Tryphon T Georgiou

List of Publications by Citations

196 papers	4,161 citations	35 h-index	58 g-index
232 ext. papers	5,287 ext. citations	3.9 avg, IF	5.93 L-index

#	Paper	IF	Citations
196	. *IEEE Transactions on Automatic Control*, **1990**, 35, 673-686	5.9	402
195	. *IEEE Transactions on Automatic Control*, **1988**, 33, 820-832	5.9	288
194	Robustness analysis of nonlinear feedback systems: an input-output approach. *IEEE Transactions on Automatic Control*, **1997**, 42, 1200-1221	5.9	128
193	On the computation of the gap metric. *Systems and Control Letters*, **1988**, 11, 253-257	2.4	127
192	A generalized entropy criterion for Nevanlinna-Pick interpolation with degree constraint. *IEEE Transactions on Automatic Control*, **2001**, 45, 822-839	5.9	126
191	Kullback-Leibler approximation of spectral density functions. *IEEE Transactions on Information Theory*, **2003**, 49, 2910-2917	2.8	111
190	A new approach to spectral estimation: a tunable high-resolution spectral estimator. *IEEE Transactions on Signal Processing*, **2000**, 48, 3189-3205	4.8	101
189	Realization of power spectra from partial covariance sequences. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1987**, 35, 438-449		94
188	On the Relation Between Optimal Transport and Schr□dinger Bridges: A Stochastic Control Viewpoint. *Journal of Optimization Theory and Applications*, **2016**, 169, 671-691	1.6	91
187	Noninvasive estimation of tissue temperature via high-resolution spectral analysis techniques. *IEEE Transactions on Biomedical Engineering*, **2005**, 52, 221-8	5	82
186	The interpolation problem with a degree constraint. *IEEE Transactions on Automatic Control*, **1999**, 44, 631-635	5.9	78
185	Dynamics of relay relaxation oscillators. *IEEE Transactions on Automatic Control*, **2001**, 46, 65-77	5.9	75
184	. *IEEE Transactions on Automatic Control*, **2016**, 61, 1158-1169	5.9	73
183	Graph Curvature for Differentiating Cancer Networks. *Scientific Reports*, **2015**, 5, 12323	4.9	67
182	Relative entropy and the multivariable multidimensional moment problem. *IEEE Transactions on Information Theory*, **2006**, 52, 1052-1066	2.8	67
181	The structure of state covariances and its relation to the power spectrum of the input. *IEEE Transactions on Automatic Control*, **2002**, 47, 1056-1066	5.9	66
180	Optimal Steering of a Linear Stochastic System to a Final Probability Distribution, Part II. *IEEE Transactions on Automatic Control*, **2016**, 61, 1170-1180	5.9	57

179	Colour of turbulence. *Journal of Fluid Mechanics*, **2017**, 812, 636-680	3.7	56
178	Spectral analysis based on the state covariance: the maximum entropy spectrum and linear fractional parametrization. *IEEE Transactions on Automatic Control*, **2002**, 47, 1811-1823	5.9	56
177	Spectral estimation via selective harmonic amplification. *IEEE Transactions on Automatic Control*, **2001**, 46, 29-42	5.9	51
176	Graphs, causality, and stabilizability: Linear, shift-invariant systems on L2[0, ∞] *Mathematics of Control, Signals, and Systems*, **1993**, 6, 195-223	1.3	51
175	Ricci curvature: An economic indicator for market fragility and systemic risk. *Science Advances*, **2016**, 2, e1501495	14.3	51
174	Distances and Riemannian Metrics for Spectral Density Functions. *IEEE Transactions on Signal Processing*, **2007**, 55, 3995-4003	4.8	49
173	. *IEEE Transactions on Automatic Control*, **1992**, 37, 1133-1143	5.9	46
172	On the robust stability of linear time-invariant plants with unstructured uncertainty. *IEEE Transactions on Automatic Control*, **1987**, 32, 201-207	5.9	46
171	Robust Stability of Feedback Systems: A Geometric Approach Using the Gap Metric. *SIAM Journal on Control and Optimization*, **1993**, 31, 1518-1537	1.9	45
170	A Topological Approach to Nevanlinna–Pick Interpolation. *SIAM Journal on Mathematical Analysis*, **1987**, 18, 1248-1260	1.7	45
169	. *IEEE Transactions on Automatic Control*, **1994**, 39, 2476-2481	5.9	43
168	. *IEEE Transactions on Automatic Control*, **2017**, 62, 2137-2152	5.9	41
167	Generalized interpolation in H^infty with a complexity constraint. *Transactions of the American Mathematical Society*, **2004**, 358, 965-987	1	40
166	Entropy and optimality in river deltas. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 11651-11656	11.5	36
165	Stochastic Observability Test for Discrete-Time Kalman Filters. *Journal of Guidance, Control, and Dynamics*, **2009**, 32, 1356-1370	2.1	36
164	Solution of the general moment problem via a one-parameter imbedding. *IEEE Transactions on Automatic Control*, **2005**, 50, 811-826	5.9	36
163	The parallel projection operators of a nonlinear feedback system. *Systems and Control Letters*, **1993**, 20, 79-85	2.4	36
162	. *IEEE Transactions on Automatic Control*, **1995**, 40, 656-669	5.9	35

