

R T Haftka

List of Publications by Year in descending order

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219
papers

16,684
citations

15495

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124
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221
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221
docs citations

221
times ranked

6644
citing authors

#	ARTICLE	IF	CITATIONS
1	Surrogate-based analysis and optimization. Progress in Aerospace Sciences, 2005, 41, 1-28.	6.3	1,891
2	Elements of Structural Optimization. Solid Mechanics and Its Applications, 1992, , .	0.1	937
3	Multidisciplinary aerospace design optimization: survey of recent developments. Structural Optimization, 1997, 14, 1-23.	0.7	783
4	Ensemble of surrogates. Structural and Multidisciplinary Optimization, 2007, 33, 199-216.	1.7	544
5	Structural shape optimizationâ€”A survey. Computer Methods in Applied Mechanics and Engineering, 1986, 57, 91-106.	3.4	512
6	Approximation concepts for optimum structural design â€” a review. Structural Optimization, 1993, 5, 129-144.	0.7	498
7	Optimization of laminate stacking sequence for buckling load maximization by genetic algorithm. AIAA Journal, 1993, 31, 951-956.	1.5	498
8	Sensitivity Analysis of Discrete Structural Systems. AIAA Journal, 1986, 24, 823-832.	1.5	472
9	Multiple surrogates: how cross-validation errors can help us to obtain the best predictor. Structural and Multidisciplinary Optimization, 2009, 39, 439-457.	1.7	339
10	Recent developments in structural sensitivity analysis. Structural Optimization, 1989, 1, 137-151.	0.7	323
11	Parallel global optimization with the particle swarm algorithm. International Journal for Numerical Methods in Engineering, 2004, 61, 2296-2315.	1.5	303
12	Preliminary Design of Composite Wings for Buckling, Strength, and Displacement Constraints. Journal of Aircraft, 1979, 16, 564-570.	1.7	277
13	Response surface approximation of Pareto optimal front in multi-objective optimization. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 879-893.	3.4	234
14	Efficient global optimization algorithm assisted by multiple surrogate techniques. Journal of Global Optimization, 2013, 56, 669-689.	1.1	212
15	Response surface approximations for structural optimization. International Journal for Numerical Methods in Engineering, 1998, 42, 517-534.	1.5	209
16	Determination of patient-specific multi-joint kinematic models through two-level optimization. Journal of Biomechanics, 2005, 38, 621-626.	0.9	209
17	Derivatives of eigenvalues and eigenvectors of a general complex matrix. International Journal for Numerical Methods in Engineering, 1988, 26, 293-311.	1.5	208
18	An approach to structure/control simultaneous optimization for largeflexible spacecraft. AIAA Journal, 1987, 25, 1133-1138.	1.5	205

