R T Haftka

List of Publications by Year in Descending Order

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	Proton radiography of explosively dispersed metal particles with varying volume fraction and varying carrier phase. *Shock Waves*, **2021**, 31, 75-88	1.6	
204	Reduced allowable strength of composite laminate for unknown distribution due to limited tests. *Journal of Composite Materials*, **2020**, 54, 2823-2836	2.7	2
203	General-Surrogate Adaptive Sampling Using Interquartile Range for Design Space Exploration. *Journal of Mechanical Design, Transactions of the ASME*, **2020**, 142,	3	7
202	Simulation-driven design of experiments examining the large-scale, explosive dispersal of particles. *Shock Waves*, **2020**, 30, 325-347	1.6	2
201	Adaptive Sampling with Varying Sampling Cost for Design Space Exploration. *AIAA Journal*, **2019**, 57, 1032-1043	2.1	5
200	Issues in Deciding Whether to Use Multifidelity Surrogates. *AIAA Journal*, **2019**, 57, 2039-2054	2.1	63
199	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,	2.1	5
198	A Kriging Surrogate Model for Computing Gas Mixture Equations of State. *Journal of Fluids Engineering, Transactions of the ASME*, **2019**, 141,	2.1	4
197	Similarity measures for identifying material parameters from hysteresis loops using inverse analysis. *International Journal of Material Forming*, **2019**, 12, 355-378	2	28
196	Linear regression-based multifidelity surrogate for disturbance amplification in multiphase explosion. *Structural and Multidisciplinary Optimization*, **2019**, 60, 2205-2220	3.6	4
195	General Surrogate Adaptive Sampling using Interquartile Range for Design Space Exploration **2019**,		2
194	On the Use of Symmetries in Building Surrogate Models. *Journal of Mechanical Design, Transactions of the ASME*, **2019**, 141,	3	3
193	Noise-dependent ranking of prognostics algorithms based on discrepancy without true damage information. *Reliability Engineering and System Safety*, **2019**, 184, 86-100	6.3	5
192	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	0.8	2
191	Review of Regulatory Emphasis on Transportation Safety in the United States, 2002-2009: Public versus Private Modes. *Risk Analysis*, **2018**, 38, 1085-1101	3.9	12
190	Low-fidelity scale factor improves Bayesian multi-fidelity prediction by reducing bumpiness of discrepancy function. *Structural and Multidisciplinary Optimization*, **2018**, 58, 399-414	3.6	18
189	Forensic Uncertainty Quantification for Experiments on the Explosively Driven Motion of Particles. *Journal of Verification, Validation and Uncertainty Quantification*, **2018**, 3,	0.9	4

188	Epistemic Uncertainty Stemming From Measurement Processing: A Case Study of Multiphase Shock Tube Experiments. *Journal of Verification, Validation and Uncertainty Quantification*, **2018**, 3,	0.9	2
187	Multifidelity Surrogate Based on Single Linear Regression. *AIAA Journal*, **2018**, 56, 4944-4952	2.1	35
186	Analysis of dataset selection for multi-fidelity surrogates for a turbine problem. *Structural and Multidisciplinary Optimization*, **2018**, 57, 2127-2142	3.6	25
185	A cost driven predictive maintenance policy for structural airframe maintenance. *Chinese Journal of Aeronautics*, **2017**, 30, 1242-1257	3.7	20
184	Function Prediction at One Inaccessible Point Using Converging Lines. *Journal of Mechanical Design, Transactions of the ASME*, **2017**, 139,	3	8
183	Sampling by Exploration and Replication for Estimating Experimental Strength of Composite Structures. *AIAA Journal*, **2017**, 55, 3594-3602	2.1	4
182	Review of Papalambros and Wilde's principles of optimal design: modeling and computation 3nd edition. *Structural and Multidisciplinary Optimization*, **2017**, 56, 939-940	3.6	
181	Remarks on multi-fidelity surrogates. *Structural and Multidisciplinary Optimization*, **2017**, 55, 1029-1050	3.6	90
180	Teaching a Verification and Validation Course Using Simulations and Experiments With Paper Helicopters. *Journal of Verification, Validation and Uncertainty Quantification*, **2016**, 1,	0.9	2
179	Advanced Space Vehicle Design Taking into Account Multidisciplinary Couplings and Mixed Epistemic/Aleatory Uncertainties. *Springer Optimization and Its Applications*, **2016**, 1-48	0.4	4
178	Deciding Optimal Number of Fatigue Crack Growth Tests for Damage-Tolerant Design. *Journal of Aircraft*, **2016**, 53, 738-745	1.6	1
177	Parallel surrogate-assisted global optimization with expensive functions – a survey. *Structural and Multidisciplinary Optimization*, **2016**, 54, 3-13	3.6	142
176	Balancing diversity and performance in global optimization. *Structural and Multidisciplinary Optimization*, **2016**, 54, 1093-1105	3.6	8
175	Comparison of Methods for Calculating B-Basis Crack Growth Life Using Limited Tests. *AIAA Journal* , **2016**, 54, 1287-1298	2.1	9
174	Accurate predictions from noisy data: replication versus exploration with applications to structural failure. *Structural and Multidisciplinary Optimization*, **2015**, 51, 23-40	3.6	10
173	The effect of ignoring dependence between failure modes on evaluating system reliability. *Structural and Multidisciplinary Optimization*, **2015**, 52, 251-268	3.6	24
172	NASA Uncertainty Quantification Challenge: An Optimization-Based Methodology and Validation. *Journal of Aerospace Information Systems*, **2015**, 12, 10-34	1	11
171	Improving the Fabrication Process of Micro-Air-Vehicle Flapping Wings. *AIAA Journal*, **2015**, 53, 3039-3048	2.1	3

