Sifeng Liu

List of Publications by Year in Descending Order

122 papers	2,968 citations	28 h-index	50 g-index
128 ext. papers	3,768 ext. citations	3.9 avg, IF	6.06 L-index

#	Paper	IF	Citations
122	A demand-based framework for resilience assessment of multistate networks under disruptions. *Reliability Engineering and System Safety*, **2022**, 222, 108423	6.3	2
121	PS-G-GERT effectiveness evaluation model of link-based GEO satellite communication constellation under poor information background. *China Communications*, **2022**, 1-21	3	
120	Optimal Age Replacement Policies with Multiple Missions for Multi-state Systems. *Computers and Industrial Engineering*, **2021**, 163, 107777	6.4	0
119	Predicting the trend of infectious diseases using grey self-memory system model: a case study of the incidence of tuberculosis. *Public Health*, **2021**, 201, 108-114	4	1
118	A novel approach to three-way conflict analysis and resolution with Pythagorean fuzzy information. *Information Sciences*, **2021**, 584, 65-65	7.7	4
117	Exploring the Philosophical Foundations of Grey Systems Theory: Subjective Processes, Information Extraction and Knowledge Formation. *Foundations of Science*, **2021**, 26, 371-404	0.8	7
116	Reliability modelling for multi-component systems subject to stochastic deterioration and generalized cumulative shock damages. *Reliability Engineering and System Safety*, **2021**, 205, 107260	6.3	12
115	Optimal position of supply chain delivery window with risk-averse suppliers: A CVaR optimization approach. *International Journal of Production Economics*, **2021**, 232, 107989	9.3	6
114	Scheduling optimal replacement policies for a stochastically deteriorating system subject to two types of shocks. *ISA Transactions*, **2021**, 112, 292-301	5.5	4
113	Forecasting cocoa production of six major producers through ARIMA and grey models. *Grey Systems Theory and Application*, **2021**, 11, 434-462	1.6	1
112	Micro-macro dynamics of the online opinion evolution: An asynchronous network model approach. *Concurrency Computation Practice and Experience*, **2021**, 33, e5981	1.4	1
111	An agent-based clustering framework for reliable satellite networks. *Reliability Engineering and System Safety*, **2021**, 212, 107630	6.3	7
110	A novel grey multi-criteria three-way decisions model and its application. *Computers and Industrial Engineering*, **2021**, 158, 107405	6.4	8
109	Resilient communication model for satellite networks using clustering technique. *Reliability Engineering and System Safety*, **2021**, 215, 107850	6.3	0
108	A reliable framework for satellite networks achieving energy requirements. *Reliability Engineering and System Safety*, **2021**, 216, 107939	6.3	0
107	A multi-stage imperfect maintenance strategy for multi-state systems with variable user demands. *Computers and Industrial Engineering*, **2020**, 145, 106508	6.4	9
106	An optimal delay routing algorithm considering delay variation in the LEO satellite communication network. *Computer Networks*, **2020**, 173, 107166	5.4	6

105	Modeling ageing effects for multi-state systems with multiple components subject to competing and dependent failure processes. *Reliability Engineering and System Safety*, **2020**, 199, 106890	6.3	13
104	Time-based replacement policies for a fault tolerant system subject to degradation and two types of shocks. *Quality and Reliability Engineering International*, **2020**, 36, 2338-2350	2.6	6
103	Exploring Grey Systems Theory-Based Methods and Applications in Sustainability Studies: A Systematic Review Approach. *Sustainability*, **2020**, 12, 4437	3.6	17
102	Reliability modeling and optimal random preventive maintenance policy for parallel systems with damage self-healing. *Computers and Industrial Engineering*, **2020**, 142, 106359	6.4	17
101	DISTINGUISHING COEFFICIENT DRIVEN SENSITIVITY ANALYSIS OF GRA MODEL FOR INTELLIGENT DECISIONS: APPLICATION IN PROJECT MANAGEMENT. *Technological and Economic Development of Economy*, **2020**, 26, 621-641	4.7	18
100	A greyness reduction framework for prediction of grey heterogeneous data. *Soft Computing*, **2020**, 24, 17913-17929	3.5	2
99	Modeling ageing effects in the context of continuous degradation and random shock. *Computers and Industrial Engineering*, **2020**, 145, 106539	6.4	7
98	Forecast of biofuel production and consumption in top CO2 emitting countries using a novel grey model. *Journal of Cleaner Production*, **2020**, 276, 123997	10.3	21
97	Reliability Improvement Allocation Method Considering Common Cause Failures. *IEEE Transactions on Reliability*, **2020**, 69, 571-580	4.6	7
96	Exploring the Philosophical Paradigm of Grey Systems Theory as a Postmodern Theory. *Foundations of Science*, **2020**, 25, 905-925	0.8	10
95	Reliability Allocation for Series-Parallel Systems subject to Potential Propagated Failures. *Quality and Reliability Engineering International*, **2020**, 36, 565-576	2.6	2
94	Grey linear programming: a survey on solving approaches and applications. *Grey Systems Theory and Application*, **2020**, 11, 110-135	1.6	3
93	Grey modeling for thermal spray processing parameter analysis. *Grey Systems Theory and Application*, **2020**, 10, 265-279	1.6	5
92	Study on mechanism and filter efficacy of AGO/IAGO in the frequency domain. *Grey Systems Theory and Application*, **2020**, 11, 1-21	1.6	1
91	Forecasting key indicators of China's inbound and outbound tourism: optimistic□essimistic method. *Grey Systems Theory and Application*, **2020**, 11, 265-287	1.6	10
90	Exploring the Human Cognitive Capacity in Understanding Systems: A Grey Systems Theory Perspective. *Foundations of Science*, **2020**, 25, 803-825	0.8	12
89	Grey Absolute Decision Analysis (GADA) Method for Multiple Criteria Group Decision-Making Under Uncertainty. *International Journal of Fuzzy Systems*, **2020**, 22, 1073-1090	3.6	18
88	Reliability Variation and Optimal Age Replacement Schedule of Compensated Discrete Multi-state Systems **2019**,		2