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19	Adaptive Designs of Experiments for Accurate Approximation of a Target Region. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	1.7	194
20	Parallel asynchronous particle swarm optimization. International Journal for Numerical Methods in Engineering, 2006, 67, 578-595.	1.5	192
21	Parallel surrogate-assisted global optimization with expensive functions – a survey. Structural and Multidisciplinary Optimization, 2016, 54, 3-13.	1.7	178
22	Simultaneous analysis and design. AIAA Journal, 1985, 23, 1099-1103.	1.5	176
23	Multiple Surrogate Modeling for Axial Compressor Blade Shape Optimization. Journal of Propulsion and Power, 2008, 24, 301-310.	1.3	163
24	Response Surface Techniques for Diffuser Shape Optimization. AIAA Journal, 2000, 38, 1512-1518.	1.5	162
25	Permutation genetic algorithm for stacking sequence design of composite laminates. Computer Methods in Applied Mechanics and Engineering, 2000, 186, 357-372.	3.4	160
26	Fast exact linear and non-linear structural reanalysis and the Sherman-Morrison-Woodbury formulas. International Journal for Numerical Methods in Engineering, 2001, 50, 1587-1606.	1.5	156
27	Remarks on multi-fidelity surrogates. Structural and Multidisciplinary Optimization, 2017, 55, 1029-1050.	1.7	150
28	Combining global and local approximations. AIAA Journal, 1991, 29, 1523-1525.	1.5	145
29	An analytical investigation of shape control of large space structures by applied temperatures. AIAA Journal, 1985, 23, 450-457.	1.5	143
30	Genetic algorithms with local improvement for composite laminate design. Structural Optimization, 1994, 7, 207-218.	0.7	142
31	Stacking sequence optimization by a genetic algorithm with a new recessive gene like repair strategy. Composites Part B: Engineering, 1998, 29, 277-285.	5.9	139
32	Stacking-sequence optimization for buckling of laminated plates by integer programming. AIAA Journal, 1992, 30, 814-819.	1.5	129
33	Issues in Deciding Whether to Use Multifidelity Surrogates. AIAA Journal, 2019, 57, 2039-2054.	1.5	127
34	Anti-optimization technique for structural design under load uncertainties. Computer Methods in Applied Mechanics and Engineering, 1998, 157, 19-31.	3.4	117
35	Structural optimization complexity: what has Moore's law done for us?. Structural and Multidisciplinary Optimization, 2004, 28, 375-387.	1.7	110
36	First- and second-order sensitivity analysis of linear and nonlinear structures. AIAA Journal, 1986, 24, 1187-1192.	1.5	107

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37	Comparison of Probability and Possibility for Design Against Catastrophic Failure Under Uncertainty. Journal of Mechanical Design, Transactions of the ASME, 2004, 126, 386-394.	1.7	107
38	Sensitivity-based scaling for approximating structural response. Journal of Aircraft, 1993, 30, 283-288.	1.7	102
39	Reliability-based design optimization using probabilistic sufficiency factor. Structural and Multidisciplinary Optimization, 2004, 27, 314.	1.7	102
40	Variable-complexity aerodynamic optimization of a high-speed civil transport wing. Journal of Aircraft, 1994, 31, 110-116.	1.7	99
41	Construction of Response Surface Approximations for Design Optimization. AIAA Journal, 1998, 36, 2242-2249.	1.5	97
42	Response Surface Models Combining Linear and Euler Aerodynamics for Supersonic Transport Design. Journal of Aircraft, 1999, 36, 75-86.	1.7	96
43	Stacking sequence optimization of simply supported laminates with stability and strain constraints. AIAA Journal, 1992, 30, 2132-2137.	1.5	91
44	Modern homotopy methods in optimization. Computer Methods in Applied Mechanics and Engineering, 1989, 74, 289-305.	3.4	90
45	Optimization and Experiments: A Survey. Applied Mechanics Reviews, 1998, 51, 435-448.	4.5	85
46	Are Patient-Specific Joint and Inertial Parameters Necessary for Accurate Inverse Dynamics Analyses of Gait?. IEEE Transactions on Biomedical Engineering, 2007, 54, 782-793.	2.5	85
47	Comparison of Materials for an Integrated Thermal Protection System for Spacecraft Reentry. Journal of Spacecraft and Rockets, 2009, 46, 501-513.	1.3	85
48	Two-point constraint approximation in structural optimization. Computer Methods in Applied Mechanics and Engineering, 1987, 60, 289-301.	3.4	84
49	Comparison of evidence theory and Bayesian theory for uncertainty modeling. Reliability Engineering and System Safety, 2004, 85, 295-311.	5.1	83
50	Accuracy problems associated with semi-analytical derivatives of static response. Finite Elements in Analysis and Design, 1988, 4, 249-265.	1.7	82
51	Micromechanical Analysis of Composite Corrugated-Core Sandwich Panels for Integral Thermal Protection Systems. AIAA Journal, 2007, 45, 2323-2336.	1.5	79
52	Similarity measures for identifying material parameters from hysteresis loops using inverse analysis. International Journal of Material Forming, 2019, 12, 355-378.	0.9	78
53	NEWSUMT-A: A General Purpose Program for Constrained Optimization Using Constraint Approximations. Journal of Mechanisms, Transmissions, and Automation in Design, 1985, 107, 94-99.	0.2	77
54	Optimization with non-homogeneous failure criteria like Tsai-Wu for composite laminates. Structural and Multidisciplinary Optimization, 2006, 32, 183-190.	1.7	77

