

1. Record Nr.	UNINA9910220747803321
Titolo	Plato: Internet Journal of the International Plato Society
Pubbl/distr/stampa	International Plato Society
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Periodico
2. Record Nr.	UNISA996511863003316
Autore	Li Yinjin
Titolo	Real-Variable Theory of Hardy Spaces Associated with Generalized Herz Spaces of Rafeiro and Samko / / Yinjin Li, Dachun Yang, and Long Huang
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore Pte Ltd., , [2022] ©2022
ISBN	981-19-6788-1
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (663 pages)
Collana	Lecture Notes in Mathematics Series ; ; Volume 2320
Disciplina	515.2433
Soggetti	Fourier analysis Espais de Hardy Anàlisi de Fourier Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Generalized Herz Spaces of Rafeiro and Samko -- 2 Block Spaces and Their Applications -- 3 Boundedness and Compactness Characterizations of Commutators on Generalized Herz Spaces -- 4 Generalized Herz–Hardy Spaces -- 5 Localized Generalized Herz–Hardy Spaces -- 6 Weak Generalized Herz–Hardy Spaces -- 7 Inhomogeneous Generalized Herz Spaces and Inhomogeneous Block Spaces -- 8 Hardy Spaces Associated with Inhomogeneous Generalized Herz Spaces.

The real-variable theory of function spaces has always been at the core of harmonic analysis. In particular, the real-variable theory of the Hardy space is a fundamental tool of harmonic analysis, with applications and connections to complex analysis, partial differential equations, and functional analysis. This book is devoted to exploring properties of generalized Herz spaces and establishing a complete real-variable theory of Hardy spaces associated with local and global generalized Herz spaces via a totally fresh perspective. This means that the authors view these generalized Herz spaces as special cases of ball quasi-Banach function spaces. In this book, the authors first give some basic properties of generalized Herz spaces and obtain the boundedness and the compactness characterizations of commutators on them. Then the authors introduce the associated Herz–Hardy spaces, localized Herz–Hardy spaces, and weak Herz–Hardy spaces, and develop a complete real-variable theory of these Herz–Hardy spaces, including their various maximal function, atomic, molecular as well as various Littlewood–Paley function characterizations. As applications, the authors establish the boundedness of some important operators arising from harmonic analysis on these Herz–Hardy spaces. Finally, the inhomogeneous Herz–Hardy spaces and their complete real-variable theory are also investigated. With the fresh perspective and the improved conclusions on the real-variable theory of Hardy spaces associated with ball quasi-Banach function spaces, all the obtained results of this book are new and their related exponents are sharp. This book will be appealing to researchers and graduate students who are interested in function spaces and their applications.

---