

1. Record Nr.	UNISA996503562603316
Titolo	Advances in optimization and applications : 13th International Conference, OPTIMA 2022, Petrovac, Montenegro, September 26-30, 2022, revised selected papers // edited by Nicholas Olenev [and four others]
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2023] ©2023
ISBN	3-031-22990-8
Descrizione fisica	1 online resource (201 pages)
Collana	Communications in Computer and Information Science Ser. ; ; v.1739
Disciplina	004.6
Soggetti	Computer networks Mathematical optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Mathematical Programming -- A Derivative-Free Nonlinear Least Squares Solver -- 1 Introduction -- 2 General Description of Nonlinear LS Solver -- 2.1 Descent Along a Subnormalized Direction -- 2.2 General Estimate for Residual Norm Reduction -- 2.3 Choosing the Value of the Step Size -- 2.4 Approximating Product of Jacobian by a Vector -- 2.5 Choosing Subspace Basis and Descent Direction -- 2.6 Characterizing Inexactness and Choosing Search Directions -- 2.7 Subnormality of Search Directions and the Lower Bound for -- 2.8 Using Quasirandom and Adaptive Rectangular Preconditioners -- 2.9 Description of Computational Algorithm -- 3 Test Problems and Numerical Results -- 3.1 Broyden Tridiagonal Function -- 3.2 Chained Rosenbrock Function -- 3.3 Approximate Canonical Decomposition of Inverse 3D Distance Tensor -- 3.4 Lennard-Jones Potential Minimization -- 4 Concluding Remarks -- A Limiting Step Size Along Subnormalized Direction -- References -- Gradient-Type Methods for Optimization Problems with Polyak-ojasiewicz Condition: Early Stopping and Adaptivity to Inexactness Parameter -- 1 Introduction -- 2 Problem Statement and Basic Definitions -- 3 Gradient Descent with an Adaptive Step-Size Policy -- 4 Gradient Descent with Adaptivity in the Step-Size and

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