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55	Title is missing!. Optimization and Engineering, 2001, 2, 431-452.	1.3	75
56	Enhanced vibration controllability by minor structural modifications. AIAA Journal, 1985, 23, 1260-1266.	1.5	74
57	Multiple-Surrogate Approach to Helicopter Rotor Blade Vibration Reduction. AIAA Journal, 2009, 47, 271-282.	1.5	74
58	Variable-complexity response surface approximations for wing structural weight in HSCT design. Computational Mechanics, 1996, 18, 112-126.	2.2	73
59	Optimization of flexible wing structures subject to strength and induced drag constraints. AIAA Journal, 1977, 15, 1101-1106.	1.5	72
60	Techniques for thermal sensitivity analysis. International Journal for Numerical Methods in Engineering, 1981, 17, 71-80.	1.5	72
61	Integrated aerodynamic/structural design of a sailplane wing. Journal of Aircraft, 1988, 25, 855-860.	1.7	71
62	On options for interdisciplinary analysis and design optimization. Structural Optimization, 1992, 4, 65-74.	0.7	70
63	A Coarse-Grained Parallel Variable-Complexity Multidisciplinary Optimization Paradigm. International Journal of High Performance Computing Applications, 1996, 10, 269-299.	1.6	69
64	Accuracy Analysis of the Semi-Analytical Method for Shape Sensitivity Calculation. Mechanics Based Design of Structures and Machines, 1990, 18, 407-432.	0.6	68
65	Multi-fidelity design of stiffened composite panel with a crack. Structural and Multidisciplinary Optimization, 2002, 23, 347-356.	1.7	68
66	Second-order sensitivity derivatives in structural analysis. AIAA Journal, 1982, 20, 1765-1766.	1.5	67
67	Multifidelity Surrogate Based on Single Linear Regression. AIAA Journal, 2018, 56, 4944-4952.	1.5	67
68	Multidisciplinary Design Optimization with Quasiseparable Subsystems. Optimization and Engineering, 2005, 6, 9-20.	1.3	66
69	Evaluation of a Particle Swarm Algorithm For Biomechanical Optimization. Journal of Biomechanical Engineering, 2005, 127, 465-474.	0.6	66
70	Preliminary design optimization of stiffened panels using approximate analysis models. International Journal for Numerical Methods in Engineering, 2003, 57, 1351-1380.	1.5	65
71	Deterministic and Reliability-Based Optimization of Composite Laminates for Cryogenic Environments. AIAA Journal, 2003, 41, 2029-2036.	1.5	65
72	Constrained particle swarm optimization using a bi-objective formulation. Structural and Multidisciplinary Optimization, 2010, 40, 65-76.	1.7	64

