

Zhenzhou Lu

List of Publications by Year in descending order

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268

papers

6,438

citations

76326

40

h-index

106344

65

g-index

268

all docs

268

docs citations

268

times ranked

2129

citing authors

#	ARTICLE	IF	CITATIONS
1	Variable importance analysis: A comprehensive review. Reliability Engineering and System Safety, 2015, 142, 399-432.	8.9	322
2	A new learning function for Kriging and its applications to solve reliability problems in engineering. Computers and Mathematics With Applications, 2015, 70, 1182-1197.	2.7	244
3	Subset simulation for structural reliability sensitivity analysis. Reliability Engineering and System Safety, 2009, 94, 658-665.	8.9	208
4	Reliability sensitivity method by line sampling. Structural Safety, 2008, 30, 517-532.	5.3	163
5	Efficient structural reliability analysis method based on advanced Kriging model. Applied Mathematical Modelling, 2015, 39, 781-793.	4.2	146
6	Efficient sampling methods for global reliability sensitivity analysis. Computer Physics Communications, 2012, 183, 1728-1743.	7.5	124
7	Nataf transformation based point estimate method. Science Bulletin, 2008, 53, 2586-2592.	9.0	119
8	Moment-independent importance measure of basic random variable and its probability density evolution solution. Science China Technological Sciences, 2010, 53, 1138-1145.	4.0	117
9	AK-SYSi: an improved adaptive Kriging model for system reliability analysis with multiple failure modes by a refined U learning function. Structural and Multidisciplinary Optimization, 2019, 59, 263-278.	3.5	115
10	Adaptive sparse polynomial chaos expansions for global sensitivity analysis based on support vector regression. Computers and Structures, 2018, 194, 86-96.	4.4	105
11	Mixed kernel function support vector regression for global sensitivity analysis. Mechanical Systems and Signal Processing, 2017, 96, 201-214.	8.0	88
12	An application of the Kriging method in global sensitivity analysis with parameter uncertainty. Applied Mathematical Modelling, 2013, 37, 6543-6555.	4.2	80
13	AK-ARBIS: An improved AK-MCS based on the adaptive radial-based importance sampling for small failure probability. Structural Safety, 2020, 82, 101891.	5.3	80
14	Monte Carlo simulation for moment-independent sensitivity analysis. Reliability Engineering and System Safety, 2013, 110, 60-67.	8.9	78
15	Global sensitivity analysis using support vector regression. Applied Mathematical Modelling, 2017, 49, 587-598.	4.2	78
16	Structural reliability analysis based on ensemble learning of surrogate models. Structural Safety, 2020, 83, 101905.	5.3	75
17	A novel learning function based on Kriging for reliability analysis. Reliability Engineering and System Safety, 2020, 198, 106857.	8.9	70
18	Surrogate-assisted global sensitivity analysis: an overview. Structural and Multidisciplinary Optimization, 2020, 61, 1187-1213.	3.5	70