170	Probabilistic Manufacturing Tolerance Optimization of Damage-Tolerant Aircraft Structures Using Measured Data. *Journal of Aircraft*, **2015**, 52, 1412-1421	1.6	5
169	Multi-Objective Experimental Optimization with Multiple Simultaneous Sampling for Flapping Wings **2015**,		2
168	Effectiveness Indicators for Stopping Criteria based on Minimum Required Improvement **2015**,		1
167	Using Bootstrap to Assess Sampling Uncertainty in Fatigue Crack Growth Life **2015**,		2
166	Reevaluation of Rolling Element Bearing Load-Life Equation Based on Fatigue Endurance Data. *Tribology Transactions*, **2015**, 58, 815-828	1.8	10
165	Experimental flapping wing optimization and uncertainty quantification using limited samples. *Structural and Multidisciplinary Optimization*, **2015**, 51, 957-970	3.6	23
164	Analysis of Thrust Production in Small Synthetic Flapping Wings. *Conference Proceedings of the Society for Experimental Mechanics*, **2014**, 1-8	0.3	3
163	Analytical benchmark example for risk allocation in structural optimization. *Structural and Multidisciplinary Optimization*, **2014**, 50, 1-7	3.6	9
162	Efficient Global Optimization with Adaptive Target Setting. *AIAA Journal*, **2014**, 52, 1573-1578	2.1	34
161	Tradeoffs of Wing Weight and Lift/Drag in Design of Medium-Range Transport Aircraft. *Journal of Aircraft*, **2014**, 51, 904-912	1.6	6
160	How coupon and element tests reduce conservativeness in element failure prediction. *Reliability Engineering and System Safety*, **2014**, 123, 123-136	6.3	17
159	Efficient global optimization algorithm assisted by multiple surrogate techniques. *Journal of Global Optimization*, **2013**, 56, 669-689	1.5	176
158	Tailoring Flapping Wings to Facilitate Desired Deformed Shapes. *AIAA Journal*, **2013**, 51, 2032-2035	2.1	
157	Bayesian Identification of Elastic Constants in Multi-Directional Laminate from Moir Interferometry Displacement Fields. *Experimental Mechanics*, **2013**, 53, 635-648	2.6	32
156	Fabrication and Analysis of Small Flapping Wings. *Conference Proceedings of the Society for Experimental Mechanics*, **2013**, 337-344	0.3	3
155	Structural optimization of composite structures with limited number of element properties. *Structural and Multidisciplinary Optimization*, **2013**, 47, 233-245	3.6	14
154	Probability of Failure Uncertainty Quantification with Kriging **2012**,		1
153	Sequential sampling for contour estimation with concurrent function evaluations. *Structural and Multidisciplinary Optimization*, **2012**, 45, 615-618	3.6	14

