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Titolo	Integral Equations and Integral Transforms // by Sudeshna Banerjea, Birendra Nath Mandal
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Altri autori (Persone)	MandalBirendra Nath
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Soggetti	Integral equations Mathematical analysis Integral Equations Integral Transforms and Operational Calculus Equacions integrals Transformacions integrals Llibres electrònics
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Nota di contenuto	Integral Equations: An Introduction -- Fredholm integral equation of the second kind with degenerate kernel -- Integral equations of second kind with more general form of kernel -- Integral equations with symmetric kernel -- Abel integral equations -- Fourier Transform -- Laplace Transform -- Mellin Transform -- Hankel Transform -- Z Transform -- Formal Construction of Integral Transforms and Their Inverses.
Sommario/riassunto	This comprehensive textbook on linear integral equations and integral transforms is aimed at senior undergraduate and graduate students of mathematics and physics. The book covers a range of topics including Volterra and Fredholm integral equations, the second kind of integral equations with symmetric kernels, eigenvalues and eigen functions, the Hilbert–Schmidt theorem, and the solution of Abel integral equations by using an elementary method. In addition, the book covers various integral transforms including Fourier, Laplace, Mellin, Hankel, and Z-transforms. One of the unique features of the book is a general method for the construction of various integral transforms and their inverses,

which is based on the properties of delta function representation in terms of Green's function of a Sturm–Liouville type ordinary differential equation and its applications to physical problems. The book is divided into two parts: integral equations and integral transforms. Each chapter is supplemented with numerous illustrative examples to aid in understanding. The clear and concise presentation of the topics covered makes this book an ideal resource for students, researchers, and professionals interested in the theory and application of linear integral equations and integral transforms.
