

## **Description of Additional Supplementary Files**

### **File name: Supplementary Movie 1**

Description: Superoxide radical derived spiro-OMeTAD solution by bubbling with O<sub>2</sub>.

### **File name: Supplementary Movie 2**

Description: Superoxide radical derived spiro-OMeTAD solution in ambient air.

### **File name: Supplementary Movie 3**

Description: Superoxide radical derived spiro-OMeTAD solution in an air glovebox.

### **File name: Supplementary Movie 4**

Description: Superoxide radical derived spiro-OMeTAD solution by bubbling with O<sub>2</sub> under different temperatures.