

R T Haftka

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

205
papers

13,169
citations

57
h-index

112
g-index

221
ext. papers

14,961
ext. citations

2.7
avg, IF

6.48
L-index

#	Paper	IF	Citations
205	Surrogate-based analysis and optimization. <i>Progress in Aerospace Sciences</i> , 2005 , 41, 1-28	8.8	1486
204	Elements of Structural Optimization. <i>Solid Mechanics and Its Applications</i> , 1992 ,	0.4	630
203	Multidisciplinary aerospace design optimization: survey of recent developments. <i>Structural Optimization</i> , 1997 , 14, 1-23		607
202	Structural shape optimization: a survey. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1986 , 57, 91-106	5.7	437
201	Optimization of laminate stacking sequence for buckling load maximization by genetic algorithm. <i>AIAA Journal</i> , 1993 , 31, 951-956	2.1	428
200	Approximation concepts for optimum structural design: a review. <i>Structural Optimization</i> , 1993 , 5, 129-144		425
199	Ensemble of surrogates. <i>Structural and Multidisciplinary Optimization</i> , 2007 , 33, 199-216	3.6	422
198	Sensitivity Analysis of Discrete Structural Systems. <i>AIAA Journal</i> , 1986 , 24, 823-832	2.1	397
197	Recent developments in structural sensitivity analysis. <i>Structural Optimization</i> , 1989 , 1, 137-151		287
196	Multiple surrogates: how cross-validation errors can help us to obtain the best predictor. <i>Structural and Multidisciplinary Optimization</i> , 2009 , 39, 439-457	3.6	253
195	Preliminary Design of Composite Wings for Buckling, Strength, and Displacement Constraints. <i>Journal of Aircraft</i> , 1979 , 16, 564-570	1.6	237
194	Parallel global optimization with the particle swarm algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 2296-2315	2.4	218
193	Response surface approximation of Pareto optimal front in multi-objective optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 196, 879-893	5.7	190
192	Response surface approximations for structural optimization. <i>International Journal for Numerical Methods in Engineering</i> , 1998 , 42, 517-534	2.4	180
191	Efficient global optimization algorithm assisted by multiple surrogate techniques. <i>Journal of Global Optimization</i> , 2013 , 56, 669-689	1.5	176
190	Determination of patient-specific multi-joint kinematic models through two-level optimization. <i>Journal of Biomechanics</i> , 2005 , 38, 621-6	2.9	172
189	Derivatives of eigenvalues and eigenvectors of a general complex matrix. <i>International Journal for Numerical Methods in Engineering</i> , 1988 , 26, 293-311	2.4	158

188	An approach to structure/control simultaneous optimization for largeflexible spacecraft. <i>AIAA Journal</i> , 1987 , 25, 1133-1138	2.1	157
187	Adaptive Designs of Experiments for Accurate Approximation of a Target Region. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2010 , 132,	3	152
186	Parallel asynchronous particle swarm optimization. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 67, 578-595	2.4	148
185	Response Surface Techniques for Diffuser Shape Optimization. <i>AIAA Journal</i> , 2000 , 38, 1512-1518	2.1	143
184	Simultaneous analysis and design. <i>AIAA Journal</i> , 1985 , 23, 1099-1103	2.1	143
183	Parallel surrogate-assisted global optimization with expensive functions \square survey. <i>Structural and Multidisciplinary Optimization</i> , 2016 , 54, 3-13	3.6	142
182	Permutation genetic algorithm for stacking sequence design of composite laminates. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 186, 357-372	5.7	140
181	Genetic algorithms with local improvement for composite laminate design. <i>Structural Optimization</i> , 1994 , 7, 207-218		128
180	Multiple Surrogate Modeling for Axial Compressor Blade Shape Optimization. <i>Journal of Propulsion and Power</i> , 2008 , 24, 301-310	1.8	120
179	Fast exact linear and non-linear structural reanalysis and the ShermanMorrisonWoodbury formulas. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 50, 1587-1606	2.4	120
178	An analytical investigation of shape control of large space structures by applied temperatures. <i>AIAA Journal</i> , 1985 , 23, 450-457	2.1	120
177	Stacking sequence optimization by a genetic algorithm with a new recessive gene like repair strategy. <i>Composites Part B: Engineering</i> , 1998 , 29, 277-285	10	119
176	Stacking-sequence optimization for buckling of laminated plates by integer programming. <i>AIAA Journal</i> , 1992 , 30, 814-819	2.1	113
175	Combining global and local approximations. <i>AIAA Journal</i> , 1991 , 29, 1523-1525	2.1	110
174	Anti-optimization technique for structural design under load uncertainties. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998 , 157, 19-31	5.7	101
173	First- and second-order sensitivity analysis of linear and nonlinearstructures. <i>AIAA Journal</i> , 1986 , 24, 1187-1192	2.1	93
172	Structural optimization complexity: what has Moore's law done for us?. <i>Structural and Multidisciplinary Optimization</i> , 2004 , 28, 375-387	3.6	91
171	Remarks on multi-fidelity surrogates. <i>Structural and Multidisciplinary Optimization</i> , 2017 , 55, 1029-1050	3.6	90