161	Entropic and Displacement Interpolation: A Computational Approach Using the Hilbert Metric. *SIAM Journal on Applied Mathematics*, **2016**, 76, 2375-2396	1.8	34
160	Distances and Riemannian Metrics for Multivariate Spectral Densities. *IEEE Transactions on Automatic Control*, **2012**, 57, 1723-1735	5.9	34
159	Microstructure Imaging of Crossing (MIX) White Matter Fibers from diffusion MRI. *Scientific Reports* , **2016**, 6, 38927	4.9	34
158	Worst case analysis of nonlinear systems. *IEEE Transactions on Automatic Control*, **1999**, 44, 1180-1196	5.9	31
157	w-Stability of feedback systems. *Systems and Control Letters*, **1989**, 13, 271-277	2.4	30
156	Metrics for Power Spectra: An Axiomatic Approach. *IEEE Transactions on Signal Processing*, **2009**, 57, 859-867	4.8	29
155	. *IEEE Transactions on Automatic Control*, **1995**, 40, 516-518	5.9	28
154	Network curvature as a hallmark of brain structural connectivity. *Nature Communications*, **2019**, 10, 4937	17.4	27
153	Positive contraction mappings for classical and quantum Schrödinger systems. *Journal of Mathematical Physics*, **2015**, 56, 033301	1.2	25
152	Numerical solution of the optimal periodic control problem using differential flatness. *IEEE Transactions on Automatic Control*, **2004**, 49, 271-275	5.9	25
151	Diffusion Dynamics and Optimal Coupling in Multiplex Networks with Directed Layers. *Physical Review X*, **2018**, 8,	9.1	25
150	Signal estimation via selective harmonic amplification: MUSIC, Redux. *IEEE Transactions on Signal Processing*, **2000**, 48, 780-790	4.8	24
149	Differential stability and robust control of nonlinear systems. *Mathematics of Control, Signals, and Systems*, **1993**, 6, 289-306	1.3	23
148	Geometric Methods for Spectral Analysis. *IEEE Transactions on Signal Processing*, **2012**, 60, 1064-1074	4.8	22
147	A Convex Optimization Approach to ARMA Modeling. *IEEE Transactions on Automatic Control*, **2008**, 53, 1108-1119	5.9	22
146	On the computation of switching surfaces in optimal control: a Grobner basis approach. *IEEE Transactions on Automatic Control*, **2001**, 46, 534-540	5.9	22
145	On Matrix-Valued Monge-Kantorovich Optimal Mass Transport. *IEEE Transactions on Automatic Control*, **2015**, 60, 373-382	5.9	21
144	Matrix Optimal Mass Transport: A Quantum Mechanical Approach. *IEEE Transactions on Automatic Control*, **2018**, 63, 2612-2619	5.9	20

