Benar F Svaiter

List of Publications by Year
in descending order

114 papers	5,676 citations	81743 39 h-index	82410 72 g-index
116 all docs	116 docs citations	116 times ranked	2225 citing authors

#	Article	IF	Citations
1	Convergence of descent methods for semi-algebraic and tame problems: proximal algorithms, forward–backward splitting, and regularized Gauss–Seidel methods. Mathematical Programming, 2013, 137, 91-129.	1.6	794
2	A New Projection Method for Variational Inequality Problems. SIAM Journal on Control and Optimization, 1999, 37, 765-776.	1.1	397
3	Steepest descent methods for multicriteria optimization. Mathematical Methods of Operations Research, 2000, 51, 479-494.	0.4	393
4	Forcing strong convergence of proximal point iterations in a Hilbert space. Mathematical Programming, 2000, 87, 189-202.	1.6	265
5	Newton's Method for Multiobjective Optimization. SIAM Journal on Optimization, 2009, 20, 602-626.	1.2	242
6	Title is missing!. Set-Valued and Variational Analysis, 1999, 7, 323-345.	0.5	168
7	A steepest descent method for vector optimization. Journal of Computational and Applied Mathematics, 2005, 175, 395-414.	1.1	146
8	An Inexact Hybrid Generalized Proximal Point Algorithm and Some New Results on the Theory of Bregman Functions. Mathematics of Operations Research, 2000, 25, 214-230.	0.8	139
9	Enlargement of Monotone Operators with Applications to Variational Inequalities. Set-Valued and Variational Analysis, 1997, 5, 159-180.	0.5	134
10	Iteration-Complexity of Block-Decomposition Algorithms and the Alternating Direction Method of Multipliers. SIAM Journal on Optimization, 2013, 23, 475-507.	1.2	133
11	Relaxed Steepest Descent and Cauchy-Barzilai-Borwein Method. Computational Optimization and Applications, 2002, 21, 155-167.	0.9	128
12	Proximal Methods in Vector Optimization. SIAM Journal on Optimization, 2005, 15, 953-970.	1.2	128
13	Entropy-Like Proximal Methods in Convex Programming. Mathematics of Operations Research, 1994, 19, 790-814.	0.8	114
14	A UNIFIED FRAMEWORK FOR SOME INEXACT PROXIMAL POINT ALGORITHMS*. Numerical Functional Analysis and Optimization, 2001, 22, 1013-1035.	0.6	107
15	On Weak Convergence of the Douglas–Rachford Method. SIAM Journal on Control and Optimization, 2011, 49, 280-287.	1.1	96
16	Kantorovich's Theorem on Newton's Method in Riemannian Manifolds. Journal of Complexity, 2002, 18, 304-329.	0.7	93
17	On the Complexity of the Hybrid Proximal Extragradient Method for the Iterates and the Ergodic Mean. SIAM Journal on Optimization, 2010, 20, 2755-2787.	1.2	91
18	Error bounds for proximal point subproblems and associated inexact proximal point algorithms. Mathematical Programming, 2000, 88, 371-389.	1.6	83

#	ARTICLE	IF	CITATIONS
19	Maximal Monotone Operators, Convex Functions and a Special Family of Enlargements. Set-Valued and Variational Analysis, 2002, 10, 297-316.	0.5	72
20	Attractive or repulsive nature of Casimir force inD-dimensional Minkowski spacetime. Physical Review D, 1991, 43, 1300-1306.	1.6	70
21	A New Sequential Optimality Condition for Constrained Optimization and Algorithmic Consequences. SIAM Journal on Optimization, 2010, 20, 3533-3554.	1.2	70
22	Inertial and noninertial particle detectors and vacuum fluctuations. Physical Review D, 1992, 46, 5267-5277.	1.6	68
23	Complexity of Variants of Tseng's Modified F-B Splitting and Korpelevich's Methods for Hemivariational Inequalities with Applications to Saddle-point and Convex Optimization Problems. SIAM Journal on Optimization, 2011, 21, 1688-1720.	1.2	68
24	An Accelerated Hybrid Proximal Extragradient Method for Convex Optimization and Its Implications to Second-Order Methods. SIAM Journal on Optimization, 2013, 23, 1092-1125.	1.2	68
25	Monotone Operators Representable by l.s.c. Convex Functions. Set-Valued and Variational Analysis, 2005, 13, 21-46.	0.5	66
26	General Projective Splitting Methods for Sums of Maximal Monotone Operators. SIAM Journal on Control and Optimization, 2009, 48, 787-811.	1.1	65
27	Newton-Like Dynamics and Forward-Backward Methods for Structured Monotone Inclusions in Hilbert Spaces. Journal of Optimization Theory and Applications, 2014, 161, 331-360.	0.8	63
28	A Continuous Dynamical Newton-Like Approach to Solving Monotone Inclusions. SIAM Journal on Control and Optimization, 2011, 49, 574-598.	1.1	61
29	On the variation of maximal operators of convolution type. Journal of Functional Analysis, 2013, 265, 837-865.	0.7	60
30	Maximal monotonicity, conjugation and the duality product. Proceedings of the American Mathematical Society, 2003, 131, 2379-2383.	0.4	58
31	Inexact Variants of the Proximal Point Algorithm without Monotonicity. SIAM Journal on Optimization, 2003, 13, 1080-1097.	1.2	57
32	Îμ-Enlargements of Maximal Monotone Operators in Banach Spaces. , 1999, 7, 117-132.		56
33	Casimir effect in a Dâ€dimensional flat spaceâ€time and the cutâ€off method. Journal of Mathematical Physics, 1991, 32, 175-180.	0.5	52
34	A Practical Optimality Condition Without Constraint Qualifications for Nonlinear Programming. Journal of Optimization Theory and Applications, 2003, 118, 117-133.	0.8	52
35	A family of projective splitting methods for the sum of two maximal monotone operators. Mathematical Programming, 2007, 111, 173-199.	1.6	52
36	Kantorovichâ€™s majorants principle for Newtonâ€™s method. Computational Optimization and Applications, 2009, 42, 213-229.	0.9	50