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19	An efficient reliability analysis method combining adaptive Kriging and modified importance sampling for small failure probability. Structural and Multidisciplinary Optimization, 2018, 58, 1383-1393.	3.5	69
20	Temporal and spatial multi-parameter dynamic reliability and global reliability sensitivity analysis based on the extreme value moments. Structural and Multidisciplinary Optimization, 2017, 56, 117-129.	3.5	66
21	Structural reliability sensitivity analysis based on classification of model output. Aerospace Science and Technology, 2017, 71, 52-61.	4.8	65
22	Aircraft Icing Severity Analysis Considering Three Uncertainty Types. AIAA Journal, 2019, 57, 1514-1522.	2.6	61
23	Non-intrusive stochastic analysis with parameterized imprecise probability models: I. Performance estimation. Mechanical Systems and Signal Processing, 2019, 124, 349-368.	8.0	60
24	Adaptive Bayesian support vector regression model for structural reliability analysis. Reliability Engineering and System Safety, 2021, 206, 107286.	8.9	60
25	A modified importance sampling method for structural reliability and its global reliability sensitivity analysis. Structural and Multidisciplinary Optimization, 2018, 57, 1625-1641.	3.5	57
26	Non-intrusive stochastic analysis with parameterized imprecise probability models: II. Reliability and rare events analysis. Mechanical Systems and Signal Processing, 2019, 126, 227-247.	8.0	57
27	An adaptive multiple-Kriging-surrogate method for time-dependent reliability analysis. Applied Mathematical Modelling, 2019, 70, 545-571.	4.2	57
28	Reliability sensitivity by method of moments. Applied Mathematical Modelling, 2010, 34, 2860-2871.	4.2	56
29	Extended Monte Carlo Simulation for Parametric Global Sensitivity Analysis and Optimization. AIAA Journal, 2014, 52, 867-878.	2.6	55
30	A Bayesian Monte Carlo-based method for efficient computation of global sensitivity indices. Mechanical Systems and Signal Processing, 2019, 117, 498-516.	8.0	54
31	AK-DS: An adaptive Kriging-based directional sampling method for reliability analysis. Mechanical Systems and Signal Processing, 2021, 156, 107610.	8.0	52
32	New validation metrics for models with multiple correlated responses. Reliability Engineering and System Safety, 2014, 127, 1-11.	8.9	50
33	Multivariate global sensitivity analysis for dynamic models based on wavelet analysis. Reliability Engineering and System Safety, 2018, 170, 20-30.	8.9	50
34	Sparse polynomial chaos expansion based on D-MORPH regression. Applied Mathematics and Computation, 2018, 323, 17-30.	2.2	50
35	An efficient method for moment-independent global sensitivity analysis by dimensional reduction technique and principle of maximum entropy. Reliability Engineering and System Safety, 2019, 187, 174-182.	8.9	49
36	Efficient methods by active learning Kriging coupled with variance reduction based sampling methods for time-dependent failure probability. Reliability Engineering and System Safety, 2019, 188, 23-35.	8.9	48

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37	A fuzzy reliability approach for structures based on the probability perspective. Structural Safety, 2015, 54, 10-18.	5.3	46
38	A derivative based sensitivity measure of failure probability in the presence of epistemic and aleatory uncertainties. Computers and Mathematics With Applications, 2013, 65, 89-101.	2.7	45
39	Time-dependent reliability sensitivity analysis of motion mechanisms. Reliability Engineering and System Safety, 2016, 149, 107-120.	8.9	43
40	Active sparse polynomial chaos expansion for system reliability analysis. Reliability Engineering and System Safety, 2020, 202, 107025.	8.9	43
41	A reliability analysis method based on analytical expressions of the first four moments of the surrogate model of the performance function. Mechanical Systems and Signal Processing, 2018, 111, 47-67.	8.0	42
42	An efficient method combining adaptive Kriging and fuzzy simulation for estimating failure credibility. Aerospace Science and Technology, 2019, 92, 620-634.	4.8	42
43	Interval optimization based line sampling method for fuzzy and random reliability analysis. Applied Mathematical Modelling, 2014, 38, 3124-3135.	4.2	40
44	Time-dependent failure possibility analysis under consideration of fuzzy uncertainty. Fuzzy Sets and Systems, 2019, 367, 19-35.	2.7	40
45	A new method for evaluating Borgonovo moment-independent importance measure with its application in an aircraft structure. Reliability Engineering and System Safety, 2014, 132, 163-175.	8.9	39
46	Borgonovo moment independent global sensitivity analysis by Gaussian radial basis function meta-model. Applied Mathematical Modelling, 2018, 54, 378-392.	4.2	39
47	An efficient sampling method for variance-based sensitivity analysis. Structural Safety, 2017, 65, 74-83.	5.3	37
48	Momentâ€independent Sensitivity Analysis Using Copula. Risk Analysis, 2014, 34, 210-222.	2.7	36
49	Multivariate sensitivity analysis based on the direction of eigen space through principal component analysis. Reliability Engineering and System Safety, 2017, 165, 1-10.	8.9	36
50	A coupled subset simulation and active learning kriging reliability analysis method for rare failure events. Structural and Multidisciplinary Optimization, 2019, 60, 2325-2341.	3.5	36
51	An enhanced Kriging surrogate modeling technique for high-dimensional problems. Mechanical Systems and Signal Processing, 2020, 140, 106687.	8.0	36
52	Aircraft icing safety analysis method in presence of fuzzy inputs and fuzzy state. Aerospace Science and Technology, 2018, 82-83, 172-184.	4.8	35
53	Aleatory and epistemic uncertainties analysis based on non-probabilistic reliability and its kriging solution. Applied Mathematical Modelling, 2016, 40, 5703-5716.	4.2	34
54	An efficient method based on Bayesâ€™ theorem to estimate the failure-probability-based sensitivity measure. Mechanical Systems and Signal Processing, 2019, 115, 607-620.	8.0	34

