A Bibliography of Publications by, and about, Roger Fletcher

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: https://www.math.utah.edu/~beebe/

22 August 2025
Version 1.01

Abstract

This bibliography records publications by, and about, Roger Fletcher.

Title word cross-reference

BiCGstab(l) [SvdVF94]. L_1 [Fle81a, Fle85a, Fle89b]. L_p [FGH71, FGH74a, FGH74b]. LDL^T [FP74]. LU [FM84].

-Approximation [FGH74b]. **-the** [Spe94].

0 [Ano88]. **0-471-86187** [Ano90]. **0-471-91547-5** [Ano88]. **09-17.07.2001** [QTY05].

13th [GW90]. **17th** [HWG98]. **1968** [Fle69c]. **1981** [Wat82]. **1986** [IP87]. **1987** [Ano90]. **1993** [Spe94]. **1995** [BCCS97]. **1997** [HWG98].

2007 [DS10]. **2015** [BFIT18]. **2016** [GH25]. **22nd** [CDF+06]. **251** [Fle66]. **2nd** [Ano90].

5 [Ano88].

65th [GLT04].

71B [BD84].

9th [Wat82].

Accelerating [AMF06]. **Acceleration** [FM69]. **Adby** [Fle76a]. **Adds** [BD84]. **Advanced** [Pow82, Spe94]. **Advances**

[DQW95]. **Algebraic** [FR63, FL03]. **Algorithm** [AMF06, Bur73, Dav68, FM85, FLT02, FGL+02, Fle12b, AF03, Brä81, CF03, CF80, Fle71, Fle72a, Fle82c, FTL00, HF79, Pow00, WF86, Fle66]. **Algorithmic** [FS83]. **Algorithms** [DM03, FH91, Pow87, Spe94, Bro70, DF06, Fle70d, FH93, FL03, GLT04, Fle73a]. **algorithmus** [Bur73]. **Analysis** [IP87, Wat75, Wat82, GW90, HWG98]. **application** [DM74]. **Applications** [BCCS97, QTY05, Fle69c, GLT04]. **approach** [BS76, Fle70d]. **Approximation** [BI97, FGH74b, BF97a, FL94]. **approximations** [FGH71, FGH74a, FGL97]. **April** [BFIT18, IP87]. **Armijo** [ZZL06]. **Armijo-type** [ZZL06]. **array** [MCPS86]. **Art** [IP87, Spe94]. **asymptotic** [DF05a]. **Augmented** [Fle17]. **Automatic** [FR63, Fle63].

Bad [Pow86]. **band** [FG80]. **Barga** [Spe94]. **Bartels** [Pow87]. **Barzilai** [DF05b, Fle05b]. **Based** [Fle98b, AF03, Fle89b]. **Basis** [FH82]. **batch** [FHJ91]. **Be** [Cur15]. **beam** [MCPS86]. **behaviour** [DF05a]. **Best** [Fle68, FGH74b, FGH71, FGH74a]. **BFGS** [Pow86]. **bi** [EE25, SvdVF94]. **Bi-CG** [SvdVF94]. **bi-criteria** [EE25]. **Biennial** [HWG98, Wat82]. **Binary** [FZ10]. **Birmingham** [IP87]. **birthday** [GLT04]. **Block** [Fle98a]. **Book** [Ano88, Ano90, Den82, Fle73a, Fle73b, Fle76a, Tap84]. **Borwein** [DF05b, Fle05b]. **Bound** [FL98]. **Bounds** [FL98, DF06, FJ74]. **box** [DF05b, Fle17]. **box-constrained** [DF05b]. **Branch** [FL98]. **Branch-and-Bound** [FL98]. **Brent** [Fle73a]. **Brief** [FLT06, BF97a]. **Broyden** [AB98, FS81, USS21]. **bundle** [FL99].

C.I.M.E. [DS10]. **Calculating** [NF70]. **calculation** [FGH71]. **Cambridge** [Pow82]. **Cancellation** [Fle86]. **Canonical** [FS83]. **Capabilities** [BD84]. **Centre** [DM03]. **certain** [FG80]. **Certification** [Fle66]. **Cetraro** [DS10]. **CG** [SvdVF94]. **Change** [FM85]. **characterization** [DM74]. **Chichester** [Ano88, Ano90]. **Ciocco** [Spe94]. **class** [Bro70, FL70a, FL70b, Fle70a, FW80]. **column** [FM00]. **Combinatorial** [Fle82a]. **Combined** [Sas69]. **Committee** [Pow82]. **complementarity** [FL04]. **composite** [Fle82c, WF86]. **computation** [Fle63]. **Computational** [AG90, FL70a, FL70b]. **Computing** [FGL97]. **Conditioning** [Fle85b, Fle94b, Fle98b, Sha70]. **conditions** [FW80]. **Conference** [CDF+06, HWG98, IP87, Wat75, Wat82, GW90]. **Conjugate** [ABF96, FR64, Fle76b, HS52, YBZC16, BKG15, EE25, JJ19, yWjL06, YBZ19, ZZL06]. **considerations** [Bro70]. **consistent** [Fle84]. **Constrained** [Fle81b, Fle14, Tap84, CF80, DF05b, DF06, Fle72a, Fle75a, Fle75b, Fle17, HF79, LL13]. **Constraint** [Fle12b]. **Constraints** [Fle85c, FLRS02, FLRS06, Fle82b, Fle85a, FL04]. **continuity** [FGH74a]. **Continuous** [Spe94]. **contributions** [BF97b, BF97c]. **Control** [QTY05, FH82, BCCS97]. **Convergence** [ABF96, DY96, FLT02, FGL+02, FLRS06, Wer74, AB85, Bro70, Bur73, CF03, DM74, Fle70a, FTL00, FLRS02, Pow00, yWjL06, ZZL06]. **Convergent** [FP63, CF80]. **Convex** [Wer74]. **corrections** [Fle82d]. **criteria** [EE25]. **Crystals** [NF70]. **Culture** [DM03]. **Curve** [BD84]. **Curve-Fitting** [BD84].

D [BI97, BF97a, BF97c, BF97d, BFIT18, Dav05]. **Dai** [JJ19]. **Davidon** [Wer74, AF03, AMF06, BD83, Wer74]. **Defects** [NF70]. **Definite** [Fle85c, Fle95]. **Degeneracy** [Fle88, Fle93, Fle94b, Fle98b, Fle14]. **Degenerate** [FS81]. **Dempster** [Fle76a]. **Dense** [Fle97]. **dependent** [yWjL06].

Derivation [FS83]. **derivative** [Fle89b, LW11, USS21]. **derivative-free** [LW11, USS21]. **Derivatives** [Fle65, Brä81, Fle73a]. **Derived** [Gol70]. **Descent** [AB85, FP63, Fle12a]. **Design** [BCCS97, FHJ91]. **developments** [Fle87b, Fle90b]. **DFP** [Pow86, Pow00]. **differentiability** [FGH74a]. **differentiable** [Fle82d]. **Differentiation** [FR63]. **Discrete** [Fle82a]. **distance** [AHF95]. **distillation** [FM00]. **double** [Bro70]. **double-rank** [Bro70]. **Doubly** [YBZC16]. **Dundee** [GW90, HWG98, Wat75, Wat82].

ed [Ano90]. **Edge** [Fle94b, Fle98b, KIK89]. **educational** [Fle81c]. **efficient** [ABF86, BCF81]. **eigendata** [YBZ19]. **Eigenproblem** [BF66]. **Eigenvalue** [YBZC16, FG80, YBZ19]. **EQP** [CF03]. **equality** [LL13]. **equation** [FH82]. **Equations** [AG90, Fle68, Fle70c, FL03, LW11, USS21]. **Equilibrium** [FLRS02, FLRS06]. **Erice** [DM03, QTY05]. **Error** [Pow87]. **Errors** [Fle86, Fle88]. **Estimation** [BD83]. **Euclidean** [AHF95]. **Evaluating** [Fle65]. **evaluation** [Brä81]. **exact** [Fle81a, FH82]. **Expected** [Fle85b]. **Experience** [FL98, CF80, FL70a, FL70b, FL02b]. **experiments** [Fle81a]. **explicit** [EE25, FM84]. **extension** [LL13]. **extensions** [Fle17].

Factorizations [Pow87, FP74]. **Factorizing** [Fle76c]. **Factors** [FM85, FM84, Fle97, Fle98a]. **Family** [Gol70]. **Fast** [NF70, AF03]. **field** [Fle84]. **Filter** [FLT02, FGL$^+$02, FL03, FLT06, CF03, FL99, FTL00, SLF12]. **Filter-type** [FL03]. **finding** [AHF95]. **First** [FW80, Fle89b]. **First-** [FW80]. **Fitting** [BD84]. **Fletcher** [AF03, AMF06, AB98, Ano88, Ano90, BD83, Bur73, Den82, GH25, Tap84, USS21, Wer74, AB85, BKG15, BS76, Bur73, DY96, Dai06, EE25, GLT04, GW16, JJ19, Ley15, Ley16, LW11, LL13, MCPS86, Pow87, Sas69, yWjL06, YBZC16, YBZ19, ZZL06]. **Flexible** [FHJ91]. **Flows** [Sas69]. **Form** [FS83]. **formula** [AB98]. **Formulae** [FR63, Fle89a, Fle91]. **Fortran** [Fle70b, Fle72b]. **free** [LW11, USS21]. **Function** [FR64, Fle65, Pow86, Sha70, FJ74, Fle75a, Fle75b, Fle81a, FL02a, Fle66]. **functions** [Fle63, Fle74, FH82, Fle83].

G. [DM03]. **Gaussian** [FR63]. **General** [FGL$^+$02, Fle70b, Fle71, Bro70]. **Generalized** [Fle68, Fle70c, FG80]. **Generation** [FR63]. **German** [Bur73, Wer74]. **Given** [DS10]. **Global** [FLT02, FGL$^+$02, yWjL06, ZZL06, AB85, CF03, FTL00]. **globally** [CF80]. **Goldfarb** [AB98, USS21]. **Golub** [Pow87]. **good** [AB98]. **Gradient** [ABF96, YBZC16, BKG15, DF05a, EE25, Fle76b, JJ19, yWjL06, YBZ19, ZZL06]. **Gradients** [FR64, HS52]. **Growth** [Pow87].

H [Fle76a]. **Hall** [Fle73a, Fle73b]. **heat** [FH82]. **held** [CDF$^+$06, DS10, IP87, Pow82, Wat82]. **hereditary** [FGL97]. **Hessian** [AB98, Fle95, FGL97, Fle00]. **High** [DM03]. **Hilbert** [Wer74]. **Hilbertraum** [Wer74]. **History** [FLT06]. **honor** [GLT04]. **HP** [BD84]. **HP-71B** [BD84]. **Hybrid** [AHF95, FX87, SvdVF94]. **hybridization** [BKG15].

ideal [Fle75a, Fle75b]. **IFIP** [CDF$^+$06]. **II** [BCCS97, FL70a, FL70b]. **im** [Wer74]. **IMA** [Fle69c, IP87]. **IMA/SIAM** [IP87]. **Impressions** [Toi15]. **Improved** [JJ19]. **Indefinite** [Fle76c, Fle76b, Fle00]. **inequalities** [FL03]. **inexact** [AB85]. **Initialising** [FM00]. **Institute** [Fle69c, Pow82, Spe94]. **integer** [FL94].

