Mesoscale simulations of confined Nafion thin films

(supplementary information)

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Water distribution

Figure 1: Water distribution profiles for carbon, $\lambda \in \{4, 6, 8, 10, 12, 14, 16\}$ in columns, film width $d \in \{5, 10, 15, 20\}$ in rows.
Figure 2: Water distribution profiles for carbon, $\lambda \in \{16, 18, 20, 22, 24\}$ in columns, film width $d \in \{5, 10, 15, 20\}$ in rows.
Figure 3: Water distribution profiles for quartz, $\lambda \in \{4, 6, 8, 10, 12, 14, 16\}$ in columns, film width $d \in \{5, 10, 15, 20\}$ in rows.
Figure 4: Water distribution profiles for quartz, $\lambda \in \{16, 18, 20, 22, 24\}$ in columns, film width $d \in \{5, 10, 15, 20\}$ in rows.
Figure 5: Clustering for carbon, water uptake in columns, film width in rows. Scale: 32.5 nm.
Figure 6: Clustering for carbon, water uptake in columns, film width in rows. Scale: 32.5 nm.
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Figure 7: Clustering for quartz, water uptake in columns, film width in rows. Scale: 32.5 nm.
Figure 8: Clustering for quartz, water uptake in columns, film width in rows. Scale: 32.5 nm.
Figure 9: Screenshots for carbon, water uptake in columns: (4, 6, 8, 10, 12, 14, 16), film width in rows. Scale: 32.5 nm.
Figure 10: Screenshots for carbon, water uptake in columns: (18, 20, 22, 24), film width in rows. Scale: 32.5 nm.
Figure 11: Screenshots for quartz, water uptake in columns: (4, 8, 10, 12, 14, 16), film width in rows. Scale: 32.5 nm.
Figure 12: Screenshots for quartz, water uptake in columns: (18, 20, 22, 24), film width in rows. Scale: 32.5 nm.

Figure 13: Sections through the Nafion thin film at the point where water profiles (Fig. 1-4) show a minimum. Water is in black.

Figure 14: Sections through the Nafion thin film at the point where water profiles (Fig. 1-4) show a maximum. Water is in black.