Yilun Shang

List of Publications by Year in Descending Order

163 papers	**2,260** citations	**27** h-index	**36** g-index
170 ext. papers	**2,742** ext. citations	**2.2** avg, IF	**6.93** L-index

#	Paper	IF	Citations
163	Fault-Tolerant Metric Dimension of Circulant Graphs. *Mathematics*, **2022**, 10, 124	2.3	4
162	A system model of three-body interactions in complex networks: consensus and conservation. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2022**, 478,	2.4	2
161	Sombor index and degree-related properties of simplicial networks. *Applied Mathematics and Computation*, **2022**, 419, 126881	2.7	10
160	Scaled consensus and reference tracking in multiagent networks with constraints. *IEEE Transactions on Network Science and Engineering*, **2022**, 1-1	4.9	1
159	On the spectral radius and energy of signless Laplacian matrix of digraphs.. *Heliyon*, **2022**, 8, e09186	3.6	0
158	Percolation of interdependent networks with limited knowledge.. *Physical Review E*, **2022**, 105, 044305	2.4	0
157	Sufficient Conditions for a Graph to Be k-Connected, β-Deficient, β-Hamiltonian and β-Independent in Terms of the Forgotten Topological Index. *Mathematics*, **2022**, 10, 1802	2.3	
156	On g-Noncommuting Graph of a Finite Group Relative to Its Subgroups. *Mathematics*, **2021**, 9, 3147	2.3	2
155	On the Second-Largest Reciprocal Distance Signless Laplacian Eigenvalue. *Mathematics*, **2021**, 9, 512	2.3	1
154	Percolation of attack with tunable limited knowledge. *Physical Review E*, **2021**, 103, 042316	2.4	5
153	Immunization of networks with limited knowledge and temporary immunity. *Chaos*, **2021**, 31, 053117	3.3	2
152	Some Extremal Graphs with Respect to Sombor Index. *Mathematics*, **2021**, 9, 1202	2.3	10
151	A Note on the Majority Dynamics in Inhomogeneous Random Graphs. *Results in Mathematics*, **2021**, 76, 1	0.9	2
150	Resilient Consensus for Robust Multiplex Networks with Asymmetric Confidence Intervals. *IEEE Transactions on Network Science and Engineering*, **2021**, 8, 65-74	4.9	4
149	Consensus formation in networks with neighbor-dependent synergy and observer effect. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105632	3.7	6
148	Resilient group consensus in heterogeneously robust networks with hybrid dynamics. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 1456-1469	2.3	3
147	Resilient Consensus for Expressed and Private Opinions. *IEEE Transactions on Cybernetics*, **2021**, 51, 318-331	11.2	17

146	Median-based resilient consensus over time-varying random networks. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 1-1	3.5	0
145	On Sombor Index. *Symmetry*, **2021**, 13, 140	2.7	26
144	On Maximal Distance Energy. *Mathematics*, **2021**, 9, 360	2.3	
143	On Laplacian Eigenvalues of the Zero-Divisor Graph Associated to the Ring of Integers Modulo n. *Mathematics*, **2021**, 9, 482	2.3	7
142	On r-Noncommuting Graph of Finite Rings. *Axioms*, **2021**, 10, 233	1.6	1
141	Common Neighborhood Energy of Commuting Graphs of Finite Groups. *Symmetry*, **2021**, 13, 1651	2.7	3
140	Generalized k-cores of networks under attack with limited knowledge. *Chaos, Solitons and Fractals*, **2021**, 152, 111305	9.3	5
139	Nordhaus Gaddum-Type Results for the Steiner Gutman Index of Graphs. *Symmetry*, **2020**, 12, 1711	2.7	5
138	Sharp Bounds on (Generalized) Distance Energy of Graphs. *Mathematics*, **2020**, 8, 426	2.3	4
137	MULTI-HOP GENERALIZED CORE PERCOLATION ON COMPLEX NETWORKS. *International Journal of Modeling, Simulation, and Scientific Computing*, **2020**, 23, 2050001	0.8	2
136	On the Generalized Distance Energy of Graphs. *Mathematics*, **2020**, 8, 17	2.3	7
135	Resilient Cluster Consensus of Multiagent Systems. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2020**, 1-11	7.3	4
134	Generalized k-core percolation on correlated and uncorrelated multiplex networks. *Physical Review E*, **2020**, 101, 042306	2.4	7
133	Generalized K-Core Percolation in Networks with Community Structure. *SIAM Journal on Applied Mathematics*, **2020**, 80, 1272-1289	1.8	9
132	The Generalized Distance Spectrum of the Join of Graphs. *Symmetry*, **2020**, 12, 169	2.7	7
131	Consensus and Clustering of Expressed and Private Opinions in Dynamical Networks Against Attacks. *IEEE Systems Journal*, **2020**, 14, 2078-2084	4.3	9
130	Resilient consensus in multi-agent systems with state constraints. *Automatica*, **2020**, 122, 109288	5.7	11
129	Longest distance of a non-uniform dispersion process on the infinite line. *Information Processing Letters*, **2020**, 164, 106008	0.8	1

