

1. Record Nr.	UNINA9910557286003321
Autore	Dui Neven
Titolo	Selected Papers from SDEWES 2018 : Conferences on Sustainable Development of Energy, Water and Environment Systems
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 electronic resource (508 p.)
Soggetti	Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Preface Several countries have recently realized that the present paradigm of development in environmental and energy fields is unsustainable. As global awareness of environmental issues grows, governments worldwide are promoting policies which aim to limit the harmful effects of human development on the environment. In particular, these novel policies seek to address the rapid increase of the global temperature (especially in the polar regions) as well as to manage human plastic waste accumulating in seas. To resolve these issues will require a number of actions to be implemented; unfortunately, the recent COP 24 Conference was unsuccessful in establishing a global agreement to achieve these actions. In order for the upcoming 2020 COP 26 Conference to be successful in creating such an agreement, the scientific community must support the policymakers' efforts. Within this framework, it is necessary to show the efforts of countries worldwide as they try to negotiate an agreement to increase the energy efficiency and reduce greenhouse gas (GHG) emissions. In addition, the research reports generated can provide quantitative measures of the necessary actions to be implemented in order to address sustainable and efficient energy use. Among other topics, the papers presented in this issue investigate innovations in novel efficient and environmentally friendly technologies mainly based on renewable energy sources. The study also highlights</p>

the different sectors involved in this task, such as energy conversion systems, urban areas, mobility, sustainability, water management, social aspects, etc. In this field, the Sustainable Development of Energy, Water and Environment Systems (SDEWES) conference provides the foremost forum for discussion on these topics. The 13th Sustainable Development of Energy, Water and Environment Systems Conference was held in Palermo, Italy in 2018. This Special Issue of Energies, precisely dedicated to 13th SDEWES Conference, features papers in three main topics: Energy policy and energy efficiency in urban areas, energy efficiency in industry, biomass and other miscellaneous energy systems.

2. Record Nr.	UNINA9910780861503321
Autore	Golub Gene H (Gene Howard), <1932-2007.>
Titolo	Matrices, moments, and quadrature with applications [[electronic resource] /] / Gene H. Golub and Gerard Meurant
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, c2010
ISBN	1-282-45801-9 1-282-93607-7 9786612458019 1-4008-3388-4
Edizione	[Course Book]
Descrizione fisica	1 online resource (376 p.)
Collana	Princeton series in applied mathematics
Classificazione	SK 915
Altri autori (Persone)	MeurantGerard A
Disciplina	512.9434
Soggetti	Matrices Numerical analysis
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 (p. 335-359) and index.
Nota di contenuto	Frontmatter -- Contents -- Preface -- PART 1. Theory -- Chapter 1. Introduction -- Chapter 2. Orthogonal Polynomials -- Chapter 3. Properties of Tridiagonal Matrices -- Chapter 4. The Lanczos and Conjugate Gradient Algorithms -- Chapter 5. Computation of the Jacobi Matrices -- Chapter 6. Gauss Quadrature -- Chapter 7. Bounds for Bilinear Forms $u^T f(A)v$ -- Chapter 8. Extensions to Nonsymmetric

Matrices -- Chapter 9. Solving Secular Equations -- PART 2.
Applications -- Chapter 10. Examples of Gauss Quadrature Rules --
Chapter 11. Bounds and Estimates for Elements of Functions of
Matrices -- Chapter 12. Estimates of Norms of Errors in the Conjugate
Gradient Algorithm -- Chapter 13. Least Squares Problems -- Chapter
14. Total Least Squares -- Chapter 15. Discrete Ill-Posed Problems --
Bibliography -- Index

Sommario/riassunto

This computationally oriented book describes and explains the mathematical relationships among matrices, moments, orthogonal polynomials, quadrature rules, and the Lanczos and conjugate gradient algorithms. The book bridges different mathematical areas to obtain algorithms to estimate bilinear forms involving two vectors and a function of the matrix. The first part of the book provides the necessary mathematical background and explains the theory. The second part describes the applications and gives numerical examples of the algorithms and techniques developed in the first part. Applications addressed in the book include computing elements of functions of matrices; obtaining estimates of the error norm in iterative methods for solving linear systems and computing parameters in least squares and total least squares; and solving ill-posed problems using Tikhonov regularization. This book will interest researchers in numerical linear algebra and matrix computations, as well as scientists and engineers working on problems involving computation of bilinear forms.