Integrals [FR63]. **international** [QTY05]. **Interview** [Cur15, Dai06, Dav05, Ley15, Toi15]. **Introduction** [Fle76a]. **Inverse** [Fle68, YBZC16, YBZ19]. **inverses** [Fle70c]. **involved** [Fle63]. **Irreducible** [FH91, FH93]. **ISBN** [Ano88, Ano90]. **issue** [GLT04]. **Italy** [DS10, Spe94, CDF+06, QTY05]. **Iterative** [BF66, Fle73b].

J [BI97, BF97a, BF97c, BF97d, BFIT18, Dav05, Fle73b]. **Jacobian** [FGL97]. **Jacoby** [Fle73b]. **January** [GH25]. **John** [Ano90]. **Joint** [IP87]. **Jordan** [FS83]. **July** [BCCS97, BFIT18, CDF+06, DM03, DS10, GH25, Pow82, Wat75]. **June** [DM03, HWG98, Wat82].

Keele [Fle69c]. **KKT** [FJ97]. **Konvergenz** [Wer74]. **konvergenzordnung** [Bur73]. **konvexe** [Wer74]. **Kowalik** [Fle73b].

L [Fle73b]. **Lagrangian** [Fle74]. **Lagrangians** [Fle17]. **Large** [BCCS97, BS76, DF05b, GLT04]. **Large-scale** [BCCS97, DF05b]. **Learning** [AMF06]. **Least** [Fle68, ABF86, FX87, HF79]. **least-squares** [HF79]. **Lectures** [DS10]. **like** [AB98]. **Limit** [FGH74b]. **limited** [Fle12a]. **line** [AB85, ABF86, JJ19, ZZL06]. **Linear** [FH91, Fle68, FGH74b, Fle12b, HS52, MCPS86, FGH71, FGH74a, Fle87b, FS89, FH90, FH93, HF79, LL13]. **Linearly** [Fle14, DF06, Fle72a]. **Load** [Sas69]. **Local** [FLRS02, FLRS06]. **locate** [AB98]. **locating** [BCF81]. **Low** [Fle90a, Fle05a, Fle06]. **Lower** [FL98, DF06, FJ74]. **LP** [Fle89b, Fle94b, Fle98a, Fle98b].

M. [BI97, BF97a, BF97c, BF97d, Fle76a]. **machines** [FZ10]. **Madison** [RMR70]. **Majorana** [DM03]. **many** [FJ74]. **Mathematical** [FLRS02, FLRS06, Pow82, Fle63, FL04]. **Mathematics** [DM03, BF97c, Fle69c]. **Matrices** [Fle76c, FG80, Fle95, Fle97, Fle98a]. **Matrix** [Fle85c, NF70, Pow87, AHF95]. **Matthews** [Pow87]. **Means** [Gol70]. **Mechanization** [FR63]. **memory** [Fle12a]. **memoryless** [USS21]. **Method** [BD83, FP63, Fle98b, Fle10, Fle14, Wer74, YBZC16, AB85, BCF81, DY96, Dav59, Dav91, EE25, FF77, Fle79a, Fle81a, Fle85a, Fle89b, FL99, Fle05b, Fle12a, KIK89, LW11, LL13, SLF12, USS21, YBZ19, ZZL06]. **Methods** [ABF96, BF66, Den82, Fle68, Fle72c, Fle73b, Fle74, Fle79b, Fle80, Fle81b, Fle82a, Fle82b, Fle86, Fle87a, FJ97, Fle01, FLT06, FLRS06, Gol70, HS52, NF70, Pow86, Sas69, Sha70, Tap84, Wal75, AHF95, Ano88, Ano90, BKG15, DF05a, DF05b, DM74, Fle69a, FL70a, FL70b, Fle70a, Fle72b, Fle76b, FS81, FX87, Fle90a, Fle90b, FLRS02, JJ19, SvdVF94, yWjL06, Fle76a]. **Metric** [Gol70, Brä81, Dav59, Dav91, Fle70d]. **Michael** [BFIT18, Dav05]. **Mike** [BF97b]. **Minimax** [FGH74b]. **Minimierungsaufgaben** [Wer74]. **minimisation** [Fle66]. **Minimization** [Dav68, FP63, FR64, Fle65, Fle73a, FJ74, Sha70, Wer74, Brä81, Bro70, Dav59, Dav91, Fle72b, FF77, Fle79a]. **Minneapolis** [BCCS97]. **MIQP** [FL98]. **mixed** [FL94]. **MN** [BCCS97]. **model** [Fle82c]. **Modeling** [CDF+06]. **models** [FM00]. **Modern** [And22]. **modification** [FP74, FM84]. **modified** [FF77, LW11, ZZL06]. **Module** [BD84]. **Molecular** [FR63, Fle63]. **monotone** [USS21]. **MPECs** [FL02b]. **Multilayer** [AMF06, AF03]. **multiproduct** [FHJ91]. **multivariate** [BF97a].

NATO [Pow82, Pow82, Spe94]. **nearest** [AHF95]. **Newton**

[DM74, Fle72b, FF77, Fle79a, Fle86, Fle89a, Fle91, Fle05a, Fle06, Sha70]. **NLP** [Fle12b]. **NLPs** [FL02b]. **Non** [Fle68, Fle82d, HF79]. **non-differentiable** [Fle82d]. **Non-Linear** [Fle68, HF79]. **nonconvex** [GLT04]. **nondifferentiable** [FW80, Fle82c]. **Nonlinear** [ABF96, AG90, And22, BF97e, DM03, DS10, Fle73b, FS89, FGL$^+$02, FL02a, Fle05a, Pow82, RMR70, Sas69, ABF86, FM69, FL70a, FL70b, Fle70a, Fle70c, Fle81c, Fle82b, Fle85a, FX87, Fle89b, Fle90b, FL94, FL99, FL04, Fle06, LW11, SLF12, USS21, GLT04]. **nonlinearly** [CF80]. **nonmonotone** [SLF12]. **Nonsmooth** [DQW95, FS89, FL99, WF86]. **Null** [FJ97]. **Null-Space** [FJ97]. **Numerical** [And22, Fle81a, FL98, FL02b, IP87, NW06, Wat75, Wat82, BF97c, CF80, GW90, HWG98].

Obituary [Ley16]. **Objective** [Pow86]. **One** [FM85]. **only** [FJ74, Pow00]. **Optimal** [BCCS97, Sas69, Fle95, FGL97]. **Optimisation** [Fle73b]. **Optimization** [And22, BCCS97, BD84, BI97, CDF$^+$06, Den82, DM03, DS10, DQW95, Fle76a, Fle79b, Fle80, Fle81b, Fle85c, Fle87a, Fle01, Fle14, NW06, Pow82, QTY05, Spe94, Tap84, Wal75, BS76, BF97b, BF97e, CF80, EE25, Fle69c, Fle69a, Fle70c, Fle72a, Fle72c, Fle75a, Fle75b, FW80, Fle82c, Fle82d, FS89, Fle90a, Fle94a, FL99, GLT04, KIK89, LL13, MCPS86, Pow00, SLF12, WF86, Den82, Tap84, Ano88, Ano90]. **Optimization.** [Fle69c]. **optimizing** [AB98]. **Orbitals** [FR63]. **Order** [ABF96, Bur73, FW80, Fle82d]. **Ordering** [FH91, FH93]. **orderings** [Fle98a]. **orthogonalization** [Fle69b]. **other** [SvdVF94]. **outer** [FL94]. **overview** [Fle94a].

P [Fle73a]. **P.** [Fle76a]. **pages** [Ano88]. **panel** [Pow82]. **Parameter** [BD83]. **parameters** [FGH74a]. **Part** [BCCS97]. **partial** [YBZ19]. **Penalty** [Fle83, Fle75a, Fle75b, Fle81a, Fle85a, FL02a]. **Perceptron** [AMF06, AF03]. **Performance** [DM03]. **Pizzo** [Fle73b]. **plants** [FHJ91]. **points** [AB98, BCF81]. **Polak** [BKG15]. **Polyak** [BKG15]. **polyhedron** [KIK89]. **positive** [Fle95]. **Powell** [BFIT18, Bur73, Wer74, AF03, AMF06, BD83, BS76, BI97, BF97a, BF97b, BF97c, BF97d, Bur73, Dav05, MCPS86, Sas69, Wer74]. **Powell-Method** [Wer74]. **Powell-Verfahrens** [Wer74]. **power** [BS76]. **pp** [Ano90]. **Praclical** [Ano90]. **Practical** [Fle80, Fle81b, Fle87a, Fle01, Ano88, Den82, Tap84]. **practice** [GLT04]. **Preconditioned** [ABF96]. **Preface** [GLT04]. **Prentice** [Fle73a, Fle73b]. **Prentice-Hall** [Fle73b]. **Presence** [Fle88]. **problem** [FG80, Fle81c, Fle84, LL13]. **Problems** [Wer74, YBZC16, Fle63, Fle72a, Fle72c, FW80, Fle82c, Ley15, WF86, YBZ19, Fle73b]. **procedure** [AF03]. **Proceedings** [CDF$^+$06, Fle69c, IP87, RMR70, Wat75, Wat82, GW90, HWG98, Pow82, Spe94]. **programme** [Pow82]. **Programming** [Fle82a, Fle93, FGL$^+$02, Fle05a, Fle10, Fle12b, Pow82, RMR70, Sas69, DF05b, FM69, FL70a, FL70b, Fle70a, Fle70b, Fle71, Fle81c, Fle87b, Fle89b, FS89, Fle90b, FH90, Fle00, FL02a, Fle06, GLT04]. **Programs** [FLRS02, FLRS06, DF06, FL94, FL04]. **Projected** [DF05b]. **properties** [DY96, Fle70a, FGL97, yWjL06]. **property** [AB85]. **publications** [BF97d].

QP [Fle17]. **Quadratic** [Fle93, Fle10, Pow86, DF05b, DF06, Fle70b, Fle71, FJ74, Fle87b, Fle00]. **Quasi** [Fle86, Fle05a, Sha70, DM74, Fle72b, Fle89a, Fle91, Fle06]. **Quasi-Newton** [Fle86, Fle05a, Sha70, DM74, Fle72b, Fle89a, Fle91, Fle06].

R [Ano88, Ano90, Den82, Fle76a, Tap84].

Rank [FM85, Fle05a, Bro70, Fle06]. **Rapidly** [FP63]. **Read** [Cur15]. **Reconstructing** [KIK89]. **reduced** [Fle00]. **Reeves** [AB85, BKG15, DY96, EE25, JJ19, LW11, LL13, yWjL06, YBZC16, YBZ19, ZZL06]. **Reeves-Type** [LW11]. **reformulation** [AB98]. **Region** [FGL+02]. **related** [Fle74]. **Relaxation** [NF70]. **reliable** [FH90]. **Research** [Pow82]. **Researchers** [Cur15]. **Resolving** [Fle93, Fle14]. **result** [Fle89a, Fle91]. **retrofit** [FHJ91]. **Review** [Ano88, Ano90, Den82, Fle65, Fle73a, Fle73b, Tap84, BF97a, Fle69a]. **Reviews** [Fle76a]. **Ribière** [BKG15]. **Richard** [Fle73a]. **Riemannian** [YBZC16, YBZ19]. **Roger** [Dai06, GLT04, GH25, GW16, Ley15, Ley16, Toi15]. **Roundoff** [Fle88].