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55	Generalized sensitivity indices based on vector projection for multivariate output. Applied Mathematical Modelling, 2019, 66, 592-610.	4.2	33
56	Reliability index function approximation based on adaptive double-loop Kriging for reliability-based design optimization. Reliability Engineering and System Safety, 2021, 216, 108020.	8.9	33
57	A new effective screening design for structural sensitivity analysis of failure probability with the epistemic uncertainty. Reliability Engineering and System Safety, 2016, 156, 1-14.	8.9	32
58	Reliability Analysis for Structures With Multiple Temporal and Spatial Parameters Based on the Effective First-Crossing Point. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	32
59	An efficient method for estimating failure probability of the structure with multiple implicit failure domains by combining Meta-IS with IS-AK. Reliability Engineering and System Safety, 2020, 193, 106644.	8.9	32
60	Efficient approach for reliability-based optimization based on weighted importance sampling approach. Reliability Engineering and System Safety, 2014, 132, 107-114.	8.9	31
61	Integrating Bayesian Calibration, Bias Correction, and Machine Learning for the 2014 Sandia Verification and Validation Challenge Problem. Journal of Verification, Validation and Uncertainty Quantification, 2016, 1, .	0.4	31
62	A new algorithm for variance based importance analysis of models with correlated inputs. Applied Mathematical Modelling, 2013, 37, 864-875.	4.2	30
63	Structural Reliability Analysis Using Combined Space Partition Technique and Unscented Transformation. Journal of Structural Engineering, 2016, 142, .	3.4	30
64	Copula-based decomposition approach for the derivative-based sensitivity of variance contributions with dependent variables. Reliability Engineering and System Safety, 2018, 169, 437-450.	8.9	30
65	Multi-level multi-fidelity sparse polynomial chaos expansion based on Gaussian process regression. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 360-377.	6.6	30
66	An efficient method combining active learning Kriging and Monte Carlo simulation for profust failure probability. Fuzzy Sets and Systems, 2020, 387, 89-107.	2.7	30
67	Advanced solution strategies for time-dependent reliability based design optimization. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112916.	6.6	30
68	An efficient global reliability sensitivity analysis algorithm based on classification of model output and subset simulation. Structural Safety, 2018, 74, 49-57.	5.3	29
69	A new efficient simulation method based on Bayes' theorem and importance sampling Markov chain simulation to estimate the failure-probability-based global sensitivity measure. Aerospace Science and Technology, 2018, 79, 364-372.	4.8	29
70	A single-loop Kriging surrogate model method by considering the first failure instant for time-dependent reliability analysis and safety lifetime analysis. Mechanical Systems and Signal Processing, 2020, 145, 106963.	8.0	29
71	Analytical variance based global sensitivity analysis for models with correlated variables. Applied Mathematical Modelling, 2017, 45, 748-767.	4.2	28
72	Regional sensitivity analysis using revised mean and variance ratio functions. Reliability Engineering and System Safety, 2014, 121, 121-135.	8.9	27

