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Nota di contenuto	Chapter 1. Preliminaries -- Chapter 2. Fundamental numerical radius inequalities -- Chapter 3. Bounds of the numerical radius using Buzano's inequality -- Chapter 4. p-numerical radius inequalities of an n-tuple of operators -- Chapter 5. Numerical radius inequalities of product of operators -- Chapter 6. Numerical radius of operator matrices and applications -- Chapter 7. Operator space numerical radius of $2 \times 2$ block matrices -- Chapter 8. A-numerical radius inequalities of semi-Hilbertian spaces -- Chapter 9. Research Problems.
Sommario/riassunto	This book is a self-contained advanced monograph on inequalities involving the numerical radius of bounded linear operators acting on complex Hilbert spaces. The study of numerical range and numerical radius has a long and distinguished history starting from the Rayleigh quotients used in the 19th century to nowadays applications in quantum information theory and quantum computing. This monograph is intended for use by both researchers and graduate students of mathematics, physics, and engineering who have a basic background in functional analysis and operator theory. The book provides several

challenging problems and detailed arguments for the majority of the results. Each chapter ends with some notes about historical views or further extensions of the topics. It contains a bibliography of about 180 items, so it can be used as a reference book including many classical and modern numerical radius inequalities.

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