S [Fle73b]. **saddle** [AB98, BCF81]. **scale** [BCCS97, DF05b, GLT04]. **scaling** [USS21]. **Scheme** [Fle05a, Fle06]. **School** [DM03, DS10]. **science** [Pow82]. **Scientific** [DM03]. **Scotland** [Wat82]. **search** [AB85, ABF86, JJ19, ZZL06]. **Second** [Fle82d, FW80]. **second-order** [FW80]. **self** [Fle84]. **self-consistent** [Fle84]. **Semi** [Fle85c]. **Semi-Definite** [Fle85c]. **separation** [FZ10]. **September** [Spe94]. **Sequential** [Fle10, Fle12b]. **Shanno** [AB98, USS21]. **Shanno-like** [AB98]. **shaping** [MCPS86]. **SIAM** [IP87]. **Sicily** [QTY05, DM03]. **simplex** [FM84]. **singly** [DF06]. **SLP** [CF03, FTL00]. **SLP-filter** [CF03, FTL00]. **Society** [Pow82]. **Software** [DM03]. **Solution** [AG90, BF66, Fle68, Fle72c]. **solve** [Ley15]. **Solving** [FL94, FL04, HS52, Fle72a, FL02b, FL03, USS21]. **Some** [CF80, DF05a, Fle63]. **Sons** [Ano90]. **Space** [FJ97, Wer74]. **Sparse** [FH91, FH93, Fle95, FGL97, Fle97, Fle98a]. **special** [Pow82, GLT04]. **Specific** [AB98]. **spectral** [EE25]. **sponsored** [Pow82]. **SQP** [FLT02, FGL+02, FLRS02, FLRS06]. **SQP-Filter** [FGL+02]. **Squares** [Fle68, ABF86, FX87, HF79]. **Stability** [FJ97]. **Stable** [FM84, FM85, Fle00]. **Staffordshire** [Fle69c]. **Stampacchia** [DM03]. **State** [IP87, Spe94]. **statistics** [Fle81c]. **Steepest** [Fle94b, Fle98b, Fle12a]. **Steepest-Edge** [Fle98b]. **steps** [CF03]. **Stochastic** [YBZC16, YBZ19]. **storage** [Fle90a]. **streng** [Wer74]. **Strictly** [Wer74]. **strong** [JJ19]. **structures** [AB98]. **Study** [Spe94, Fle63]. **subject** [DF06, FJ74]. **subroutine** [Fle70b]. **subroutines** [Fle72b]. **successive** [Fle89b, FS89]. **Summer** [DS10]. **superlinear** [DM74]. **support** [FZ10]. **Symmetric** [Fle76c, LW11]. **Symposium** [Fle69c, RMR70]. **System** [CDF+06, BS76, USS21]. **Systems** [AG90, FH91, Fle68, FJ97, HS52, Fle76b, FH93, FL03, Pow82].

T [Fle73b]. **takes** [CF03]. **TC7** [CDF+06]. **technique** [Fle69b]. **techniques** [FM69]. **termination** [Fle70a]. **testing** [Fle81c]. **Theory** [BI97, BF97a, GLT04]. **there** [Pow00]. **training** [AF03, FZ10]. **transition** [AB98]. **Triangular** [FM85, Fle98a]. **Tributes** [BI97]. **Trust** [FGL+02]. **Trust-Region** [FGL+02]. **Turin** [CDF+06]. **two** [Pow00, yWjL06]. **Type** [LW11, FL03, ZZL06].

Unconstrained [Den82, Fle80, Brä81, Fle69a, Fle90a, Fle94a, Pow00]. **univariate** [BF97a]. **University** [IP87, RMR70]. **unsymmetric** [FG80]. **Update** [Fle05a, AB98, Fle95, Fle06]. **updates** [FM84, Fle00]. **Updating** [FM85, Pow87]. **upper** [DF06, FJ74]. **Use** [Sas69]. **using** [KIK89, MCPS86].

values [FS81]. **Variable** [Dav59, Dav91, Gol70, Brä81, Fle70d]. **Variable-Metric** [Gol70]. **variables** [FJ74, Pow00]. **Variance** [Dav68]. **variant**

[YBZ19]. **Variational** [Gol70, Fle89a, Fle91]. **vector** [FZ10]. **Verfahrens** [Wer74]. **Vol** [Den82]. **Volume** [Fle80, Fle81b, Tap84].

was [Pow82]. **wave** [Fle63]. **wave-functions** [Fle63]. **which** [Pow82]. **Wiley** [Ano88, Ano90]. **Wisconsin** [RMR70, RMR70]. **Wise** [Cur15]. **Without** [Fle65, Brä81, Fle73a, FL02a]. **Wolfe** [Fle14, JJ19]. **work** [BF97a]. **workshop** [QTY05]. **Would** [Cur15].

xii [Ano90]. **xiv** [Ano88].

Young [Cur15]. **Yuan** [JJ19].

References

Al-Baali:1985:DPG

[AB85] M. Al-Baali. Descent property and global convergence of the Fletcher–Reeves method with inexact line search. *IMA Journal of Numerical Analysis*, 5(1):121–124, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Anglada:1998:HGB

[AB98] Josep Maria Anglada and Josep Maria Bofill. How good is a Broyden–Fletcher–Goldfarb–Shanno-like update Hessian formula to locate transition structures? Specific reformulation of Broyden–Fletcher–Goldfarb–Shanno for optimizing saddle points. *Journal of Computational Chemistry*, 19(3):349–362, February 1998. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Al-Baali:1986:ELS

[ABF86] M. Al-Baali and R. Fletcher. An efficient line search for nonlinear least squares. *Journal of Optimization Theory and Applications*, 48(3):359–377, 1986. CODEN JOTABN. ISSN 0022-3239,1573-2878.

Al-Baali:1996:OCP

[ABF96] M. Al-Baali and R. Fletcher. On the order of convergence of preconditioned nonlinear conjugate gradient methods. *SIAM Journal on Scientific Computing*, 17(3):658–665, May 1996. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/19430`.

Abid:2003:NFM

[AF03] S. Abid and F. Fnaiech. A new fast multilayer perceptron training procedure based on the Davidon Fletcher Powell algorithm. In Sven Lonçariç, Alessandro Neri, and Hrvoje Babič, editors, *Proceedings of the 3rd International Symposium on Image and Signal Processing and Analysis, 2003. ISPA 2003*, volume 1, pages 123–127 Vol.1. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003. ISBN 953-184-061-X (vol. 1), 953-184-062-8 (vol. 2). LCCN TA1637.I55367 2003.

Allgower:1990:CSN

[AG90] E. L. Allgower and K. Georg, editors. *Computational Solution of Nonlinear Systems of Equations*,

volume 26 of *Lectures in Applied Mathematics*. American Mathematical Society, Providence, RI, USA, 1990. ISBN 0-8218-1131-2. xix + 762 pp. LCCN QA372 .C6374 1990.

Al-Homidan:1995:HMF

[AHF95] Suliman Al-Homidan and Roger Fletcher. Hybrid methods for finding the nearest Euclidean distance matrix. In Du et al. [DQW95], pages 1–17. ISBN 981-02-2265-3. LCCN QA402.5 .R424 1995.

Abid:2006:AMP

[AMF06] S. Abid, A. Mouelhi, and F. Fnaiech. Accelerating the multilayer perceptron learning with the Davidon Fletcher Powell algorithm. In IEEE, editor, *2006 International Joint Conference on Neural Networks, Sheraton Vancouver Wall Centre Hotel, Vancouver, BC, Canada, July 16–21, 2006*, pages 3389–3394. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006. ISBN 0-7803-9490-9. LCCN QA76.87.

Andrei:2022:MNN

[And22] Neculai Andrei. *Modern Numerical Nonlinear Optimization*, volume 195 of *Springer Optimization and Its Applications SeRIES*. Springer, Cham, Switzerland, 2022. ISBN 3-031-08719-4 (print), 3-031-08720-8 (e-book). xxxiii + 807 pp. LCCN Z6654.M33 .A537 2022.

Anonymous:1988:BRPa

[Ano88] Anonymous. Book review: *Practical methods of optimization*: R. Fletcher: Wiley, Chichester, 1987, xiv + 436 pages, £24.50, ISBN 0-471-91547-5. *Mathematics and Computers in Simulation*, 30(1–2):196–197, February 1988. CODEN MCSIDR. ISSN 0378-4754 (print), 1872-7166 (electronic). URL `https://www.sciencedirect.com/science/article/pii/0378475488901292`.

Anonymous:1990:BRP

[Ano90] Anonymous. Book review: *Praclical methods of optimization*, 2nd ed, R. Fletcher. John Wiley and ISBN 0-471-86187, £24.50. pp. xii + 436. Sons, Chichester, 1987. *Journal of Applied Econometrics*, 5(4):407–409, September–December 1990. CODEN JAECET. ISSN 0883-7252 (print), 1099-1255 (electronic).

Biegler:1997:LSO

[BCCS97] Lorenz T. Biegler, Thomas F. Coleman, Andrew R. Conn, and Fadil N. Santosa, editors. *Large-scale Optimization with Applications, Part II: Optimal Design and Control (Minneapolis, MN, July 10–28, 1995)*, volume 93 of *IMA Volumes in Mathematics and its Applications*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1997. ISBN 0-387-98287-6 (hardcover). LCCN QA402.5 .L356 1997.

Bell:1981:NEM

[BCF81] Stephen Bell, James S. Crighton, and Roger Fletcher. A new efficient method for locating saddle points. *Chemical Physics Letters*, 82(1):122–126, 1981. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Beinicke:1983:PED

[BD83] G. Beinicke and K. O. Dzhaparidze. On parameter estimation by the Davidon–Fletcher–Powell method. *Theory of Probability and its Applications*, 27 (2):396–402, ???? 1983. CODEN TPRBAU. ISSN 0040-585X (print), 1095-7219 (electronic).

Blascow:1984:MAC

[BD84] Stanley M. Blascow, Jr. and James A. Donnelly. Module adds curve-fitting and optimization capabilities to the HP-71B. *Hewlett-Packard Journal: technical information from the laboratories of Hewlett-Packard Company*, 35 (7):22–24, July 1984. CODEN HPJOAX. ISSN 0018-1153.

Bradbury:1966:NIM

[BF66] W. W. Bradbury and R. Fletcher. New iterative methods for solution of the eigenproblem. *Numerische Mathematik*, 9(3):259–267, December 1966. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic).

Buhmann:1997:BRM

[BF97a] M. D. Buhmann and R. Fletcher. A brief review of M. J. D. Powell's work in univariate and multivariate approximation theory. In Buhmann and Iserles [BI97], pages 1–12. ISBN 0-521-58190-7. LCCN QA221 .A655 1997. URL `https://www.cambridge.org/us/universitypress/subjects/mathematics/numerical-analysis/approximation-theory-and-optimization-tributes-m-j-d-powell#contents`.

