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Nota di contenuto	Introduction -- Chapter 1. Metric and topological spaces -- Chapter 2. Measure theory -- Chapter 3. Measurable functions -- Chapter 4. The Lebesgue integral -- Chapter 5. Linear spaces, linear functionals, and the Hahn-Banach theorem -- Chapter 6. Normed spaces -- Chapter 7. Absolute continuity of measures and functions. Connection between derivative and integral -- Chapter 8. The integral on $C(K)$ -- Chapter 9. Continuous linear functionals -- Chapter 10. Classical theorems on continuous operators -- Chapter 11. Elements of spectral theory of operators. Compact operators -- Chapter 12. Hilbert spaces -- Chapter 13. Functions of an operator -- Chapter 14. Operators in L_p -- Chapter 15. Fixed-point theorems and applications -- Chapter 16. Topological vector spaces -- Chapter 17. Elements of duality theory -- Chapter 18. The Krein-Milman theorem and applications -- References. Index.
Sommario/riassunto	Written by an expert on the topic and experienced lecturer, this textbook provides an elegant, self-contained introduction to functional

analysis, including several advanced topics and applications to harmonic analysis. Starting from basic topics before proceeding to more advanced material, the book covers measure and integration theory, classical Banach and Hilbert space theory, spectral theory for bounded operators, fixed point theory, Schauder bases, the Riesz-Thorin interpolation theorem for operators, as well as topics in duality and convexity theory. Aimed at advanced undergraduate and graduate students, this book is suitable for both introductory and more advanced courses in functional analysis. Including over 1500 exercises of varying difficulty and various motivational and historical remarks, the book can be used for self-study and alongside lecture courses.
