

P-A Absil

List of Publications by Year in descending order

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65
papers

3,477
citations

257450
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docs citations

65
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Solving non-convex economic dispatch with valve-point effects and losses with guaranteed accuracy. International Journal of Electrical Power and Energy Systems, 2022, 134, 107143.	5.5	2
2	A Riemannian rank-adaptive method for low-rank matrix completion. Computational Optimization and Applications, 2022, 81, 67-90.	1.6	15
3	Riemannian gradient descent methods for graph-regularized matrix completion. Linear Algebra and Its Applications, 2021, 623, 193-235.	0.9	4
4	Geometry of the Symplectic Stiefel Manifold Endowed with the Euclidean Metric. Lecture Notes in Computer Science, 2021, , 789-796.	1.3	1
5	Riemannian Optimization on the Symplectic Stiefel Manifold. SIAM Journal on Optimization, 2021, 31, 1546-1575.	2.0	17
6	Computing Symplectic Eigenpairs of Symmetric Positive-Definite Matrices via Trace Minimization and Riemannian Optimization. SIAM Journal on Matrix Analysis and Applications, 2021, 42, 1732-1757.	1.4	7
7	Computing the matrix geometric mean: Riemannian versus Euclidean conditioning, implementation techniques, and a Riemannian BFGS method. Numerical Linear Algebra With Applications, 2020, 27, e2321.	1.6	4
8	Global Solution of Economic Dispatch with Valve Point Effects and Transmission Constraints. Electric Power Systems Research, 2020, 189, 106786.	3.6	5
9	On the Quality of First-Order Approximation of Functions with Hölder Continuous Gradient. Journal of Optimization Theory and Applications, 2020, 185, 17-33.	1.5	1
10	Quotient Geometry with Simple Geodesics for the Manifold of Fixed-Rank Positive-Semidefinite Matrices. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 171-198.	1.4	33
11	Data Fitting on Manifolds with Composite B-splines-Like Curves and Blended Cubic Splines. Journal of Mathematical Imaging and Vision, 2019, 61, 645-671.	1.3	22
12	A Collection of Nonsmooth Riemannian Optimization Problems. International Series of Numerical Mathematics, 2019, , 1-15.	1.1	17
13	MILP-Based Algorithm for the Global Solution of Dynamic Economic Dispatch Problems with Valve-Point Effects. , 2019, , .		2
14	Global rates of convergence for nonconvex optimization on manifolds. IMA Journal of Numerical Analysis, 2019, 39, 1-33.	2.9	103
15	Curvature of the Manifold of Fixed-Rank Positive-Semidefinite Matrices Endowed with the Bures-Wasserstein Metric. Lecture Notes in Computer Science, 2019, , 739-748.	1.3	8
16	A Riemannian BFGS Method Without Differentiated Retraction for Nonconvex Optimization Problems. SIAM Journal on Optimization, 2018, 28, 470-495.	2.0	32
17	Matrix geometric means based on shuffled inductive sequences. Linear Algebra and Its Applications, 2018, 542, 334-359.	0.9	6
18	ROPTLIB. ACM Transactions on Mathematical Software, 2018, 44, 1-21.	2.9	22

#	ARTICLE	IF	CITATIONS
19	Variable Projection Applied to Block Term Decomposition of Higher-Order Tensors. Lecture Notes in Computer Science, 2018, , 139-148.	1.3	5
20	Fast Method to Fit a \mathcal{C}^1 Piecewise-B�zier Function to Manifold-Valued Data Points: How�Suboptimal is the Curve Obtained on the Sphere \mathbb{S}^2 ?. Lecture Notes in Computer Science, 2017, , 595-603.	1.3	0
21	Intrinsic representation of tangent vectors and vector transports on matrix manifolds. Numerische Mathematik, 2017, 136, 523-543.	1.9	22
22	A Riemannian Limited-Memory BFGS Algorithm for Computing the Matrix Geometric Mean. Procedia Computer Science, 2016, 80, 2147-2157.	2.0	16
23	Differentiable Piecewise-B�zier Surfaces on Riemannian Manifolds. SIAM Journal on Imaging Sciences, 2016, 9, 1788-1828.	2.2	19
24	Robust Low-Rank Matrix Completion by Riemannian Optimization. SIAM Journal of Scientific Computing, 2016, 38, S440-S460.	2.8	34
25	A Riemannian BFGS Method for Nonconvex Optimization Problems. Lecture Notes in Computational Science and Engineering, 2016, , 627-634.	0.3	10
26	A Riemannian approach for computing geodesies in elastic shape analysis. , 2015, , .		2
27	A Broyden Class of Quasi-Newton Methods for Riemannian Optimization. SIAM Journal on Optimization, 2015, 25, 1660-1685.	2.0	104
28	Low-rank matrix completion via preconditioned optimization on the Grassmann manifold. Linear Algebra and Its Applications, 2015, 475, 200-239.	0.9	58
29	Low-rank retractions: a survey and new results. Computational Optimization and Applications, 2015, 62, 5-29.	1.6	31
30	A Riemannian symmetric rank-one trust-region method. Mathematical Programming, 2015, 150, 179-216.	2.4	45
31	A convex formulation for informed source separation in the single channel setting. Neurocomputing, 2014, 141, 26-36.	5.9	7
32	Two Newton methods on the manifold of fixed-rank matrices endowed with Riemannian quotient geometries. Computational Statistics, 2014, 29, 569-590.	1.5	17
33	Two algorithms for orthogonal nonnegative matrix factorization with application to clustering. Neurocomputing, 2014, 141, 15-25.	5.9	111
34	A Riemannian subgradient algorithm for economic dispatch with valve-point effect. Journal of Computational and Applied Mathematics, 2014, 255, 848-866.	2.0	26
35	Robust estimation of rotations from relative measurements by maximum likelihood. , 2013, , .		21
36	Spherical Mesh Adaptive Direct Search for Separating Quasi-Unrelated Sources by Range-Based Independent Component Analysis. Neural Computation, 2013, 25, 2486-2522.	2.2	18