Buhmann:1997:CMP

[BF97b] M. D. Buhmann and R. Fletcher. The contributions of Mike Powell to optimization. In Buhmann and Iserles [BI97], pages 13–18. ISBN 0-521-58190-7. LCCN QA221 .A655 1997. URL `https://www.cambridge.org/us/universitypress/subjects/mathematics/numerical-analysis/approximation-theory-and-optimization-tributes-m-j-d-powell#contents`.

Buhmann:1997:MJDa

[BF97c] M. D. Buhmann and R. Fletcher. M. J. D. Powell's contributions to numerical mathematics. In Buhmann and Iserles [BI97], page 1. ISBN 0-521-58190-7. LCCN QA221 .A655 1997. URL `https://www.cambridge.org/us/universitypress/subjects/mathematics/numerical-analysis/approximation-theory-and-optimization-tributes-m-j-d-powell#contents`.

Buhmann:1997:MJDb

[BF97d] M. D. Buhmann and R. Fletcher. M. J. D. Powell's publications. In Buhmann and Iserles [BI97], pages 19–30. ISBN 0-521-58190-7. LCCN QA221 .A655 1997.

URL https://www.cambridge.org/us/universitypress/subjects/mathematics/numerical-analysis/approximation-theory-and-optimization-tributes-m-j-d-powell#contents.

Buhmann:1997:NO

[BF97e] Martin D. Buhmann and Roger Fletcher. Nonlinear optimization. In Martin D. Buhmann and A. Iserles, editors, *[Unknown: this book is NOT [BI97]]*, pages 1–30. Cambridge University Press, Cambridge, UK, 1997.

Buhmann:2018:MJD

[BFIT18] M. D. Buhmann, R. Fletcher FRS, A. Iserles, and P. Toint. Michael J. D. Powell. 29 July 1936–19 April 2015. *Biographical Memoirs of Fellows of the Royal Society*, 64: 341–366, June 2018. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Buhmann:1997:ATO

[BI97] Martin D. Buhmann and A. Iserles, editors. *Approximation Theory and Optimization: Tributes to M. J. D. Powell*. Cambridge University Press, Cambridge, UK, 1997. ISBN 0-521-58190-7. LCCN QA221 .A655 1997. URL https://www.cambridge.org/us/universitypress/subjects/mathematics/numerical-analysis/approximation-theory-and-optimization-tributes-m-j-d-powell#contents.

Babaie-Kafaki:2015:HPR

[BKG15] Saman Babaie-Kafaki and Reza Ghanbari. A hybridization of the Polak–Ribière–Polyak and Fletcher–Reeves conjugate gradient methods. *Numerical Algorithms*, 68(3):481–495, March 2015. CODEN NUALEG. ISSN 1017-1398 (print), 1572-9265 (electronic). URL http://link.springer.com/article/10.1007/s11075-014-9856-6.

Brauninger:1981:VMA

[Brä81] J. Bräuninger. A variable metric algorithm for unconstrained minimization without evaluation of derivatives. *Numerische Mathematik*, 36(4):359–373, May 1981. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic).

Broyden:1970:CCDa

[Bro70] C. G. Broyden. The convergence of a class of double-rank minimization algorithms. I: General considerations. *Journal of the Institute of Mathematics and its Applications*, 6(??):76–90, 1970. CODEN JMTAA8. ISSN 0020-2932.

Billinton:1976:FPA

[BS76] R. Billinton and S. S. Sachdeva. The Fletcher–Powell approach for large power system optimization. *Canadian Electrical Engineering Journal = Revue canadienne de génie électrique*, 1(2):17–23, 1976. CODEN CEEJDY. ISSN 0700-9216.

Burmeister:1973:KFP

[Bur73] W. Burmeister. Die konvergenzordnung des Fletcher–Powell algorithmus. (German) [The convergence order of the Fletcher–Powell algorithm]. *Zeitschrift*

für Angewandte Mathematik und Mechanik, 53(10):693–699, ???? 1973. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic). URL https://onlinelibrary.wiley.com/doi/10.1002/zamm.19730531007.

Ceragioli:2006:SMO

[CDF+06] Francesca Ceragioli, A. Dontchev, H. Futura, K. Marti, and L. Pandolfi, editors. *System Modeling and Optimization: Proceedings of the 22nd IFIP TC7 Conference held from, July 18–22, 2005, Turin, Italy*, volume 199 of *IFIP Int. Fed. Inf. Process.* Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2006. ISBN 0-387-32774-6, 0-387-32774-6. LCCN QA402.3 .I4536 2005.

Coope:1980:SNE

[CF80] I. D. Coope and R. Fletcher. Some numerical experience with a globally convergent algorithm for nonlinearly constrained optimization. *Journal of Optimization Theory and Applications*, 32(1):1–16, 1980. CODEN JOTABN. ISSN 0022-3239,1573-2878.

Chin:2003:GCS

[CF03] Choong Ming Chin and Roger Fletcher. On the global convergence of an SLP-filter algorithm that takes EQP steps. *Mathematical Programming*, 96(1):161–177, April 2003. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Curtis:2015:YRW

[Cur15] Frank E. Curtis. Young researchers would be wise to read this interview! *Optima*, 99(??):6–7, December 2015. URL https://www.mathopt.org/Optima-Issues/optima99.pdf. See [Ley15].

Dai:2006:IRF

[Dai06] Yu-Hong Dai. An interview with Roger Fletcher. *Pacific Journal of Optimization*, 2(1):3–10, 2006. CODEN ???? ISSN 1348-9151 (print), 1349-8169 (electronic). URL http://www.ybook.co.jp/online-p/PJO/vol2/pjov2n1p3.pdf; https://lsec.cc.ac.cn/~dyh/file/An_Interview_with_Roger_Fletcher.pdf.

Davidon:1959:VMM

[Dav59] William C. Davidon. Variable metric method for minimization. AEC Research and Development Report ANL-5990 (revised), Argonne National Laboratory, Argonne, IL, USA, May 1959. Reprinted in [Dav91].

Davidon:1968:VAM

[Dav68] William C. Davidon. Variance algorithm for minimization. *The Computer Journal*, 10(4):406–410, February 1968. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL http://comjnl.oxfordjournals.org/content/10/4/406.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/100406.sgm.abs.html; http://www3.

oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/406.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/407.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/408.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/409.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/410.tif.

Davidon:1991:VMM

[Dav91] William C. Davidon. Variable metric method for minimization. *SIAM Journal on Optimization*, 1 (1):1–17, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). Reprint of [Dav59].

Davis:2005:MJD

[Dav05] Philip Davis. An interview with Michael J. D. Powell. SIAM Oral History interview., April 6, 2005. URL https://history.siam.org/oralhistories/powell.htm.

Dennis:1982:BRP

[Den82] John E. Dennis, Jr. Book review: *Practical Methods of Optimization, Vol. 1: Unconstrained Optimization* (R. Fletcher). *SIAM Review*, 24(1):97–98, ???? 1982. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Dai:2005:ABS

[DF05a] Yu-Hong Dai and Roger Fletcher. On the asymptotic behaviour of some new gradient methods. *Mathematical Programming*, 103 (3):541–559, July 2005. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Dai:2005:PBB

[DF05b] Yu-Hong Dai and Roger Fletcher. Projected Barzilai–Borwein methods for large-scale box-constrained quadratic programming. *Numerische Mathematik*, 100(1):21–47, 2005. CODEN NUMMA7. ISSN 0029-599X,0945-3245.

Dai:2006:NAS

[DF06] Yu-Hong Dai and Roger Fletcher. New algorithms for singly linearly constrained quadratic programs subject to lower and upper bounds. *Mathematical Programming*, 106(3):403–421, May 2006. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Dennis:1974:CSC

[DM74] J. E. Dennis, Jr. and Jorge J. Moré. A characterization of superlinear convergence and its application to quasi-Newton methods. *Mathematics of Computation*, 28 (126):549–560, April 1974. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).

DiPillo:2003:HPA

[DM03] Gianni Di Pillo and Almerico Murli, editors. *High Performance Algorithms and Software for Nonlinear Optimization (G. Stampacchia School of Mathematics of the E. Majorana Centre for Scientific*

Culture, June 30–July 8, 2001, Erice, Sicily), volume 82 of *Appl. Optim.* Kluwer Academic Publishers Group, Norwell, MA, USA, and Dordrecht, The Netherlands, 2003. ISBN 1-4020-7532-4. LCCN QA76.88 .H487 2001.

Du:1995:HMF

[DQW95] Ding-Zhu Du, Liqun Qi, and Robert S. Womersley, editors. *Recent Advances in Nonsmooth Optimization*. World Scientific Publishing Co. Pte. Ltd., P. O. Box 128, Farrer Road, Singapore 9128, 1995. ISBN 981-02-2265-3. viii + 472 pp. LCCN QA402.5 .R424 1995.

DiPillo:2010:NOL

[DS10] Gianni Di Pillo and Fabio Schoen, editors. *Nonlinear Optimization: Lectures Given at the C.I.M.E. Summer School held in Cetraro, Italy, July 1–7, 2007*, volume 1989 of *Lecture Notes in Mathematics*. Springer-Verlag and Fondazione C.I.M.E., Berlin, Germany / Heidelberg, Germany / London, UK / etc. and Florence, Italy, 2010. CODEN LNMAA2. ISBN 3-642-11338-9 (print), 3-642-11339-7 (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). LCCN QA3 .L28 no. 1989; QA402.5.C515 2010. URL `http://link.springer.com/content/pdf/10.1007/978-3-642-11339-0_3.pdf`. Papers from the CIME Summer School held in Cetraro, July 1–7, 2007.

Dai:1996:CPF

[DY96] Y. H. Dai and Y. Yuan. Convergence properties of the Fletcher–Reeves method. *IMA Journal of Numerical Analysis*, 16 (2):155–164, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160155.sgm.abs.html`.

Elboulqe:2025:ESF

[EE25] Y. Elboulqe and M. El Maghri. An explicit spectral Fletcher–Reeves conjugate gradient method for bicriteria optimization. *IMA Journal of Numerical Analysis*, 45 (1):223–242, January 2025. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://academic.oup.com/imajna/article/45/1/223/7643964`.

Fletcher:1977:MNM

[FF77] R. Fletcher and T. L. Freeman. A modified Newton method for minimization. *Journal of Optimization Theory and Applications*, 23(3): 357–372, 1977. CODEN JOTABN. ISSN 0022-3239,1573-2878.

Fletcher:1980:GEP

[FG80] R. Fletcher and D. F. Griffiths. The generalized eigenvalue problem for certain unsymmetric band matrices. *Linear Algebra and its Applications*, 29(??): 139–149, February 1980. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0024379580902359`.

Fletcher:1971:CLB

[FGH71] R. Fletcher, J. A. Grant, and M. D. Hebden. The calculation of linear best L_p approximations. *The Computer Journal*, 14(3):276–279, August 1971. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/14/3/276.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_14/Issue_03/140276.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_14/Issue_03/tiff/276.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_14/Issue_03/tiff/277.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_14/Issue_03/tiff/278.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_14/Issue_03/tiff/279.tif`.

Fletcher:1974:CDP

[FGH74a] R. Fletcher, J. A. Grant, and M. D. Hebden. The continuity and differentiability of the parameters of best linear L_p approximations. *Journal of Approximation Theory*, 10:69–73, 1974. CODEN JAXTAZ. ISSN 0021-9045 (print), 1096-0430 (electronic).

