1. Record Nr. UNINA9910466877003321

Autore	Hovestadt Ludger
Titolo	A genius planet : energy: from scarcity to abundance, a radical pathway / / Ludger Hovestadt, Vera Buhlmann, Sebastian Michael
Pubbl/distr/stampa	Basel, Switzerland : , : Birkhauser Verlag GmbH, , 2017
ISBN	3-0356-1419-9 3-0356-1421-0
Descrizione fisica	1 online resource (264 pages) : illustrations
Collana	Applied Virtuality Book Series ; ; 11
Disciplina	724.6
Soggetti	Renewable energy sources Energy development Energy consumption Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages 257-264).
Nota di contenuto	Genius -- The Task in Hand -- Energy Is Not the Problem -- Quick Refresher on Electricity -- The Network: Sharing Power -- Making it Happen: A Turnkey Technology -- Three Case Studies -- The Bigger Picture -- A Planet in Crisis: Intellect to the Rescue -- The Outlook: What Next?
Sommario/riassunto	Imagine a world where the power is always on, where there is not just enough energy, but an abundance of it. Such a world is no Utopia, it is a possible reality. Using indefinitely available sources of energy – especially photovoltaic solar, in combination with others – and networking this energy, much in the way that we have networked information, we can get beyond our current energy ‘crisis’ and resolve it. The world we then find ourselves in is not a world without problems – we will face new challenges on the way – but in terms of energy it is a world of plenty. Rooted in sound theory and based on technology that is available now, A Genius Planet offers an accessible but detailed and insightful perspective on how we can free ourselves from our dependency on natural resources and generate, trade, and use energy in ways that open up the genuine potential that we have at our disposal today.

2.

Record Nr.	UNINA9910965467003321
Autore	Golub Gene H (Gene Howard), <1932-2007.>
Titolo	Matrices, moments, and quadrature with applications / / Gene H. Golub and Gerard Meurant
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, c2010
ISBN	9786612458019 9781282458017 1282458019 9781282936072 1282936077 9781400833887 1400833884
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 uTƒ(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.