152	Accounting for Future Redesign in the Optimization of an Integrated Thermal Protection System **2012**,		2
151	Experimental study on identifying cracks of increasing size using ultrasonic excitation. *Structural Health Monitoring*, **2012**, 11, 95-108	4.4	7
150	How to Decide Whether to Run One More Cycle in Efficient Global Optimization **2012**,		4
149	Uncertainty Analysis of Integrated Thermal Protection System with Rigid Insulation Bars **2011**,		8
148	Efficient Global Optimization with Experimental Data: Revisiting the Paper Helicopter Design **2011**,		4
147	Modeling the Effect of Structural Tests on Uncertainty in Estimated Failure Stress **2010**,		1
146	Error Estimation and Error Reduction in Separable Monte-Carlo Method. *AIAA Journal*, **2010**, 48, 2624-2630	2.1	7
145	Effects of Structural Tests on Aircraft Safety. *AIAA Journal*, **2010**, 48, 2235-2248	2.1	25
144	Using Cross Validation to Design Conservative Surrogates. *AIAA Journal*, **2010**, 48, 2286-2298	2.1	35
143	Surrogate modelling for characterising the performance of a dielectric barrier discharge plasma actuator. *International Journal of Computational Fluid Dynamics*, **2010**, 24, 281-301	1.2	5
142	Adaptive Designs of Experiments for Accurate Approximation of a Target Region. *Journal of Mechanical Design, Transactions of the ASME*, **2010**, 132,	3	152
141	Making the Most Out of Surrogate Models: Tricks of the Trade **2010**,		32
140	Surrogate-based Optimization with Parallel Simulations using the Probability of Improvement **2010** ,		23
139	Global structural optimization of a stepped cantilever beam using quasi-separable decomposition. *Engineering Optimization*, **2010**, 42, 347-367	2	5
138	Control-Oriented Design Using H-infinity Synthesis and Multiple Surrogates **2010**,		3
137	Why Not Run the Efficient Global Optimization Algorithm with Multiple Surrogates? **2010**,		24
136	Constrained particle swarm optimization using a bi-objective formulation. *Structural and Multidisciplinary Optimization*, **2010**, 40, 65-76	3.6	52
135	Application of bootstrap method in conservative estimation of reliability with limited samples. *Structural and Multidisciplinary Optimization*, **2010**, 41, 205-217	3.6	49

134	Structural optimization with limited number of element properties. *Structural and Multidisciplinary Optimization*, **2010**, 41, 817-820	3.6	7
133	Effect of approximation fidelity on vibration-based elastic constants identification. *Structural and Multidisciplinary Optimization*, **2010**, 42, 293-304	3.6	4
132	Estimating training data boundaries in surrogate-based modeling. *Structural and Multidisciplinary Optimization*, **2010**, 42, 811-821	3.6	2
131	Cross Validation Can Estimate How Well Prediction Variance Correlates with Error. *AIAA Journal*, **2009**, 47, 2266-2270	2.1	20
130	Comparison of Materials for an Integrated Thermal Protection System for Spacecraft Reentry. *Journal of Spacecraft and Rockets*, **2009**, 46, 501-513	1.5	64
129	Multiple-Surrogate Approach to Helicopter Rotor Blade Vibration Reduction. *AIAA Journal*, **2009**, 47, 271-282	2.1	54
128	Multiple surrogates: how cross-validation errors can help us to obtain the best predictor. *Structural and Multidisciplinary Optimization*, **2009**, 39, 439-457	3.6	253
127	Assessing the value of another cycle in Gaussian process surrogate-based optimization. *Structural and Multidisciplinary Optimization*, **2009**, 39, 459-475	3.6	11
126	Importing Uncertainty Estimates from One Surrogate to Another **2009**,		10
125	Separable Monte Carlo Simulation Applied to Laminated Composite Plates Reliability **2008**,		3
124	Multiple Surrogate Modeling for Axial Compressor Blade Shape Optimization. *Journal of Propulsion and Power*, **2008**, 24, 301-310	1.8	120
123	Being Conservative with a Limited Number of Test Results. *Journal of Aircraft*, **2008**, 45, 1969-1975	1.6	12
122	Pitfalls of using a single criterion for selecting experimental designs. *International Journal for Numerical Methods in Engineering*, **2008**, 75, 127-155	2.4	38
121	Surrogate model-based strategy for cryogenic cavitation model validation and sensitivity evaluation. *International Journal for Numerical Methods in Fluids*, **2008**, 58, 969-1007	1.9	35
120	A computational framework to predict post-treatment outcome for gait-related disorders. *Medical Engineering and Physics*, **2008**, 30, 434-43	2.4	43
119	Improved global convergence probability using multiple independent optimizations. *International Journal for Numerical Methods in Engineering*, **2007**, 71, 678-702	2.4	13
118	Response surface approximation of Pareto optimal front in multi-objective optimization. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 879-893	5.7	190
117	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	5.7	51