Fletcher:1974:LMA

[FGH74b] R. Fletcher, J. A. Grant, and M. D. Hebden. Linear minimax approximation as the limit of best L_p-approximation. *SIAM Journal on Numerical Analysis*, 11(1):123–136, March 1974. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Fletcher:1997:CSH

[FGL97] Roger Fletcher, Andreas Grothey, and Sven Leyffer. Computing sparse Hessian and Jacobian approximations with optimal hereditary properties. In Biegler et al. [BCCS97], pages 37–52. ISBN 0-387-98287-6 (hardcover). LCCN QA402.5 .L356 1997.

Fletcher:2002:GCT

[FGL+02] Roger Fletcher, Nicholas I. M. Gould, Sven Leyffer, Philippe L. Toint, and Andreas Wächter. Global convergence of a trust-region SQP-filter algorithm for general nonlinear programming. *SIAM Journal on Optimization*, 13(3):635–659, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/35725`.

Fletcher:1982:BFE

[FH82] R. Fletcher and P. J. Harley. Basis functions for the exact control of the heat equation. *IMA Journal of Applied Mathematics*, 28(1):93–105, ???? 1982. CODEN IJAMDM. ISSN 0272-4960 (print), 1464-3634 (electronic).

Fletcher:1990:TRL

[FH90] R. Fletcher and J. A. J. Hall. Towards reliable linear programming. In Griffiths and Watson [GW90], pages 89–104. ISBN 0-470-21586-0 (Wiley), 0-582-05923-

2 (paperback). LCCN QA297 .D85 1989.

Flet91a

[FH91] R. Fletcher and J. A. J. Hall. Ordering algorithms for irreducible sparse linear systems. Report NA/131, Dundee University, Dundee, Scotland, 1991.

Fletcher:1993:OAI

[FH93] R. Fletcher and J. A. J. Hall. Ordering algorithms for irreducible sparse linear systems. *Annals of Operations Research*, 43(1–4):15–32, 1993. CODEN AOREEV. ISSN 0254-5330,1572-9338. Applied mathematical programming and modelling (Uxbridge, 1991).

Fletcher:1991:FRD

[FHJ91] Roger Fletcher, J. A. J. Hall, and W. R. Johns. Flexible retrofit design of multiproduct batch plants. *Computers & Chemical Engineering*, 15(12):843–852, December 1991. CODEN CCENDW. ISSN 0098-1354 (print), 1873-4375 (electronic).

Fletcher:1974:MQF

[FJ74] R. Fletcher and M. P. Jackson. Minimization of a quadratic function of many variables subject only to lower and upper bounds. *Journal of the Institute of Mathematics and its Applications*, 14(??): 159–174, 1974. CODEN JMTAA8. ISSN 0020-2932.

Fletcher:1997:SNS

[FJ97] Roger Fletcher and Tom Johnson. On the stability of null-space methods for KKT systems. *SIAM Journal on Matrix Analysis and Applications*, 18(4):938–958, October 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/29773`.

Fletcher:1970:CMNa

[FL70a] R. Fletcher and Shirley A. Lill. A class of methods for nonlinear programming. II. Computational experience. In Rosen et al. [RMR70], pages 67–92. ISBN 0-12-597050-1. LCCN QA3 .U45 no. 25.

Fletcher:1970:CMNb

[FL70b] R. Fletcher and Shirley A. Lill. A class of methods for nonlinear programming II. Computational experience. In Rosen et al. [RMR70], page ?? ISBN 0-12-597050-1. LCCN QA3 .U45 no. 25.

Fletcher:1994:SMI

[FL94] Roger Fletcher and Sven Leyffer. Solving mixed integer nonlinear programs by outer approximation. *Mathematical Programming*, 66(1–3):327–349, August 1994. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Fletcher:1998:NEL

[FL98] Roger Fletcher and Sven Leyffer. Numerical experience with lower bounds for MIQP branch-and-bound. *SIAM Journal on Optimization*, 8(2):604–616, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL `http:/`

/epubs.siam.org/sam-bin/dbq/article/26845.

Fletcher:1999:BFM

[FL99] Roger Fletcher and Sven Leyffer. A bundle filter method for nonsmooth nonlinear optimization. Numerical Analysis Report NA/209, Mathematics Department, University of Dundee, Dundee, Scotland, December 22, 1999. URL https://optimization-online.org/?p=8434.

Fletcher:2002:NPP

[FL02a] Roger Fletcher and Sven Leyffer. Nonlinear programming without a penalty function. *Mathematical Programming*, 91(2):239–269, January 2002. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Fletcher:2002:NES

[FL02b] Roger Fletcher and Sven Leyffer. Numerical experience with solving MPECs as NLPs. Numerical Analysis Report NA/210, Mathematics Department, University of Dundee, Dundee, Scotland, August 20, 2002. URL https://optimization-online.org/?p=9269.

Fletcher:2003:FTA

[FL03] Roger Fletcher and Sven Leyffer. Filter-type algorithms for solving systems of algebraic equations and inequalities. In Di Pillo and Murli [DM03], pages 265–284. ISBN 1-4020-7532-4. LCCN QA76.88 .H487 2001.

Fletcher:2004:SMP

[FL04] Roger Fletcher and Sven Leyffer. Solving mathematical programs with complementarity constraints as nonlinear programs. *Optimization Methods and Software*, 19(1):15–40, 2004. ISSN 1055-6788,1029-4937.

Fletcher:1963:ACM

[Fle63] Roger Fletcher. *The automatic computation of molecular wavefunctions and a study of some mathematical problems involved*. Ph.D. thesis, Department of Mathematics, University of Leeds, Leeds, UK, 1963.

Fletcher:1965:FME

[Fle65] R. Fletcher. Function minimization without evaluating derivatives — a review. *The Computer Journal*, 8(1):33–41, April 1965. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL http://comjnl.oxfordjournals.org/content/8/1/33.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/080033.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/33.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/34.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/35.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/36.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/

37.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/38.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/39.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/40.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_08/Issue_01/tiff/41.tif.

Fletcher:1966:CAF

[Fle66] R. Fletcher. Certification of Algorithm 251: Function minimisation. *Communications of the ACM*, 9 (9):686–687, September 1966. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Fletcher:1968:GIM

[Fle68] R. Fletcher. Generalized inverse methods for the best least squares solution of systems of non-linear equations. *The Computer Journal*, 10(4):392–399, February 1968. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL http://comjnl.oxfordjournals.org/content/10/4/392.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/100392.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/392.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/393.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/394.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/395.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/396.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/397.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/398.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_10/Issue_04/tiff/399.tif.

Fletcher:1969:RMU

[Fle69a] R. Fletcher. A review of methods for unconstrained optimization. In Fletcher [Fle69c], pages 1–12. ISBN 0-12-260650-7. LCCN QA402.5 .K4 1968.

Fletcher:1969:TO

[Fle69b] R. Fletcher. A technique for orthogonalization. *Journal of the Institute of Mathematics and its Applications*, 5(2):162–166, June 1969. CODEN JMTAA8. ISSN 0020-2932.

Fletcher:1969:OSI

[Fle69c] Roger Fletcher, editor. *Optimization. Symposium of the Institute of mathematics and its applications, IMA, Keele, Staffordshire 1968. Proceedings: Symposium on optimization 1968*. Academic Press, New York, NY, USA, 1969. ISBN 0-12-260650-7. LCCN QA402.5 .K4 1968.

Fletcher:1970:CMNc

[Fle70a] R. Fletcher. A class of methods for nonlinear programming with termination and convergence properties. In J. Abadie, Philip Wolfe,

et al., editors, *Integer and Nonlinear Programming*, pages 157–175. North-Holland, Amsterdam, The Netherlands, 1970. ISBN 0-444-10000-8, 0-7204-2036-9. LCCN T57.7I5 1970.

Fletcher:1970:FSG

[Fle70b] R. Fletcher. A Fortran subroutine for general quadratic programming. AERE-R 6370, United Kingdom Atomic Energy Authority, Harwell, Berkshire, UK, 1970. 14 pp.

Fletcher:1970:GIN

[Fle70c] R. Fletcher. Generalized inverses for nonlinear equations and optimization. In Philip Rabinowitz, editor, *Numerical Methods for Nonlinear Algebraic Equations (Proceedings of the Conference, University of Essex, Colchester, 1969)*, pages 75–85. Gordon and Breach, New York, NY, USA, 1970. ISBN 0-677-14235-8 (paperback), 0-677-14230-7 (hardcover). LCCN QA218 .N85.

Fletcher:1970:NAV

[Fle70d] R. Fletcher. A new approach to variable metric algorithms. *The Computer Journal*, 13(3): 317–322, August 1970. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/13/3/317.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/130317.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/tiff/317.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/tiff/318.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/tiff/319.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/tiff/320.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/tiff/321.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_13/Issue_03/tiff/322.tif`.

Fletcher:1971:GQP

[Fle71] R. Fletcher. A general quadratic programming algorithm. *Journal of the Institute of Mathematics and its Applications*, 7(1):76–91, February 1971. CODEN JMTAA8. ISSN 0020-2932.

Fletcher:1972:ASL

[Fle72a] R. Fletcher. An algorithm for solving linearly constrained optimization problems. *Mathematical Programming*, 2:133–165, February 1972. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Fletcher:1972:FSM

[Fle72b] R. Fletcher. Fortran subroutines for minimization by quasi-Newton methods. Technical report, United Kingdom Atomic Energy Authority, Harwell, Berkshire, UK, 1972. 29 pp.

Fletcher:1972:MSO

[Fle72c] R. Fletcher. Methods for the solution of optimization prob-

lems. *Computer Physics Communications*, 3(3):159–172, April/ May 1972. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0010465572900653`.

Fletcher:1973:BRA

[Fle73a] R. Fletcher. Book review: *Algorithms for Minimization without Derivatives*, Richard P. Brent, 1973; 195. (Prentice Hall Inc., £6.00). *The Computer Journal*, 16(4):314, ???? 1973. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/16/4/314.2.full.pdf+html`.

Fletcher:1973:BRI

[Fle73b] R. Fletcher. Book review: *Iterative Methods for Nonlinear Optimisation Problems*, S. L. S. Jacoby, J. S. Kowalik, and J. T. Pizzo, 1972; 274. (Prentice-Hall Inc., £7.00). *The Computer Journal*, 16(4):314, ???? 1973. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/16/4/314.1.full.pdf+html`.

Fletcher:1974:MRL

[Fle74] R. Fletcher. Methods related to Lagrangian functions. In Philip E. Gill and Walter Murray, editors, *Numerical Methods for Constrained Optimization (Proceedings of the Symposium, National Physical Laboratory, Teddington, 10–11 January, 1974)*, pages 219–239. Academic Press, New York, NY, USA, 1974. ISBN 0-12-283550-6. LCCN QA402.5 .N83.