143	The Separation Principle in Stochastic Control, Redux. *IEEE Transactions on Automatic Control*, **2013**, 58, 2481-2494	5.9	20
142	A Constructive Algorithm for Sensitivity Optimization of Periodic Systems. *SIAM Journal on Control and Optimization*, **1987**, 25, 334-340	1.9	20
141	Optimal transport for Gaussian mixture models. *IEEE Access*, **2018**, 7, 6269-6278	3.5	20
140	Optimal Steering of a Linear Stochastic System to a Final Probability Distribution—Part III. *IEEE Transactions on Automatic Control*, **2018**, 63, 3112-3118	5.9	19
139	On the robust stabilizability of uncertain linear time-invariant plants using nonlinear time-varying controllers. *Automatica*, **1987**, 23, 617-624	5.7	19
138	Skew-prime polynomial matrices: The polynomial-model approach. *Linear Algebra and Its Applications*, **1983**, 50, 403-435	0.9	18
137	Fast cooling for a system of stochastic oscillators. *Journal of Mathematical Physics*, **2015**, 56, 113302	1.2	17
136	Uncertainty Bounds for Spectral Estimation. *IEEE Transactions on Automatic Control*, **2013**, 58, 1659-1673	5.9	17
135	Robust transport over networks. *IEEE Transactions on Automatic Control*, **2017**, 62, 4675-4682	5.9	16
134	The Inverse Problem of Analytic Interpolation With Degree Constraint and Weight Selection for Control Synthesis. *IEEE Transactions on Automatic Control*, **2010**, 55, 405-418	5.9	16
133	The Carathéodory–Fejér–Pisarenko Decomposition and Its Multivariable Counterpart. *IEEE Transactions on Automatic Control*, **2007**, 52, 212-228	5.9	16
132	Distribution Metrics and Image Segmentation. *Linear Algebra and Its Applications*, **2007**, 425, 663-672	0.9	16
131	Remarks on control design with degree constraint. *IEEE Transactions on Automatic Control*, **2006**, 51, 1150-1156	5.9	15
130	Robustness of a relaxation oscillator. *International Journal of Robust and Nonlinear Control*, **2000**, 10, 1005-1024	3.6	14
129	Vector-Valued Optimal Mass Transport. *SIAM Journal on Applied Mathematics*, **2018**, 78, 1682-1696	1.8	13
128	On the Covariance Completion Problem Under a Circulant Structure. *IEEE Transactions on Automatic Control*, **2011**, 56, 918-922	5.9	13
127	Linear fractional transformations and spectral factorization. *IEEE Transactions on Automatic Control*, **1986**, 31, 345-347	5.9	13
126	Stochastic Dynamical Modeling of Turbulent Flows. *Annual Review of Control, Robotics, and Autonomous Systems*, **2020**, 3, 195-219	11.8	13

125	On the definiteness of graph Laplacians with negative weights: Geometrical and passivity-based approaches **2016**,		13
124	Coping with model error in variational data assimilation using optimal mass transport. *Water Resources Research*, **2014**, 50, 5817-5830	5.4	12
123	Optimal steering of inertial particles diffusing anisotropically with losses **2015**,		12
122	On the Geometry of Covariance Matrices. *IEEE Signal Processing Letters*, **2013**, 20, 787-790	3.2	12
121	Signals and control aspects of optimal mass transport and the Boltzmann entropy **2010**,		11
120	On a large-gain theorem. *Systems and Control Letters*, **1997**, 32, 231-234	2.4	11
119	Optimal periodic control of a drug delivery system. *Computers and Chemical Engineering*, **2008**, 32, 2256-2262	4	11
118	An Intrinsic Metric for Power Spectral Density Functions. *IEEE Signal Processing Letters*, **2007**, 14, 561-563	3.2	11
117	Spectral Factorization and Nevanlinna–Pick Interpolation. *SIAM Journal on Control and Optimization*, **1987**, 25, 754-766	1.9	11
116	Measure-Valued Spline Curves: An Optimal Transport Viewpoint. *SIAM Journal on Mathematical Analysis*, **2018**, 50, 5947-5968	1.7	11
115	Validating Aircraft Models in the Gap Metric. *Journal of Aircraft*, **2014**, 51, 1665-1672	1.6	10
114	Low-Complexity Modeling of Partially Available Second-Order Statistics: Theory and an Efficient Matrix Completion Algorithm. *IEEE Transactions on Automatic Control*, **2017**, 62, 1368-1383	5.9	10
113	Feedback control and the arrow of time. *International Journal of Control*, **2010**, 83, 1325-1338	1.5	10
112	Flexible structure experiments at JPL and WPAFB: H∞ controller designs. *International Journal of Control*, **1993**, 58, 1-19	1.5	10
111	. *IEEE Transactions on Circuits and Systems*, **1989**, 36, 568-574		10
110	Linear Models Based on Noisy Data and the Frisch Scheme. *SIAM Review*, **2015**, 57, 167-197	7.4	9
109	An Efficient Algorithm for Matrix-Valued and Vector-Valued Optimal Mass Transport. *Journal of Scientific Computing*, **2018**, 77, 79-100	2.3	9
108	Upper and lower bounds for approximation in the gap metric. *IEEE Transactions on Automatic Control*, **1993**, 38, 946-951	5.9	9

