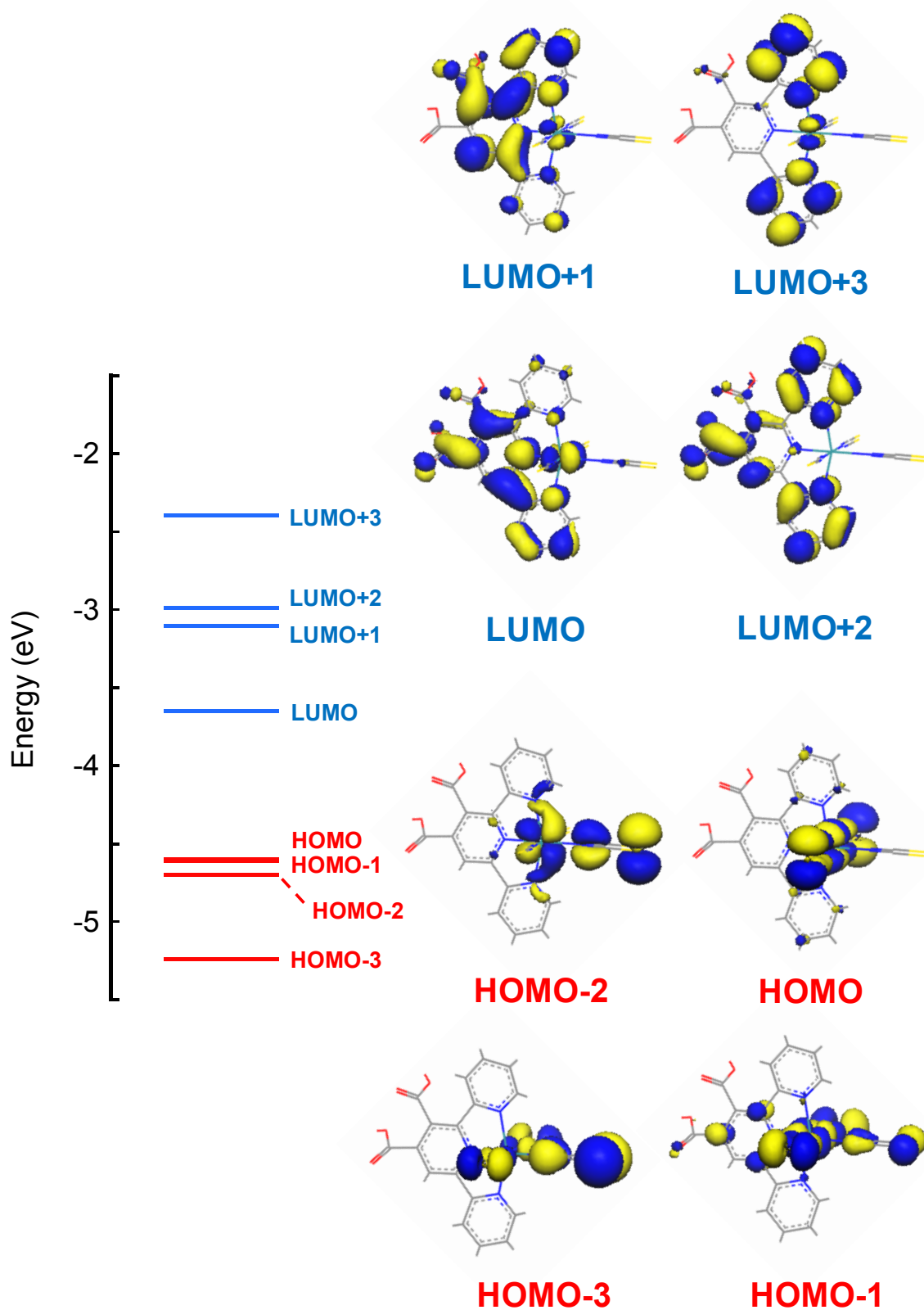


## Supporting Information

### **Ruthenium Sensitizers Having an Ortho-Dicarboxyl Group as an Anchoring Unit for Dye-Sensitized Solar Cells: Synthesis, Photo- and Electrochemical Properties, and Adsorption Behavior to the TiO<sub>2</sub> Surface**

Hironobu Ozawa, Kei Fukushima, Takahito Sugiura, Ayako Urayama and Hironori Arakawa\*

Department of Industrial Chemistry, Faculty of Engineering, Tokyo University of Science, 12-1, Ichigaya-Funagawara, Shinjuku, Tokyo, 162-0826, JAPAN  
E-mail: h.arakawa@ci.kagu.tus.ac.jp; Fax: (+81) 3 5261 4631; Tel: (+81) 3 5228 8311



**Figure S1.** Energy diagram and the frontier molecular orbitals of a fully optimized structure of **TUS-28** in acetonitrile.