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73	A new kind of sensitivity index for multivariate output. Reliability Engineering and System Safety, 2016, 147, 123-131.	8.9	27
74	Maximum probable life time analysis under the required time-dependent failure probability constraint and its meta-model estimation. Structural and Multidisciplinary Optimization, 2017, 55, 1439-1451.	3.5	27
75	Multivariate global sensitivity analysis for dynamic models based on energy distance. Structural and Multidisciplinary Optimization, 2018, 57, 279-291.	3.5	27
76	Efficient numerical algorithm of profust reliability analysis: An application to wing box structure. Aerospace Science and Technology, 2018, 80, 203-211.	4.8	27
77	An innovative estimation of failure probability function based on conditional probability of parameter interval and augmented failure probability. Mechanical Systems and Signal Processing, 2019, 123, 606-625.	8.0	27
78	Surrogate modeling of high-dimensional problems via data-driven polynomial chaos expansions and sparse partial least square. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112906.	6.6	27
79	Non-intrusive imprecise stochastic simulation by line sampling. Structural Safety, 2020, 84, 101936.	5.3	27
80	A new method on ANN for variance based importance measure analysis of correlated input variables. Structural Safety, 2012, 38, 56-63.	5.3	26
81	Failure-mode importance measures in structural system with multiple failure modes and its estimation using copula. Reliability Engineering and System Safety, 2018, 174, 53-59.	8.9	26
82	A generalized Borgonovo's importance measure for fuzzy input uncertainty. Fuzzy Sets and Systems, 2012, 189, 53-62.	2.7	25
83	A new framework of variance based global sensitivity analysis for models with correlated inputs. Structural Safety, 2015, 55, 1-9.	5.3	25
84	Time-dependent failure credibility analysis and its optimization based computational methods. Engineering Structures, 2019, 181, 605-616.	5.3	25
85	Enhanced Morris method for global sensitivity analysis: good proxy of Sobol' index. Structural and Multidisciplinary Optimization, 2019, 59, 373-387.	3.5	25
86	A new variance-based global sensitivity analysis technique. Computer Physics Communications, 2013, 184, 2540-2551.	7.5	24
87	Safety life analysis under required failure credibility constraint for unsteady thermal structure with fuzzy input parameters. Structural and Multidisciplinary Optimization, 2019, 59, 43-59.	3.5	24
88	An efficient sampling approach for variance-based sensitivity analysis based on the law of total variance in the successive intervals without overlapping. Mechanical Systems and Signal Processing, 2018, 106, 495-510.	8.0	23
89	Active Polynomial Chaos Expansion for Reliability-Based Design Optimization. AIAA Journal, 2019, 57, 5431-5446.	2.6	23
90	Adaptive Kriging coupled with importance sampling strategies for time-variant hybrid reliability analysis. Applied Mathematical Modelling, 2020, 77, 1820-1841.	4.2	23

