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Soggetti	Operator theory Functional analysis Algebras, Linear Mathematical physics Operator Theory Functional Analysis Linear Algebra Mathematical Physics
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Nota di contenuto	- Introduction. - Notations and Preliminaries -- Double Operator Integrals -- Multiple Operator Integrals -- Applications.
Sommario/riassunto	This book provides a comprehensive treatment of multilinear operator integral techniques. The exposition is structured to be suitable for a course on methods and applications of multilinear operator integrals and also as a research aid. The ideas and contributions to the field are surveyed and up-to-date results and methods are presented. Most practical constructions of multiple operator integrals are included along with fundamental technical results and major applications to smoothness properties of operator functions (Lipschitz and Hölder continuity, differentiability), approximation of operator functions, spectral shift functions, spectral flow in the setting of noncommutative geometry, quantum differentiability, and differentiability of noncommutative L^p -norms. Main ideas are demonstrated in simpler cases, while more involved, technical proofs are outlined and

supplemented with references. Selected open problems in the field are also presented.
