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Nota di contenuto	1. Metric, Banach, and Hilbert Spaces -- 2. Linear Operators on Banach Spaces -- 3. Almost Periodic Functions -- 4. Almost Automorphic Functions -- 5. Pseudo-Almost Periodic Functions -- 6. Pseudo-Almost Automorphic Functions -- 7. Existence Results for Some Second-Order Differential Equations -- 8. Existence Results to Some Integrodifferential Equations -- 9. Existence of C(m)-Pseudo-Almost Automorphic Solutions -- 10. Pseudo-Almost Periodic Solutions to Some Third-Order Differential Equations -- 11. Pseudo-Almost Automorphic Solutions to Some Sobolev-Type Equations -- 12. Stability Results for Some Higher-Order Difference Equations -- 13. Appendix A -- References -- Index.
Sommario/riassunto	This book presents a comprehensive introduction to the concepts of almost periodicity, asymptotic almost periodicity, almost automorphy, asymptotic almost automorphy, pseudo-almost periodicity, and pseudo-almost automorphy as well as their recent generalizations. Some of the results presented are either new or else cannot be easily found in the mathematical literature. Despite the noticeable and rapid progress made on these important topics, the only standard references that currently exist on those new classes of functions and their

applications are still scattered research articles. One of the main objectives of this book is to close that gap. The prerequisites for the book is the basic introductory course in real analysis. Depending on the background of the student, the book may be suitable for a beginning graduate and/or advanced undergraduate student. Moreover, it will be of a great interest to researchers in mathematics as well as in engineering, in physics, and related areas. Further, some parts of the book may be used for various graduate and undergraduate courses.