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91	An efficient method based on AK-MCS for estimating failure probability function. Reliability Engineering and System Safety, 2020, 201, 106975.	8.9	23
92	Moment-independent regional sensitivity analysis: Application to an environmental model. Environmental Modelling and Software, 2013, 47, 55-63.	4.5	22
93	A novel step-wise AK-MCS method for efficient estimation of fuzzy failure probability under probability inputs and fuzzy state assumption. Engineering Structures, 2019, 183, 340-350.	5.3	22
94	Error-based stopping criterion for the combined adaptive Kriging and importance sampling method for reliability analysis. Probabilistic Engineering Mechanics, 2021, 65, 103131.	2.7	22
95	An efficient and robust adaptive sampling method for polynomial chaos expansion in sparse Bayesian learning framework. Computer Methods in Applied Mechanics and Engineering, 2019, 352, 654-674.	6.6	21
96	Dynamic reliability analysis model for structure with both random and interval uncertainties. International Journal of Mechanics and Materials in Design, 2019, 15, 521-537.	3.0	21
97	Estimation of small failure probability using generalized subset simulation. Mechanical Systems and Signal Processing, 2022, 163, 108114.	8.0	21
98	Validation metric based on Mahalanobis distance for models with multiple correlated responses. Reliability Engineering and System Safety, 2017, 159, 80-89.	8.9	20
99	Cross-covariance based global dynamic sensitivity analysis. Mechanical Systems and Signal Processing, 2018, 100, 846-862.	8.0	20
100	Time-variant reliability analysis based on high dimensional model representation. Reliability Engineering and System Safety, 2019, 188, 310-319.	8.9	20
101	Multivariate output global sensitivity analysis using multi-output support vector regression. Structural and Multidisciplinary Optimization, 2019, 59, 2177-2187.	3.5	20
102	Line sampling-based local and global reliability sensitivity analysis. Structural and Multidisciplinary Optimization, 2020, 61, 267-281.	3.5	20
103	The uncertainty importance measures of the structural system in view of mixed uncertain variables. Fuzzy Sets and Systems, 2014, 243, 25-35.	2.7	19
104	A generalized separation for the variance contributions of input variables and their distribution parameters. Applied Mathematical Modelling, 2017, 47, 381-399.	4.2	19
105	Safety life analysis under the required failure possibility constraint for structure involving fuzzy uncertainty. Structural and Multidisciplinary Optimization, 2018, 58, 287-303.	3.5	19
106	A new interpretation and validation of variance based importance measures for models with correlated inputs. Computer Physics Communications, 2013, 184, 1401-1413.	7.5	18
107	Use of Relevance Vector Machine in Structural Reliability Analysis. Journal of Aircraft, 2013, 50, 1726-1733.	2.4	18
108	Moment independent sensitivity analysis with correlations. Applied Mathematical Modelling, 2014, 38, 4885-4896.	4.2	18

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109	Regional sensitivity analysis of aleatory and epistemic uncertainties on failure probability. Mechanical Systems and Signal Processing, 2014, 46, 209-226.	8.0	18
110	Global sensitivity analysis based on distance correlation for structural systems with multivariate output. Engineering Structures, 2018, 167, 74-83.	5.3	18
111	A new method for model validation with multivariate output. Reliability Engineering and System Safety, 2018, 169, 579-592.	8.9	18
112	An efficient computational method of a moment-independent importance measure using quantile regression. Mechanical Systems and Signal Processing, 2018, 109, 235-246.	8.0	18
113	Novel decoupling method for time-dependent reliability-based design optimization. Structural and Multidisciplinary Optimization, 2020, 61, 507-524.	3.5	18
114	Parametric sensitivity analysis of the importance measure. Mechanical Systems and Signal Processing, 2012, 28, 482-491.	8.0	17
115	Reliability Analysis by Combining Higher-Order Unscented Transformation and Fourth-Moment Method. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2018, 4, .	1.7	17
116	Multivariate Global Sensitivity Analysis Based on Distance Components Decomposition. Risk Analysis, 2018, 38, 2703-2721.	2.7	17
117	An expanded sparse Bayesian learning method for polynomial chaos expansion. Mechanical Systems and Signal Processing, 2019, 128, 153-171.	8.0	16
118	Bi-Objective Adaptive Kriging for Reliability Analysis with Random and Evidence Variables. AIAA Journal, 2020, 58, 1733-1747.	2.6	16
119	Adaptive subdomain sampling and its adaptive Kriging-based method for reliability and reliability sensitivity analyses. Structural and Multidisciplinary Optimization, 2020, 61, 1107-1121.	3.5	16
120	A novel time-dependent system constraint boundary sampling technique for solving time-dependent reliability-based design optimization problems. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113342.	6.6	15
121	Support vector machine-based importance sampling for rare event estimation. Structural and Multidisciplinary Optimization, 2021, 63, 1609-1631.	3.5	15
122	Importance measure of correlated normal variables and its sensitivity analysis. Reliability Engineering and System Safety, 2012, 99, 151-160.	8.9	14
123	Sparse grid integration based solutions for moment-independent importance measures. Probabilistic Engineering Mechanics, 2015, 39, 46-55.	2.7	14
124	An efficient method for estimating global sensitivity indices. International Journal for Numerical Methods in Engineering, 2016, 108, 1275-1289.	2.8	14
125	Root finding method of failure credibility for fuzzy safety analysis. Structural and Multidisciplinary Optimization, 2018, 58, 1917-1934.	3.5	14
126	Time-dependent reliability-based design optimization with probabilistic and interval uncertainties. Applied Mathematical Modelling, 2020, 80, 268-289.	4.2	14