116	Are patient-specific joint and inertial parameters necessary for accurate inverse dynamics analyses of gait?. *IEEE Transactions on Biomedical Engineering*, **2007**, 54, 782-93	5	69
115	Ensemble of surrogates. *Structural and Multidisciplinary Optimization*, **2007**, 33, 199-216	3.6	422
114	Surrogate Modeling for Optimization of Dimpled Channel to Enhance Heat Transfer Performance. *Journal of Thermophysics and Heat Transfer*, **2007**, 21, 667-671	1.3	20
113	Micromechanical Analysis of Composite Corrugated-Core Sandwich Panels for Integral Thermal Protection Systems. *AIAA Journal*, **2007**, 45, 2323-2336	2.1	62
112	Comparing Effectiveness of Measures That Improve Aircraft Structural Safety. *Journal of Aerospace Engineering*, **2007**, 20, 186-199	1.4	19
111	Tradeoff of Uncertainty Reduction Mechanisms for Reducing Weight of Composite Laminates. *Journal of Mechanical Design, Transactions of the ASME*, **2007**, 129, 266-274	3	22
110	Application of a Weighted Average Surrogate Approach to Helicopter Rotor Blade Vibration Reduction **2007**,		9
109	Generalized pointwise bias error bounds for response surface approximations. *International Journal for Numerical Methods in Engineering*, **2006**, 65, 2035-2059	2.4	2
108	Parallel asynchronous particle swarm optimization. *International Journal for Numerical Methods in Engineering*, **2006**, 67, 578-595	2.4	148
107	Performance Estimate and Simultaneous Application of Multiple Surrogates **2006**,		10
106	Piezoresistive Microphone Design Pareto Optimization: Tradeoff Between Sensitivity and Noise Floor. *Journal of Microelectromechanical Systems*, **2006**, 15, 1632-1643	2.5	32
105	Attracting cracks for arrestment in bone-like composites. *Materials & Design*, **2006**, 27, 461-469		11
104	Decomposition theory for multidisciplinary design optimization problems with mixed integer quasiseparable subsystems. *Optimization and Engineering*, **2006**, 7, 135-149	2.1	25
103	A double-distribution statistical algorithm for composite laminate optimization. *Structural and Multidisciplinary Optimization*, **2006**, 31, 49-59	3.6	12
102	Optimization with non-homogeneous failure criteria like Tsai□Wu for composite laminates. *Structural and Multidisciplinary Optimization*, **2006**, 32, 183-190	3.6	56
101	Multiple Surrogates for the Shape Optimization of Bluff Body-facilitated Mixing **2005**,		23
100	Determination of patient-specific multi-joint kinematic models through two-level optimization. *Journal of Biomechanics*, **2005**, 38, 621-6	2.9	172
99	Surrogate-based analysis and optimization. *Progress in Aerospace Sciences*, **2005**, 41, 1-28	8.8	1486