107	Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. *IEEE Transactions on Automatic Control*, **2020**, 65, 3441-3456	5.9	9
106	Steering the Distribution of Agents in Mean-Field Games System. *Journal of Optimization Theory and Applications*, **2018**, 179, 332-357	1.6	9
105	Sparse factor analysis via likelihood and 1-regularization **2011**,		8
104	A new distribution metric for image segmentation **2008**,		8
103	Metric uncertainty and nonlinear feedback stabilization **1995**, 88-98		8
102	Robust Control of Feedback Systems with Combined Plant and Controller Uncertainty **1990**,		8
101	. *IEEE Transactions on Automatic Control*, **1988**, 33, 1161-1165	5.9	8
100	Stability Theory of Stochastic Models in Opinion Dynamics. *IEEE Transactions on Automatic Control*, **2020**, 65, 522-533	5.9	8
99	Likelihood Analysis of Power Spectra and Generalized Moment Problems. *IEEE Transactions on Automatic Control*, **2017**, 62, 4580-4592	5.9	7
98	Fractional SIR epidemiological models. *Scientific Reports*, **2020**, 10, 20882	4.9	7
97	Efficient Robust Routing for Single Commodity Network Flows. *IEEE Transactions on Automatic Control*, **2018**, 63, 2287-2294	5.9	7
96	Interpolation of matrices and matrix-valued densities: The unbalanced case. *European Journal of Applied Mathematics*, **2019**, 30, 458-480	1	7
95	Gradient flows in uncertainty propagation and filtering of linear Gaussian systems **2017**,		7
94	State covariances and the matrix completion problem **2013**,		7
93	Avoiding ambiguity in beamspace processing. *IEEE Signal Processing Letters*, **2005**, 12, 372-375	3.2	7
92	On a Schur-algorithm based approach to spectral factorization: connection with the Riccati equation. *Linear Algebra and Its Applications*, **1992**, 171, 233-247	0.9	7
91	Identification of linear systems: A graph point of view **1992**,		7
90	Wasserstein Geometry of Quantum States and Optimal Transport of Matrix-Valued Measures. *Lecture Notes in Control and Information Sciences - Proceedings*, **2018**, 139-150	0.2	7

89	Stochastic control and non-equilibrium thermodynamics: fundamental limits. *IEEE Transactions on Automatic Control*, **2020**, 65, 1	5.9	7
88	Stochastic Control Liaisons: Richard Sinkhorn Meets Gaspard Monge on a Schrödinger Bridge. *SIAM Review*, **2021**, 63, 249-313	7.4	7
87	Gradient Flows in Filtering and Fisher-Rao Geometry **2018**,		7
86	Matricial Wasserstein-1 Distance **2017**, 1, 14-19		6
85	An ADMM algorithm for matrix completion of partially known state covariances **2013**,		6
84	l/sub 2/ state-feedback control with a prescribed rate of exponential convergence. *IEEE Transactions on Automatic Control*, **1997**, 42, 1476-1481	5.9	6
83	Weight Selection in Feedback Design With Degree Constraints. *IEEE Transactions on Automatic Control*, **2008**, 53, 1951-1955	5.9	6
82	. *IEEE Transactions on Circuits and Systems*, **1989**, 36, 103-108		6
81	On a Schur-algorithm based approach to spectral factorization: State-space formulae. *Systems and Control Letters*, **1988**, 10, 123-129	2.4	6
80	On the matrix Monge–Kantorovich problem. *European Journal of Applied Mathematics*, **2020**, 31, 574-600	1	6
79	Relaxed Schrödinger bridges and robust network routing. *IEEE Transactions on Control of Network Systems*, **2020**, 7, 923-931	4	6
78	Metrics for Matrix-valued Measures via Test Functions **2014**,		5
77	Analytic Interpolation With a Degree Constraint for Matrix-Valued Functions. *IEEE Transactions on Automatic Control*, **2010**, 55, 1075-1088	5.9	5
76	The Inverse Problem of Analytic Interpolation with Degree Constraint **2006**,		5
75	Decomposition of Toeplitz Matrices via Convex Optimization. *IEEE Signal Processing Letters*, **2006**, 13, 537-540	3.2	5
74	Network Curvature as a Hallmark of Brain Structural Connectivity		5
73	Perturbation of system dynamics and the covariance completion problem **2016**,		5
72	Alternating direction optimization algorithms for covariance completion problems **2015**,		4