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73	Application of bootstrap method in conservative estimation of reliability with limited samples. Structural and Multidisciplinary Optimization, 2010, 41, 205-217.	1.7	64
74	Reasonable Design Space Approach to Response Surface Approximation. Journal of Aircraft, 1999, 36, 308-315.	1.7	63
75	A computational framework to predict post-treatment outcome for gait-related disorders. Medical Engineering and Physics, 2008, 30, 434-443.	0.8	62
76	A Comparison of Global Optimization Methods for the Design of a High-speed Civil Transport. Journal of Global Optimization, 2001, 21, 415-432.	1.1	60
77	Sensitivity calculations for iteratively solved problems. International Journal for Numerical Methods in Engineering, 1985, 21, 1535-1546.	1.5	58
78	A convex hull approach for the reliability-based design optimization of nonlinear transient dynamic problems. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2895-2906.	3.4	58
79	Two Approaches to Sensitivity Analysis for Shape Variation of Structures. Mechanics Based Design of Structures and Machines, 1988, 16, 501-522.	0.6	55
80	Requirements for papers focusing on new or improved global optimization algorithms. Structural and Multidisciplinary Optimization, 2016, 54, 1-1.	1.7	55
81	Response Surface Approximations: Noise, Error Repair, and Modeling Errors. AIAA Journal, 2000, 38, 2336-2343.	1.5	53
82	Integrated aerodynamic-structural design of a transport wing. Journal of Aircraft, 1990, 27, 1050-1056.	1.7	48
83	Surrogate model-based strategy for cryogenic cavitation model validation and sensitivity evaluation. International Journal for Numerical Methods in Fluids, 2008, 58, 969-1007.	0.9	46
84	Design of Laminated Plates for Maximum Buckling Load. Journal of Composite Materials, 1989, 23, 348-369.	1.2	45
85	A FORTRAN 90 genetic algorithm module for composite laminate structure design. Engineering With Computers, 1998, 14, 260-273.	3.5	43
86	Pitfalls of using a single criterion for selecting experimental designs. International Journal for Numerical Methods in Engineering, 2008, 75, 127-155.	1.5	43
87	Making the Most Out of Surrogate Models: Tricks of the Trade. , 2010, , .		43
88	Analysis of dataset selection for multi-fidelity surrogates for a turbine problem. Structural and Multidisciplinary Optimization, 2018, 57, 2127-2142.	1.7	43
89	Efficient Global Optimization with Adaptive Target Setting. AIAA Journal, 2014, 52, 1573-1578.	1.5	42
90	Piezoresistive Microphone Design Pareto Optimization: Tradeoff Between Sensitivity and Noise Floor. Journal of Microelectromechanical Systems, 2006, 15, 1632-1643.	1.7	41

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91	Computational study of a nonhierarchical decomposition algorithm. Computational Optimization and Applications, 1993, 2, 273-293.	0.9	40
92	Using Cross Validation to Design Conservative Surrogates. AIAA Journal, 2010, 48, 2286-2298.	1.5	40
93	Bayesian Identification of Elastic Constants in Multi-Directional Laminate from Moiré Interferometry Displacement Fields. Experimental Mechanics, 2013, 53, 635-648.	1.1	39
94	Multifidelity response surface model for HSCT wing bending material weight. , 1998, , .		37
95	DESIGN OF A BLADE STIFFENED COMPOSITE PANEL BY GENETIC ALGORITHM. , 1993, , .		35
96	Analytical-Experimental Correlation for a Stiffened Composite Panel Loaded in Axial Compression. Journal of Aircraft, 2001, 38, 379-387.	1.7	35
97	Low-fidelity scale factor improves Bayesian multi-fidelity prediction by reducing bumpiness of discrepancy function. Structural and Multidisciplinary Optimization, 2018, 58, 399-414.	1.7	33
98	Effects of Structural Tests on Aircraft Safety. AIAA Journal, 2010, 48, 2235-2248.	1.5	32
99	A cost driven predictive maintenance policy for structural airframe maintenance. Chinese Journal of Aeronautics, 2017, 30, 1242-1257.	2.8	32
100	Why Not Run the Efficient Global Optimization Algorithm with Multiple Surrogates?. , 2010, , .		31
101	Experimental flapping wing optimization and uncertainty quantification using limited samples. Structural and Multidisciplinary Optimization, 2015, 51, 957-970.	1.7	31
102	Using response surface approximations in fuzzy set based design optimization. Structural Optimization, 1999, 18, 218-227.	0.7	30
103	The effect of ignoring dependence between failure modes on evaluating system reliability. Structural and Multidisciplinary Optimization, 2015, 52, 251-268.	1.7	30
104	Surrogate Modeling for Optimization of Dimpled Channel to Enhance Heat Transfer Performance. Journal of Thermophysics and Heat Transfer, 2007, 21, 667-671.	0.9	29
105	Integrated structural electromagnetic shape control of large space antenna reflectors. AIAA Journal, 1989, 27, 814-819.	1.5	28
106	Comparing Effectiveness of Measures That Improve Aircraft Structural Safety. Journal of Aerospace Engineering, 2007, 20, 186-199.	0.8	28
107	Surrogate-based Optimization with Parallel Simulations using the Probability of Improvement. , 2010, , .		28
108	Bilevel Design of a Wing Structure Using Response Surfaces. Journal of Aircraft, 2003, 40, 985-992.	1.7	27

