

1. Record Nr.	UNINA9910492145903321
Autore	Ghaemi Mohammad Bagher
Titolo	Advances in matrix inequalities // Mohammad Bagher Ghaemi [and three others]
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-76047-2
Descrizione fisica	1 online resource (287 pages)
Collana	Springer Optimization and Its Applications ; ; v.176
Disciplina	512.9434
Soggetti	Matrix inequalities Matrius (Matemàtica) Desigualtats matricials Operator theory Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Contents -- Acronyms -- 1 Elementary Linear Algebra Review -- 1.1 Operators and Matrices in Hilbert Space -- 2 Interpolating the Arithmetic-Geometric Mean Inequality and Its Operator Version -- 2.1 Refinements of the Scalar Young and Heinz Inequalities -- 2.2 Operator Inequalities Involving Improved Young Inequality -- 2.3 Advanced Refinements of the Scalar Reverse Young Inequalities -- 2.4 Improvements of the Operator Reverse Young Inequality -- 3 Operator Inequalities for Positive Linear Maps -- 3.1 On an Operator Kantorovich Inequality for Positive Linear Maps -- 3.2 A Schwarz Inequality for Positive Linear Maps -- 3.3 Squaring the Reverse Arithmetic-Geometric Mean Inequality -- 3.4 Reverses of Ando's Inequality for Positive Linear Maps -- 3.5 Squaring the Reverse Ando's Operator Inequality -- 4 Operator Inequalities Involving Operator Monotone Functions -- 4.1 Young Inequalities Involving Operator Monotone Functions -- 4.2 Eigenvalue Inequalities Involving Operator Concave Functions -- 4.3 Operator Aczel Inequality Involving Operator Monotone Functions -- 4.4 Norm Inequalities Involving Operator Monotone Functions -- 5 Inequalities for Sector Matrices -- 5.1

Haynsworth and Hartfiel Type Determinantal Inequality -- 5.2
Inequalities with Determinants of Perturbed Positive Matrices -- 5.3
Analogue of Fischer's Inequality for Sector Matrices -- 5.4 Analogues of
Hadamard and Minkowski Inequality for Sector Matrices -- 5.5
Generalizations of the Brunn Minkowski Inequality -- 5.6 A Lewent
Type Determinantal Inequality -- 5.7 Principal Powers of Matrices with
Positive Definite Real Part -- 5.8 Geometric Mean of Accretive
Operators -- 5.9 Weighted Geometric Mean of Accretive Operators and
Its Applications -- 5.10 Fischer Type Determinantal Inequalities for
Accretive-Dissipative Matrices.
5.11 Extensions of Fischer's Inequality for Sector Matrices -- 5.12
Singular Value Inequalities of Sector Matrices -- 5.13 Extension of
Rottfel'd Inequality for Sector Matrices -- 5.14 A Further Extension of
Rottfel'd Inequality for Accretive-Dissipative Matrices -- 5.15 Hilbert-
Schmidt Norm Inequalities for Accretive-Dissipative Operators -- 5.16
Schatten p-Norm Inequalities for Accretive-Dissipative Matrices -- 5.17
Schatten p-Norm Inequalities for Sector Matrices -- 5.18 Schatten p-
Norms and Determinantal Inequalities Involving Partial Traces -- 5.19
Ando-Choi Type Inequalities for Sector Matrices -- 5.20 Geometric
Mean Inequality for Sector Matrices -- 5.21 Weighted Geometric Mean
Inequality for Sector Matrices -- 6 Positive Partial Transpose Matrix
Inequalities -- 6.1 Singular Value Inequalities Related to PPT Matrices
-- 6.2 Matrix Inequalities and Completely PPT Maps -- 6.3 Hiroshima's
Type Inequalities for Positive Semidefinite Block Matrices -- 6.4
Geometric Mean and Norm Schwarz Inequality -- 6.5 Inequalities
Involving the Off-Diagonal Block of a PPT Matrix -- 6.6 Unitarily
Invariant Norm Inequalities of PPT Matrices -- 6.7 On Symmetric Norm
Inequalities for Positive Block Matrices -- 6.8 Matrix Norm Inequalities
and Majorization Relation for Singular Values -- Appendix References
-- -- Index.