71	On time-reversibility of linear stochastic models. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 10403-10408		4
70	Completion of partially known turbulent flow statistics **2014**,		4
69	Signal analysis, moment problems & uncertainty measures		4
68	. *IEEE Transactions on Information Theory*, **1994**, 40, 584-588	2.8	4
67	Linear systems and robustness: a graph point of view **1992**, 114-121		4
66	Structured Covariances and Related Approximation Questions135-140		4
65	Maximal power output of a stochastic thermodynamic engine. *Automatica*, **2021**, 123, 109366	5.7	4
64	Prof. Rudolf Emil Kalman [Obituary]. *IEEE Control Systems*, **2017**, 37, 151-152	2.9	3
63	Steering state statistics with output feedback **2015**,		3
62	Weight Selection in Interpolation with a Dimensionality Constraint **2006**,		3
61	Tunable line spectral estimators based on state-covariance subspace analysis. *IEEE Transactions on Signal Processing*, **2006**, 54, 2662-2671	4.8	3
60	Two Alternative Views on Control Design with Degree Constraint		3
59	Robustness of a relaxation oscillator		3
58	Remarks on "Robustness analysis of nonlinear feedback systems: an input-output approach". *IEEE Transactions on Automatic Control*, **2001**, 46, 171-172	5.9	3
57	. *IEEE Transactions on Automatic Control*, **1995**, 40, 1142-1147	5.9	3
56	Topological approaches to robustness **1993**, 222-241		3
55	Geometric aspects of the Carathɘdory extension problem. *Linear Algebra and Its Applications*, **1994**, 203-204, 209-251	0.9	3
54	Toeplitz Covariance Matrices and the von Neumann Relative Entropy **2003**, 23-29		3

53	Covariance steering in zero-sum linear-quadratic two-player differential games **2019**,		3
52	Principles of Lossless Adjustable One-Ports. *IEEE Transactions on Automatic Control*, **2020**, 65, 252-262	5.9	3
51	Rotated Spectral Principal Component Analysis (rsPCA) for Identifying Dynamical Modes of Variability in Climate Systems. *Journal of Climate*, **2021**, 34, 715-736	4.4	3
50	Regularization and Interpolation of Positive Matrices. *IEEE Transactions on Automatic Control*, **2018**, 63, 1208-1212	5.9	3
49	Separation of system dynamics and line spectra via sparse representation **2010**,		2
48	Revisiting the separation principle in stochastic control **2012**,		2
47	Feedback control and the arrow of time **2008**,		2
46	Tracking with a new distribution metric in a particle filtering framework **2008**,		2
45	The Maximum Entropy Principle in the Absence of a Time-Arrow: Fractional-Pole Models. *IEEE Transactions on Information Theory*, **2007**, 53, 2841-2851	2.8	2
44	Global stability of periodic orbits in relay feedback systems		2
43	. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1990**, 38, 1815-1817		2
42	Robust Stabilization in the Gap Metric: Controller Design for Distributed Plants **1990**,		2
41	Interpolation of binary series based on Discrete-Time Markov Chain Models. *Water Resources Research*, **1987**, 23, 515-518	5.4	2
40	Metrics and Morphing of Power Spectra. *Lecture Notes in Control and Information Sciences*, **2008**, 125-135	0.5	2
39	Multi-marginal Schr□inger Bridges. *Lecture Notes in Computer Science*, **2019**, 725-732	0.9	2
38	Fractional SIR Epidemiological Models **2020**,		2
37	Optimal Mass Transport over Bridges. *Lecture Notes in Computer Science*, **2015**, 77-84	0.9	2
36	Brain Tissue Micro-Structure Imaging from Diffusion MRI Using Least Squares Variable Separation. *Mathematics and Visualization*, **2016**, 55-64	0.6	2