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109	Multiple Surrogates for the Shape Optimization of Bluff Body-facilitated Mixing. , 2005, , .		27
110	Decomposition theory for multidisciplinary design optimization problems with mixed integer quasiseparable subsystems. Optimization and Engineering, 2006, 7, 135-149.	1.3	27
111	Tradeoff of Uncertainty Reduction Mechanisms for Reducing Weight of Composite Laminates. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 266-274.	1.7	27
112	Global/local analysis of composite plates with cutouts. Computational Mechanics, 1997, 19, 386-396.	2.2	26
113	Getting the full benefits of CFD in conceptual design. , 1998, , .		26
114	Sensitivity algorithms for an inverse design problem involving a shock wave. Inverse Problems in Science and Engineering, 1995, 2, 49-83.	0.5	25
115	Efficient optimization of integrated aerodynamic-structural design. International Journal for Numerical Methods in Engineering, 1989, 28, 593-607.	1.5	22
116	Cross Validation Can Estimate How Well Prediction Variance Correlates with Error. AIAA Journal, 2009, 47, 2266-2270.	1.5	22
117	Approximations to eigenvalues of modified general matrices. Computers and Structures, 1988, 29, 903-917.	2.4	21
118	Combining genetic and deterministic algorithms for locating actuators on space structures. Journal of Spacecraft and Rockets, 1996, 33, 422-427.	1.3	21
119	Analytical-experimental comparison of probabilistic methods and fuzzy set based methods for designing under uncertainty. Structural Optimization, 1997, 13, 69-80.	0.7	21
120	How coupon and element tests reduce conservativeness in element failure prediction. Reliability Engineering and System Safety, 2014, 123, 123-136.	5.1	20
121	Integrated structure-control optimization of space structures. , 1990, , .		19
122	A double-distribution statistical algorithm for composite laminate optimization. Structural and Multidisciplinary Optimization, 2006, 31, 49-59.	1.7	19
123	Variable-complexity aerodynamic-structural design of a high-speed civil transport wing. , 1992, , .		18
124	Multi-Objective Control-Structure Optimization via Homotopy Methods. SIAM Journal on Optimization, 1993, 3, 654-667.	1.2	18
125	Structural optimization of composite structures with limited number of element properties. Structural and Multidisciplinary Optimization, 2013, 47, 233-245.	1.7	18
126	Being Conservative with a Limited Number of Test Results. Journal of Aircraft, 2008, 45, 1969-1975.	1.7	17

