

Molecular Simulation Study of Temperature Effect on Ionic Hydration in Carbon Nanotubes

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Table S1. The details of simulated systems

case	<i>T</i> /K	<i>D</i> /nm	Nw	cation/anion	case	<i>T</i> /K	<i>D</i> /nm	Nw	cation/anion
1	298	1.00	328	K ⁺ /Cl ⁻	22	298	1.00	466	Na ⁺ /Cl ⁻
2	298	1.00	466	K ⁺ /Cl ⁻	23	373	1.00	328	Na ⁺ /Cl ⁻
3	373	1.00	328	K ⁺ /Cl ⁻	24	373	1.00	466	Na ⁺ /Cl ⁻
4	373	1.00	466	K ⁺ /Cl ⁻	25	493	1.00	164	Na ⁺ /Cl ⁻
5	493	1.00	164	K ⁺ /Cl ⁻	26	493	1.00	328	Na ⁺ /Cl ⁻
6	493	1.00	328	K ⁺ /Cl ⁻	27	493	1.00	466	Na ⁺ /Cl ⁻
7	493	1.00	466	K ⁺ /Cl ⁻	28	683	1.00	164	Na ⁺ /Cl ⁻
8	683	1.00	164	K ⁺ /Cl ⁻	29	683	1.00	328	Na ⁺ /Cl ⁻
9	683	1.00	328	K ⁺ /Cl ⁻	30	683	1.00	466	Na ⁺ /Cl ⁻
10	683	1.00	466	K ⁺ /Cl ⁻	31	298	0.87	328	Li ⁺ /Cl ⁻
11	298	1.00	328	Li ⁺ /F ⁻	32	683	0.87	328	Li ⁺ /Cl ⁻
12	298	1.00	466	Li ⁺ /F ⁻	33	298	0.87	328	Na ⁺ /Cl ⁻
13	373	1.00	328	Li ⁺ /F ⁻	34	683	0.87	328	Na ⁺ /Cl ⁻
14	373	1.00	466	Li ⁺ /F ⁻	35	298	0.87	328	K ⁺ /Cl ⁻
15	493	1.00	164	Li ⁺ /F ⁻	36	683	0.87	328	K ⁺ /Cl ⁻
16	493	1.00	328	Li ⁺ /F ⁻	37	298	0.73	328	Li ⁺ /Cl ⁻
17	493	1.00	466	Li ⁺ /F ⁻	38	683	0.73	328	Li ⁺ /Cl ⁻
18	683	1.00	164	Li ⁺ /F ⁻	39	298	0.73	328	Na ⁺ /Cl ⁻
19	683	1.00	328	Li ⁺ /F ⁻	40	683	0.73	328	Na ⁺ /Cl ⁻
20	683	1.00	466	Li ⁺ /F ⁻	41	298	0.73	328	K ⁺ /Cl ⁻
21	298	1.00	328	Na ⁺ /Cl ⁻	42	683	0.73	328	K ⁺ /Cl ⁻

Nw: the number of water molecules inside the carbon nanotube. The MD simulations of the bulk electrolyte solutions at ambient condition (298 K and 101 KPa) and supercritical condition (683 K and 30 MPa) were also carried out for comparison.