

Two-dimensional correlation spectroscopy.

Autorzy

Mirosław A. Czarnecki

Shigeaki Morita

Rok wydania

2021

Wydawca

Springer

Miejsce wydania

Singapore

Strony

111-126

DOI

10.1007/978-981-15-8648-4_6

bookChapter.title

Near-infrared spectroscopy :
theory, spectral analysis,
instrumentation, and
applications.

ISBN

978-981-15-8647-7

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Rozdział książki

Streszczenie

Two-dimensional (2D) correlation spectroscopy is a well-established method for analysis of perturbation-induced spectral changes in various kinds of data. Due to selective correlation of the peaks and resolution enhancement, it provides useful information on the dynamics of spectral changes and enables more reliable band assignments. The generalized 2D correlation approach permits to apply various kinds of perturbations and makes possible for correlation between data obtained from different experiments (hetero-correlation). At the beginning of this chapter are shown the basic principles of 2D correlation spectroscopy together with the rules for interpretation of the synchronous and asynchronous spectra. Next, we report new developments in this method like sample–sample correlation spectroscopy and perturbation–correlation moving-window 2D correlation spectroscopy. Finally, are shown selected examples of successful applications of 2D correlation spectroscopy for study of interactions and molecular structure.

Słowa kluczowe

2D correlation spectroscopy, Sample–sample correlation spectroscopy, Perturbation-correlation moving-window 2D correlation spectroscopy, Applications of 2D correlation NIR spectroscopy

Plik został wygenerowany dnia 2026-08-18 09:02:24

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/dcfPADy>.