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127	MDO of a Blended-Wing-Body Transport Aircraft with Distributed Propulsion. , 2003, , .		16
128	Sequential sampling for contour estimation with concurrent function evaluations. Structural and Multidisciplinary Optimization, 2012, 45, 615-618.	1.7	16
129	Composite wing structural optimization using genetic algorithms and response surfaces. , 1998, , .		15
130	Improved global convergence probability using multiple independent optimizations. International Journal for Numerical Methods in Engineering, 2007, 71, 678-702.	1.5	15
131	Uncertainty Analysis of Integrated Thermal Protection System with Rigid Insulation Bars. , 2011, , .		15
132	NASA Uncertainty Quantification Challenge: An Optimization-Based Methodology and Validation. Journal of Aerospace Information Systems, 2015, 12, 10-34.	1.0	15
133	Reevaluation of Rolling Element Bearing Load-Life Equation Based on Fatigue Endurance Data. Tribology Transactions, 2015, 58, 815-828.	1.1	14
134	Review of Regulatory Emphasis on Transportation Safety in the United States, 2002â€“2009: Public versus Private Modes. Risk Analysis, 2018, 38, 1085-1101.	1.5	14
135	General-Surrogate Adaptive Sampling Using Interquartile Range for Design Space Exploration. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	1.7	14
136	Performance Estimate and Simultaneous Application of Multiple Surrogates. , 2006, , .		13
137	Variable-Complexity Multidisciplinary Design Optimization Using Parallel Computers. , 1995, , 489-494.		13
138	Response surface techniques for diffuser shape optimization. AIAA Journal, 2000, 38, 1512-1518.	1.5	13
139	Modal truncation, Ritz vectors, and derivatives of closed-loop damping ratios. Journal of Guidance, Control, and Dynamics, 1991, 14, 785-790.	1.6	12
140	OPTIMAL PLACEMENT OF TUNING MASSES ON TRUSS STRUCTURES BY GENETIC ALGORITHMS. , 1993, , .		12
141	Detection and Repair of Poorly Converged Optimization Runs. AIAA Journal, 2001, 39, 2242-2249.	1.5	12
142	Structural Optimization: What has Moore's Law Done for Us?. , 2002, , .		12
143	Attracting cracks for arrestment in bone-like composites. Materials & Design, 2006, 27, 461-469.	5.1	12
144	Assessing the value of another cycle in Gaussian process surrogate-based optimization. Structural and Multidisciplinary Optimization, 2009, 39, 459-475.	1.7	12

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145	Tradeoffs of Wing Weight and Lift/Drag in Design of Medium-Range Transport Aircraft. Journal of Aircraft, 2014, 51, 904-912.	1.7	12
146	Balancing diversity and performance in global optimization. Structural and Multidisciplinary Optimization, 2016, 54, 1093-1105.	1.7	12
147	Efficient single-level solution of hierarchical problems in structural optimization. AIAA Journal, 1990, 28, 506-514.	1.5	10
148	Structural weight estimation for multidisciplinary optimization of a high-speed civil transport. Journal of Aircraft, 1996, 33, 608-616.	1.7	10
149	Application of a Weighted Average Surrogate Approach to Helicopter Rotor Blade Vibration Reduction. , 2007, , .		10
150	Importing Uncertainty Estimates from One Surrogate to Another. , 2009, , .		10
151	Structural optimization with limited number of element properties. Structural and Multidisciplinary Optimization, 2010, 41, 817-820.	1.7	10
152	Accurate predictions from noisy data: replication versus exploration with applications to structural failure. Structural and Multidisciplinary Optimization, 2015, 51, 23-40.	1.7	10
153	Comparison of Methods for Calculating B-Basis Crack Growth Life Using Limited Tests. AIAA Journal, 2016, 54, 1287-1298.	1.5	10
154	Noise-dependent ranking of prognostics algorithms based on discrepancy without true damage information. Reliability Engineering and System Safety, 2019, 184, 86-100.	5.1	10
155	Derivative based approximation for predicting the effect of changes in laminate stacking sequence. Structural Optimization, 1996, 11, 235-243.	0.7	9
156	Experimental study on identifying cracks of increasing size using ultrasonic excitation. Structural Health Monitoring, 2012, 11, 95-108.	4.3	9
157	Analytical benchmark example for risk allocation in structural optimization. Structural and Multidisciplinary Optimization, 2014, 50, 1-7.	1.7	9
158	Function Prediction at One Inaccessible Point Using Converging Lines. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	1.7	9
159	Linear regression-based multifidelity surrogate for disturbance amplification in multiphase explosion. Structural and Multidisciplinary Optimization, 2019, 60, 2205-2220.	1.7	9
160	Integrated aerodynamic-structural-control wing design. , 1992, , .		8
161	Error Estimation and Error Reduction in Separable Monte-Carlo Method. AIAA Journal, 2010, 48, 2624-2630.	1.5	8
162	Early Time Evolution of Circumferential Perturbation of Initial Particle Volume Fraction in Explosive Cylindrical Multiphase Dispersion. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	8