98	Multidisciplinary Design Optimization with Quasiseparable Subsystems. *Optimization and Engineering*, **2005**, 6, 9-20	2.1	51
97	Evaluation of a particle swarm algorithm for biomechanical optimization. *Journal of Biomechanical Engineering*, **2005**, 127, 465-74	2.1	45
96	Effects of Uncertainty Reduction on Weight of Composite Laminates at Cryogenic Temperatures **2005**,		2
95	Comparison of Probability and Possibility for Design Against Catastrophic Failure Under Uncertainty. *Journal of Mechanical Design, Transactions of the ASME*, **2004**, 126, 386-394	3	86
94	Reliability-based design optimization using probabilistic sufficiency factor. *Structural and Multidisciplinary Optimization*, **2004**, 27, 314	3.6	81
93	Structural optimization complexity: what has Moore's law done for us?. *Structural and Multidisciplinary Optimization*, **2004**, 28, 375-387	3.6	91
92	Parallel global optimization with the particle swarm algorithm. *International Journal for Numerical Methods in Engineering*, **2004**, 61, 2296-2315	2.4	218
91	Comparison of evidence theory and Bayesian theory for uncertainty modeling. *Reliability Engineering and System Safety*, **2004**, 85, 295-311	6.3	68
90	Decomposition and Two-level Optimization of Structures with Discrete Sizing Variables **2004**,		5
89	Bilevel Design of a Wing Structure Using Response Surfaces. *Journal of Aircraft*, **2003**, 40, 985-992	1.6	25
88	Preliminary design optimization of stiffened panels using approximate analysis models. *International Journal for Numerical Methods in Engineering*, **2003**, 57, 1351-1380	2.4	55
87	Deterministic and Reliability-Based Optimization of Composite Laminates for Cryogenic Environments. *AIAA Journal*, **2003**, 41, 2029-2036	2.1	52
86	MDO of a Blended-Wing-Body Transport Aircraft with Distributed Propulsion **2003**,		11
85	Multi-fidelity design of stiffened composite panel with a crack. *Structural and Multidisciplinary Optimization*, **2002**, 23, 347-356	3.6	54
84	Probabilistic Modeling of Errors from Structural Optimization Based on Multiple Starting Points. *Optimization and Engineering*, **2002**, 3, 415-430	2.1	3
83	Structural Optimization: What has Moore's Law Done for Us? **2002**,		7
82	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	2.4	120
81	Polynomial Response Surface Approximations for the Multidisciplinary Design Optimization of a High Speed Civil Transport. *Optimization and Engineering*, **2001**, 2, 431-452	2.1	55

80	A Comparison of Global Optimization Methods for the Design of a High-speed Civil Transport. *Journal of Global Optimization*, **2001**, 21, 415-432	1.5	45
79	Analytical-Experimental Correlation for a Stiffened Composite Panel Loaded in Axial Compression. *Journal of Aircraft*, **2001**, 38, 379-387	1.6	31
78	Detection and Repair of Poorly Converged Optimization Runs. *AIAA Journal*, **2001**, 39, 2242-2249	2.1	9
77	Permutation genetic algorithm for stacking sequence design of composite laminates. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 186, 357-372	5.7	140
76	Response Surface Techniques for Diffuser Shape Optimization. *AIAA Journal*, **2000**, 38, 1512-1518	2.1	143
75	Response Surface Approximations: Noise, Error Repair, and Modeling Errors. *AIAA Journal*, **2000**, 38, 2336-2343	2.1	44
74	Response surface techniques for diffuser shape optimization. *AIAA Journal*, **2000**, 38, 1512-1518	2.1	4
73	???????????(?????). *Journal of the Japan Society for Composite Materials*, **2000**, 26, 203-212	0.1	
72	Reasonable Design Space Approach to Response Surface Approximation. *Journal of Aircraft*, **1999**, 36, 308-315	1.6	50
71	Response Surface Models Combining Linear and Euler Aerodynamics for Supersonic Transport Design. *Journal of Aircraft*, **1999**, 36, 75-86	1.6	73
70	Using response surface approximations in fuzzy set based design optimization. *Structural Optimization*, **1999**, 18, 218-227		28
69	Distributed control parallelism in multidisciplinary aircraft design. *Concurrency and Computation: Practice and Experience*, **1999**, 11, 435-459		2
68	Response surface approximations for structural optimization. *International Journal for Numerical Methods in Engineering*, **1998**, 42, 517-534	2.4	180
67	Anti-optimization technique for structural design under load uncertainties. *Computer Methods in Applied Mechanics and Engineering*, **1998**, 157, 19-31	5.7	101
66	Stacking sequence optimization by a genetic algorithm with a new recessive gene like repair strategy. *Composites Part B: Engineering*, **1998**, 29, 277-285	10	119
65	Classroom project in analytical and experimental optimization. *Structural Optimization*, **1998**, 15, 63-67		4
64	A FORTRAN 90 genetic algorithm module for composite laminate structure design. *Engineering With Computers*, **1998**, 14, 260-273	4.5	36
63	Getting the full benefits of CFD in conceptual design **1998**,		22