128	Estrada Index and Laplacian Estrada Index of Random Interdependent Graphs. *Mathematics*, **2020**, 8, 1063	2.3	3
127	. *IEEE Access*, **2020**, 8, 182307-182319	3.5	2
126	Resilient interval consensus in robust networks. *International Journal of Robust and Nonlinear Control*, **2020**, 30, 7783-7790	3.6	7
125	Finite-time median-related group consensus over directed networks. *International Journal of Control*, **2020**, 93, 1485-1498	1.5	3
124	Consensus of Hybrid Multi-Agent Systems With Malicious Nodes. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2020**, 67, 685-689	3.5	37
123	On the Structural Balance Dynamics Under Perceived Sentiment **2020**, 46, 717-724		5
122	Isoperimetric Numbers of Randomly Perturbed Intersection Graphs. *Symmetry*, **2019**, 11, 452	2.7	1
121	Super Connectivity of Erdš–Ršyi Graphs. *Mathematics*, **2019**, 7, 267	2.3	1
120	Attack robustness and stability of generalized k-cores. *New Journal of Physics*, **2019**, 21, 093013	2.9	12
119	Merging the Spectral Theories of Distance Estrada and Distance Signless Laplacian Estrada Indices of Graphs. *Mathematics*, **2019**, 7, 995	2.3	7
118	Strong Equality of Perfect Roman and Weak Roman Domination in Trees. *Mathematics*, **2019**, 7, 997	2.3	5
117	Bounds for the Generalized Distance Eigenvalues of a Graph. *Symmetry*, **2019**, 11, 1529	2.7	7
116	On Generalized Distance Gaussian Estrada Index of Graphs. *Symmetry*, **2019**, 11, 1276	2.7	8
115	Subgraph Robustness of Complex Networks Under Attacks. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2019**, 49, 821-832	7.3	48
114	Scaled consensus of switched multi-agent systems. *IMA Journal of Mathematical Control and Information*, **2019**, 36, 639-657	1.1	16
113	Consensus in topologically interacting swarms under communication constraints and time-delays. *Nonlinear Dynamics*, **2018**, 93, 1287-1300	5	18
112	Opinion formation in multiplex networks with general initial distributions. *Scientific Reports*, **2018**, 8, 2852	4.9	13
111	Fixed-time group consensus for multi-agent systems with non-linear dynamics and uncertainties. *IET Control Theory and Applications*, **2018**, 12, 395-404	2.5	34

