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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Greedy approximation with respect to bases -- 2. Greedy approximation with respect to dictionaries: Hilbert spaces -- 3. Entropy -- 4. Approximation in learning theory -- 5. Approximation in compressed sensing -- 6. Greedy approximation with respect to dictionaries: Banach spaces.
Sommario/riassunto	This first book on greedy approximation gives a systematic presentation of the fundamental results. It also contains an introduction to two hot topics in numerical mathematics: learning theory and compressed sensing. Nonlinear approximation is becoming increasingly important, especially since two types are frequently employed in applications: adaptive methods are used in PDE solvers, while m-term approximation is used in image/signal/data processing, as well as in the design of neural networks. The fundamental question

of nonlinear approximation is how to devise good constructive methods (algorithms) and recent results have established that greedy type algorithms may be the solution. The author has drawn on his own teaching experience to write a book ideally suited to graduate courses. The reader does not require a broad background to understand the material. Important open problems are included to give students and professionals alike ideas for further research.

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