62	Multifidelity response surface model for HSCT wing bending material weight **1998**,		26
61	Composite wing structural optimization using genetic algorithms and response surfaces **1998**,		12
60	Paper helicopter - Experimental Optimum Engineering Design classroom problem **1998**,		2
59	Construction of Response Surface Approximations for Design Optimization. *AIAA Journal*, **1998**, 36, 2242-2249	2.1	76
58	Optimization and Experiments: A Survey. *Applied Mechanics Reviews*, **1998**, 51, 435-448	8.6	69
57	Global/local analysis of composite plates with cutouts. *Computational Mechanics*, **1997**, 19, 386-396	4	24
56	Multidisciplinary aerospace design optimization: survey of recent developments. *Structural Optimization*, **1997**, 14, 1-23		607
55	Analytical-experimental comparison of probabilistic methods and fuzzy set based methods for designing under uncertainty. *Structural Optimization*, **1997**, 13, 69-80		16
54	A Coarse-Grained Parallel Variable-Complexity Multidisciplinary Optimization Paradigm. *International Journal of High Performance Computing Applications*, **1996**, 10, 269-299		50
53	Variable-complexity response surface approximations for wing structural weight in HSCT design. *Computational Mechanics*, **1996**, 18, 112-126	4	54
52	Derivative based approximation for predicting the effect of changes in laminate stacking sequence. *Structural Optimization*, **1996**, 11, 235-243		7
51	Combining genetic and deterministic algorithms for locating actuators on space structures. *Journal of Spacecraft and Rockets*, **1996**, 33, 422-427	1.5	17
50	Structural weight estimation for multidisciplinary optimization of a high-speed civil transport. *Journal of Aircraft*, **1996**, 33, 608-616	1.6	9
49	Developing customized weight function by structural optimization on parallel computers **1996**,		5
48	Sensitivity algorithms for an inverse design problem involving a shock wave. *Inverse Problems in Science and Engineering*, **1995**, 2, 49-83		20
47	Variable-Complexity Multidisciplinary Design Optimization Using Parallel Computers **1995**, 489-494		13
46	Variable-complexity aerodynamic optimization of a high-speed civil transport wing. *Journal of Aircraft*, **1994**, 31, 110-116	1.6	76
45	Genetic algorithms with local improvement for composite laminate design. *Structural Optimization*, **1994**, 7, 207-218		128

44	Multi-Objective Control-Structure Optimization via Homotopy Methods. *SIAM Journal on Optimization*, **1993**, 3, 654-667	2	16
43	DESIGN OF A BLADE STIFFENED COMPOSITE PANEL BY GENETIC ALGORITHM **1993**,		31
42	Optimization of laminate stacking sequence for buckling load maximization by genetic algorithm. *AIAA Journal*, **1993**, 31, 951-956	2.1	428
41	Sensitivity-based scaling for approximating structural response. *Journal of Aircraft*, **1993**, 30, 283-288	1.6	83
40	OPTIMAL PLACEMENT OF TUNING MASSES ON TRUSS STRUCTURES BY GENETIC ALGORITHMS **1993**,		10
39	Approximation concepts for optimum structural design review. *Structural Optimization*, **1993**, 5, 129-144		425
38	Computational study of a nonhierarchical decomposition algorithm. *Computational Optimization and Applications*, **1993**, 2, 273-293	1.4	36
37	Elements of Structural Optimization. *Solid Mechanics and Its Applications*, **1992**,	0.4	630
36	Stacking sequence optimization of simply supported laminates with stability and strain constraints. *AIAA Journal*, **1992**, 30, 2132-2137	2.1	74
35	Stacking-sequence optimization for buckling of laminated plates by integer programming. *AIAA Journal*, **1992**, 30, 814-819	2.1	113
34	Integrated aerodynamic-structural-control wing design **1992**,		7
33	Variable-complexity aerodynamic-structural design of a high-speed civil transport wing **1992**,		15
32	On options for interdisciplinary analysis and design optimization. *Structural Optimization*, **1992**, 4, 65-74		60
31	Modal truncation, Ritz vectors, and derivatives of closed-loop damping ratios. *Journal of Guidance, Control, and Dynamics*, **1991**, 14, 785-790	2.1	12
30	Combining global and local approximations. *AIAA Journal*, **1991**, 29, 1523-1525	2.1	110
29	An easily implemented static condensation method for structural sensitivity analysis. *Communications in Applied Numerical Methods*, **1990**, 6, 161-171		2
28	Integrated aerodynamic-structural design of a transport wing. *Journal of Aircraft*, **1990**, 27, 1050-1056	1.6	37
27	Efficient single-level solution of hierarchical problems in structural optimization. *AIAA Journal*, **1990**, 28, 506-514	2.1	10

