Nai-ming Xie

List of Publications by Year
in descending order

91 papers	2,507 citations	257450 24 h-index	214800 47 g-index
91 all docs	91 docs citations	91 times ranked	1187 citing authors

#	Article	IF	Citations
1	Grey-based approach for estimating Weibull model and its application. Communications in Statistics - Theory and Methods, 2023, 52, 7601-7617.	1.0	4
2	Parameter estimation for grey system models: gradient matching versus integral matching. Grey Systems Theory and Application, 2023, 13, 125-140.	2.1	3
3	Grey clustering of the variations in the back-to-front airplane boarding method considering COVID-19 flying restrictions. Grey Systems Theory and Application, 2022, 12, 25-59.	2.1	11
4	On unified framework for continuous-time grey models: An integral matching perspective. Applied Mathematical Modelling, 2022, 101, 432-452.	4.2	16
5	Integrated cross-supplier order and logistic scheduling in cloud manufacturing. International Journal of Production Research, 2022, 60, 1633-1649.	7.5	11
6	Pricing and collection decisions of a closed-loop supply chain with fuzzy demand. International Journal of Production Economics, 2022, 245, 108409.	8.9	17
7	On unified framework for nonlinear grey system models: An integro-differential equation perspective. Communications in Nonlinear Science and Numerical Simulation, 2022, 108, 106250.	3.3	8
8	A self-adaptive grey forecasting model and its application. Journal of Systems Engineering and Electronics, 2022, 33, 665-673.	2.2	0
9	A flexible grey Fourier model based on integral matching for forecasting seasonal PM2.5 time series. Chaos, Solitons and Fractals, 2022, 162, 112417.	5.1	16
10	Hybrid genetic algorithm based on bin packing strategy for the unrelated parallel workgroup scheduling problem. Journal of Intelligent Manufacturing, 2021, 32, 957-969.	7.3	19
11	Exploring the Philosophical Foundations of Grey Systems Theory: Subjective Processes, Information Extraction and Knowledge Formation. Foundations of Science, 2021, 26, 371-404.	0.7	11
12	A novel time-delay multivariate grey model for impact analysis of CO_2 emissions from China's transportation sectors. Applied Mathematical Modelling, 2021, 91, 493-507.	4.2	82
13	Parameter estimation for grey system models: A nonlinear least squares perspective. Communications in Nonlinear Science and Numerical Simulation, 2021, 95, 105653.	3.3	14
14	Optimal position of supply chain delivery window with risk-averse suppliers: A CVaR optimization approach. International Journal of Production Economics, 2021, 232, 107989.	8.9	13
15	Integral matching-based nonlinear grey Bernoulli model for forecasting the coal consumption in China. Soft Computing, 2021, 25, 5209-5223.	3.6	5
16	Forecasting annual foreign tourist arrivals to China by incorporating firefly algorithm into fractional non-homogenous discrete Grey model. Kybernetes, 2021, ahead-of-print, .	2.2	6
17	Predicting the Population Growth and Structure of China Based on Grey Fractional-Order Models. Journal of Mathematics, 2021, 2021, 1-11.	1.0	4
18	Single batch machine scheduling with dual setup times for autoclave molding manufacturing. Computers and Operations Research, 2021, 133, 105381.	4.0	3