Fletcher:1975:IPFa

[Fle75a] R. Fletcher. An ideal penalty function for constrained optimization. In Olvi L. Mangasarian, Robert R. Meyer, and Stephen M. Robinson, editors, *Nonlinear programming, 2: proceedings of the Special Interest Group on Mathematical Programming symposium, conducted by the Computer Sciences Department at the University of Wisconsin–Madison, April 15–17, 1974*, pages 121–163. Academic Press, New York, NY, USA, 1975. ISBN 0-12-468650-8, 1-4832-6041-0. LCCN T57.8 .S9 1974.

Fletcher:1975:IPFb

[Fle75b] R. Fletcher. An ideal penalty function for constrained optimization. *Journal of the Institute of Mathematics and its Applications*, 15 (??):319–342, 1975. CODEN JMTAA8. ISSN 0020-2932.

Fletcher:1976:BRI

[Fle76a] R. Fletcher. Book reviews: *Introduction to Optimization Methods*, by P. R. Adby and M. A. H. Dempster. *Applied Statistics*, 25(1):69, 1976. CODEN APSTAG. ISSN 0035-9254 (print), 1467-9876 (electronic).

Fletcher:1976:CGM

[Fle76b] R. Fletcher. Conjugate gradient methods for indefinite systems. In Watson [Wat75],

pages 73–89. CODEN LNMAA2. ISBN 3-540-07610-7 (print), 3-540-38129-5 (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). LCCN QA297; QA3 .L28 no. 506. URL `http://link.springer.com/chapter/10.1007/BFb0080116/`.

Fletcher:1976:FSI

[Fle76c] R. Fletcher. Factorizing symmetric indefinite matrices. *Linear Algebra and its Applications*, 14(3):257–272, ???? 1976. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0024379576900719`.

Fletcher:1979:NMM

[Fle79a] R. Fletcher. On Newton's method for minimization. In András Prékopa, editor, *Survey of Mathematical Programming: Proceedings of the 9th International Mathematical Programming Symposium, Budapest, August 23–27, 1976*, pages 447–463. North-Holland, Amsterdam, The Netherlands, 1979. ISBN 0-444-85033-3. LCCN QA402.5 .I52 1976.

Fletcher:1979:OM

[Fle79b] R. Fletcher. Optimization methods. In *25 years of Theoretical Physics 1954–1979: A special progress report from Theoretical Physics Division, Harwell in recognition of the 25th anniversary of the U.K. Atomic Energy Authority*, chapter XIX, pages iv + iv + 273. Harwell Research Laboratory, Harwell, UK, 1979. URL `https://www.chilton-computing.org.uk/ChiltonCatalog/1980.25.years.of.theoretical.physics/1980.25.years.of.theoretical.physics.pdf`. Report TP.843.

Fletcher:1980:PMO

[Fle80] R. Fletcher. *Practical Methods of Optimization. Volume 1: Unconstrained Optimization*. A Wiley-Interscience Publication. Wiley, New York, NY, USA, 1980. ISBN 0-471-27711-8. viii + 120 pp. LCCN QA402.5 .F43. Unconstrained optimization.

Fletcher:1981:NEE

[Fle81a] R. Fletcher. Numerical experiments with an exact L_1 penalty function method. In Olvi L. (Olvi Leon) Mangasarian, Robert R. (Robert Ricardo) Meyer, and Stephen M. (Stephen Michael) Robinson, editors, *Nonlinear programming 4: Proceedings of the Nonlinear Programming Symposium 4 held at the University of Wisconsin, Madison, July 14–16, 1980*, pages 99–129. Academic Press, New York, NY, USA, 1981. ISBN 0-12-468662-1. LCCN T57.8 .N67 1980.

Fletcher:1981:PMO

[Fle81b] R. Fletcher. *Practical Methods of Optimization. Volume 2: Constrained Optimization*. A Wiley-Interscience Publication. Wiley, New York, NY, USA, 1981. ISBN 0-471-27828-9. ix + 224 pp. LCCN QA402.5 .F43. Constrained optimization.

Fletcher:1981:NPP

[Fle81c] Roger Fletcher. A nonlinear programming problem in statistics (educational testing). *SIAM Journal on Scientific and Statistical Computing*, 2(3):257–267, September 1981. CODEN SIJCD4. ISSN 0196-5204.

Fletcher:1982:CMD

[Fle82a] R. Fletcher. Combinatorial methods of discrete programming. *The Computer Journal*, 25(1): 160b–160, February 1982. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/25/1/160-b.full.pdf+html`.

Fletcher:1982:MNC

[Fle82b] R. Fletcher. Methods for nonlinear constraints. In Powell [Pow82], pages 185–211. ISBN 0-12-563860-4. LCCN QA402.5 .N66 1981.

Fletcher:1982:MAC

[Fle82c] R. Fletcher. A model algorithm for composite nondifferentiable optimization problems. *Mathematical Programming Study*, (17):67–76, 1982. CODEN MPSTDF. ISSN 0303-3929. URL `https://link.springer.com/chapter/10.1007/BFb0120959`.

Fletcher:1982:SOC

[Fle82d] R. Fletcher. Second order corrections for non-differentiable optimization. In Watson [Wat82], pages 85–114. CODEN LNMAA2. ISBN 3-540-11199-9 (print), 3-540-39009-X (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). LCCN QA297 D82 1981; QA3 .L28 no. 912. URL `http://link.springer.com/chapter/10.1007/BFb0093151/`.

Fletcher:1983:PF

[Fle83] R. Fletcher. Penalty functions. In Achim Bachem, Martin Grötschel, and Bernhard H. Korte, editors, *Mathematical Programming — the State of the Art: 11th international symposium on mathematical programming, Bonn, August 23–27, 1982, proceedings*, pages 87–114. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1983. ISBN 3-540-12082-3. LCCN QA402.5 .M3529 1983.

Fletcher:1984:SCF

[Fle84] R. Fletcher. The self-consistent field problem. *Bulletin of the Institute of Mathematics and its Applications*, 20(5-6):72–76, 1984. CODEN IMTABW. ISSN 0905-5628.

Fletcher:1985:PMN

[Fle85a] R. Fletcher. An l_1 penalty method for nonlinear constraints. In Paul T. Boggs, Richard H. Byrd, and Robert B. Schnabel, editors, *Numerical Optimization 1984: proceedings of the SIAM Conference on Numerical Optimization, Boulder, Colorado, June 12–14, 1984*, pages 26–40. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 1985. ISBN 0-89871-054-5. LCCN QA402.5 .S544 1984.

Fletcher:1985:EC

[Fle85b] R. Fletcher. Expected conditioning. *IMA Journal of Numerical Analysis*, 5(3):247–273, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fletcher:1985:SDM

[Fle85c] R. Fletcher. Semi-definite matrix constraints in optimization. *SIAM Journal on Control and Optimization*, 23(4):493–513, July 1985. CODEN SJCODC. ISSN 0363-0129 (print), 1095-7138 (electronic).

Fletcher:1986:CEQ

[Fle86] R. Fletcher. Cancellation errors in quasi-Newton methods. *SIAM Journal on Scientific and Statistical Computing*, 7(4):1387–1399, October 1986. CODEN SIJCD4. ISSN 0196-5204.

Fletcher:1987:PMO

[Fle87a] R. Fletcher. *Practical Methods of Optimization*. A Wiley-Interscience Publication. Wiley, New York, NY, USA, second edition, 1987. ISBN 0-471-49463-1 (paperback), 0-471-91547-5 (hardcover). xiv + 436 pp. LCCN QA402.5 F57 1987; QE262 .W2S42 1987.

Fletcher:1987:RDL

[Fle87b] R. Fletcher. Recent developments in linear and quadratic programming. In Iserles and Powell [IP87], pages 213–243. ISBN 0-19-853614-3. LCCN QA297 .J65 1986; QA297 .S781 1987. UK£55.00, US$77.50. URL `http://www.gbv.de/dms/hbz/toc/ht002967923.pdf`; `http://zbmath.org/?q=an:0611.00024`.

Fletcher:1988:DPR

[Fle88] R. Fletcher. Degeneracy in the presence of roundoff errors. *Linear Algebra and its Applications*, 106(??):149–183, August 1988. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0024379588900262`.

Fletcher:1989:NVR

[Fle89a] R. Fletcher. A new variational result for quasi-Newton formulae. Technical report, Report NA/119, Department of Mathematics and Computer Science, University of Dundee, ????, 1989. ???? pp.

Fletcher:1989:FDM

[Fle89b] Roger Fletcher. A first derivative method for nonlinear programming based on successive l_1 LP. In Jean-Paul Penot, editor, *New methods in optimization and their industrial uses: State of the art, recent advances, perspectives: Proceedings of the symposia held in Pau, October 19–29, 1987 and Paris, November 19, 1987*, volume 87 of *Internat. Schriftenreihe Numer. Math.*, pages 43–56. Birkhäuser, Cambridge, MA, USA; Berlin, Germany; Basel, Switzerland, 1989. ISBN 0-8176-2286-1 (Boston), 3-7643-2286-1 (Basel). LCCN QA402.5 .N466 1989.

Fletcher:1990:LSM

[Fle90a] R. Fletcher. Low storage methods for unconstrained optimization. In Allgower and Georg [AG90], pages 165–179. ISBN 0-8218-1131-2. LCCN QA372 .C6374 1990.

Fletcher:1990:RDM

[Fle90b] R. Fletcher. Recent developments in methods for nonlinear programming. In Ferran Valls i Taberner, Manuel J. Peláez, and Jordi Guillamet i Anton, editors, *Proceedings of the XIth Congress on Differential Equations and Applications/ First Congress on Applied Mathematics (Spanish) (Málaga, 1989)*, pages 23–37. Universidad Málaga, Málaga, Spain, 1990. ISBN 84-600-7547-8. LCCN QA371 .C6612 1989.

Fletcher:1991:NVR

[Fle91] R. Fletcher. A new variational result for quasi-Newton formulae. *SIAM Journal on Optimization*, 1 (1):18–21, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fletcher:1993:RDQ

[Fle93] R. Fletcher. Resolving degeneracy in quadratic programming. *Annals of Operations Research*, 47(1–4):307–334, 1993. CODEN AOREEV. ISSN 0254-5330 (print), 1572-9338 (electronic). Degeneracy in optimization problems.

Fletcher:1994:OUO

[Fle94a] R. Fletcher. An overview of unconstrained optimization. In Spedicato [Spe94], pages 109–143. ISBN 0-7923-2859-0 (hardcover), 94-009-0369-3 (e-book). LCCN QA402.5 .N36 1993.

Fletcher:1994:SED

[Fle94b] R. Fletcher. Steepest edge, degeneracy and conditioning in LP. Numerical Analysis Report NA/154, Department of Mathematics and Computer Science, University of Dundee, Dundee, Scotland, November 1994. 21 pp.

Fletcher:1995:OPD

[Fle95] R. Fletcher. An optimal positive definite update for sparse Hessian matrices. *SIAM Journal on Optimization*, 5(1):192–218, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fletcher:1997:DFS

[Fle97] Roger Fletcher. Dense factors of sparse matrices. In Buhmann and Iserles [BI97], pages 145–166. ISBN 0-521-58190-7. LCCN QA221 .A655 1997. URL `https://www.cambridge.org/us/universitypress/subjects/mathematics/numerical-analysis/approximation-theory-and-optimization-tributes-m-j-d-powell#contents`.

