

In-Situ/Operando Soft X-Ray Spectroscopy of Catalytic and Electrochemical Reactions

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The energy materials and devices have been largely limited in a framework of thermodynamic and kinetic concepts or atomic and nanoscale. Synchrotron radiation based X-ray spectroscopic techniques offers unique characterization in fundamental science with in-situ/operando characterization for understanding the physical and chemical interfacial processes. The presentation will show the development of in-situ/operando soft X-ray spectroscopy studies of catalytic and electrochemical reactions in recent years, and how to overcome the challenge that soft X-rays cannot easily peek into the liquid electrochemical cells under vacuum condition.

References

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