.447 (3) Å
	c = 17.254 (4) Å	c = 16.516 (6) Å	c = 19.099 (2) Å
	α = 89.190 (10)°	α = 90°	α = 90°
	β = 86.06 (2)°	β = 111.70 (2)°	β = 99.35(2)°
	γ = 72.48 (1)°	γ = 90°	γ = 90°
Volume, Z	1248.5 (7) $Å^3$, 2	2663.9 (15) $Å^3$, 4	4428.6 (17) $Å^3$, 8
Density (Calcd)	1.183 g/cm^3	1.096 mg/m^3	1.079 mg/m^3
Absorption coefficient	0.175 mm^{-1}	0.106 mm^{-1}	0.114 mm^{-1}
F (000)	476	968	1584
Crystal size [mm^3]	0.10 x 0.10 x 0.10	0.20 x 0.10 x 0.02	0.15 x 0.10 x 0.02
θ range for data collection	1.18 to 28.30°	1.46 to 26.35°	1.48 to 27.58°
Limiting indices	$-11 \le h \le 11$, $-12 \le k \le 12$, $-22 \le l \le 22$	$-18 \le h \le 18$, $-14 \le k \le 14$, $-20 \le l \le 20$	$-36 \le h \le 36$, $-10 \le k \le 10$, $-24 \le l \le 24$
Reflections collected	42389	60239	39498
Independent reflections	6185 (R_{int} = 0.0192)	5422 (R_{int} = 0.0398)	5111 (R_{int} = 0.0492)

Completeness to θ	99.7% (θ = 28.30)	99.5% (θ = 26.35)	99.9% (θ = 27.58)
Refinement method	Full - matrix least - squares on F^2	Full - matrix least - squares on F^2	Full - matrix least - squares on F^2
Data/ restraints/ parameters	6185 / 0 / 286	5422 / 0 / 286	5111/ 0 / 236
Goodness - of - fit on F^2	1.061	1.043	1.047
Final R indices [$I>2\sigma(I)$]	$R1$ = 0.0311, $wR2$ = 0.0828	$R1$ = 0.0379, w$R2$ = 0.0876	$R1$ = 0.0416, $wR2$ = 0.0936
R indices (all data)	$R1$ = 0.0333, $wR2$ = 0.0841	$R1$ = 0.0493, $wR2$ = 0.0921	$R1$ = 0.0621, $wR2$ = 0.1002
Largest diff. peak and hole	0.355 and -0.259 eÅ^{-3}	0.219 and -0.264 eÅ^{-3}	0.299 and -0.263 eÅ^{-3}