Fletcher:1998:BTO

[Fle98a] R. Fletcher. Block triangular orderings and factors for sparse matrices in LP. In Higham et al. [HWG98], pages 91–110. ISBN 0-582-31261-2 (paperback). ISSN 0269-3674. LCCN QA297 .D85 1997.

Fletcher:1998:NDM

[Fle98b] Roger Fletcher. A new degeneracy method and steepest-edge–based conditioning for LP. *SIAM Journal on Optimization*, 8(4): 1038–1059, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/27747`.

Fletcher:2000:SRH

[Fle00] R. Fletcher. Stable reduced Hessian updates for indefinite quadratic programming. *Mathematical Programming*, 87(2):251–264, April 2000. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic). Studies in algorithmic optimization.

Fletcher:2001:PMO

[Fle01] R. Fletcher. *Practical Methods of Optimization*. Wiley-Interscience, New York, NY, USA, second edition, 2001. ISBN 0-471-49463-1. xiv + 436 pp. LCCN QA402.5 .F57 2008.

Fletcher:2005:NLR

[Fle05a] Roger Fletcher. A new low rank quasi-Newton update scheme for nonlinear programming. Numerical Analysis Report NA/223, Mathematics Department, University of Dundee, Dundee, Scotland, August 2005. URL `https://optimization-online.org/?p=9012`.

Fletcher:2005:BBM

[Fle05b] Roger Fletcher. On the Barzilai–Borwein method. In Qi et al. [QTY05], pages 235–256. ISBN 0-387-24254-6. LCCN QA402.5 .O6423 2005.

Fletcher:2006:NLR

[Fle06] R. Fletcher. A new low rank quasi-Newton update scheme for nonlinear programming. In Ceragioli et al. [CDF+06], pages 275–293. ISBN 0-387-32774-6, 0-387-32774-6. LCCN QA402.3 .I4536 2005.

Fletcher:2010:SQP

[Fle10] Roger Fletcher. The sequential quadratic programming method. In Di Pillo and Schoen [DS10], pages 165–214. CODEN LNMAA2. ISBN 3-642-11338-9 (print), 3-642-11339-7 (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). LCCN QA3 .L28 no. 1989; QA402.5.C515 2010. URL `http://link.springer.com/content/pdf/10.1007/978-3-642-11339-0_3.pdf`. Papers from the CIME Summer School held in Cetraro, July 1–7, 2007.

Fletcher:2012:LMS

[Fle12a] Roger Fletcher. A limited memory steepest descent method. *Mathematical Programming*, 135(1–2): 413–436, October 2012. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic). URL `https://optimization-online.org/?p=11005`.

Fletcher:2012:SLC

[Fle12b] Roger Fletcher. A sequential linear constraint programming algorithm for NLP. *SIAM Journal on Optimization*, 22(3):772–794, ????

2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fletcher:2014:WMR

[Fle14] Roger Fletcher. On Wolfe's method for resolving degeneracy in linearly constrained optimization. *SIAM Journal on Optimization*, 24(3):1122–1137, ???? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fletcher:2017:ALB

[Fle17] Roger Fletcher. Augmented Lagrangians, box constrained QP and extensions. *IMA Journal of Numerical Analysis*, 37(4):1635–1656, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `https://academic.oup.com/imajna/article/37/4/1635/3059683`.

Fletcher:2002:LCS

[FLRS02] Roger Fletcher, Sven Leyffer, Daniel Ralph, and Stefan Scholtes. Local convergence of SQP methods for mathematical programs with equilibrium constraints. Numerical Analysis Report NA/209, Mathematics Department, University of Dundee, Dundee, Scotland, May 9, 2002. URL `https://optimization-online.org/?p=9231`.

Fletcher:2006:LCS

[FLRS06] Roger Fletcher, Sven Leyffer, Danny Ralph, and Stefan Scholtes. Local convergence of SQP methods for mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 17(1):259–286, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fletcher:2002:GCF

[FLT02] Roger Fletcher, Sven Leyffer, and Philippe L. Toint. On the global convergence of a filter–SQP algorithm. *SIAM Journal on Optimization*, 13(1):44–59, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38081`.

Fletcher:2006:BHF

[FLT06] Roger Fletcher, Sven Leyffer, and Philippe L. Toint. A brief history of filter methods. Preprint ANL/MCS-P1372-0906, Argonne National Laboratory, Mathematics and Computer Science Division, Argonne, IL, USA, September 2006. URL `https://optimization-online.org/?p=10003`.

Fletcher:1969:ATN

[FM69] R. Fletcher and A. P. McCann. Acceleration techniques for nonlinear programming. In Fletcher [Fle69c], pages 203–215. ISBN 0-12-260650-7. LCCN QA402.5 .K4 1968.

Fletcher:1984:SME

[FM84] R. Fletcher and S. P. J. Matthews. Stable modification of explicit *LU* factors for simplex updates. *Mathematical Programming*, 30(3):267–284, October 1984. CODEN MH-

PGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Fletcher:1985:SAU

[FM85] R. Fletcher and S. P. J. Matthews. A stable algorithm for updating triangular factors under a rank one change. *Mathematics of Computation*, 45(172):471–485, October 1985. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).

Fletcher:2000:IDC

[FM00] Roger Fletcher and William Morton. Initialising distillation column models. *Computers & Chemical Engineering*, 23(11–12):1811–1824, January 5, 2000. CODEN CCENDW. ISSN 0098-1354 (print), 1873-4375 (electronic).

Fletcher:1963:RCD

[FP63] R. Fletcher and M. J. D. Powell. A rapidly convergent descent method for minimization. *The Computer Journal*, 6(2): 163–168, August 1963. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/6/2/163.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/060163.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/tiff/163.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/tiff/164.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/tiff/165.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/tiff/166.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/tiff/167.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_02/tiff/168.tif`.

Fletcher:1974:MF

[FP74] R. Fletcher and M. J. D. Powell. On the modification of LDL^T factorizations. *Mathematics of Computation*, 28(128):1067–1087, October 1974. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).

Fletcher:1963:MAD

[FR63] R. Fletcher and C. M. Reeves. A mechanization of algebraic differentiation and the automatic generation of formulae for molecular integrals of Gaussian orbitals. *The Computer Journal*, 6 (3):287–292, November 1963. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/6/3/287.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/060287.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/tiff/287.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/tiff/288.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/tiff/289.tif;`

http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/tiff/290.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/tiff/291.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_06/Issue_03/tiff/292.tif.

Fletcher:1964:FMC

[FR64] R. Fletcher and C. M. Reeves. Function minimization by conjugate gradients. *The Computer Journal*, 7(2):149–154, July 1964. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL http://comjnl.oxfordjournals.org/content/7/2/149.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/070149.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/tiff/149.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/tiff/150.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/tiff/151.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/tiff/152.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/tiff/153.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_07/Issue_02/tiff/154.tif.

Fletcher:1981:DVB

[FS81] R. Fletcher and J. W. Sinclair. Degenerate values for Broyden methods. *Journal of Optimization Theory and Applications*, 33(3):311–324, 1981. CODEN JOTABN. ISSN 0022-3239,1573-2878.

Fletcher:1983:ADJ

[FS83] R. Fletcher and D. C. Sorensen. An algorithmic derivation of the Jordan canonical form. *American Mathematical Monthly*, 90(1):12–16, January 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fletcher:1989:NPN

[FS89] R. Fletcher and E. Sáinz de la Maza. Nonlinear programming and nonsmooth optimization by successive linear programming. *Mathematical Programming*, 43(1–3):235–256, January 1989. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Fletcher:2000:GCS

[FTL00] Roger Fletcher, Philippe L. Toint, and Sven Leyffer. On the global convergence of an SLP-filter algorithm. Numerical Analysis Report NA/209, Mathematics Department, University of Dundee and Department of Mathematics, University of Namur, Dundee, Scotland and Namur, Belgium, 2000. URL https://optimization-online.org/?p=8439.

Fletcher:1980:FSO

[FW80] R. Fletcher and G. A. Watson. First- and second-order conditions for a class of nondifferentiable optimization problems. *Mathematical Programming*, 18(1):291–307,

December 1980. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Fletcher:1987:HMN

[FX87] R. Fletcher and C. Xu. Hybrid methods for nonlinear least squares. *IMA Journal of Numerical Analysis*, 7(3):371–389, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Fletcher:2010:BST

[FZ10] Roger Fletcher and Gaetano Zanghirati. Binary separation and training support vector machines. *Acta Numerica*, 19:121–158, 2010. CODEN ANUMFU. ISBN 0-521-19284-6. ISSN 0962-4929 (print), 1474-0508 (electronic).

Gould:2025:RFJ

[GH25] N. I. M. Gould and J. A. J. Hall. Roger Fletcher. 29 January 1939–15 July 2016. *Biographical Memoirs of Fellows of the Royal Society*, 78:127–146, June 2025. CODEN BMFRA3. ISSN 0080-4606 (print), 1748-8494 (electronic).

Gould:2004:PNP

[GLT04] Nick Gould, Sven Leyffer, and Philippe Toint. Preface: Nonlinear programming: theory and practice [Special issue on large scale nonconvex optimization algorithms and applications in honor of Roger Fletcher's 65th birthday]. *Mathematical Programming*, 100 (1):1–2, May 2004. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Goldfarb:1970:FVM

[Gol70] Donald Goldfarb. A family of variable-metric methods derived by variational means. *Mathematics of Computation*, 24(109):23–26, January 1970. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).

Griffiths:1990:NAP

[GW90] David F. (David Francis) Griffiths and G. A. (G. Alistair) Watson, editors. *Numerical analysis 1989: proceedings of the 13th Dundee Conference*, volume 228 of *Pitman research notes in mathematics series*. Longman Scientific and Technical, Harlow, Essex, UK, 1990. ISBN 0-470-21586-0 (Wiley), 0-582-05923-2 (paperback). LCCN QA297 .D85 1989.

Griffiths:2016:RF

[GW16] David F. Griffiths and Alistair Watson. Roger Fletcher (1939–2016). *NA Digest*, 16(27), July 18, 2016. URL `https://www.netlib.org/na-digest-html/16/v16n27.html`.

Holt:1979:ACN

[HF79] J. N. Holt and R. Fletcher. An algorithm for constrained non-linear least-squares. *Journal of the Institute of Mathematics and its Applications*, 23(4):449–463, 1979. CODEN JMTAA8. ISSN 0020-2932.

Hestenes:1952:MCG

[HS52] Magnus R. Hestenes and Eduard Stiefel. Methods of conjugate gradients for solving linear systems. *Journal of Research of*

the National Bureau of Standards (1934), 49(6):409–436, December 1952. ISSN 0091-0635 (print), 2376-5305 (electronic). Research paper 2379.

Higham:1998:NAP

[HWG98] D. J. (Desmond J.) Higham, G. A. Watson, and D. F. (David Francis) Griffiths, editors. *Numerical analysis 1997: proceedings of the 17th Dundee Biennial Conference, June 24–27, 1997*, volume 380 of *Pitman Research Notes in Mathematics*. Longman Scientific and Technical, Harlow, Essex, UK, 1998. ISBN 0-582-31261-2 (paperback). ISSN 0269-3674. LCCN QA297 .D85 1997.