87	Exploring Grey Systems Theory-Based Methods and Applications in Analyzing Socio-Economic Systems. *Sustainability*, **2019**, 11, 4192	3.6	20
86	Dynamic multi-attribute group decision making method based on 4-dimensional matrix grey target model. *Journal of Intelligent and Fuzzy Systems*, **2019**, 37, 1043-1053	1.6	1
85	. *IEEE Access*, **2019**, 7, 60885-60896	3.5	26
84	A model based on hidden graphic evaluation and review technique network to evaluate reliability and lifetime of multi-state systems. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, **2019**, 233, 369-378	0.8	4
83	Systems Evaluation through New Grey Relational Analysis Approach: An Application on Thermal Conductivity□Petrophysical Parameters□Relationships. *Processes*, **2019**, 7, 348	2.9	18
82	Optimal periodic maintenance policies for a parallel redundant system with component dependencies. *Computers and Industrial Engineering*, **2019**, 138, 106133	6.4	12
81	Reliability variation of multi-state components with inertial effect of deteriorating output performances. *Reliability Engineering and System Safety*, **2019**, 186, 176-185	6.3	12
80	A novel GREY-ASMAA model for reliability growth evaluation in the large civil aircraft test flight phase. *Grey Systems Theory and Application*, **2019**, 10, 46-55	1.6	1
79	Grey relational evaluation of impact and control of malaria in Sub-Saharan Africa. *Grey Systems Theory and Application*, **2019**, 9, 415-431	1.6	7
78	Uncertainty and grey data analytics. *Marine Economics and Management*, **2019**, 2, 73-86	1.5	7
77	A comparative analysis of grey ranking approaches. *Grey Systems Theory and Application*, **2019**, 9, 472-487	1.6	7
76	Patients' satisfaction and public and private sectors' health care service quality in Pakistan: Application of grey decision analysis approaches. *International Journal of Health Planning and Management*, **2019**, 34, e168-e182	2.2	39
75	A new method to mitigate data fluctuations for time series prediction. *Applied Mathematical Modelling*, **2019**, 65, 390-407	4.5	9
74	Comparative analysis of properties of weakening buffer operators in time series prediction models. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 68, 257-285	3.7	9
73	A novel method for solving linear programming with grey parameters. *Journal of Intelligent and Fuzzy Systems*, **2019**, 36, 161-172	1.6	25
72	A prediction method for plasma concentration by using a nonlinear grey Bernoulli combined model based on a self-memory algorithm. *Computers in Biology and Medicine*, **2019**, 105, 81-91	7	10
71	Reliability Assessment for Uncertain Multi-state Systems: An Extension of Fuzzy Universal Generating Function. *International Journal of Fuzzy Systems*, **2019**, 21, 945-953	3.6	9
70	Using the fractional order method to generalize strengthening buffer operator and weakening buffer operator. *IEEE/CAA Journal of Automatica Sinica*, **2018**, 5, 1074-1078	7	8