170	Comparison of Probability and Possibility for Design Against Catastrophic Failure Under Uncertainty. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2004 , 126, 386-394	3	86
169	Sensitivity-based scaling for approximating structural response. <i>Journal of Aircraft</i> , 1993 , 30, 283-288	1.6	83
168	Reliability-based design optimization using probabilistic sufficiency factor. <i>Structural and Multidisciplinary Optimization</i> , 2004 , 27, 314	3.6	81
167	Construction of Response Surface Approximations for Design Optimization. <i>AIAA Journal</i> , 1998 , 36, 2242-2249	7.6	76
166	Variable-complexity aerodynamic optimization of a high-speed civil transport wing. <i>Journal of Aircraft</i> , 1994 , 31, 110-116	1.6	76
165	Stacking sequence optimization of simply supported laminates with stability and strain constraints. <i>AIAA Journal</i> , 1992 , 30, 2132-2137	2.1	74
164	Response Surface Models Combining Linear and Euler Aerodynamics for Supersonic Transport Design. <i>Journal of Aircraft</i> , 1999 , 36, 75-86	1.6	73
163	Two-point constraint approximation in structural optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1987 , 60, 289-301	5.7	72
162	Are patient-specific joint and inertial parameters necessary for accurate inverse dynamics analyses of gait?. <i>IEEE Transactions on Biomedical Engineering</i> , 2007 , 54, 782-93	5	69
161	Optimization and Experiments: A Survey. <i>Applied Mechanics Reviews</i> , 1998 , 51, 435-448	8.6	69
160	Comparison of evidence theory and Bayesian theory for uncertainty modeling. <i>Reliability Engineering and System Safety</i> , 2004 , 85, 295-311	6.3	68
159	Accuracy problems associated with semi-analytical derivatives of static response. <i>Finite Elements in Analysis and Design</i> , 1988 , 4, 249-265	2.2	68
158	Modern homotopy methods in optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1989 , 74, 289-305	5.7	67
157	Comparison of Materials for an Integrated Thermal Protection System for Spacecraft Reentry. <i>Journal of Spacecraft and Rockets</i> , 2009 , 46, 501-513	1.5	64
156	Issues in Deciding Whether to Use Multifidelity Surrogates. <i>AIAA Journal</i> , 2019 , 57, 2039-2054	2.1	63
155	NEWSUMT-A: A General Purpose Program for Constrained Optimization Using Constraint Approximations. <i>Journal of Mechanisms, Transmissions, and Automation in Design</i> , 1985 , 107, 94-99		63
154	Micromechanical Analysis of Composite Corrugated-Core Sandwich Panels for Integral Thermal Protection Systems. <i>AIAA Journal</i> , 2007 , 45, 2323-2336	2.1	62
153	Techniques for thermal sensitivity analysis. <i>International Journal for Numerical Methods in Engineering</i> , 1981 , 17, 71-80	2.4	61