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127	Moment-independent importance measure of correlated input variable and its state dependent parameter solution. Aerospace Science and Technology, 2016, 48, 281-290.	4.8	13
128	A kernel estimate method for characteristic function-based uncertainty importance measure. Applied Mathematical Modelling, 2017, 42, 58-70.	4.2	13
129	Variance-based sensitivity analysis for models with correlated inputs and its state dependent parameter solution. Structural and Multidisciplinary Optimization, 2017, 56, 919-937.	3.5	13
130	An improved AK-MCS for reliability analysis by an efficient and simple reduction strategy of candidate sample pool. Structures, 2022, 35, 373-387.	3.6	13
131	A new preventive maintenance strategy optimization model considering lifecycle safety. Reliability Engineering and System Safety, 2022, 221, 108325.	8.9	13
132	Saddlepoint approximation based line sampling method for uncertainty propagation in fuzzy and random reliability analysis. Science China Technological Sciences, 2010, 53, 2252-2260.	4.0	12
133	Importance analysis for models with correlated input variables by the state dependent parameters method. Computers and Mathematics With Applications, 2011, 62, 4547-4556.	2.7	12
134	Regional importance effect analysis of the input variables on failure probability. Computers and Structures, 2013, 125, 74-85.	4.4	12
135	Importance analysis on the failure probability of the fuzzy and random system and its state dependent parameter solution. Fuzzy Sets and Systems, 2014, 250, 69-89.	2.7	12
136	A probabilistic procedure for quantifying the relative importance of model inputs characterized by second-order probability models. International Journal of Approximate Reasoning, 2018, 98, 78-95.	3.3	12
137	An efficient method for estimating global reliability sensitivity indices. Probabilistic Engineering Mechanics, 2019, 56, 35-49.	2.7	12
138	Efficient numerical simulation methods for estimating fuzzy failure probability based importance measure indices. Structural and Multidisciplinary Optimization, 2019, 59, 577-593.	3.5	12
139	Active learning polynomial chaos expansion for reliability analysis by maximizing expected indicator function prediction error. International Journal for Numerical Methods in Engineering, 2020, 121, 3159-3177.	2.8	12
140	Saddlepoint approximation based structural reliability analysis with non-normal random variables. Science China Technological Sciences, 2010, 53, 566-576.	4.0	11
141	Reproducing kernel technique for high dimensional model representations (HDMR). Computer Physics Communications, 2014, 185, 3099-3108.	7.5	11
142	Regional and parametric sensitivity analysis of Sobolx ³ indices. Reliability Engineering and System Safety, 2015, 137, 87-100.	8.9	11
143	Global sensitivity analysis for fuzzy inputs based on the decomposition of fuzzy output entropy. Engineering Optimization, 2018, 50, 1078-1096.	2.6	11
144	Time-dependent safety and sensitivity analysis for structure involving both random and fuzzy inputs. Structural and Multidisciplinary Optimization, 2018, 58, 2655-2675.	3.5	11