110	Finite-Time Scaled Consensus in Discrete-Time Networks of Agents. *Asian Journal of Control*, **2018**, 20, 2351-2356	1.7	5
109	Hybrid consensus for averager–copier–voter networks with non-rational agents. *Chaos, Solitons and Fractals*, **2018**, 110, 244-251	9.3	31
108	False Positive and False Negative Effects on Network Attacks. *Journal of Statistical Physics*, **2018**, 170, 141-164	1.5	19
107	A note on the H index in random networks. *Journal of Mathematical Sociology*, **2018**, 42, 77-82	1.2	1
106	Percolation on random networks with proliferation. *International Journal of Modern Physics B*, **2018**, 32, 1850359	1.1	3
105	IEEE Access Special Section Editorial: Recent Developments in Consensus Problems for Complex Networked Systems. *IEEE Access*, **2018**, 6, 60993-60995	3.5	1
104	Resilient consensus of switched multi-agent systems. *Systems and Control Letters*, **2018**, 122, 12-18	2.4	60
103	Lower Bounds for Gaussian Estrada Index of Graphs. *Symmetry*, **2018**, 10, 325	2.7	13
102	Resilient Multiscale Coordination Control against Adversarial Nodes. *Energies*, **2018**, 11, 1844	3.1	47
101	Limit of a nonpreferential attachment multitype network model. *International Journal of Modern Physics B*, **2017**, 31, 1750026	1.1	6
100	Consensus in averager-copier-voter networks of moving dynamical agents. *Chaos*, **2017**, 27, 023116	3.3	20
99	Robustness of non-interdependent and interdependent networks against dependent and adaptive attacks. *Physica A: Statistical Mechanics and Its Applications*, **2017**, 482, 713-727	3.3	8
98	Finite-time cluster average consensus for networks via distributed iterations. *International Journal of Control, Automation and Systems*, **2017**, 15, 933-938	2.9	10
97	Clustering coefficients of large networks. *Information Sciences*, **2017**, 382-383, 350-358	7.7	30
96	Leader-Follower Fixed-Time Group Consensus Control of Multiagent Systems under Directed Topology. *Complexity*, **2017**, 2017, 1-9	1.6	33
95	Fixed-Time Group Tracking Control With Unknown Inherent Nonlinear Dynamics. *IEEE Access*, **2017**, 5, 12833-12842	3.5	34
94	Finite-time scaled consensus through parametric linear iterations. *International Journal of Systems Science*, **2017**, 48, 2033-2040	2.3	21
93	Subspace confinement for switched linear systems. *Forum Mathematicum*, **2017**, 29,	0.6	9

92	Lie algebraic discussion for affinity based information diffusion in social networks. *Open Physics*, **2017**, 15, 705-711	1.3	48
91	On the Delayed Scaled Consensus Problems. *Applied Sciences (Switzerland)*, **2017**, 7, 713	2.6	35
90	Further Results on Distance Estrada Index of Random Graphs. *Bulletin of the Malaysian Mathematical Sciences Society*, **2016**, 41, 537	1.2	8
89	On the likelihood of forests. *Physica A: Statistical Mechanics and Its Applications*, **2016**, 456, 157-166	3.3	16
88	Finite-Time Weighted Average Consensus and Generalized Consensus Over a Subset. *IEEE Access*, **2016**, 4, 2615-2620	3.5	21
87	Consensus seeking over Markovian switching networks with time-varying delays and uncertain topologies. *Applied Mathematics and Computation*, **2016**, 273, 1234-1245	2.7	37
86	Bounding Extremal Degrees of Edge-Independent Random Graphs Using Relative Entropy. *Entropy*, **2016**, 18, 53	2.8	8
85	Groupies in multitype random graphs. *SpringerPlus*, **2016**, 5, 989		4
84	Localized recovery of complex networks against failure. *Scientific Reports*, **2016**, 6, 30521	4.9	35
83	Effect of link oriented self-healing on resilience of networks. *Journal of Statistical Mechanics: Theory and Experiment*, **2016**, 2016, 083403	1.9	9
82	A combinatorial necessary and sufficient condition for cluster consensus. *Neurocomputing*, **2016**, 216, 611-616	5.4	19
81	On the number of spanning trees, the Laplacian eigenvalues, and the Laplacian Estrada index of subdivided-line graphs. *Open Mathematics*, **2016**, 14, 641-648	0.8	14
80	Degree distribution dynamics for disease spreading with individual awareness. *Journal of Systems Science and Complexity*, **2015**, 28, 96-104	1	19
79	Impact of self-healing capability on network robustness. *Physical Review E*, **2015**, 91, 042804	2.4	25
78	On the Hamiltonicity of random bipartite graphs. *Indian Journal of Pure and Applied Mathematics*, **2015**, 46, 163-173	0.3	6
77	A Note on the Commutativity of Prime Near-rings. *Algebra Colloquium*, **2015**, 22, 361-366	0.2	14
76	Couple-group consensus of continuous-time multi-agent systems under Markovian switching topologies. *Journal of the Franklin Institute*, **2015**, 352, 4826-4844	4	44
75	The Estrada index of evolving graphs. *Applied Mathematics and Computation*, **2015**, 250, 415-423	2.7	11