Iserles:1987:SAN

[IP87] A. Iserles and M. J. D. Powell, editors. *The State of the Art in Numerical Analysis: Proceedings of the Joint IMA/SIAM Conference on the State of the Art in Numerical Analysis held at the University of Birmingham, 14–18 April 1986*, volume 9 of *The Institute of Mathematics and Its Applications conference series; new series*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1987. ISBN 0-19-853614-3. LCCN QA297 .J65 1986; QA297 .S781 1987. UK£55.00, US$77.50. URL `http://www.gbv.de/dms/hbz/toc/ht002967923.pdf`; `http://zbmath.org/?q=an:0611.00024`.

Jiang:2019:IFR

[JJ19] Xianzhen Jiang and Jinbao Jian. Improved Fletcher–Reeves and Dai–Yuan conjugate gradient methods with the strong Wolfe line search. *Journal of Computational and Applied Mathematics*, 348(??):525–534, March 1, 2019. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0377042718305570`.

Kamata:1989:REP

[KIK89] Seiichiro Kamata, Seiji Ishikawa, and Kiyoshi Kato. Reconstructing an edge on a polyhedron using an optimization method. *Computer Vision, Graphics, and Image Processing*, 47(1):92–104, July 1989. CODEN CVGPDB. ISSN 0734-189X (print), 1557-895X (electronic).

Leyffer:2015:SPI

[Ley15] Sven Leyffer. It's to solve problems: an interview with Roger Fletcher. *Optima*, 99(??):1–6, December 2015. URL `https://www.mathopt.org/Optima-Issues/optima99.pdf`. See comments [Ley15, Cur15].

Leyffer:2016:ORF

[Ley16] Sven Leyffer. Obituary: Roger Fletcher. *SIAM News*, 29:2, December 01, 2016. ISSN 0036-1437.

Li:2013:EFR

[LL13] Can Li and Dong-Hui Li. An extension of the Fletcher–Reeves method to linear equality constrained optimization problem. *Applied Mathematics and Computation*, 219(23):10909–10914, Au-

gust 1, 2013. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0096300313005134`.

Li:2011:MFR

[LW11] Dong-Hui Li and Xiao-Lin Wang. A modified Fletcher–Reeves-type derivative-free method for symmetric nonlinear equations. *Numerical Algebra, Control and Optimization*, 1(1):71–82, ???? 2011. CODEN ???? ISSN 2155-3289 (print), 2155-3297 (electronic). URL `http://aimsciences.org/article/doi/10.3934/naco.2011.1.71`.

Martins-Camelo:1986:LAB

[MCPS86] L. Martins-Camelo, Y. Patenaude, and G. Seguin. Linear array beam shaping using Fletcher–Powell optimization. In IEEE, editor, *1986 Antennas and Propagation Society International Symposium [Wyndham Franklin Plaza Hotel, Philadelphia, PA, USA, June 8–13, 1986]*, volume 24, pages 395–398. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1986. LCCN TK7871.6.A15 1986. IEEE Catalog No. 86CH2325-9.

Norgett:1970:FMM

[NF70] M. J. Norgett and R. Fletcher. Fast matrix methods for calculating relaxation about defects in crystals. *Journal of Physics C: Solid State Physics*, 3 (11):L190–L192, November 1970. CODEN JPSOAW. ISSN 0022-3719 (print), 1747-3802 (electronic). URL `https://iopscience.iop.org/article/10.1088/0022-3719/3/11/003`.

Nocedal:2006:NO

[NW06] Jorge Nocedal and Stephen J. Wright. *Numerical Optimization*. Springer series in operations research and financial engineering. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 2006. ISBN 0-387-30303-0 (hardcover), 0-387-40065-6. ISSN 1431-8598. xxii + 664 pp. LCCN QA402.5.

Powell:1982:NOP

[Pow82] M. J. D. Powell, editor. *Nonlinear Optimization 1981: [proceedings of the NATO Advanced Research Institute held at Cambridge in July 1981 which was sponsored by the special programme panel on systems science of the NATO science Committee and the Mathematical Programming Society]*, NATO Conf. Ser. II: Systems Sci. Academic Press, New York, NY, USA, 1982. ISBN 0-12-563860-4. LCCN QA402.5 .N66 1981.

Powell:1986:HBB

[Pow86] M. J. D. Powell. How bad are the BFGS and DFP methods when the objective function is quadratic? *Mathematical Programming*, 34(1):34–47, 1986. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic).

Powell:1987:EGB

[Pow87] M. J. D. Powell. On error growth in the Bartels–Golub and Fletcher–Matthews algorithms for updating matrix factorizations. *Linear Algebra and its Applications*, 88–89(??):597–621, ???? 1987. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Powell:2000:CDA

[Pow00] M. J. D. Powell. On the convergence of the DFP algorithm for unconstrained optimization when there are only two variables. *Mathematical Programming*, 87(2):281–301, 2000. CODEN MHPGA4. ISSN 0025-5610 (print), 1436-4646 (electronic). Studies in algorithmic optimization.

Qi:2005:OCA

[QTY05] Liqun Qi, Koklay Teo, and Xiaoqi Yang, editors. *Optimization and Control with Applications: [international workshop, Erice, Sicily, Italy, 09-17.07.2001]*, volume 96 of *Applied Optimization*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 0-387-24254-6. LCCN QA402.5 .O6423 2005.

Rosen:1970:NPP

[RMR70] J. B. (Judah Ben) Rosen, O. L. (Olvi L.) Mangasarian, and K. (Klaus) Ritter, editors. *Nonlinear Programming (Proceedings of the Symposium, University of Wisconsin, Madison, Wisconsin, 1970)*. Academic Press, New York, NY, USA, 1970. ISBN 0-12-597050-1. LCCN QA3 .U45 no. 25.

Sasson:1969:CUP

[Sas69] Albert M. Sasson. Combined use of the Powell and Fletcher–Powell nonlinear programming methods for optimal load flows. *IEEE Transactions on Power Apparatus and Systems*, PAS-88(10):1530–1537, October 1969. CODEN IEPSA9. ISSN 0018-9510.

Shanno:1970:CQN

[Sha70] D. F. Shanno. Conditioning of quasi-Newton methods for function minimization. *Mathematics of Computation*, 24(111):647–656, July 1970. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).

Shen:2012:NFM

[SLF12] Chungen Shen, Sven Leyffer, and Roger Fletcher. A nonmonotone filter method for nonlinear optimization. *Computational Optimization and Applications*, 52 (3):583–607, July 2012. CODEN CPPPEF. ISSN 0926-6003,1573-2894. URL `https://optimization-online.org/2009/10/2439/`.

Spedicato:1994:ACO

[Spe94] Emilio Spedicato, editor. *Algorithms for Continuous Optimization – -the State of the Art: proceedings of the NATO Advanced Study Institute on Algorithms for Continuous Optimization–the State of the Art, Il Ciocco, Barga,*

Italy, September 5–18, 1993, volume 434 of *NATO Adv. Sci. Inst. Ser. C: Math. Phys. Sci.* Kluwer Academic Publishers Group, Norwell, MA, USA, and Dordrecht, The Netherlands, 1994. ISBN 0-7923-2859-0 (hardcover), 94-009-0369-3 (e-book). LCCN QA402.5 .N36 1993.

Sleijpen:1994:OHB

[SvdVF94] G. L. G. Sleijpen, H. A. van der Vorst, and D. R. Fokkema. BiCGstab(l) and other hybrid Bi-CG methods. *Numerical Algorithms*, 7(1):75–109, June 1994. CODEN NUALEG. ISSN 1017-1398 (print), 1572-9265 (electronic).

Tapia:1984:BRP

[Tap84] Richard Tapia. Book review: *Practical Methods of Optimization, Volume 2: Constrained Optimization* (R. Fletcher). *SIAM Review*, 26(1):143–144, ???? 1984. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Toint:2015:IRI

[Toi15] Phillipe Toint. Impressions of Roger's interview. *Optima*, 99(??): 6, December 2015. URL `https://www.mathopt.org/Optima-Issues/optima99.pdf`.

Ullah:2021:DFS

[USS21] Najib Ullah, Jamilu Sabi'u, and Abdullah Shah. A derivative-free scaling memoryless Broyden–Fletcher–Goldfarb–Shanno method for solving a system of monotone nonlinear equations. *Numerical Linear Algebra with Applications*, 28(5):e2374:1–e2374:??, October 2021. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).

Walsh:1975:MO

[Wal75] G. R. Walsh. *Methods of Optimization*. Wiley, New York, NY, USA, 1975. ISBN 0-471-91922-5 (hardcover), 0-471-91924-1 (paperback). x + 200 pp. LCCN QA402.5 .W341.

Watson:1975:NAD

[Wat75] George A. Watson, editor. *Numerical Analysis: Proceedings of the Dundee Conference on Numerical Analysis, July 1–4, 1975*, volume 506 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1975. ISBN 3-540-07610-7 (print), 3-540-38129-5 (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). LCCN QA297; QA3 .L28 no. 506.

Watson:1982:NAP

[Wat82] G. Alistair Watson, editor. *Numerical Analysis: Proceedings of the 9th Biennial conference held at Dundee, Scotland, June 23–26, 1981*, volume 912 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1982. CODEN LNMAA2. ISBN 3-540-11199-9 (print), 3-540-39009-X (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). LCCN QA297 D82 1981;

QA3 .L28 no. 912. URL `https://link.springer.com/book/10.1007/BFb0093144`.

Werner:1974:KDF

[Wer74] Jochen Werner. Über die Konvergenz des Davidon–Fletcher–Powell-Verfahrens für streng konvexe Minimierungsaufgaben im Hilbertraum. (German) [On the convergence of the Davidon–Fletcher–Powell-method for strictly convex minimization problems in Hilbert space]. *Computing*, 12 (2):167–176, June 1974. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic).

Womersley:1986:ACN

[WF86] R. S. Womersley and R. Fletcher. An algorithm for composite nonsmooth optimization problems. *Journal of Optimization Theory and Applications*, 48(3):493–523, 1986. CODEN JOTABN. ISSN 0022-3239,1573-2878.

Yao:2019:RVF

[YBZ19] Teng-Teng Yao, Zheng-Jian Bai, and Zhi Zhao. A Riemannian variant of the Fletcher–Reeves conjugate gradient method for stochastic inverse eigenvalue problems with partial eigendata. *Numerical Linear Algebra with Applications*, 26(2):e2221:1–e2221:??, March 2019. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).

Yao:2016:RFR

[YBZC16] Teng-Teng Yao, Zheng-Jian Bai, Zhi Zhao, and Wai-Ki Ching. A Riemannian Fletcher–Reeves conjugate gradient method for doubly stochastic inverse eigenvalue problems. *SIAM Journal on Matrix Analysis and Applications*, 37(1): 215–234, ???? 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Wang:2006:GCP

[yWjL06] Chang yu Wang and Shu jun Lian. Global convergence properties of the two new dependent Fletcher–Reeves conjugate gradient methods. *Applied Mathematics and Computation*, 181(2): 920–931, October 15, 2006. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S009630030600172X`.

Zhang:2006:GCM

[ZZL06] Li Zhang, Weijun Zhou, and Donghui Li. Global convergence of a modified Fletcher–Reeves conjugate gradient method with Armijo-type line search. *Numerische Mathematik*, 104(4):561–572, October 2006. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic).