1.	Record Nr.	UNINA9910303448003321
	Titolo	Advances in Summability and Approximation Theory / / edited by S. A. Mohiuddine, Tuncer Acar
	Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
	ISBN	981-13-3077-8
	Edizione	[1st ed. 2018.]
	Descrizione fisica	1 online resource (XIII, 241 p. 10 illus., 9 illus. in color.)
	Disciplina	515.24
	Soggetti	Sequences (Mathematics)
		Approximation theory
		Functional analysis
		Sequences, Series, Summability
		Approximations and Expansions
		Functional Analysis
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Chapter 1. A Survey for Paranormed Sequence Spaces Generated by Infinite Matrices -- Chapter 2. Tauberian Conditions under which Convergence Follows from Statistical Summability by Weighted Means -- Chapter 3. Applications of Fixed Point Theorems and General Convergence in Orthogonal Metric Spaces -- Chapter 4. Application of Measure of Noncompactness to the Infinite Systems of Second-Order Differential Equations in Banach Sequence Spaces c, lp and c0 -- Chapter 5. Infinite Systems of Differential Equations in Banach Spaces Constructed by Fibonacci Numbers -- Chapter 6. Convergence Properties of Genuine Bernstein-Durrmeyer Operators -- Chapter 7. Bivariate Szasz Type Operators Based on Multiple Appell Polynomials -- Chapter 8. Approximation Properties of Chlodowsky Variant of (P, Q) SzAsz–Mirakyan–Stancu Operators -- Chapter 9. Approximation Theorems for Positive Linear Operators Associated with Hermite and Laguerre Polynomials -- Chapter 10. On Generalized Picard Integral Operators -- Chapter 11. From Uniform to Statistical Convergence of Binomial-Type Operators -- Chapter 12. Weighted Statistically Uniform Convergence of Bögel Continuous Functions by Positive Linear

Operators -- Chapter 13. Optimal Linear Approximation under General Statistical Convergence -- Chapter 14. Statistical Deferred Cesaro Summability Mean Based on (p, q)-Integers with Application to Approximation Theorems -- Chapter 15. Approximation Results for an Urysohn-type Nonlinear Bernstein Operators.

| Sommario/riassunto | This book discusses the Tauberian conditions under which convergence follows from statistical summability, various linear positive operators, Urysohn-type nonlinear Bernstein operators and also presents the use of Banach sequence spaces in the theory of infinite systems of differential equations. It also includes the generalization of linear positive operators in post-quantum calculus, which is one of the currently active areas of research in approximation theory. Presenting original papers by internationally recognized authors, the book is of interest to a wide range of mathematicians whose research areas include summability and approximation theory. One of the most active areas of research in summability theory is the concept of statistical convergence, which is a generalization of the familiar and widely investigated concept of convergence of real and complex sequences, and it has been used in Fourier analysis, probability theory, approximation theory and in other branches of mathematics. The theory of approximation deals with how functions can best be approximated with simpler functions. In the study of approximation of functions by linear positive operators, Bernstein polynomials play a highly significant role due to their simple and useful structure. And, during the last few decades, different types of research have been dedicated to improving the rate of convergence and decreasing the error of approximation. |