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37	The analytic regularization zeta function method and the cut-off method in the Casimir effect. Journal of Physics A, 1992, 25, 979-989.	1.6	45
38	A Truly Globally Convergent Newton-Type Method for the Monotone Nonlinear Complementarity Problem. SIAM Journal on Optimization, 2000, 10, 605-625.	1.2	44
39	Weber-Fechner Law and the Optimality of the Logarithmic Scale. Minds and Machines, 2011, 21, 73-81.	2.7	44
40	An Outer Approximation Method for the Variational Inequality Problem. SIAM Journal on Control and Optimization, 2005, 43, 2071-2088.	1.1	43
41	A Relative Error Tolerance for a Family of Generalized Proximal Point Methods. Mathematics of Operations Research, 2001, 26, 816-831.	0.8	30
42	On the choice of parameters for the weighting method in vector optimization. Mathematical Programming, 2007, 111, 201-216.	1.6	28
43	A quadratically convergent Newton method for vector optimization. Optimization, 2014, 63, 661-677.	1.0	28
44	Central Paths, Generalized Proximal Point Methods, and Cauchy Trajectories in Riemannian Manifolds. SIAM Journal on Control and Optimization, 1999, 37, 566-588.	1.1	27
45	A Family of Enlargements of Maximal Monotone Operators. Set-Valued and Variational Analysis, 2000, 8, 311-328.	0.5	27
46	Zero point energy and analytic regularizations. Physical Review D, 1993, 47, 4581-4585.	1.6	26
47	Iteration-Complexity of a Newton Proximal Extragradient Method for Monotone Variational Inequalities and Inclusion Problems. SIAM Journal on Optimization, 2012, 22, 914-935.	1.2	23
48	Gradient descent and fast artificial time integration. ESAIM: Mathematical Modelling and Numerical Analysis, 2009, 43, 689-708.	0.8	22
49	An adaptive accelerated first-order method for convex optimization. Computational Optimization and Applications, 2016, 64, 31-73.	0.9	22
50	GROUP-THEORETIC APPROACH FOR SYMBOLIC TENSOR MANIPULATION. International Journal of Modern Physics C, 2002, 13, 859-879.	0.8	20
51	Fixed points in the family of convex representations of a maximal monotone operator. Proceedings of the American Mathematical Society, 2003, 131, 3851-3859.	0.4	20
52	A computational model for telomere-dependent cell-replicative aging. BioSystems, 2008, 91, 262-267.	0.9	19
53	Optimal auction with a general distribution: Virtual valuation without densities. Journal of Mathematical Economics, 2010, 46, 21-31.	0.4	17
54	On projective Landweber–Kaczmarz methods for solving systems of nonlinear ill-posed equations. Inverse Problems, 2016, 32, 025004.	1.0	17

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55	A row-action method for convex programming. Mathematical Programming, 1994, 64, 149-171.	1.6	16
56	Quantum processes: stimulated and spontaneous emission near cosmic strings. Classical and Quantum Gravity, 1994, 11, 347-358.	1.5	15
57	Global Convergence of a Closed-Loop Regularized Newton Method for Solving Monotone Inclusions in Hilbert Spaces. Journal of Optimization Theory and Applications, 2013, 157, 624-650.	0.8	15
58	Minimal convex functions bounded below by the duality product. Proceedings of the American Mathematical Society, 2008, 136, 873-878.	0.4	14
59	Algebraic rules for computing the regularization parameter of the Levenbergâ€"Marquardt method. Computational Optimization and Applications, 2016, 65, 723-751.	0.9	14
60	The cost of computing integers. Proceedings of the American Mathematical Society, 1996, 124, 1377-1378.	0.4	14
61	A first-order block-decomposition method for solving two-easy-block structured semidefinite programs. Mathematical Programming Computation, 2014, 6, 103-150.	3.2	13
62	A Class of FejÃ©r Convergent Algorithms, Approximate Resolvents and the Hybrid Proximal-Extragradient Method. Journal of Optimization Theory and Applications, 2014, 162, 133-153.	0.8	13
63	Implementation of a block-decomposition algorithm for solving large-scale conic semidefinite programming problems. Computational Optimization and Applications, 2014, 57, 45-69.	0.9	13
64	A $$\mathcal {O}(1/k^{3/2})$$ O (1 / k 3 / 2) hybrid proximal extragradient primalâ€"dual interior point method for nonlinear monotone mixed complementarity problems. Computational and Applied Mathematics, 2018, 37, 1847-1876.	1.3	13
65	On Well Definedness of the Central Path. Journal of Optimization Theory and Applications, 1999, 102, 223-237.	0.8	12
66	Robustness of the Hybrid Extragradient Proximal-Point Algorithm. Journal of Optimization Theory and Applications, 2001, 111, 117-136.	0.8	12
67	A strongly convergent hybrid proximal method inÂBanach spaces. Journal of Mathematical Analysis and Applications, 2004, 289, 700-711.	0.5	12
68	On Diagonal Subdifferential Operators in Nonreflexive Banach Spaces. Set-Valued and Variational Analysis, 2012, 20, 1-14.	0.5	12
69	The distributional zeta-function in disordered field theory. International Journal of Modern Physics A, 2016, 31, 1650144.	0.5	12
70	A robust Kantorovichâ€™s theorem on the inexact Newton method with relative residual error tolerance. Journal of Complexity, 2012, 28, 346-363.	0.7	11
71	Regularized HPE-Type Methods for Solving Monotone Inclusions with Improved Pointwise Iteration-Complexity Bounds. SIAM Journal on Optimization, 2016, 26, 2730-2743.	1.2	11
72	A new smoothing-regularization approach for a maximum-likelihood estimation problem. Applied Mathematics and Optimization, 1994, 29, 225-241.	0.8	10

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73	The stress tensor conformal anomaly and analytic regularizations. Journal of Mathematical Physics, 1994, 35, 1840-1849.	0.5	10
74	RIEMANN ZETA ZEROS AND PRIME NUMBER SPECTRA IN QUANTUM FIELD THEORY. International Journal of Modern Physics A, 2013, 28, 1350128.	0.5	10
75	On the need for hybrid steps in hybrid proximal point methods. Operations Research Letters, 2001, 29, 217-220.	0.5	9
76	On First Order Optimality Conditions for Vector Optimization. Acta Mathematicae Applicatae Sinica, 2003, 19, 371-386.	0.4	9
77	A Comparison of Rates of Convergence of Two Inexact Proximal Point Algorithms. Applied Optimization, 2000, , 415-427.	0.4	9
78	Addressing the greediness phenomenon in Nonlinear Programming by means of Proximal Augmented Lagrangians. Computational Optimization and Applications, 2010, 46, 229-245.	0.9	8
79	On the behaviour of constrained optimization methods when Lagrange multipliers do not exist. Optimization Methods and Software, 2014, 29, 646-657.	1.6	8
80	Algebraic rules for quadratic regularization of Newton's method. Computational Optimization and Applications, 2015, 60, 343-376.	0.9	8
81	Order preserving and order reversing operators on the class of convex functions in Banach spaces. Journal of Functional Analysis, 2015, 268, 73-92.	0.7	8
82	Primal-dual row-action method for convex programming. Journal of Optimization Theory and Applications, 1995, 86, 73-112.	0.8	7
83	Multiplicative Interior Gradient Methods for Minimization over the Nonnegative Orthant. SIAM Journal on Control and Optimization, 1996, 34, 389-406.	1.1	7
84	A new proximal-based globalization strategy for the Josephy–Newton method for variational inequalities. Optimization Methods and Software, 2002, 17, 965-983.	1.6	7
85	Hölder continuity of the policy function approximation in the value function approximation. Journal of Mathematical Economics, 2007, 43, 629-639.	0.4	6
86	A new duality theory for mathematical programming. Optimization, 2011, 60, 1209-1231.	1.0	5
87	Analytic regularization of the Yukawa model at finite temperature. Journal of Mathematical Physics, 1997, 38, 2210-2218.	0.5	4
88	Descent methods with linesearch in the presence of perturbations. Journal of Computational and Applied Mathematics, 1997, 80, 265-275.	1.1	4
89	A Hybrid Proximal Extragradient Self-Concordant Primal Barrier Method for Monotone Variational Inequalities. SIAM Journal on Optimization, 2015, 25, 1965-1996.	1.2	4
90	A note on Fejér-monotone sequences in product spaces and its applications to the dual convergence of augmented Lagrangian methods. Mathematical Programming, 2016, 155, 613-616.	1.6	4