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145	An efficient algorithm for time-dependent failure credibility by combining adaptive single-loop Kriging model with fuzzy simulation. Structural and Multidisciplinary Optimization, 2020, 62, 1025-1039.	3.5	11
146	Safety analysis for the posfust reliability model under possibilistic input and fuzzy state. Aerospace Science and Technology, 2020, 99, 105739.	4.8	11
147	Time-dependent structural system reliability analysis model and its efficiency solution. Reliability Engineering and System Safety, 2021, 216, 108029.	8.9	11
148	Importance measure system of fuzzy and random input variables and its solution by point estimates. Science China Technological Sciences, 2011, 54, 2167-2179.	4.0	10
149	Reliability Sensitivity Based on Profust Model: An Application to Aircraft Icing Analysis. AIAA Journal, 2019, 57, 5390-5402.	2.6	10
150	A novel dual-stage adaptive Kriging method for profust reliability analysis. Journal of Computational Physics, 2020, 419, 109701.	3.8	10
151	Probabilistic safety model and its efficient solution for structure with random and interval mixed uncertainties. Mechanism and Machine Theory, 2020, 147, 103782.	4.5	10
152	Bayesian Support Vector Regression for Reliability-Based Design Optimization. AIAA Journal, 2021, 59, 5141-5157.	2.6	10
153	Adaboost-based ensemble of polynomial chaos expansion with adaptive sampling. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114238.	6.6	10
154	Uncertainty Importance Measure by Fast Fourier Transform for Wing Transonic Flutter. Journal of Aircraft, 2011, 48, 449-455.	2.4	9
155	Moving least squares based sensitivity analysis for models with dependent variables. Applied Mathematical Modelling, 2013, 37, 6097-6109.	4.2	9
156	Application of Rejection Sampling based methodology to variance based parametric sensitivity analysis. Reliability Engineering and System Safety, 2015, 142, 9-18.	8.9	9
157	Efficient numerical simulation method for evaluations of global sensitivity analysis with parameter uncertainty. Applied Mathematical Modelling, 2016, 40, 597-611.	4.2	9
158	Importance analysis for model with mixed uncertainties. Fuzzy Sets and Systems, 2017, 310, 90-107.	2.7	9
159	Sparse polynomial chaos expansions for global sensitivity analysis with partial least squares and distance correlation. Structural and Multidisciplinary Optimization, 2019, 59, 229-247.	3.5	9
160	An efficient computational method for estimating failure credibility by combining genetic algorithm and active learning Kriging. Structural and Multidisciplinary Optimization, 2020, 62, 771-785.	3.5	9
161	Failure-Mode Importance Measures in System Reliability Analysis. Journal of Engineering Mechanics - ASCE, 2014, 140, 04014084.	2.9	8
162	Uncertainty Importance Analysis Using Parametric Moment Ratio Functions. Risk Analysis, 2014, 34, 223-234.	2.7	8

