1. Record Nr. UNISA996466504703316

Autore	Lang Jan
Titolo	Eigenvalues, Embeddings and Generalised Trigonometric Functions [[electronic resource] /] / by Jan Lang, David E. Edmunds
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2011
ISBN	3-642-18429-4
Edizione	[1st ed. 2011.]
Descrizione fisica	1 online resource (XI, 220 p. 10 illus.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2016
Disciplina	515
Soggetti	Mathematical analysis Analysis (Mathematics) Approximation theory Functional analysis Special functions Differential equations Mathematics—Study and teaching Analysis Approximations and Expansions Functional Analysis Special Functions Ordinary Differential Equations Mathematics Education
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Basic material -- 2 Trigonometric generalisations -- 3 The Laplacian and some natural variants -- 4 Hardy operators -- 5 s-Numbers and generalised trigonometric functions -- 6 Estimates of s-numbers of weighted Hardy operators -- 7 More refined estimates -- 8 A non-linear integral system -- 9 Hardy operators on variable exponent spaces.
Sommario/riassunto	The main theme of the book is the study, from the standpoint of s-numbers, of integral operators of Hardy type and related Sobolev embeddings. In the theory of s-numbers the idea is to attach to every

bounded linear map between Banach spaces a monotone decreasing sequence of non-negative numbers with a view to the classification of operators according to the way in which these numbers approach a limit: approximation numbers provide an especially important example of such numbers. The asymptotic behavior of the s-numbers of Hardy operators acting between Lebesgue spaces is determined here in a wide variety of cases. The proof methods involve the geometry of Banach spaces and generalized trigonometric functions; there are connections with the theory of the p-Laplacian.