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163	Developing customized weight function by structural optimization on parallel computers. , 1996, , .		8
164	Predictive airframe maintenance strategies using model-based prognostics. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2018, 232, 690-709.	0.6	7
165	Replication of results. Structural and Multidisciplinary Optimization, 2019, 60, 405-409.	1.7	7
166	Decomposition and Two-level Optimization of Structures with Discrete Sizing Variables. , 2004, , .		6
167	Efficient Global Optimization with Experimental Data: Revisiting the Paper Helicopter Design. , 2011, , .		6
168	Advanced Space Vehicle Design Taking into Account Multidisciplinary Couplings and Mixed Epistemic/Aleatory Uncertainties. Springer Optimization and Its Applications, 2016, , 1-48.	0.6	6
169	Forensic Uncertainty Quantification for Experiments on the Explosively Driven Motion of Particles. Journal of Verification, Validation and Uncertainty Quantification, 2018, 3, .	0.3	6
170	A Kriging Surrogate Model for Computing Gas Mixture Equations of State. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	6
171	Simulation-driven design of experiments examining the large-scale, explosive dispersal of particles. Shock Waves, 2020, 30, 325-347.	1.0	6
172	Probabilistic Modeling of Errors from Structural Optimization Based on Multiple Starting Points. Optimization and Engineering, 2002, 3, 415-430.	1.3	5
173	Surrogate modelling for characterising the performance of a dielectric barrier discharge plasma actuator. International Journal of Computational Fluid Dynamics, 2010, 24, 281-301.	0.5	5
174	Global structural optimization of a stepped cantilever beam using quasi-separable decomposition. Engineering Optimization, 2010, 42, 347-367.	1.5	5
175	Probabilistic Manufacturing Tolerance Optimization of Damage-Tolerant Aircraft Structures Using Measured Data. Journal of Aircraft, 2015, 52, 1412-1421.	1.7	5
176	Adaptive Sampling with Varying Sampling Cost for Design Space Exploration. AIAA Journal, 2019, 57, 1032-1043.	1.5	5
177	Classroom project in analytical and experimental optimization. Structural Optimization, 1998, 15, 63-67.	0.7	4
178	Effect of approximation fidelity on vibration-based elastic constants identification. Structural and Multidisciplinary Optimization, 2010, 42, 293-304.	1.7	4
179	Modeling the Effect of Structural Tests on Uncertainty in Estimated Failure Stress. , 2010, , .		4
180	Control-Oriented Design Using H-infinity Synthesis and Multiple Surrogates. , 2010, , .		4

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181	Analysis of Thrust Production in Small Synthetic Flapping Wings. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 1-8.	0.3	4
182	Sampling by Exploration and Replication for Estimating Experimental Strength of Composite Structures. AIAA Journal, 2017, 55, 3594-3602.	1.5	4
183	On the Use of Symmetries in Building Surrogate Models. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	1.7	4
184	Reduced allowable strength of composite laminate for unknown distribution due to limited tests. Journal of Composite Materials, 2020, 54, 2823-2836.	1.2	4
185	How to Decide Whether to Run One More Cycle in Efficient Global Optimization. , 2012, , .		4
186	Paper helicopter - Experimental Optimum Engineering Design classroom problem. , 1998, , .		3
187	Distributed control parallelism in multidisciplinary aircraft design. Concurrency and Computation: Practice and Experience, 1999, 11, 435-459.	0.6	3
188	Separable Monte Carlo Simulation Applied to Laminated Composite Plates Reliability. , 2008, , .		3
189	Estimating training data boundaries in surrogate-based modeling. Structural and Multidisciplinary Optimization, 2010, 42, 811-821.	1.7	3
190	Accounting for Future Redesign in the Optimization of an Integrated Thermal Protection System. , 2012, , .		3
191	Fabrication and Analysis of Small Flapping Wings. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 337-344.	0.3	3
192	Using Bootstrap to Assess Sampling Uncertainty in Fatigue Crack Growth Life. , 2015, , .		3
193	Improving the Fabrication Process of Micro-Air-Vehicle Flapping Wings. AIAA Journal, 2015, 53, 3039-3048.	1.5	3
194	Teaching a Verification and Validation Course Using Simulations and Experiments With Paper Helicopters. Journal of Verification, Validation and Uncertainty Quantification, 2016, 1, .	0.3	3
195	Epistemic Uncertainty Stemming From Measurement Processingâ€™ A Case Study of Multiphase Shock Tube Experiments. Journal of Verification, Validation and Uncertainty Quantification, 2018, 3, .	0.3	3
196	General Surrogate Adaptive Sampling using Interquartile Range for Design Space Exploration. , 2019, , .		3
197	Construction of response surface approximations for design optimization. AIAA Journal, 1998, 36, 2242-2249.	1.5	3
198	An easily implemented static condensation method for structural sensitivity analysis. Communications in Applied Numerical Methods, 1990, 6, 161-171.	0.5	2