152	On options for interdisciplinary analysis and design optimization. <i>Structural Optimization</i> , 1992 , 4, 65-74		60
151	Integrated aerodynamic/structural design of a sailplane wing. <i>Journal of Aircraft</i> , 1988 , 25, 855-860	1.6	60
150	Enhanced vibration controllability by minor structural modifications. <i>AIAA Journal</i> , 1985 , 23, 1260-1266	2.1	59
149	Second-order sensitivity derivatives in structural analysis. <i>AIAA Journal</i> , 1982 , 20, 1765-1766	2.1	57
148	Optimization of flexible wing structures subject to strength and induced drag constraints. <i>AIAA Journal</i> , 1977 , 15, 1101-1106	2.1	57
147	Optimization with non-homogeneous failure criteria like Tsai-Wu for composite laminates. <i>Structural and Multidisciplinary Optimization</i> , 2006 , 32, 183-190	3.6	56
146	Accuracy Analysis of the Semi-Analytical Method for Shape Sensitivity Calculation*. <i>Mechanics Based Design of Structures and Machines</i> , 1990 , 18, 407-432		56
145	Preliminary design optimization of stiffened panels using approximate analysis models. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 57, 1351-1380	2.4	55
144	Polynomial Response Surface Approximations for the Multidisciplinary Design Optimization of a High Speed Civil Transport. <i>Optimization and Engineering</i> , 2001 , 2, 431-452	2.1	55
143	Multiple-Surrogate Approach to Helicopter Rotor Blade Vibration Reduction. <i>AIAA Journal</i> , 2009 , 47, 271-282	2.1	54
142	Multi-fidelity design of stiffened composite panel with a crack. <i>Structural and Multidisciplinary Optimization</i> , 2002 , 23, 347-356	3.6	54
141	Variable-complexity response surface approximations for wing structural weight in HSCT design. <i>Computational Mechanics</i> , 1996 , 18, 112-126	4	54
140	Constrained particle swarm optimization using a bi-objective formulation. <i>Structural and Multidisciplinary Optimization</i> , 2010 , 40, 65-76	3.6	52
139	Deterministic and Reliability-Based Optimization of Composite Laminates for Cryogenic Environments. <i>AIAA Journal</i> , 2003 , 41, 2029-2036	2.1	52
138	A convex hull approach for the reliability-based design optimization of nonlinear transient dynamic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2007 , 196, 2895-2906	5.7	51
137	Multidisciplinary Design Optimization with Quasiseparable Subsystems. <i>Optimization and Engineering</i> , 2005 , 6, 9-20	2.1	51
136	A Coarse-Grained Parallel Variable-Complexity Multidisciplinary Optimization Paradigm. <i>International Journal of High Performance Computing Applications</i> , 1996 , 10, 269-299		50
135	Reasonable Design Space Approach to Response Surface Approximation. <i>Journal of Aircraft</i> , 1999 , 36, 308-315	1.6	50

