

1. Record Nr.	UNISA996466561803316
Autore	Powers Victoria
Titolo	Certificates of positivity for real polynomials : theory, practice, and applications // Victoria Powers
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	9783030855475 9783030855468
Descrizione fisica	1 online resource (161 pages) : illustrations
Collana	Developments in mathematics ; ; Volume 69
Disciplina	512.942
Soggetti	Polinomis Polynomials 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 -- 0 Introduction -- 1 Preliminaries -- 1.1 Basic Notation -- 1.2 The Real Numbers -- 1.3 Polynomials -- 1.4 Polynomials Versus Forms -- 1.5 Matrices and Quadratic Forms -- 1.6 Convex Sets and Cones -- Reference -- 2 Sums of Squares and Positive Polynomials -- 2.1 SOS and PSD Polynomials -- 2.2 Hilbert's 17th Problem -- 2.2.1 Uniform Denominators -- 2.2.2 Degree Bounds -- 2.3 The Gap Between PSD and SOS Polynomials -- References -- 3 Global Certificates of Positivity -- 3.1 The Gram Matrix Method -- 3.2 From Gram Matrices to Certificates -- 3.3 Application: Global Optimization of Polynomials -- References -- 4 Positive Semidefinite Ternary Quartics -- 4.1 Proofs of Hilbert's Theorem on Ternary Quartics -- 4.2 Finding and Counting Sum of Squares Representations -- References -- 5 Positivity on Semialgebraic Sets -- 5.1 Semialgebraic Sets -- 5.2 Preorders and Quadratic Modules -- 5.3 Positivity Properties -- 5.4 Saturated Quadratic Modules and Preorders -- 5.5 The Positivstellensatz -- 5.6 Sums of Squares and Positivity on Algebraic Sets -- 5.7 Application: The Moment Problem -- References -- 6 The Archimedean Property -- 6.1 Archimedean T-Modules -- 6.2 Marshall's Representation Theorem -- 6.3 Application: Theorems of

Handelman and Pólya -- References -- 7 Theorems of Schmüdgen and Putinar -- 7.1 Schmüdgen's Positivstellensatz -- 7.1.1 Wörmann's Proof -- 7.2 Putinar's Positivstellensatz -- 7.3 Minimal Representations -- 7.4 Constructive Proofs -- 7.4.1 Degree Bounds -- 7.5 Application: Polynomial Optimization on Compact Semialgebraic Sets -- References -- 8 The Dimension One Case -- 8.1 Positivity on a Closed Interval -- 8.1.1 Bernstein Representations -- 8.2 Basic Closed Semialgebraic Subsets of \mathbb{R} -- 8.3 Positivity on Curves in the Plane -- References -- 9 Positivity on Polytopes -- 9.1 Pólya's Theorem. 9.1.1 Pólya's Theorem with Zeros -- 9.2 Certificates in Preprimes and Quadratic Modules -- 9.3 Applications -- 9.3.1 Approximating the Stability Number of a Graph -- 9.3.2 Minimization of Polynomials on Polytopes -- References -- 10 The Noncompact Case -- 10.1 Saturation in the Noncompact Case -- 10.2 Stability and Open Cones -- 10.3 Cylinders with Compact Cross-Section -- References -- 11 Sums of Squares of Rational Polynomials -- 11.1 Weighted Sums of Squares Representations -- 11.2 The Univariate Case -- 11.3 Sums of Rational Squares -- 11.4 Algorithmic Approaches -- References -- 12 Positive Polynomials with Special Structure -- 12.1 Symmetric Polynomials -- 12.2 Diagonal-Tail Forms -- 12.3 Agiforms -- 12.4 Circuit Polynomials -- 12.5 Application: Global Optimization Using Geometric Programming -- References -- Appendix A Real Algebra and Algebraic Geometry -- A.1 Algebraic Sets -- A.2 Real Fields -- A.3 Tarski-Seidenberg Theorem -- A.4 The Real Spectrum -- References -- Appendix Index of Notation -- Index.

2. Record Nr.	UNINA9910778336003321
Titolo	Design and destiny : Jewish and Christian perspectives on human germline modification // edited by Ronald Cole-Turner
Pubbl/distr/stampa	Cambridge, MA, : MIT Press, ©2008
ISBN	1-282-09932-9 9786612099328 0-262-27063-3 1-4356-2803-9
Descrizione fisica	1 online resource (251 p.)
Collana	Basic bioethics
Altri autori (Persone)	Cole-TurnerRonald <1948->
Disciplina	201/.666065
Soggetti	Medical genetics - Religious aspects - Judaism Medical genetics - Religious aspects - Christianity Genetic engineering - Religious aspects - Judaism Genetic engineering - Religious aspects - Christianity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Series Foreword; Acknowledgments; 1 Religion and the Question of Human Germline Modification; 2 Judaism and Germline Modification; 3 The Roman Catholic Magisterium and Genetic Research: An Overview and Evaluation; 4 A Traditional Christian Reflection on Reengineering Human Nature; 5 Germline Gene Modification and the Human Condition before God; 6 Human Germline Therapy: Proper Human Responsibility or Playing God?; 7 Germline Genetics, Human Nature, and Social Ethics; 8 Freedom, Conscience, and Virtue: Theological Perspectives on the Ethics of Inherited Genetic Modification 9 Religion, Genetics, and the Future Suggestions for Further Reading; Contributors; Index
Sommario/riassunto	Scholars discuss the genetic modification of embryonic cells from the viewpoints of traditional Jewish and Christian teaching, considering both the possible therapeutic benefits of this technology and moral concerns about its implementation.

3. Record Nr.	UNISA996204051603316
Titolo	Forbes global
Pubbl/distr/stampa	London, : Forbes Global Inc
Descrizione fisica	1 online resource
Disciplina	650/.05
Soggetti	Business International trade Internationale economie Periodicals.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Periodico