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Collana	Series on concrete and applicable mathematics, , 1793-1142 ; ; v. 11
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface; Contents; 1. Introduction; 2. Advanced Univariate Ostrowski Type Inequalities; 3. Higher Order Ostrowski Inequalities; 4. Multidimensional Euler Identity and Optimal Multidimensional Ostrowski Inequalities; 5. More on Multidimensional Ostrowski Type Inequalities; 6. Ostrowski Inequalities on Euclidean Domains; 7. High Order Ostrowski Inequalities on Euclidean Domains; 8. Ostrowski Inequalities on Spherical Shells; 9. Ostrowski Inequalities on Balls and Shells Via Taylor{Widder Formula; 10. Multivariate Opial Type Inequalities for Functions Vanishing at an Interior Point 11. General Multivariate Weighted Opial Inequalities 12. Opial Inequalities for Widder Derivatives; 13. Opial Inequalities for Linear Differential Operators; 14. Opial Inequalities for Vector Valued Functions; 15. Opial Inequalities for Semigroups; 16. Opial Inequalities for Cosine and Sine Operator Functions; 17. Poincare Like Inequalities for Linear Differential Operators; 18. Poincare and Sobolev Like Inequalities for Widder Derivatives; 19. Poincare and Sobolev Like Inequalities for Vector Valued Functions; 20. Poincare Type Inequalities for Semigroups, Cosine and Sine Operator Functions 21. Hardy-Opial Type Inequalities 22. A Basic Sharp Integral Inequality; 23. Estimates of the Remainder in Taylor's Formula; 24. The Distributional Taylor Formula; 25. Chebyshev-Gruss Type Inequalities Using Euler Type and Fink Identities; 26. Gruss Type Multivariate Integral Inequalities; 27. Chebyshev-Gruss Type Inequalities on

	Spherical Shells and Balls; 28. Multivariate Chebyshev-Gruss and Comparison of Integral Means Inequalities; 29. Multivariate Fink Type Identity Applied to Multivariate Inequalities; Bibliography; List of Symbols; Index
Sommario/riassunto	This monograph presents univariate and multivariate classical analyses of advanced inequalities. This treatise is a culmination of the author's last thirteen years of research work. The chapters are self-contained and several advanced courses can be taught out of this book. Extensive background and motivations are given in each chapter with a comprehensive list of references given at the end. The topics covered are wide-ranging and diverse. Recent advances on Ostrowski type inequalities, Opial type inequalities, Poincare and Sobolev type inequalities, and Hardy-Opial type inequalities are exam