69	Evaluation of outpatient satisfaction and service quality of Pakistani healthcare projects. *Grey Systems Theory and Application*, **2018**, 8, 462-480	1.6	39
68	A Critical Review: Shape Optimization of Welded Plate Heat Exchangers based on Grey Correlation Theory. *Applied Thermal Engineering*, **2018**, 144, 593-599	5.8	23
67	On modeling mechanisms and applicable ranges of grey incidence analysis models. *Grey Systems Theory and Application*, **2018**, 8, 448-461	1.6	4
66	Balancing reliability and maintenance cost rate of multi-state components with fault interval omission. *Eksploatacja I Niezawodnosc*, **2018**, 21, 37-45	3.5	8
65	Predicting the research output/growth of selected countries: application of Even GM (1, 1) and NDGM models. *Scientometrics*, **2018**, 115, 395-413	3	52
64	Optimal due date quoting for a risk-averse decision-maker under CVaR. *International Journal of Production Research*, **2018**, 56, 1934-1959	7.8	7
63	Suitable computerized maintenance management system selection using grey group TOPSIS and fuzzy group VIKOR: A case study. *Decision Science Letters*, **2018**, 341-358	1.3	19
62	Explanation of terms of Grey models for decision-making. *Grey Systems Theory and Application*, **2018**, 8, 382-387	1.6	6
61	Grey-fuzzy solution for multi-objective linear programming with interval coefficients. *Grey Systems Theory and Application*, **2018**, 8, 312-327	1.6	18
60	An investigation into the relationship between China's economic development and carbon dioxide emissions. *Climate and Development*, **2017**, 9, 66-79	4.4	4
59	Explanation of terms of grey incidence analysis models. *Grey Systems Theory and Application*, **2017**, 7, 136-142	1.6	18
58	Explanation of terms of grey forecasting models. *Grey Systems Theory and Application*, **2017**, 7, 123-128	1.6	9
57	Evaluating remanufacturing industry of China using an improved grey fixed weight clustering method-a case of Jiangsu Province. *Journal of Cleaner Production*, **2017**, 142, 2006-2020	10.3	22
56	Key indices of the remanufacturing industry in China using a combined method of grey incidence analysis and grey clustering. *Journal of Cleaner Production*, **2017**, 168, 1348-1357	10.3	25
55	A self-adaptive intelligence gray prediction model with the optimal fractional order accumulating operator and its application. *Mathematical Methods in the Applied Sciences*, **2017**, 40, 7843-7857	2.3	46
54	**2017**,		13
53	Using grey Holt□Winters model to predict the air quality index for cities in China. *Natural Hazards*, **2017**, 88, 1003-1012	3	25
52	Schedule risk analysis for new-product development: The GERT method extended by a characteristic function. *Reliability Engineering and System Safety*, **2017**, 167, 464-473	6.3	20

51	Algorithm rules of interval grey numbers based on different kernel and the degree of greyness of grey numbers. *Grey Systems Theory and Application*, **2017**, 7, 168-178	1.6	5
50	Grey Data Analysis. *Computational Risk Management*, **2017**,	0.4	108
49	Control and optimization of quality cost based on discrete grey forecasting model **2017**,		2
48	Using the GM(1,1) model cluster to forecast global oil consumption. *Grey Systems Theory and Application*, **2017**, 7, 286-296	1.6	8
47	Study of a discrete grey forecasting model based on the quality cost characteristic curve. *Grey Systems Theory and Application*, **2017**, 7, 376-384	1.6	8
46	Development of an optimization method for the GM(1,N) model. *Engineering Applications of Artificial Intelligence*, **2016**, 55, 353-362	7.2	57
45	Explanation of terms of grey numbers and its operations. *Grey Systems Theory and Application*, **2016** , 6, 436-441	1.6	8
44	A novel multi-variable grey forecasting model and its application in forecasting the amount of motor vehicles in Beijing. *Computers and Industrial Engineering*, **2016**, 101, 479-489	6.4	42
43	Grey double exponential smoothing model and its application on pig price forecasting in China. *Applied Soft Computing Journal*, **2016**, 39, 117-123	7.5	62
42	A Gray Model With a Time Varying Weighted Generating Operator. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2016**, 46, 427-433	7.3	23
41	Comparison of China's primary energy consumption forecasting by using ARIMA (the autoregressive integrated moving average) model and GM(1,1) model. *Energy*, **2016**, 100, 384-390	7.9	200
40	**2016**,		7
39	Explanation of terms of sequence operators and grey data mining. *Grey Systems Theory and Application*, **2016**, 6, 442-447	1.6	6
38	Explanation of terms of concepts and fundamental principles of grey systems. *Grey Systems Theory and Application*, **2016**, 6, 429-435	1.6	2
37	Multi-stage group risk decision making with grey numbers based on grey target and prospect theory. *Grey Systems Theory and Application*, **2016**, 6, 64-79	1.6	6
36	Multi-variable weakening buffer operator and its application. *Information Sciences*, **2016**, 339, 98-107	7.7	21
35	New progress of Grey System Theory in the new millennium. *Grey Systems Theory and Application*, **2016**, 6, 2-31	1.6	97
34	Properties of the GM(1,1) with fractional order accumulation. *Applied Mathematics and Computation*, **2015**, 252, 287-293	2.7	52