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19	A hybrid ACS-VTM algorithm for the vehicle routing problem with simultaneous delivery & pickup and real-time traffic condition. Computers and Industrial Engineering, 2021, 162, 107747.	6.3	14
20	Flexible flow shop scheduling with interval grey processing time. Grey Systems Theory and Application, 2021, 11, 779-795.	2.1	7
21	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.	2.9	6
22	Single workgroup scheduling problem with variable processing personnel. Central European Journal of Operations Research, 2020, 28, 671-684.	1.8	5
23	Exploring the Philosophical Paradigm of Grey Systems Theory as a Postmodern Theory. Foundations of Science, 2020, 25, 905-925.	0.7	16
24	Understanding cumulative sum operator in grey prediction model with integral matching. Communications in Nonlinear Science and Numerical Simulation, 2020, 82, 105076.	3.3	31
25	On unified framework for discrete-time grey models: Extensions and applications. ISA Transactions, 2020, 107, 1-11.	5.7	23
26	Uncertainty representation and information measurement of grey numbers. Grey Systems Theory and Application, 2020, 10, 495-512.	2.1	9
27	A new approach to the degree of greyness. Grey Systems Theory and Application, 2020, 11, 241-252.	2.1	3
28	Coordination and competition in two-echelon supply chain using grey revenue-sharing contracts. Grey Systems Theory and Application, 2020, ahead-of-print, .	2.1	17
29	Forecasting CO_2 emissions of China's cement industry using a hybrid Verhulst-GM(1,N) model and emissions' technical conversion. Renewable and Sustainable Energy Reviews, 2020, 130, 109945.	16.4	89
30	Two-dimensional packing algorithm for autoclave molding scheduling of aeronautical composite materials production. Computers and Industrial Engineering, 2020, 146, 106599.	6.3	10
31	Exploring Grey Systems Theory-Based Methods and Applications in Sustainability Studies: A Systematic Review Approach. Sustainability, 2020, 12, 4437.	3.2	34
32	Optimal pricing for a multi-echelon closed loop supply chain with different power structures and product dual differences. Journal of Cleaner Production, 2020, 257, 120281.	9.3	30
33	Day surgery appointment scheduling with patient preferences and stochastic operation duration. Technology and Health Care, 2020, 29, 1-12.	1.2	6
34	Data-based structure selection for unified discrete grey prediction model. Expert Systems With Applications, 2019, 136, 264-275.	7.6	44
35	Research on the evaluation of tourism development potential of tea intangible cultural heritage based on grey clustering. Grey Systems Theory and Application, 2019, 9, 295-304.	2.1	15
36	A nonlinear grey forecasting model with double shape parameters and its application. Applied Mathematics and Computation, 2019, 360, 203-212.	2.2	38

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37	Uncertainty and grey data analytics. Marine Economics and Management, 2019, 2, 73-86.	1.4	12
38	Evaluation of provincial integration degree of "internet + industry"based on matrix grey relational analysis. Grey Systems Theory and Application, 2019, 9, 31-44.	2.1	8
39	New axiomatic approach to the concept of grey information. Grey Systems Theory and Application, 2018, 8, 199-209.	2.1	18
40	Interval grey number based project scheduling model and algorithm. Grey Systems Theory and Application, 2018, 8, 100-109.	2.1	16
41	Research on safety evaluation of civil aircraft based on the grey clustering model. Grey Systems Theory and Application, 2018, 8, 110-120.	2.1	11
42	Measurement of shock effect following change of one-child policy based on grey forecasting approach. Kybernetes, 2018, 47, 559-586.	2.2	26
43	Explanation of terms of Grey models for decision-making. Grey Systems Theory and Application, 2018, 8, 382-387.	2.1	10
44	Optimal solution for novel grey polynomial prediction model. Applied Mathematical Modelling, 2018, 62, 717-727.	4.2	82
45	Flexible job shop scheduling problem with interval grey processing time. Applied Soft Computing Journal, 2018, 70, 513-524.	7.2	67
46	Estimating a civil aircraft's development cost with a GM(1, N) model and an MLP neural network. Grey Systems Theory and Application, 2017, 7, 2-18.	2.1	9
47	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.	9.3	35
48	Explanations about grey information and framework of grey system modeling. Grey Systems Theory and Application, 2017, 7, 179-193.	2.1	24
49	Grey linear space based grey project scheduling. , 2017, , .		1
50	Explanation of terms of sequence operators and grey data mining. Grey Systems Theory and Application, 2016, 6, 442-447.	2.1	9
51	New progress of Grey System Theory in the new millennium. Grey Systems Theory and Application, 2016, 6, 2-31.	2.1	126
52	Grey cluster evaluation models based on mixed triangular whitenization weight functions. Grey Systems Theory and Application, 2015, 5, 410-418.	2.1	28
53	Four basic models of GM(1, 1) and their suitable sequences. Grey Systems Theory and Application, 2015, 5, 141-156.	2.1	28
54	Civil Aircraft Cost Drive Parameters Selecting Method Based on Grey Clustering Model. , 2015, , .		1

