

Table 2. Structural parameters for di-C₁₈-PC (adsorbed and grafted samples) at various temperatures used in Eq. 1.

	<i>Adsorbed sample</i>		<i>Grafted sample</i>
$T, ^\circ\text{C}$	25.0	56.1	57
$\rho_{\text{H}_2\text{O}}, e^-/\text{\AA}^3$	0.344	0.344	0.344
$D_{h,2}, \text{nm}$	2.35 ± 0.05	2.41 ± 0.02	2.1 ± 0.1
$\rho_{h,2}, e^-/\text{\AA}^3$	0.11 ± 0.02	0.1 ± 0.1	0.13 ± 0.02
$\sigma_{h,2}, \text{nm}$	0.6 ± 0.1	0.2 ± 0.1	0.4 ± 0.1
$\rho_{\text{CH}_2}, e^-/\text{\AA}^3$	0.32 ± 0.02	0.29 ± 0.02	0.32 ± 0.01
$\rho_{\text{CH}_3}, e^-/\text{\AA}^3$	-0.14 ± 0.05	-0.14 ± 0.05	-0.13 ± 0.03
$\sigma_{\text{CH}_3}, \text{nm}$	0.17 ± 0.03	0.10 ± 0.05	0.15 ± 0.05
$\rho_{\text{CH}_2}, e^-/\text{\AA}^3$	0.32 ± 0.02	0.29 ± 0.02	0.32 ± 0.01
$D_{h,2}, \text{nm}$	2.35 ± 0.05	2.41 ± 0.02	2.1 ± 0.1
$\rho_{h,2}, e^-/\text{\AA}^3$	0.11 ± 0.02	0.1 ± 0.1	0.13 ± 0.02
$\sigma_{h,2}, \text{nm}$	0.6 ± 0.1	0.2 ± 0.1	0.4 ± 0.1
$D_{\text{H}_2\text{O},2}, \text{nm}$	1.9 ± 0.1	2.4 ± 0.4	2.1 ± 0.1
$\rho_{\text{H}_2\text{O},2}, e^-/\text{\AA}^3$	0.344	0.344	0.344
$D_{h,1}, \text{nm}$	2.31 ± 0.02	2.41 ± 0.02	1.55 ± 0.05
$\rho_{h,1}, e^-/\text{\AA}^3$	0.13 ± 0.02	0.12 ± 0.01	0.055 ± 0.005
$\sigma_{h,1}, \text{nm}$	0.39 ± 0.03	0.41 ± 0.03	0.40 ± 0.01
$\rho_{\text{CH}_2}, e^-/\text{\AA}^3$	0.29 ± 0.02	0.27 ± 0.02	0.32 ± 0.02
$\rho_{\text{CH}_3}, e^-/\text{\AA}^3$	-0.15 ± 0.01	-0.14 ± 0.01	-0.14 ± 0.02
$\sigma_{\text{CH}_3}, \text{nm}$	0.14 ± 0.02	0.25 ± 0.05	0.36 ± 0.05
$\rho_{\text{CH}_2}, e^-/\text{\AA}^3$	0.32 ± 0.02	0.29 ± 0.02	0.32 ± 0.01
$D_{h,1}, \text{nm}$	2.31 ± 0.02	2.41 ± 0.02	1.55 ± 0.05
$\rho_{h,1}, e^-/\text{\AA}^3$	0.13 ± 0.02	0.12 ± 0.01	0.055 ± 0.005
$\sigma_{h,1}, \text{nm}$	0.39 ± 0.03	0.41 ± 0.03	0.40 ± 0.01
$D_{\text{H}_2\text{O},1}, \text{nm}$	0.33 ± 0.05	0.33 ± 0.05	
$\rho_{\text{H}_2\text{O},1}, e^-/\text{\AA}^3$	0.344	0.344	0.344
$D_{\text{sil}}, \text{nm}$			2.6 ± 0.1
$\rho_{\text{sil}}, e^-/\text{\AA}^3$			0.02 ± 0.01
$\sigma_{\text{sil}}, \text{nm}$			0.25 ± 0.02
$D_{\text{SiO}_2}, \text{nm}$	2.3 ± 0.2	2.3 ± 0.2	1.5 ± 0.2
$\rho_{\text{SiO}_2}, e^-/\text{\AA}^3$	0.34 ± 0.02	0.34 ± 0.02	0.27 ± 0.02
$\sigma_{\text{SiO}_2}, \text{nm}$	0.13 ± 0.02	0.27 ± 0.02	0.25 ± 0.02
$\rho_{\text{Si}}, e^-/\text{\AA}^3$	0.376	0.376	0.376

D , box thickness; ρ , electron density amplitude; σ , standard deviation of the box interface position (averaged over the coherence length $2\lambda/\theta \cdot \delta\theta$). Data are obtained by specular reflectivity experiments using the 1G-hybrid box model (Eq. 1) in which some boxes lack D or σ . They are presented from top to bottom: bulk water 1, lipid layer 2 (floating bilayer), water layer 2 (intermediate), lipid layer 1 (adsorbed or grafted), water layer 1 (hydration), and substrate. h= head, sil=silane, Si=silicon.