35	Geometry of correlation networks for studying the biology of cancer **2016**,		2
34	Opinion Dynamics over Influence Networks **2019**,		2
33	**2019**,		2
32	Statistical Learning in Wasserstein Space **2021**, 5, 899-904		2
31	Optimal Transport in Systems and Control. *Annual Review of Control, Robotics, and Autonomous Systems*, **2021**, 4, 89-113	11.8	2
30	Optimal Estimation With Missing Observations via Balanced Time-Symmetric Stochastic Models. *IEEE Transactions on Automatic Control*, **2017**, 62, 5590-5603	5.9	1
29	Rudolf E. Kalman's quest for algebraic characterizations of positivity. *Annual Reviews in Control*, **2018**, 45, 205-206	10.3	1
28	Dynamic Relations in Sampled Processes **2019**, 3, 144-149		1
27	Stochastic Bridges of Linear Systems. *IEEE Transactions on Automatic Control*, **2015**, 1-1	5.9	1
26	Matrix-valued Monge-Kantorovich optimal mass transport **2013**,		1
25	A new method for moving-average parameter estimation **2010**,		1
24	Metrics for multivariate power spectra **2012**,		1
23	The fractional integrator as a control design element **2007**,		1
22	Distances Between Time-Series and Their Autocorrelation Statistics **2007**, 113-122		1
21	Optimal Mass Transport for Problems in Control, Statistical Estimation, and Image Analysis **2012**, 311-324		1
20	A new approach to robust transportation over networks **2016**,		1
19	The Role of the Time-Arrow in Mean-Square Estimation of Stochastic Processes **2018**, 2, 85-90		0
18	Energy harvesting from anisotropic fluctuations. *Physical Review E*, **2021**, 104, 044101	2.4	0

17	Underdamped stochastic thermodynamic engines in contact with a heat bath with arbitrary temperature profile. *Physical Review E*, **2021**, 103, 062103	2.4	0
16	Controlling Uncertainty. *IEEE Control Systems*, **2021**, 41, 82-94	2.9	0
15	On the Relation Between Information and Power in Stochastic Thermodynamic Engines **2022**, 6, 434-439		0
14	The Wasserstein metric in Factor Analysis **2013**, 8-12		
13	Sparse Blind Source Separation via ℓ1-Norm Optimization. *Lecture Notes in Control and Information Sciences*, **2010**, 321-330	0.5	
12	Memories from My Gainesville Days as a Student of R.E. Kalman [Historical Perspectives]. *IEEE Control Systems*, **2010**, 30, 102-103	2.9	
11	Geometric concepts and models in power spectral analysis. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**, 42, 1529-1530		
10	Switching surfaces and groebner bases **1999**, 81-89		
9	The mixing of state statistics207-211		
8	Advances in High-Resolution Spectral Estimation. *Kluwer International Series in Engineering and Computer Science*, **2000**, 167-179		
7	Maximal Entropy for Reconstruction of Back Projection Images. *The IMA Volumes in Mathematics and Its Applications*, **2003**, 57-64	0.5	
6	Sparse Blind Source Deconvolution with Application to High Resolution Frequency Analysis **2010**, 187-201		
5	Regularized Transport Between Singular Covariance Matrices. *IEEE Transactions on Automatic Control*, **2021**, 66, 3339-3346	5.9	
4	On a Fejér–Riesz factorization of generalized trigonometric polynomials. *Communications in Information and Systems*, **2021**, 21, 371-384	0.8	
3	Fast and Asymptotic Steering to a Steady State for Networks Flows. *Lecture Notes in Computer Science*, **2021**, 860-868	0.9	
2	Some Personal Reminisces About Bruce Allen Francis [Historical Perspectives]. *IEEE Control Systems* , **2018**, 38, 93-95	2.9	
1	Macroscopic network circulation for planar graphs. *IEEE Transactions on Control of Network Systems* , **2022**, 1-1	4	