134	Application of bootstrap method in conservative estimation of reliability with limited samples. <i>Structural and Multidisciplinary Optimization</i> , 2010 , 41, 205-217	3.6	49
133	Two Approaches to Sensitivity Analysis for Shape Variation of Structures. <i>Mechanics Based Design of Structures and Machines</i> , 1988 , 16, 501-522		47
132	Evaluation of a particle swarm algorithm for biomechanical optimization. <i>Journal of Biomechanical Engineering</i> , 2005 , 127, 465-74	2.1	45
131	A Comparison of Global Optimization Methods for the Design of a High-speed Civil Transport. <i>Journal of Global Optimization</i> , 2001 , 21, 415-432	1.5	45
130	Sensitivity calculations for iteratively solved problems. <i>International Journal for Numerical Methods in Engineering</i> , 1985 , 21, 1535-1546	2.4	45
129	Response Surface Approximations: Noise, Error Repair, and Modeling Errors. <i>AIAA Journal</i> , 2000 , 38, 2336-2343	2.1	44
128	A computational framework to predict post-treatment outcome for gait-related disorders. <i>Medical Engineering and Physics</i> , 2008 , 30, 434-43	2.4	43
127	Design of Laminated Plates for Maximum Buckling Load. <i>Journal of Composite Materials</i> , 1989 , 23, 348-369		39
126	Pitfalls of using a single criterion for selecting experimental designs. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 75, 127-155	2.4	38
125	Integrated aerodynamic-structural design of a transport wing. <i>Journal of Aircraft</i> , 1990 , 27, 1050-1056	1.6	37
124	A FORTRAN 90 genetic algorithm module for composite laminate structure design. <i>Engineering With Computers</i> , 1998 , 14, 260-273	4.5	36
123	Computational study of a nonhierarchical decomposition algorithm. <i>Computational Optimization and Applications</i> , 1993 , 2, 273-293	1.4	36
122	Using Cross Validation to Design Conservative Surrogates. <i>AIAA Journal</i> , 2010 , 48, 2286-2298	2.1	35
121	Surrogate model-based strategy for cryogenic cavitation model validation and sensitivity evaluation. <i>International Journal for Numerical Methods in Fluids</i> , 2008 , 58, 969-1007	1.9	35
120	Multifidelity Surrogate Based on Single Linear Regression. <i>AIAA Journal</i> , 2018 , 56, 4944-4952	2.1	35
119	Efficient Global Optimization with Adaptive Target Setting. <i>AIAA Journal</i> , 2014 , 52, 1573-1578	2.1	34
118	Bayesian Identification of Elastic Constants in Multi-Directional Laminate from Moiré Interferometry Displacement Fields. <i>Experimental Mechanics</i> , 2013 , 53, 635-648	2.6	32
117	Making the Most Out of Surrogate Models: Tricks of the Trade 2010 ,		32

116	Piezoresistive Microphone Design Pareto Optimization: Tradeoff Between Sensitivity and Noise Floor. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 1632-1643	2.5	32
115	Analytical-Experimental Correlation for a Stiffened Composite Panel Loaded in Axial Compression. <i>Journal of Aircraft</i> , 2001 , 38, 379-387	1.6	31
114	DESIGN OF A BLADE STIFFENED COMPOSITE PANEL BY GENETIC ALGORITHM 1993 ,		31
113	Similarity measures for identifying material parameters from hysteresis loops using inverse analysis. <i>International Journal of Material Forming</i> , 2019 , 12, 355-378	2	28
112	Using response surface approximations in fuzzy set based design optimization. <i>Structural Optimization</i> , 1999 , 18, 218-227		28
111	Multifidelity response surface model for HSCT wing bending material weight 1998 ,		26
110	Effects of Structural Tests on Aircraft Safety. <i>AIAA Journal</i> , 2010 , 48, 2235-2248	2.1	25
109	Decomposition theory for multidisciplinary design optimization problems with mixed integer quasiseparable subsystems. <i>Optimization and Engineering</i> , 2006 , 7, 135-149	2.1	25
108	Bilevel Design of a Wing Structure Using Response Surfaces. <i>Journal of Aircraft</i> , 2003 , 40, 985-992	1.6	25
107	Analysis of dataset selection for multi-fidelity surrogates for a turbine problem. <i>Structural and Multidisciplinary Optimization</i> , 2018 , 57, 2127-2142	3.6	25
106	The effect of ignoring dependence between failure modes on evaluating system reliability. <i>Structural and Multidisciplinary Optimization</i> , 2015 , 52, 251-268	3.6	24
105	Why Not Run the Efficient Global Optimization Algorithm with Multiple Surrogates? 2010 ,		24
104	Global/local analysis of composite plates with cutouts. <i>Computational Mechanics</i> , 1997 , 19, 386-396	4	24
103	Experimental flapping wing optimization and uncertainty quantification using limited samples. <i>Structural and Multidisciplinary Optimization</i> , 2015 , 51, 957-970	3.6	23
102	Surrogate-based Optimization with Parallel Simulations using the Probability of Improvement 2010 ,		23
101	Multiple Surrogates for the Shape Optimization of Bluff Body-facilitated Mixing 2005 ,		23
100	Integrated structural electromagnetic shape control of large space antenna reflectors. <i>AIAA Journal</i> , 1989 , 27, 814-819	2.1	23
99	Tradeoff of Uncertainty Reduction Mechanisms for Reducing Weight of Composite Laminates. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2007 , 129, 266-274	3	22

