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Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Introduction -- Fixed Point Theory in Metric Spaces: An Introduction --

Modular Function Spaces -- Geometry of Modular Function Spaces -- Fixed Point Existence Theorems in Modular Function Spaces -- Fixed Point Construction Processes -- Semigroups of Nonlinear Mappings in

Modular Function Spaces -- Modular Metric Spaces.

and further development directions are suggested when

Sommario/riassunto This monograph provides a concise introduction to the main results

and methods of the fixed point theory in modular function spaces. Modular function spaces are natural generalizations of both function and sequence variants of many important spaces like Lebesgue, Orlicz, Musielak-Orlicz, Lorentz, Orlicz-Lorentz, Calderon-Lozanovskii spaces, and others. In most cases, particularly in applications to integral operators, approximation and fixed point results, modular type conditions are much more natural and can be more easily verified than their metric or norm counterparts. There are also important results that can be proved only using the apparatus of modular function spaces. The material is presented in a systematic and rigorous manner that allows readers to grasp the key ideas and to gain a working knowledge of the theory. Despite the fact that the work is largely self-contained, extensive bibliographic references are included, and open problems

applicable. The monograph is targeted mainly at the mathematical research community but it is also accessible to graduate students interested in functional analysis and its applications. It could also serve as a text for an advanced course in fixed point theory of mappings acting in modular function spaces.