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91	The multiobjective steepest descent direction is not Lipschitz continuous, but is Hölder continuous. Operations Research Letters, 2018, 46, 430-433.	0.5	4
92	IS THE MILNE COORDINATE SYSTEM A GOOD ONE?. Modern Physics Letters A, 1994, 09, 19-27.	0.5	3
93	Solving monotone inclusions with linear multi-step methods. Mathematical Programming, 2003, 96, 469-487.	1.6	3
94	A proximal-Newton method for unconstrained convex optimization in Hilbert spaces. Optimization, 2018, 67, 67-82.	1.0	3
95	A Further Study on Asymptotic Functions via Variational Analysis. Journal of Optimization Theory and Applications, 2019, 182, 366-382.	0.8	3
96	Some Inexact Hybrid Proximal Augmented Lagrangian Algorithms. Numerical Algorithms, 2004, 35, 175-184.	1.1	2
97	New Condition Characterizing the Solutions of Variational Inequality Problems. Journal of Optimization Theory and Applications, 2008, 137, 89-98.	0.8	2
98	Moreau–Yosida Regularization of Maximal Monotone Operators of Type (D). Set-Valued and Variational Analysis, 2011, 19, 97-106.	0.5	2
99	A non-type (D) operator in c_0. Mathematical Programming, 2013, 139, 81-88.	1.6	2
100	Interior hybrid proximal extragradient methods for the linear monotone complementarity problem. Optimization, 2015, 64, 1957-1982.	1.0	2
101	On a Family of Gradient-Type Projection Methods for Nonlinear Ill-Posed Problems. Numerical Functional Analysis and Optimization, 2018, 39, 1153-1180.	0.6	2
102	ON THE SCALAR CASIMIR ENERGIES IN SPACE-TIMES WITH Md × Tq STRUCTURE. Modern Physics Letters A, 1991, 06, 1855-1861.	0.5	1
103	On the regularization of mixed complementarity problems. Numerical Functional Analysis and Optimization, 2000, 21, 589-600.	0.6	1
104	Convexity for the diffuse tomography model. Inverse Problems, 2001, 17, 729-738.	1.0	1
105	Analytic center of spherical shells and its application to analytic center machine. Computational Optimization and Applications, 2009, 43, 329-352.	0.9	1
106	A Markovian Growth Dynamics on Rooted Binary Trees Evolving According to the Gompertz Curve. Journal of Statistical Physics, 2012, 148, 565-578.	0.5	1
107	A simplified proof of weak convergence in Douglas–Rachford method. Operations Research Letters, 2019, 47, 291-293.	0.5	1
108	Iteration-complexity of a Rockafellar's proximal method of multipliers for convex programming based on second-order approximations. Optimization, 2019, 68, 1521-1550.	1.0	1

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109	A weakly convergent fully inexact Douglas-Rachford method with relative error tolerance. ESAIM - Control, Optimisation and Calculus of Variations, 2019, 25, 57.	0.7	1
110	A partially inexact ADMM with $o(1/n)$ asymptotic convergence rate, $?(1/n)$ complexity, and immediate relative error tolerance. Optimization, 2021, 70, 2061-2080.	1.0	1
111	Diffusion methods for classification with pairwise relationships. Quarterly of Applied Mathematics, 2019, 77, 793-810.	0.5	1
112	A new Kontorowich-Lebedev-like transformation. Journal of Physics A, 1991, 24, 3199-3203.	1.6	0
113	Optimal auctions with multidimensional types and the desirability of exclusion. Journal of Mathematical Economics, 2013, 49, 106-110.	0.4	0
114	A Variant of the Hybrid Proximal Extragradient Method for Solving Strongly Monotone Inclusions and its Complexity Analysis. Journal of Optimization Theory and Applications, 2016, 168, 198-215.	0.8	0