74	Distance Estrada index of random graphs. *Linear and Multilinear Algebra*, **2015**, 63, 466-471	0.7	13
73	Deffuant model of opinion formation in one-dimensional multiplex networks. *Journal of Physics A: Mathematical and Theoretical*, **2015**, 48, 395101	2	35
72	Estrada and L-Estrada Indices of Edge-Independent Random Graphs. *Symmetry*, **2015**, 7, 1455-1462	2.7	12
71	Estrada Index of Random Bipartite Graphs. *Symmetry*, **2015**, 7, 2195-2205	2.7	7
70	Laplacian Estrada and normalized Laplacian Estrada indices of evolving graphs. *PLoS ONE*, **2015**, 10, e0123426	3.7	21
69	Consensus of Noisy Multiagent Systems with Markovian Switching Topologies and Time-Varying Delays. *Mathematical Problems in Engineering*, **2015**, 2015, 1-13	1.1	5
68	Group consensus of multi-agent systems in directed networks with noises and time delays. *International Journal of Systems Science*, **2015**, 46, 2481-2492	2.3	51
67	Inhomogeneous Long-Range Percolation on the Hierarchical Lattice. *Reports on Mathematical Physics*, **2015**, 76, 53-61	0.8	2
66	Global stability of disease-free equilibria in a two-group SI model with feedback control. *Nonlinear Analysis: Modelling and Control*, **2015**, 20, 501-508	1.3	18
65	Analytical Solution for an In-host Viral Infection Model with Time-inhomogeneous Rates. *Acta Physica Polonica B*, **2015**, 46, 1567	1.9	46
64	Influence of the number of topologically interacting neighbors on swarm dynamics. *Scientific Reports*, **2014**, 4, 4184	4.9	60
63	Continuous-time average consensus under dynamically changing topologies and multiple time-varying delays. *Applied Mathematics and Computation*, **2014**, 244, 457-466	2.7	21
62	An agent based model for opinion dynamics with random confidence threshold. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 3766-3777	3.7	40
61	Consensus formation of two-level opinion dynamics. *Acta Mathematica Scientia*, **2014**, 34, 1029-1040	0.7	17
60	Geometric assortative growth model for small-world networks. *Scientific World Journal, The*, **2014**, 2014, 759391	2.2	8
59	Consensus reaching in swarms ruled by a hybrid metric-topological distance. *European Physical Journal B*, **2014**, 87, 1	1.2	30
58	A Note on the Warmth of Random Graphs with Given Expected Degrees. *International Journal of Mathematics and Mathematical Sciences*, **2014**, 2014, 1-4	0.8	3
57	Vulnerability of networks: fractional percolation on random graphs. *Physical Review E*, **2014**, 89, 012813	2.4	32

