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Titolo	Solutions of Fixed Point Problems with Computational Errors [[electronic resource] /] / by Alexander J. Zaslavski
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Descrizione fisica	1 online resource (392 pages)
Collana	Springer Optimization and Its Applications, , 1931-6836 ; ; 210
Disciplina	519.6
Soggetti	Mathematical optimization Operator theory Mathematics - Data processing Optimization Operator Theory Computational Mathematics and Numerical Analysis
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	1 - Introduction -- 2 - Iterative methods in a Hilbert space -- 3 - The Cimmino algorithm in a Hilbert space -- 4 - Dynamic string-averaging methods in Hilbert spaces -- 5 - Methods with remotest set control in a Hilbert space -- 6 - Algorithms based on unions of nonexpansive maps -- 7 - Inconsistent convex feasibility problems -- 8 - Split common fixed point problems.
Sommario/riassunto	The book is devoted to the study of approximate solutions of fixed point problems in the presence of computational errors. It begins with a study of approximate solutions of star-shaped feasibility problems in the presence of perturbations. The goal is to show the convergence of algorithms, which are known as important tools for solving convex feasibility problems and common fixed point problems. The text also presents studies of algorithms based on unions of nonexpansive maps, inconsistent convex feasibility problems, and split common fixed point problems. A number of algorithms are considered for solving convex feasibility problems and common fixed point problems. The book will be of interest for researchers and engineers working in optimization, numerical analysis, and fixed point theory. It also can be useful in

preparation courses for graduate students. The main feature of the book which appeals specifically to this audience is the study of the influence of computational errors for several important algorithms used for nonconvex feasibility problems.

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