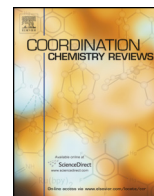




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Review

The application of synchrotron radiation and in particular X-ray absorption spectroscopy to matrix isolated species

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ABSTRACT

This review provides comprehensive coverage of the application of X-ray absorption spectroscopy (XAS, XAFS, EXAFS, and XANES) to matrix isolated species. As X-ray absorption spectroscopy provides structural data without the need for long range order it has been applied to a large number of systems to yield unique structural data about both the matrix isolated species, and their interactions with the matrix host. To put the work into perspective there is a tutorial introduction to the theoretical background of X-ray absorption spectroscopy, data content, processing and analysis. In addition there is brief coverage of the use of other synchrotron radiation techniques for the study of matrix isolated species, and a consideration of future perspectives.

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