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Record Nr.	UNINA9910815775303321
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Titolo	The theory of multiple zeta values with applications in combinatorics / / Minking Eie, National Chung Cheng University, Taiwan
Pubbl/distr/stampa	Hackensack, NJ, : World Scientific Pub., c2013 New Jersey : , : World Scientific, , [2013] 2013
ISBN	981-4472-64-6
Descrizione fisica	1 online resource (xii, 300 pages) : illustrations
Collana	Monographs in number theory ; ; v.7
Disciplina	510 512.73 515.56
Soggetti	Functions, Zeta Functions of complex variables Combinatorial analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface; Contents; I Basic Theory of Multiple Zeta Values; 0 The Time Before Multiple Zeta Values; 0.1 The Evaluation of Euler Double Sums; 0.2 Vandermonde Convolution; 0.3 Zeta Functions Associated with Multiple Zeta Values; 0.4 Messages from Modular Forms; 1 Introduction to the Theory of Multiple Zeta Values; 1.1 Introduction and Notations; 1.2 Drinfeld Integral Representations of Multiple Zeta Values; 1.3 Double Weighted Sum Formulas; 1.4 The Expectations of Binomial Distributions; 1.5 Exercises; 2 The Sum Formula; 2.1 Through the Integral Representations 2.2 Another Proof of the Sum Formula2.3 Evaluation of Multiple Zeta Values of Height One; 2.4 Exercises; II Shuffle Relations among Multiple Zeta Values; 3 Some Shuffle Relations; 3.1 Shuffle Relations of Multiple Zeta Values; 3.2 An Application of Double Weighted Sums; 3.3 Shuffle Relations of Two Sums of Multiple Zeta Values; 3.4 A Vector Version of the Restricted Sum Formula; 3.5 Exercises; 4 Euler Decomposition Theorem; 4.1 A Shuffle Relation with Two Parameters; 4.2 Integrals with Three Factors; 4.3 Generalizations of Euler Decomposition

Theorem

Sommario/riassunto	This is the first book on the theory of multiple zeta values since its birth around 1994. Readers will find that the shuffle products of multiple zeta values are applied to complicated counting problems in combinatorics, producing numerous interesting identities that are ready to be used. This will provide a powerful tool to deal with problems in multiple zeta values, both in evaluations and shuffle relations. The volume will benefit graduate students doing research in number theory.