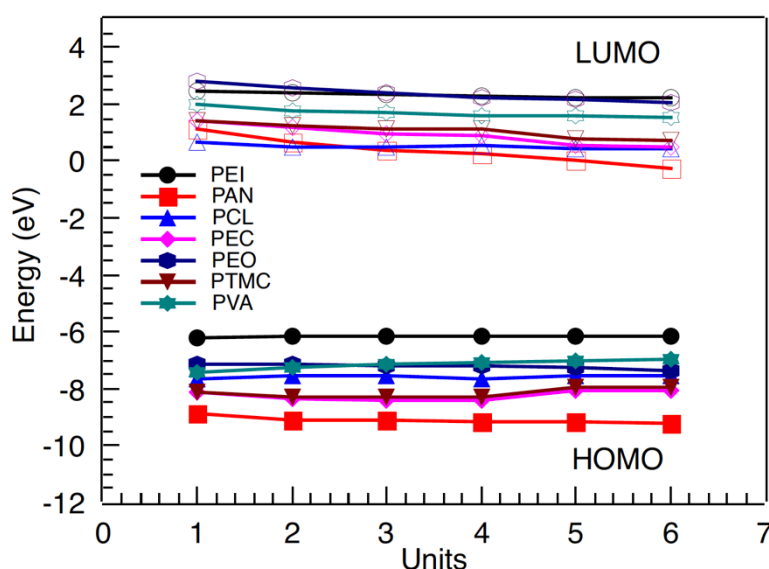


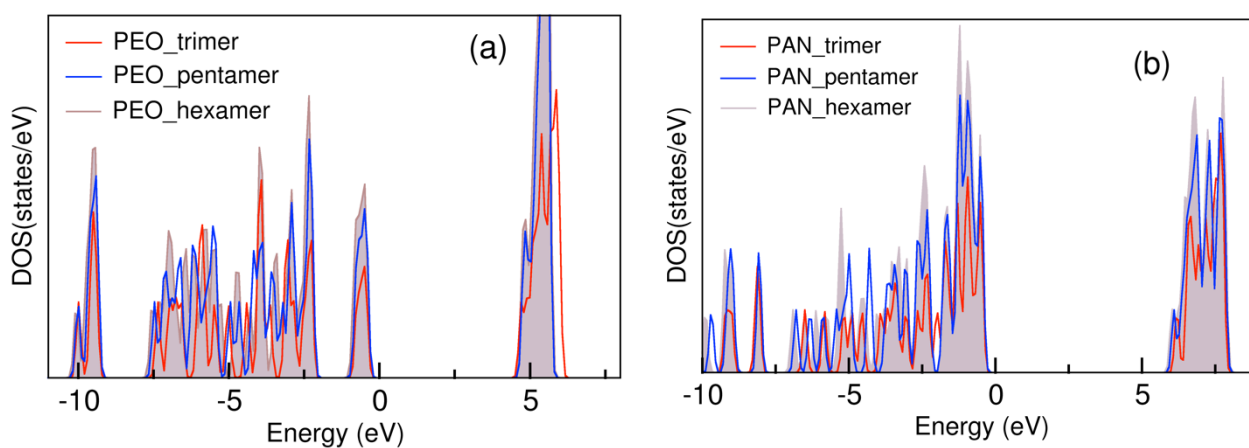
## Supporting information

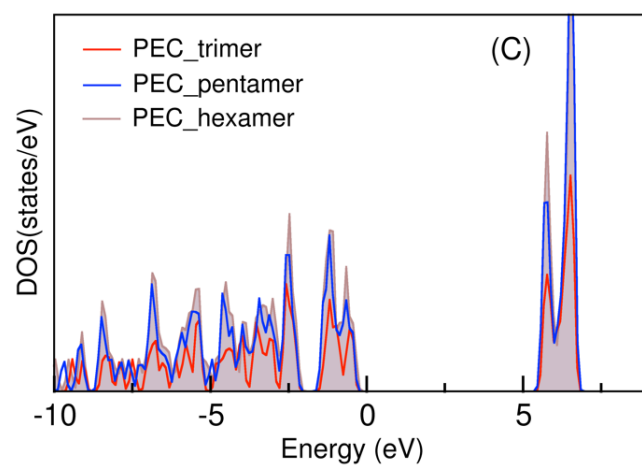
### Assessing Structure and Stability of Polymer/Lithium-Metal Interfaces from First-Principles Calculations

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**Fig. S1.** Highest occupied molecular orbital (HOMO) and lowest unoccupied molecular orbital (LUMO) energies for different oligomers in the study with different number of repeating units.





**Fig. S2.** Total density of states (DOS) of trimer, pentamer and hexamer of (a) PEO, (b) PAN, and (c) PEC.