56	Unveiling robustness and heterogeneity through percolation triggered by random-link breakdown. *Physical Review E*, **2014**, 90, 032820	2.4	22
55	Average consensus in multi-agent systems with uncertain topologies and multiple time-varying delays. *Linear Algebra and Its Applications*, **2014**, 459, 411-429	0.9	30
54	Group consensus in generic linear multi-agent systems with inter-group non-identical inputs. *Cogent Engineering*, **2014**, 1, 947761	1.5	9
53	More on the normalized Laplacian Estrada index. *Applicable Analysis and Discrete Mathematics*, **2014**, 8, 346-357	1	7
52	Group pinning consensus under fixed and randomly switching topologies with acyclic partition. *Networks and Heterogeneous Media*, **2014**, 9, 553-573	1.6	23
51	Modeling epidemic spread with awareness and heterogeneous transmission rates in networks. *Journal of Biological Physics*, **2013**, 39, 489-500	1.6	42
50	Mixed SI (R) epidemic dynamics in random graphs with general degree distributions. *Applied Mathematics and Computation*, **2013**, 219, 5042-5048	2.7	17
49	L 1 group consensus of multi-agent systems with stochastic inputs under directed interaction topology. *International Journal of Control*, **2013**, 86, 1-8	1.5	18
48	group consensus of multi-agent systems with switching topologies and stochastic inputs. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2013**, 377, 1582-1586	2.3	34
47	Large dicliques in a directed inhomogeneous random graph. *International Journal of Computer Mathematics*, **2013**, 90, 445-456	1.2	8
46	Consensus Recovery from Intentional Attacks in Directed Nonlinear Multi-agent Systems. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2013**, 14,	1.8	11
45	ESTRADA INDEX OF GENERAL WEIGHTED GRAPHS. *Bulletin of the Australian Mathematical Society*, **2013**, 88, 106-112	0.4	11
44	DISCRETE-TIME EPIDEMIC DYNAMICS WITH AWARENESS IN RANDOM NETWORKS. *International Journal of Biomathematics*, **2013**, 06, 1350007	1.8	18
43	Continuity of a percolation function on the hierarchical group. *Journal of Interdisciplinary Mathematics*, **2013**, 16, 235-244	1.2	
42	Deffuant model with general opinion distributions: First impression and critical confidence bound. *Complexity*, **2013**, 19, 38-49	1.6	48
41	Non-Hyperbolicity of Random Graphs with Given Expected Degrees. *Stochastic Models*, **2013**, 29, 451-462	0.5	24
40	Measuring degree-dependent failure in scale-free networks of bipartite structure. *International Journal of Simulation and Process Modelling*, **2013**, 8, 74	0.4	
39	Lower bounds for the Estrada index using mixing time and Laplacian spectrum. *Rocky Mountain Journal of Mathematics*, **2013**, 43,	1.4	8

38	A Note on the Perturbation of Mixed Percolation on the Hierarchical Group. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **2013**, 68, 475-478	1.4	2
37	Optimal Control Strategies for Virus Spreading in Inhomogeneous Epidemic Dynamics. *Canadian Mathematical Bulletin*, **2013**, 56, 621-629	0.6	14
36	Phase transition in long-range percolation on bipartite hierarchical lattices. *Scientific World Journal, The*, **2013**, 2013, 172393	2.2	1
35	Sandwich Theorem of Cover Times. *ISRN Probability and Statistics*, **2013**, 2013, 1-3		
34	The Limit Behavior of a Stochastic Logistic Model with Individual Time-Dependent Rates. *Journal of Mathematics*, **2013**, 2013, 1-7	1.2	10
33	SEIR Epidemic Dynamics in Random Networks. *ISRN Epidemiology*, **2013**, 2013, 1-5		7
32	Joint probability generating function for degrees of active/passive random intersection graphs. *Frontiers of Mathematics in China*, **2012**, 7, 117-124	0.8	5
31	Distinct Clusterings and Characteristic Path Lengths in Dynamic Small-World Networks with Identical Limit Degree Distribution. *Journal of Statistical Physics*, **2012**, 149, 505-518	1.5	20
30	A remark on the spectra of random graphs with given expected degrees. *Journal of Discrete Mathematical Sciences and Cryptography*, **2012**, 15, 317-321	1.7	2
29	Lack of Gromov-hyperbolicity in small-world networks **2012**, 10, 1152-1158		32
28	Biased edge failure in scale-free networks based on natural connectivity. *Indian Journal of Physics*, **2012**, 86, 485-488	1.4	27
27	Finite-time consensus for multi-agent systems with fixed topologies. *International Journal of Systems Science*, **2012**, 43, 499-506	2.3	67
26	DISTRIBUTION DYNAMICS FOR SIS MODEL ON RANDOM NETWORKS. *Journal of Biological Systems*, **2012**, 20, 213-220	1.6	6
25	Mean Commute Time for Random Walks on Hierarchical Scale-Free Networks. *Internet Mathematics*, **2012**, 8, 321-337	0	11
24	Uniqueness of the Infinite Component for Percolation on a Hierarchical Lattice **2012**, 2012, 1-6		
23	Multi-Type Directed Scale-Free Percolation. *Communications in Theoretical Physics*, **2012**, 57, 701-716	2.4	9
22	Fast distributed consensus seeking in large-scale sensor networks via shortcuts. *International Journal of Computational Science and Engineering*, **2012**, 7, 121	0.4	8
21	Percolation in a Hierarchical Lattice. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **2012**, 67, 225-229	1.4	10

