1. Record Nr. UNINA9910412150903321 Autore Jones Oliver **Titolo** Two-Dimensional Liquid Chromatography: Principles and Practical

Applications / / by Oliver Jones

Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa

981-15-6190-7 **ISBN** 

Edizione [1st ed. 2020.]

Descrizione fisica 1 online resource (XVI, 75 p. 20 illus., 18 illus. in color.)

Collana SpringerBriefs in Molecular Science, , 2191-5407

Disciplina 543.0894

Soggetti Chromatography

> Metabolism **Proteomics**

Biochemical engineering

Metabolomics

**Biochemical Engineering** 

Lingua di pubblicazione Inglese

**Formato** Materiale a stampa

Livello bibliografico Monografia

Introduction to 2DLC -- Basic Principles -- Method development --Nota di contenuto

Data Analysis -- Hyphenation -- Applications of 2D-LC -- Conclusions

and Future Developments -- Further Reading.

Sommario/riassunto This book addresses the growing interest in the field of two-

> dimensional liquid chromatography (2DLC), a powerful approach to increasing resolution, available peak capacity, and selectivity in analytical chromatography. 2DLC is suitable for many applications, including in the pharmaceutical and polymer industries and the omic sciences (metabolomics, lipidomics and proteomics). Thanks to recent advances in technology and software the instrumentation needed to perform 2D-LC is broadly available to the analytical community in both industry and academia. Indeed, the technique can now be considered ready for application in R&D as well as in QA and QC labs, yet it is not widely known about outside academic laboratories and is rarely taught at the undergraduate level. This book outlines the main principles and features of 2D-LC (including comprehensive and heart-cutting modes, method development and real world applications) to enable modern analysts to start using this fascinating technique. The book offers an

ideal starting point for those wishing to get into 2D-LC and will also be of interest to more experienced scientists in the field.