98	Getting the full benefits of CFD in conceptual design 1998 ,		22
97	Efficient optimization of integrated aerodynamic-structural design. <i>International Journal for Numerical Methods in Engineering</i> , 1989 , 28, 593-607	2.4	21
96	Approximations to eigenvalues of modified general matrices. <i>Computers and Structures</i> , 1988 , 29, 903-917	1.75	21
95	A cost driven predictive maintenance policy for structural airframe maintenance. <i>Chinese Journal of Aeronautics</i> , 2017 , 30, 1242-1257	3.7	20
94	Cross Validation Can Estimate How Well Prediction Variance Correlates with Error. <i>AIAA Journal</i> , 2009 , 47, 2266-2270	2.1	20
93	Surrogate Modeling for Optimization of Dimpled Channel to Enhance Heat Transfer Performance. <i>Journal of Thermophysics and Heat Transfer</i> , 2007 , 21, 667-671	1.3	20
92	Sensitivity algorithms for an inverse design problem involving a shock wave. <i>Inverse Problems in Science and Engineering</i> , 1995 , 2, 49-83		20
91	Comparing Effectiveness of Measures That Improve Aircraft Structural Safety. <i>Journal of Aerospace Engineering</i> , 2007 , 20, 186-199	1.4	19
90	Low-fidelity scale factor improves Bayesian multi-fidelity prediction by reducing bumpiness of discrepancy function. <i>Structural and Multidisciplinary Optimization</i> , 2018 , 58, 399-414	3.6	18
89	How coupon and element tests reduce conservativeness in element failure prediction. <i>Reliability Engineering and System Safety</i> , 2014 , 123, 123-136	6.3	17
88	Combining genetic and deterministic algorithms for locating actuators on space structures. <i>Journal of Spacecraft and Rockets</i> , 1996 , 33, 422-427	1.5	17
87	Analytical-experimental comparison of probabilistic methods and fuzzy set based methods for designing under uncertainty. <i>Structural Optimization</i> , 1997 , 13, 69-80		16
86	Multi-Objective Control-Structure Optimization via Homotopy Methods. <i>SIAM Journal on Optimization</i> , 1993 , 3, 654-667	2	16
85	Variable-complexity aerodynamic-structural design of a high-speed civil transport wing 1992 ,		15
84	Structural optimization of composite structures with limited number of element properties. <i>Structural and Multidisciplinary Optimization</i> , 2013 , 47, 233-245	3.6	14
83	Sequential sampling for contour estimation with concurrent function evaluations. <i>Structural and Multidisciplinary Optimization</i> , 2012 , 45, 615-618	3.6	14
82	Improved global convergence probability using multiple independent optimizations. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 678-702	2.4	13
81	Variable-Complexity Multidisciplinary Design Optimization Using Parallel Computers 1995 , 489-494		13