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55	Estimating civil aircraft's research and manufacture cost by using grey system model and neural network algorithm. Grey Systems Theory and Application, 2015, 5, 89-104.	2.1	8
56	Interval grey number sequence prediction by using non-homogenous exponential discrete grey forecasting model. Journal of Systems Engineering and Electronics, 2015, 26, 96-102.	2.2	43
57	On the new model system and framework of grey system theory. , 2015, , .		5
58	Forecasting China's energy demand and self-sufficiency rate by grey forecasting model and Markov model. International Journal of Electrical Power and Energy Systems, 2015, 66, 1-8.	5.5	123
59	Expansion modelling of discrete grey model based on multi-factor information aggregation. Journal of Systems Engineering and Electronics, 2014, 25, 833-839.	2.2	8
60	Interval grey numbers based multi-attribute decision making method for supplier selection. Kybernetes, 2014, 43, 1064-1078.	2.2	19
61	Combined model of GM (0, N) and neural network algorithm for civil aircraft cost estimation. , 2014, , .		0
62	China's regional meteorological disaster loss analysis and evaluation based on grey cluster model. Natural Hazards, 2014, 71, 1067-1089.	3.4	40
63	Ranking grey numbers based on dominance grey degrees. Journal of Systems Engineering and Electronics, 2014, 25, 618-626.	2.2	11
64	Forecasting energy consumption in China following instigation of an energy-saving policy. Natural Hazards, 2014, 74, 639-659.	3.4	16
65	Grey cluster model based approach for selecting international cooperation key-technology projects. Grey Systems Theory and Application, 2014, 4, 463-472.	2.1	2
66	A summary on the research of GRA models. Grey Systems Theory and Application, 2013, 3, 7-15.	2.1	63
67	On novel grey forecasting model based on non-homogeneous index sequence. Applied Mathematical Modelling, 2013, 37, 5059-5068.	4.2	120
68	A novel grey forecasting model and its optimization. Applied Mathematical Modelling, 2013, 37, 4399-4406.	4.2	164
69	Prediction of China's energy consumption structure. Kybernetes, 2012, 41, 559-567.	2.2	6
70	IN‐GM(0, N) cost forecasting model of commercial aircraft based on interval grey numbers. Kybernetes, 2012, 41, 886-896.	2.2	4
71	Difference‐ratio‐based NDGM interpolation forecasting algorithm and its application. Grey Systems Theory and Application, 2012, 2, 70-80.	2.1	4
72	A grey multi-stage dynamic multiple attribute decision making method. , 2011, , .		0

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73	Study on parameters characteristics of NGM(1,1,k) prediction model with multiplication transformation. , 2011, , .		1
74	Cost prediction model of commercial aircraft based on grey incidence weight. , 2011, , .		1
75	Difference-ratio-based NDGM interpolation forecasting algorithm and its application. , 2011, , .		0
76	Novel DGM model of systematic main variable trend forecasting based on interval grey number sequence. , 2011, , .		1
77	Novel methods on comparing grey numbers. Applied Mathematical Modelling, 2010, 34, 415-423.	4.2	51
78	The impact on chinese economic growth and energy consumption of the Global Financial Crisis: An inputâ€"output analysis. Energy, 2010, 35, 1805-1812.	8.8	107
79	The relation between Chinese economic development and energy consumption in the different periods. Energy Policy, 2010, 38, 5189-5198.	8.8	66
80	Study on the weakening buffer operator based on the interpolatory Function. , 2010, , .		0
81	Prediction model of interval grey number based on DGM (1, 1). Journal of Systems Engineering and Electronics, 2010, 21, 598-603.	2.2	30
82	The Discrete Grey Prediction Model Based on Optimized Initial Value. Understanding Complex Systems, 2010, , 385-393.	0.6	2
83	Progress assessment on energy-saving goal achieving in&#x201D;11th Five-Year Plan&#x201D; period and analysis of energy-saving situation. , 2009, , .		0
84	On the properties of small sample of GM(1,1) model. Applied Mathematical Modelling, 2009, 33, 1894-1903.	4.2	65
85	Discrete grey forecasting model and its optimization. Applied Mathematical Modelling, 2009, 33, 1173-1186.	4.2	386
86	Multi-variable grey dynamic forecasting model based on complex network. , 2009, , .		2
87	On grey geometrical relational model and its properties. , 2008, , .		3
88	A study on choosing the sample data of grey forecast model. , 2007, , .		0
89	A method to construct a new type of degree of grey incidence. , 2007, , .		2
90	Research on the multiple and parallel properties of several grey relational models. , 2007, , .		3

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91	Online single batch machine scheduling with linear setup times and incompatible jobs for autoclave molding manufacturing. Journal of Ambient Intelligence and Humanized Computing, 0, , 1.	4.9	0