33	. *Journal of Systems Engineering and Electronics*, **2015**, 26, 96-102	1.3	36
32	A multi-variable grey model with a self-memory component and its application on engineering prediction. *Engineering Applications of Artificial Intelligence*, **2015**, 42, 82-93	7.2	37
31	**2015**,		1
30	Modelling and forecasting CO 2 emissions in the BRICS (Brazil, Russia, India, China, and South Africa) countries using a novel multi-variable grey model. *Energy*, **2015**, 79, 489-495	7.9	141
29	Using fractional order accumulation to reduce errors from inverse accumulated generating operator of grey model. *Soft Computing*, **2015**, 19, 483-488	3.5	41
28	Dynamic grey target decision making method with grey numbers based on existing state and future development trend of alternatives. *Journal of Intelligent and Fuzzy Systems*, **2015**, 28, 2159-2168	1.6	17
27	Using gray model with fractional order accumulation to predict gas emission. *Natural Hazards*, **2014** , 71, 2231-2236	3	25
26	An analysis on investment policy effect of China□ photovoltaic industry based on feedback model. *Applied Energy*, **2014**, 135, 423-428	10.7	24
25	Random network models and sensitivity algorithms for the analysis of ordering time and inventory state in multi-stage supply chains. *Computers and Industrial Engineering*, **2014**, 70, 168-175	6.4	4
24	Covered solution for a grey linear program based on a general formula for the inverse of a grey matrix. *Grey Systems Theory and Application*, **2014**, 4, 72-94	1.6	13
23	A grey NGM(1,1, k) self-memory coupling prediction model for energy consumption prediction. *Scientific World Journal, The*, **2014**, 2014, 301032	2.2	3
22	Grey power models based on optimization of initial condition and model parameters. *Grey Systems Theory and Application*, **2014**, 4, 370-382	1.6	8
21	Application of a novel grey self-memory coupling model to forecast the incidence rates of two notifiable diseases in China: dysentery and gonorrhea. *PLoS ONE*, **2014**, 9, e115664	3.7	4
20	A summary on the research of GRA models. *Grey Systems Theory and Application*, **2013**, 3, 7-15	1.6	35
19	Grey system model with the fractional order accumulation. *Communications in Nonlinear Science and Numerical Simulation*, **2013**, 18, 1775-1785	3.7	283
18	A summary of The progress in grey system research **2013**,		9
17	The effect of sample size on the grey system model. *Applied Mathematical Modelling*, **2013**, 37, 6577-6583	4.5	89
16	A stochastic network model for ordering analysis in multi-stage supply chain systems. *Simulation Modelling Practice and Theory*, **2012**, 22, 92-108	3.9	17

15	Grey Lotka–Volterra model and its application. *Technological Forecasting and Social Change*, **2012**, 79, 1720-1730	9.5	31
14	On uncertain systems and uncertain models. *Kybernetes*, **2012**, 41, 548-558	2	11
13	A brief introduction to grey systems theory. *Grey Systems Theory and Application*, **2012**, 2, 89-104	1.6	139
12	General grey numbers and their operations. *Grey Systems Theory and Application*, **2012**, 2, 341-349	1.6	57
11	Grey Systems. *Understanding Complex Systems*, **2011**,	0.4	40
10	Cost prediction model of commercial aircraft based on grey incidence weight **2011**,		1
9	Advance in grey incidence analysis modelling **2011**,		6
8	The impact on chinese economic growth and energy consumption of the Global Financial Crisis: An input–output analysis. *Energy*, **2010**, 35, 1805-1812	7.9	81
7	The relation between Chinese economic development and energy consumption in the different periods. *Energy Policy*, **2010**, 38, 5189-5198	7.2	50
6	An approach to increase prediction precision of GM(1,1) model based on optimization of the initial condition. *Expert Systems With Applications*, **2010**, 37, 5640-5644	7.8	75
5	On the properties of small sample of GM(1,1) model. *Applied Mathematical Modelling*, **2009**, 33, 1894-1903	4.5	46
4	Research on the energy-saving effect of energy policies in China: 1982–2006. *Energy Policy*, **2009**, 37, 2475-2480	7.2	35
3	Research on energy-saving effect of technological progress based on Cobb–Douglas production function. *Energy Policy*, **2009**, 37, 2842-2846	7.2	45
2	Two-stage ordering decision for a short-life-cycle product. *Journal of Systems Science and Systems Engineering*, **2006**, 15, 340-358	1.2	6
1	. *IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans*, **2006**, 36, 53-61		20