

Supporting Information

Molecular perspective on charge-tunable adsorption of volatile organic compounds on carbon nanotubes

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Table S1 Force field parameters describing the interactions between VOCs and the CNT.

Atom name	Atom type	$\sigma(\text{nm})$	$\varepsilon(\text{kJ/mol})$	Atom name	Atom type	$\sigma(\text{nm})$	$\varepsilon(\text{kJ/mol})$
CNT							
C	CA	0.355	0.293	C(CH ₃)	CG331	0.365	0.326
Methanol							
C(CH ₃)	CG331	0.365	0.326	C(CH ₂)	CG321	0.358	0.234
H(CH ₃)	HGA3	0.239	0.100	H(CH ₂)	HGA2	0.239	0.146
O(O)	OG311	0.314	0.804	O(O)	OG301	0.294	0.428
H(H)	HGP1	0.04	0.192	Toluene			
Acetone				C(C ₆ H ₅)	CG2R61	0.355	0.293
C(CH ₃)	CG331	0.365	0.326	H(C ₆ H ₅)	HGR61	0.242	0.126
H(CH ₃)	HGA3	0.239	0.100	C(CH ₃)	CG331	0.365	0.326
C(CO)	CG2O5	0.356	0.377	H(CH ₃)	HGA3	0.239	0.100
O(CO)	OG2D3	0.303	0.209				