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199	Generalized pointwise bias error bounds for response surface approximations. International Journal for Numerical Methods in Engineering, 2006, 65, 2035-2059.	1.5	2
200	Multi-Objective Experimental Optimization with Multiple Simultaneous Sampling for Flapping Wings. , 2015, , .		2
201	Gaussian process as complement to test functions for surrogate modeling. Structural and Multidisciplinary Optimization, 2020, 61, 855-861.	1.7	2
202	Effects of Uncertainty Reduction on Weight of Composite Laminates at Cryogenic Temperatures. , 2005, , .		2
203	Response approximations - Noise, error repair, modeling errors. AIAA Journal, 2000, 38, 2336-2343.	1.5	2
204	PROTON RADIOGRAPHY OF EXPLOSIVELY DISPERSED METAL PARTICLES WITH VARYING CARRIER FLUID. WIT Transactions on Engineering Sciences, 2019, , .	0.0	2
205	Special issue on approximations in optimization. Structural and Multidisciplinary Optimization, 2004, 27, 301.	1.7	1
206	Ensemble of Surrogates: A Framework Based on Minimization of Integrated Square Error. , 2008, , .		1
207	Probability of Failure Uncertainty Quantification with Kriging. , 2012, , .		1
208	Effectiveness Indicators for Stopping Criteria based on Minimum Required Improvement. , 2015, , .		1
209	Deciding Optimal Number of Fatigue Crack Growth Tests for Damage-Tolerant Design. Journal of Aircraft, 2016, 53, 738-745.	1.7	1
210	Proton radiography of explosively dispersed metal particles with varying volume fraction and varying carrier phase. Shock Waves, 2021, 31, 75-88.	1.0	1
211	Uncertainty Reduction for Model Error Detection in Multiphase Shock Tube Simulation. Journal of Verification, Validation and Uncertainty Quantification, 2021, 6, .	0.3	1
212	Conservative Reliability Estimates in Design Optimization Using Multiple Tail Median. , 2009, , .		0
213	Design Optimization of a Bendable UAV Wing Under Uncertainty. , 2010, , .		0
214	Effective Tests for Discovering Unexpected Structural Failure Modes. , 2012, , .		0
215	Tailoring Flapping Wings to Facilitate Desired Deformed Shapes. AIAA Journal, 2013, 51, 2032-2035.	1.5	0
216	Optimistic Bias in Surrogate Prediction near Surrogate Optima. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
217	Structural and multidisciplinary optimization â€“ special issue editorial note. Structural and Multidisciplinary Optimization, 2016, 54, 1365-1366.	1.7	0
218	Review of Papalambros and Wildeâ€™s principles of optimal design: modeling and computation 3rd edition. Structural and Multidisciplinary Optimization, 2017, 56, 939-940.	1.7	0
219	è†åæ–™âfâfâf«âœœé©èè(æ–1æ³•ãâ®ÿè·µ). Journal of the Japan Society for Composite Materials, 2000,âœŒ, 203-212.		