

## **SUPPORTING INFORMATION**

### **Hydration Peculiarities of Graphene Oxides with Multiple Oxidation Degrees**

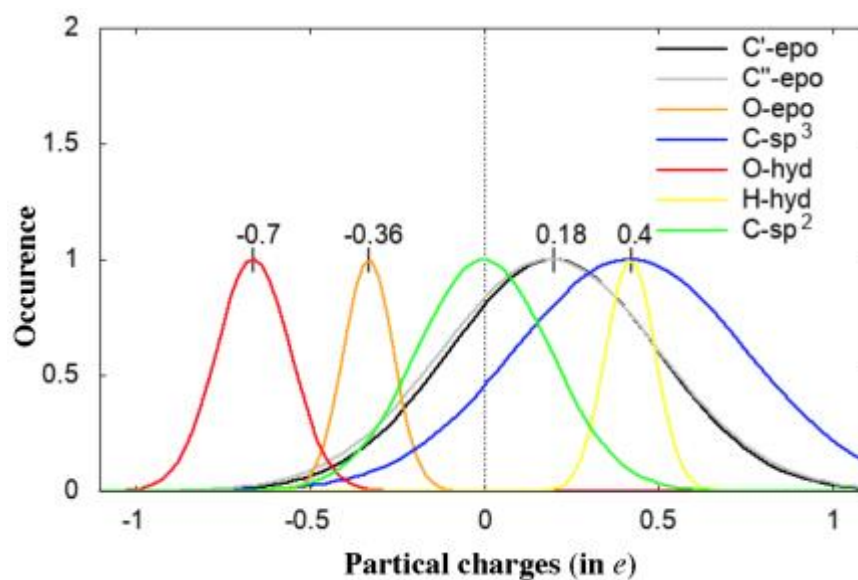
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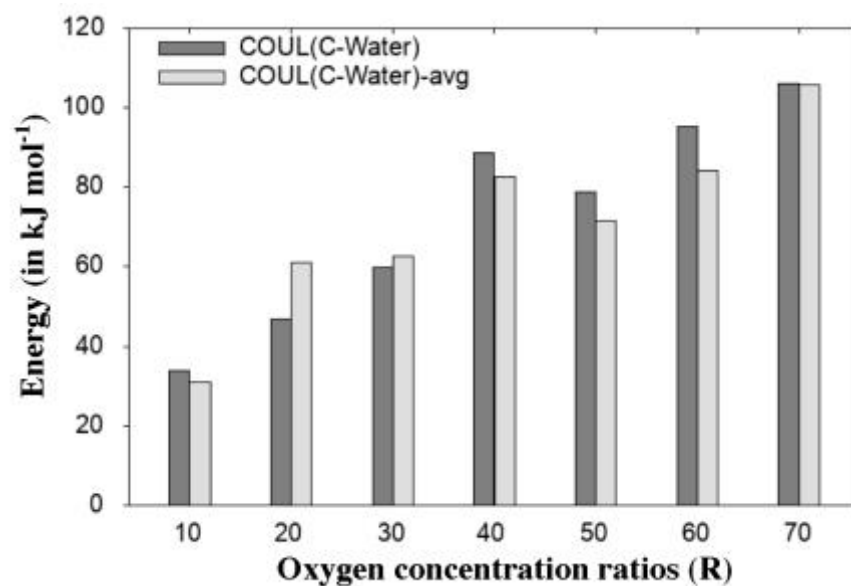
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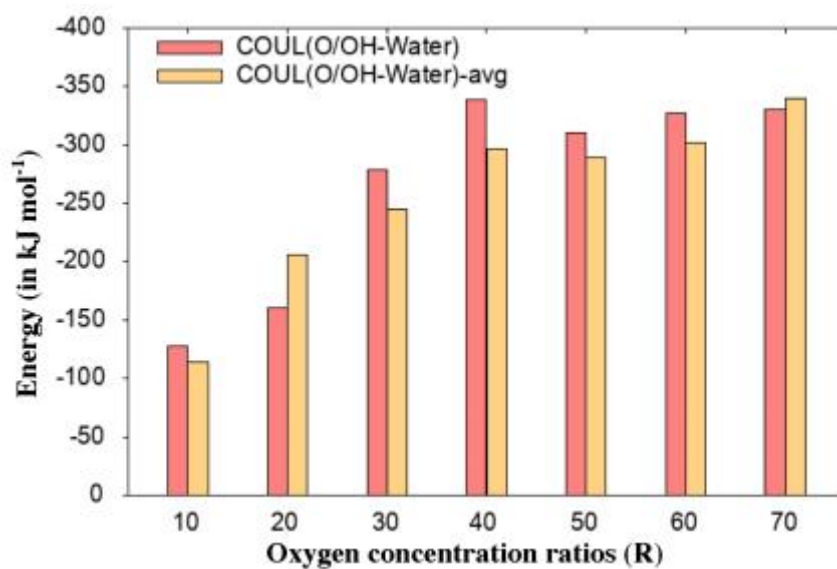
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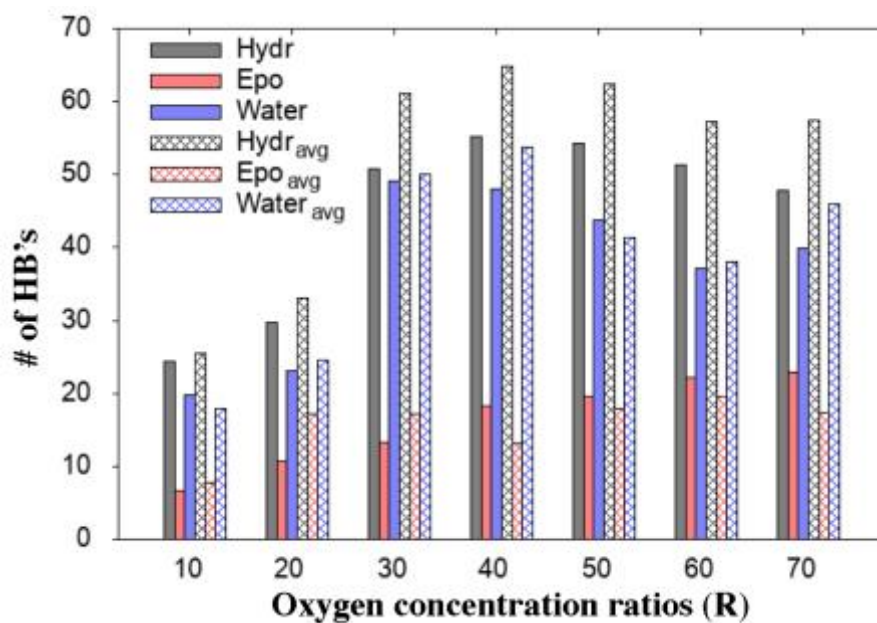
**FIGURE S1:** Distributions and average charges obtained on all similar atoms for each of the graphene oxides.