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163	Momentâ€independent regional sensitivity analysis of complicated models with great efficiency. International Journal for Numerical Methods in Engineering, 2015, 103, 996-1014.	2.8	8
164	Global sensitivity analysis for model with random inputs characterized by probability-box. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2015, 229, 237-253.	0.7	8
165	An efficient method for estimating the parameter global reliability sensitivity analysis by innovative single-loop process and embedded Kriging model. Mechanical Systems and Signal Processing, 2019, 133, 106288.	8.0	8
166	Two Efficient AK-Based Global Reliability Sensitivity Methods by Elaborative Combination of Bayesâ€™ Theorem and the Law of Total Expectation in the Successive Intervals Without Overlapping. IEEE Transactions on Reliability, 2020, 69, 260-276.	4.6	8
167	Global sensitivity analysis for multivariate output model and dynamic models. Reliability Engineering and System Safety, 2020, 204, 107195.	8.9	8
168	A novel reliability sensitivity analysis method based on directional sampling and Monte Carlo simulation. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2020, 234, 622-635.	0.7	8
169	Local sensitivity analysis of failure possibility and its universal solution by fuzzy simulation. Structural and Multidisciplinary Optimization, 2021, 64, 219-238.	3.5	8
170	Regional importance effect analysis of the input variables on failure probability and its state dependent parameter estimation. Computers and Mathematics With Applications, 2013, 66, 2075-2091.	2.7	7
171	Uncertainty importance measure for models with correlated normal variables. Reliability Engineering and System Safety, 2013, 112, 48-58.	8.9	7
172	Importance analysis for models with correlated variables and its sparse grid solution. Reliability Engineering and System Safety, 2013, 119, 207-217.	8.9	7
173	Sensitivity analysis of the variance contributions with respect to the distribution parameters by the kernel function. Computers and Mathematics With Applications, 2014, 67, 1756-1771.	2.7	7
174	General validation and decomposition of the variance-based measures for models with correlated inputs. Aerospace Science and Technology, 2017, 62, 75-86.	4.8	7
175	Sensitivity analysis method for model with correlated inputs and multivariate output and its application to aircraft structure. Computer Methods in Applied Mechanics and Engineering, 2019, 355, 373-404.	6.6	7
176	Time-dependent reliability analysis model under fuzzy state and its safety lifetime model. Structural and Multidisciplinary Optimization, 2019, 60, 2511-2529.	3.5	7
177	A new surrogate modeling method combining polynomial chaos expansion and Gaussian kernel in a sparse Bayesian learning framework. International Journal for Numerical Methods in Engineering, 2019, 120, 498-516.	2.8	7
178	A new global sensitivity measure based on the elementary effects method. Computers and Structures, 2020, 229, 106183.	4.4	7
179	Efficient adaptive Kriging for system reliability analysis with multiple failure modes under random and interval hybrid uncertainty. Chinese Journal of Aeronautics, 2022, 35, 333-346.	5.3	7
180	The derivative based variance sensitivity analysis for the distribution parameters and its computation. Reliability Engineering and System Safety, 2013, 119, 305-315.	8.9	6

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181	New Spearman Correlation Based Sensitivity Index and Its Unscented Transformation Solutions. Journal of Engineering Mechanics - ASCE, 2016, 142, 04015076.	2.9	6
182	Efficient computational method based on AK-MCS and Bayes formula for time-dependent failure probability function. Structural and Multidisciplinary Optimization, 2019, 60, 1373-1388.	3.5	6
183	A novel estimation method for failure-probability-based-sensitivity by conditional probability theorem. Structural and Multidisciplinary Optimization, 2020, 61, 1589-1602.	3.5	6
184	The importance measure of fuzzy input on failure credibility under the fuzzy uncertainty. Aerospace Science and Technology, 2020, 107, 106320.	4.8	6
185	Parameter global reliability sensitivity analysis with meta-models: A probability estimation-driven approach. Aerospace Science and Technology, 2020, 106, 106040.	4.8	6
186	A Decoupled Method for Credibility-Based Design Optimization with Fuzzy Variables. International Journal of Fuzzy Systems, 2020, 22, 844-858.	4.0	6
187	A novel hypercube-based fuzzy simulation and its combination with adaptive Kriging for estimating failure credibility. Aerospace Science and Technology, 2021, 108, 106406.	4.8	6
188	Compound kriging-based importance sampling for reliability analysis of systems with multiple failure modes. Engineering Optimization, 2022, 54, 805-829.	2.6	6
189	Advanced single-loop Kriging surrogate model method by combining the adaptive reduction of candidate sample pool for safety lifetime analysis. Applied Mathematical Modelling, 2021, 100, 580-595.	4.2	6
190	Global reliability sensitivity analysis index and its efficient numerical simulation solution in presence of both random and interval hybrid uncertainty. Structural and Multidisciplinary Optimization, 2021, 63, 551-573.	3.5	6
191	Reliability analysis model of time-dependent multi-mode system under fuzzy uncertainty: Applied to undercarriage structures. Aerospace Science and Technology, 2022, 120, 107278.	4.8	6
192	Extended fuzzy first-order and second-moment method based on equivalent regularization for estimating failure credibility. Aerospace Science and Technology, 2022, 124, 107559.	4.8	6
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