#	Reference		
20	A sharp threshold for rainbow connection in small-world networks. *Miskolc Mathematical Notes*, **2012**, 13, 493	2.1	4
19	A central limit theorem for randomly indexed m-dependent random variables. *Filomat*, **2012**, 26, 713-717	0.7	11
18	A Note on the Central Limit Theorems for Dependent Random Variables. *ISRN Probability and Statistics*, **2012**, 2012, 1-10		3
17	Classical Random Graphs with Unbounded Expected Degrees are Locally Scale-Free. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **2012**, 67, 61-64	1.4	1
16	Estimation of the Shortest Average Distance in Bipartite Networks with Given Density. *Journal of the Physical Society of Japan*, **2011**, 80, 055001	1.5	3
15	A note on the 2-connectivity in one-dimensional ad hoc networks. *Science China Information Sciences*, **2011**, 54, 123-128	3.4	2
14	Asymptotic behaviour of estimates of link probability in random networks. *Reports on Mathematical Physics*, **2011**, 67, 255-257	0.8	2
13	Perturbation results for the Estrada index in weighted networks. *Journal of Physics A: Mathematical and Theoretical*, **2011**, 44, 075003	2	26
12	L-hop percolation on networks with arbitrary degree distributions and its applications. *Physical Review E*, **2011**, 84, 031113	2.4	18
11	On the Isolated Vertices and Connectivity in Random Intersection Graphs. *International Journal of Combinatorics*, **2011**, 2011, 1-9		5
10	Robustness of scale-free networks under attack with tunable grey information. *Europhysics Letters*, **2011**, 95, 28005	1.6	20
9	The natural connectivity of colored random graphs. *Creative Mathematics and Informatics*, **2011**, 20, 197-202		2
8	Central Limit Theorem for the Sum of a Random Number of Dependent Random Variables. *Asian Journal of Mathematics & Statistics*, **2011**, 4, 168-173	0	2
7	Groupies in random bipartite graphs. *Applicable Analysis and Discrete Mathematics*, **2010**, 4, 278-283	1	6
6	Degree Distributions in General Random Intersection Graphs. *Electronic Journal of Combinatorics*, **2010**, 17,	1.1	14
5	Connectivity in a random interval graph with access points. *Information Processing Letters*, **2009**, 109, 446-449	0.8	6
4	On consensus of nonlinear multi-agent systems under directed interaction topologies **2009**,		4
3	Exponential random geometric graph process models for mobile wireless networks **2009**,		5

List of Publications

2   Lower bounds for the Estrada index. *Electronic Journal of Linear Algebra*,23,   1.6   11

1   Interval consensus of switched multiagent systems. *International Journal of Systems Science*,1-12   2.3   2