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Nota di contenuto	Chapter 1. Inequalities for the Generalized k-g-Fractional Integrals in Terms of Double Integral Means -- Chapter 2. Fixed Point Approach to Solution Existence of Differential Equations -- Chapter 3. Lyapunov Inequalities for Some Differential Equations with Integral Type Boundary Conditions -- Chapter 4. A New Class of Generalized Convex Functions and Integral Inequalities -- Chapter 5. Redheffer Type Inequalities for the Fox-Wright Functions -- Chapter 6. Relations of the Extended Voigt Function with other Families of Polynomials and Numbers -- Chapter 7. Nonlinear Dynamical Model for DNA -- Chapter 8. A Variety of Nonlinear retarded Integral Inequalities of Gronwall-type and their Applications -- Chapter 9. On the Integral Inequalities for Riemann–Liouville and Conformable Fractional Integrals -- Chapter 10. Weighted Integral Inequalities in Terms of Omega–Fractional Integro-Differentiation -- Chapter 11. On Sherman Method to Deriving

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Chapter 15. Comprehensive Inequalities and Equations Specified by the  
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-- Chapter 16. Novel Results on Hermite–Hadamard Kind Inequalities  
for Convex Functions by Means of  $(k; r)$ -Fractional Integral Operators  
-- Chapter 17. A Family of Integral Inequalities on the Interval  $[1; 1]$  --  
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Inequality via Means with Max and Min Values.

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## Sommario/riassunto

This book is a collection of original research and survey articles on mathematical inequalities and their numerous applications in diverse areas of mathematics and engineering. It includes chapters on convexity and related concepts; inequalities for mean values, sums, functions, operators, functionals, integrals and their applications in various branches of mathematics and related sciences; fractional integral inequalities; and weighted type integral inequalities. It also presents their wide applications in biomathematics, boundary value problems, mechanics, queuing models, scattering, and geomechanics in a concise, but easily understandable way that makes the further ramifications and future directions clear. The broad scope and high quality of the contributions make this book highly attractive for graduates, postgraduates and researchers. All the contributing authors are leading international academics, scientists, researchers and scholars. .

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