80	Review of Regulatory Emphasis on Transportation Safety in the United States, 2002-2009: Public versus Private Modes. <i>Risk Analysis</i> , 2018 , 38, 1085-1101	3.9	12
79	Being Conservative with a Limited Number of Test Results. <i>Journal of Aircraft</i> , 2008 , 45, 1969-1975	1.6	12
78	A double-distribution statistical algorithm for composite laminate optimization. <i>Structural and Multidisciplinary Optimization</i> , 2006 , 31, 49-59	3.6	12
77	Composite wing structural optimization using genetic algorithms and response surfaces 1998 ,		12
76	Modal truncation, Ritz vectors, and derivatives of closed-loop damping ratios. <i>Journal of Guidance, Control, and Dynamics</i> , 1991 , 14, 785-790	2.1	12
75	Integrated structure-control optimization of space structures 1990 ,		12
74	NASA Uncertainty Quantification Challenge: An Optimization-Based Methodology and Validation. <i>Journal of Aerospace Information Systems</i> , 2015 , 12, 10-34	1	11
73	Assessing the value of another cycle in Gaussian process surrogate-based optimization. <i>Structural and Multidisciplinary Optimization</i> , 2009 , 39, 459-475	3.6	11
72	Attracting cracks for arrestment in bone-like composites. <i>Materials & Design</i> , 2006 , 27, 461-469		11
71	MDO of a Blended-Wing-Body Transport Aircraft with Distributed Propulsion 2003 ,		11
70	Accurate predictions from noisy data: replication versus exploration with applications to structural failure. <i>Structural and Multidisciplinary Optimization</i> , 2015 , 51, 23-40	3.6	10
69	Reevaluation of Rolling Element Bearing Load-Life Equation Based on Fatigue Endurance Data. <i>Tribology Transactions</i> , 2015 , 58, 815-828	1.8	10
68	Importing Uncertainty Estimates from One Surrogate to Another 2009 ,		10
67	Performance Estimate and Simultaneous Application of Multiple Surrogates 2006 ,		10
66	OPTIMAL PLACEMENT OF TUNING MASSES ON TRUSS STRUCTURES BY GENETIC ALGORITHMS 1993 ,		10
65	Efficient single-level solution of hierarchical problems in structural optimization. <i>AIAA Journal</i> , 1990 , 28, 506-514	2.1	10
64	Analytical benchmark example for risk allocation in structural optimization. <i>Structural and Multidisciplinary Optimization</i> , 2014 , 50, 1-7	3.6	9
63	Application of a Weighted Average Surrogate Approach to Helicopter Rotor Blade Vibration Reduction 2007 ,		9

62	Detection and Repair of Poorly Converged Optimization Runs. <i>AIAA Journal</i> , 2001 , 39, 2242-2249	2.1	9
61	Structural weight estimation for multidisciplinary optimization of a high-speed civil transport. <i>Journal of Aircraft</i> , 1996 , 33, 608-616	1.6	9
60	Comparison of Methods for Calculating B-Basis Crack Growth Life Using Limited Tests. <i>AIAA Journal</i> , 2016 , 54, 1287-1298	2.1	9
59	Function Prediction at One Inaccessible Point Using Converging Lines. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2017 , 139,	3	8
58	Uncertainty Analysis of Integrated Thermal Protection System with Rigid Insulation Bars 2011 ,		8
57	Balancing diversity and performance in global optimization. <i>Structural and Multidisciplinary Optimization</i> , 2016 , 54, 1093-1105	3.6	8
56	Error Estimation and Error Reduction in Separable Monte-Carlo Method. <i>AIAA Journal</i> , 2010 , 48, 2624-2630		7
55	Experimental study on identifying cracks of increasing size using ultrasonic excitation. <i>Structural Health Monitoring</i> , 2012 , 11, 95-108	4.4	7
54	Structural optimization with limited number of element properties. <i>Structural and Multidisciplinary Optimization</i> , 2010 , 41, 817-820	3.6	7
53	Structural Optimization: What has Moore's Law Done for Us? 2002 ,		7
52	Derivative based approximation for predicting the effect of changes in laminate stacking sequence. <i>Structural Optimization</i> , 1996 , 11, 235-243		7
51	Integrated aerodynamic-structural-control wing design 1992 ,		7
50	General-Surrogate Adaptive Sampling Using Interquartile Range for Design Space Exploration. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2020 , 142,	3	7
49	Tradeoffs of Wing Weight and Lift/Drag in Design of Medium-Range Transport Aircraft. <i>Journal of Aircraft</i> , 2014 , 51, 904-912	1.6	6
48	Adaptive Sampling with Varying Sampling Cost for Design Space Exploration. <i>AIAA Journal</i> , 2019 , 57, 1032-1043	2.1	5
47	Early Time Evolution of Circumferential Perturbation of Initial Particle Volume Fraction in Explosive Cylindrical Multiphase Dispersion. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2019 , 141,	2.1	5
46	Probabilistic Manufacturing Tolerance Optimization of Damage-Tolerant Aircraft Structures Using Measured Data. <i>Journal of Aircraft</i> , 2015 , 52, 1412-1421	1.6	5
45	Surrogate modelling for characterising the performance of a dielectric barrier discharge plasma actuator. <i>International Journal of Computational Fluid Dynamics</i> , 2010 , 24, 281-301	1.2	5