26	Accuracy Analysis of the Semi-Analytical Method for Shape Sensitivity Calculation*. *Mechanics Based Design of Structures and Machines*, **1990**, 18, 407-432		56
25	Integrated structure-control optimization of space structures **1990**,		12
24	Design of Laminated Plates for Maximum Buckling Load. *Journal of Composite Materials*, **1989**, 23, 348-369	2.7	39
23	Modern homotopy methods in optimization. *Computer Methods in Applied Mechanics and Engineering*, **1989**, 74, 289-305	5.7	67
22	Recent developments in structural sensitivity analysis. *Structural Optimization*, **1989**, 1, 137-151		287
21	Efficient optimization of integrated aerodynamic structural design. *International Journal for Numerical Methods in Engineering*, **1989**, 28, 593-607	2.4	21
20	Integrated structural electromagnetic shape control of large space anatenna reflectors. *AIAA Journal*, **1989**, 27, 814-819	2.1	23
19	Derivatives of eigenvalues and eigenvectors of a general complex matrix. *International Journal for Numerical Methods in Engineering*, **1988**, 26, 293-311	2.4	158
18	Accuracy problems associted with semi-analytical derivatives of static response. *Finite Elements in Analysis and Design*, **1988**, 4, 249-265	2.2	68
17	Approximations to eigenvalues of modified general matrices. *Computers and Structures*, **1988**, 29, 903-917	1.75	21
16	Two Approaches to Sensitivity Analysis for Shape Variation of Structures. *Mechanics Based Design of Structures and Machines*, **1988**, 16, 501-522		47
15	Integrated aerodynamic/structural design of a sailplane wing. *Journal of Aircraft*, **1988**, 25, 855-860	1.6	60
14	An approach to structure/control simultaneous optimization for largeflexible spacecraft. *AIAA Journal*, **1987**, 25, 1133-1138	2.1	157
13	Two-point constraint approximation in structural optimization. *Computer Methods in Applied Mechanics and Engineering*, **1987**, 60, 289-301	5.7	72
12	Structural shape optimization A survey. *Computer Methods in Applied Mechanics and Engineering*, **1986**, 57, 91-106	5.7	437
11	First- and second-order sensitivity analysis of linear and nonlinearstructures. *AIAA Journal*, **1986**, 24, 1187-1192	2.1	93
10	Sensitivity Analysis of Discrete Structural Systems. *AIAA Journal*, **1986**, 24, 823-832	2.1	397
9	NEWSUMT-A: A General Purpose Program for Constrained Optimization Using Constraint Approximations. *Journal of Mechanisms, Transmissions, and Automation in Design*, **1985**, 107, 94-99		63

8	Sensitivity calculations for iteratively solved problems. *International Journal for Numerical Methods in Engineering*, **1985**, 21, 1535-1546	2.4	45
7	Simultaneous analysis and design. *AIAA Journal*, **1985**, 23, 1099-1103	2.1	143
6	Enhanced vibration controllability by minor structural modifications. *AIAA Journal*, **1985**, 23, 1260-1266	2.1	59
5	An analytical investigation of shape control of large space structures by applied temperatures. *AIAA Journal*, **1985**, 23, 450-457	2.1	120
4	Second-order sensitivity derivatives in structural analysis. *AIAA Journal*, **1982**, 20, 1765-1766	2.1	57
3	Techniques for thermal sensitivity analysis. *International Journal for Numerical Methods in Engineering*, **1981**, 17, 71-80	2.4	61
2	Preliminary Design of Composite Wings for Buckling, Strength, and Displacement Constraints. *Journal of Aircraft*, **1979**, 16, 564-570	1.6	237
1	Optimization of flexible wing structures subject to strength and induced drag constraints. *AIAA Journal*, **1977**, 15, 1101-1106	2.1	57