#	ARTICLE	IF	CITATIONS
37	Jacobi Algorithm for the Best Low Multilinear Rank Approximation of Symmetric Tensors. SIAM Journal on Matrix Analysis and Applications, 2013, 34, 651-672.	1.4	38
38	Projection-like Retractions on Matrix Manifolds. SIAM Journal on Optimization, 2012, 22, 135-158.	2.0	161
39	A Gradient-Descent Method for Curve Fitting on Riemannian Manifolds. Foundations of Computational Mathematics, 2012, 12, 49-73.	2.5	57
40	A Riemannian Dennis-Moré Condition. , 2012, , 281-293.		4
41	Best Low Multilinear Rank Approximation of Higher-Order Tensors, Based on the Riemannian Trust-Region Scheme. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 115-135.	1.4	81
42	A discrete regression method on manifolds and its application to data on SO(n). IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2284-2289.	0.4	25
43	Tucker compression and local optima. Chemometrics and Intelligent Laboratory Systems, 2011, 106, 57-64.	3.5	10
44	New relations between norms of system transfer functions. Systems and Control Letters, 2011, 60, 151-155.	2.3	2
45	Two-sided Grassmann-Rayleigh quotient iteration. Numerische Mathematik, 2010, 114, 549-571.	1.9	6
46	On the Best Low Multilinear Rank Approximation of Higher-order Tensors*. , 2010, , 145-164.		16
47	Low-Rank Optimization on the Cone of Positive Semidefinite Matrices. SIAM Journal on Optimization, 2010, 20, 2327-2351.	2.0	117
48	H_2 -Optimal Model Reduction with Higher-Order Poles. SIAM Journal on Matrix Analysis and Applications, 2010, 31, 2738-2753.	1.4	32
49	Optimization On Manifolds: Methods and Applications. , 2010, , 125-144.		14
50	Riemannian BFGS Algorithm with Applications. , 2010, , 183-192.		19
51	A Geometric Newton Method for Oja's Vector Field. Neural Computation, 2009, 21, 1415-1433.	2.2	21
52	Differential-geometric Newton method for the best rank-(R_1, R_2, R_3) approximation of tensors. Numerical Algorithms, 2009, 51, 179-194.	1.9	47
53	Accelerated Line-search and Trust-region Methods. SIAM Journal on Numerical Analysis, 2009, 47, 997-1018.	2.3	19
54	H_2 -optimal model reduction of MIMO systems. Applied Mathematics Letters, 2008, 21, 1267-1273.	2.7	128

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55	An implicit trust-region method on Riemannian manifolds. IMA Journal of Numerical Analysis, 2008, 28, 665-689.	2.9	27
56	Optimization Algorithms on Matrix Manifolds. , 2008, , .		1,058
57	Newton-KKT interior-point methods for indefinite quadratic programming. Computational Optimization and Applications, 2007, 36, 5-41.	1.6	23
58	Trust-Region Methods on Riemannian Manifolds. Foundations of Computational Mathematics, 2007, 7, 303-330.	2.5	272
59	A truncated-CG style method for symmetric generalized eigenvalue problems. Journal of Computational and Applied Mathematics, 2006, 189, 274-285.	2.0	29
60	On the largest principal angle between random subspaces. Linear Algebra and Its Applications, 2006, 414, 288-294.	0.9	45
61	On the stable equilibrium points of gradient systems. Systems and Control Letters, 2006, 55, 573-577.	2.3	96
62	Riemannian Geometry of Grassmann Manifolds with a View on Algorithmic Computation. Acta Applicandae Mathematicae, 2004, 80, 199-220.	1.0	241
63	Continuous dynamical systems that realize discrete optimization on the hypercube. Systems and Control Letters, 2004, 52, 297-304.	2.3	10
64	Joint Diagonalization on the Oblique Manifold for Independent Component Analysis. , 0, , .		32
65	Low-rank multi-parametric covariance identification. BIT Numerical Mathematics, 0, , 1.	2.0	0