44	Global structural optimization of a stepped cantilever beam using quasi-separable decomposition. <i>Engineering Optimization</i> , 2010 , 42, 347-367	2	5
43	Decomposition and Two-level Optimization of Structures with Discrete Sizing Variables 2004 ,		5
42	Developing customized weight function by structural optimization on parallel computers 1996 ,		5
41	Noise-dependent ranking of prognostics algorithms based on discrepancy without true damage information. <i>Reliability Engineering and System Safety</i> , 2019 , 184, 86-100	6.3	5
40	A Kriging Surrogate Model for Computing Gas Mixture Equations of State. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2019 , 141,	2.1	4
39	Linear regression-based multifidelity surrogate for disturbance amplification in multiphase explosion. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 60, 2205-2220	3.6	4
38	Sampling by Exploration and Replication for Estimating Experimental Strength of Composite Structures. <i>AIAA Journal</i> , 2017 , 55, 3594-3602	2.1	4
37	Efficient Global Optimization with Experimental Data: Revisiting the Paper Helicopter Design 2011 ,		4
36	Effect of approximation fidelity on vibration-based elastic constants identification. <i>Structural and Multidisciplinary Optimization</i> , 2010 , 42, 293-304	3.6	4
35	Classroom project in analytical and experimental optimization. <i>Structural Optimization</i> , 1998 , 15, 63-67		4
34	Response surface techniques for diffuser shape optimization. <i>AIAA Journal</i> , 2000 , 38, 1512-1518	2.1	4
33	How to Decide Whether to Run One More Cycle in Efficient Global Optimization 2012 ,		4
32	Advanced Space Vehicle Design Taking into Account Multidisciplinary Couplings and Mixed Epistemic/Aleatory Uncertainties. <i>Springer Optimization and Its Applications</i> , 2016 , 1-48	0.4	4
31	Forensic Uncertainty Quantification for Experiments on the Explosively Driven Motion of Particles. <i>Journal of Verification, Validation and Uncertainty Quantification</i> , 2018 , 3,	0.9	4
30	Improving the Fabrication Process of Micro-Air-Vehicle Flapping Wings. <i>AIAA Journal</i> , 2015 , 53, 3039-3048	4.1	3
29	Analysis of Thrust Production in Small Synthetic Flapping Wings. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2014 , 1-8	0.3	3
28	Fabrication and Analysis of Small Flapping Wings. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2013 , 337-344	0.3	3
27	Control-Oriented Design Using H-infinity Synthesis and Multiple Surrogates 2010 ,		3

26	Separable Monte Carlo Simulation Applied to Laminated Composite Plates Reliability 2008 ,		3
25	Probabilistic Modeling of Errors from Structural Optimization Based on Multiple Starting Points. <i>Optimization and Engineering</i> , 2002 , 3, 415-430	2.1	3
24	On the Use of Symmetries in Building Surrogate Models. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2019 , 141,	3	3
23	Reduced allowable strength of composite laminate for unknown distribution due to limited tests. <i>Journal of Composite Materials</i> , 2020 , 54, 2823-2836	2.7	2
22	Predictive airframe maintenance strategies using model-based prognostics. <i>Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability</i> , 2018 , 232, 690-709	0.8	2
21	Multi-Objective Experimental Optimization with Multiple Simultaneous Sampling for Flapping Wings 2015 ,		2
20	Using Bootstrap to Assess Sampling Uncertainty in Fatigue Crack Growth Life 2015 ,		2
19	Accounting for Future Redesign in the Optimization of an Integrated Thermal Protection System 2012 ,		2
18	Estimating training data boundaries in surrogate-based modeling. <i>Structural and Multidisciplinary Optimization</i> , 2010 , 42, 811-821	3.6	2
17	Generalized pointwise bias error bounds for response surface approximations. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 65, 2035-2059	2.4	2
16	Paper helicopter - Experimental Optimum Engineering Design classroom problem 1998 ,		2
15	Distributed control parallelism in multidisciplinary aircraft design. <i>Concurrency and Computation: Practice and Experience</i> , 1999 , 11, 435-459		2
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