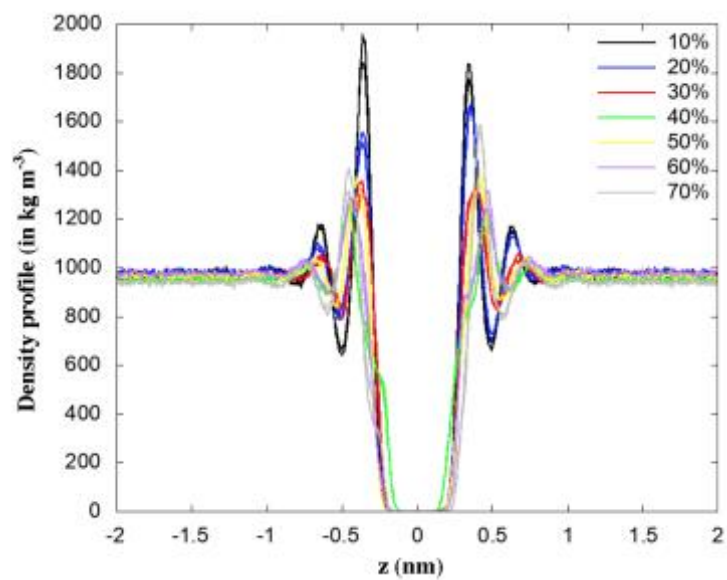
**FIGURE S2:** Comparison between carbon-water Coulomb interaction energies obtained with both charge sets; CHELPG (dark bars) and average charges (light bars).



**FIGURE S3:** Comparison between O/OH-water Coulomb interaction energies obtained with both charge sets; CHELPG (dark bars) and average charges (light bars).



**FIGURE S4:** Average number of hydrogen bonds obtained with both charge sets; CHELPG (solid bars) and average charges (traced bars).



**FIGURE S5:** Profile of mass density for each oxygen concentration ration.