Grace Wahba

List of Publications by Year
in descending order

76 papers	16,797 citations	101384 36 h-index	98622 67 g-index
86 all docs	86 docs citations	86 times ranked	9853 citing authors

#	Article	IF	Citations
1	Generalized Cross-Validation as a Method for Choosing a Good Ridge Parameter. Technometrics, 1979, 21, 215-223.	1.3	2,987
2	Smoothing noisy data with spline functions. Numerische Mathematik, 1978, 31, 377-403.	0.9	2,595
3	Some results on Tchebycheffian spline functions. Journal of Mathematical Analysis and Applications, 1971, 33, 82-95.	0.5	988
4	A Correspondence Between Bayesian Estimation on Stochastic Processes and Smoothing by Splines. Annals of Mathematical Statistics, 1970, 41, 495-502.	0.5	710
5	Practical Approximate Solutions to Linear Operator Equations When the Data are Noisy. SIAM Journal on Numerical Analysis, 1977, 14, 651-667.	1.1	665
6	Some New Mathematical Methods for Variational Objective Analysis Using Splines and Cross Validation. Monthly Weather Review, 1980, 108, 1122-1143.	0.5	488
7	Smoothing noisy data with spline functions. Numerische Mathematik, 1975, 24, 383-393.	0.9	486
8	Multicategory Support Vector Machines. Journal of the American Statistical Association, 2004, 99, 67-81.	1.8	480
9	Generalized Cross-Validation as a Method for Choosing a Good Ridge Parameter. , 0, .		446
10	Spline Interpolation and Smoothing on the Sphere. SIAM Journal on Scientific and Statistical Computing, 1981, 2, 5-16.	1.5	293
11	Support Vector Machines for Classification in Nonstandard Situations. Machine Learning, 2002, 46, 191-202.	3.4	233
12	Automatic Smoothing of the Log Periodogram. Journal of the American Statistical Association, 1980, 75, 122-132.	1.8	180
13	Bayesian "Confidence Intervals" for the Cross-Validated Smoothing Spline. Journal of the Royal Statistical Society Series B: Methodological, 1983, 45, 133-150.	0.8	161
14	Improper Priors, Spline Smoothing and the Problem of Guarding Against Model Errors in Regression. Journal of the Royal Statistical Society Series B: Methodological, 1978, 40, 364-372.	0.8	160
15	Smoothing spline ANOVA for exponential families, with application to the Wisconsin Epidemiological Study of Diabetic Retinopathy : the 1994 Neyman Memorial Lecture. Annals of Statistics, 1995, 23, 1865.	1.4	159
16	Minimizing GCV/GML Scores with Multiple Smoothing Parameters via the Newton Method. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 383-398.	1.5	127
17	Hybrid Adaptive Splines. Journal of the American Statistical Association, 1997, 92, 107-116.	1.8	124
18	Testing the (Parametric) Null Model Hypothesis in (Semiparametric) Partial and Generalized Spline Models. Annals of Statistics, 1988, 16, 113.	1.4	109

#	Article	IF	Citations
19	Multivariate Bernoulli distribution. Bernoulli, 2013, 19, .	0.7	109
20	Generalized Inverses in Reproducing Kernel Spaces: An Approach to Regularization of Linear Operator Equations. SIAM Journal on Mathematical Analysis, 1974, 5, 974-987.	0.9	103
21	Gcvpack â€" routines for generalized cross validation. Communications in Statistics Part B: Simulation and Computation, 1987, 16, 263-297.	0.6	93
22	Convergence rates of approximate least squares solutions of linear integral and operator equations of the first kind. Mathematics of Computation, 1974, 28, 69-80.	1.1	80
23	The Computation of Generalized Cross-Validation Functions Through Householder Tridiagonalization with Applications to the Fitting of Interaction Spline Models. SIAM Journal on Matrix Analysis and Applications, 1989, 10, 457-480.	0.7	73
24	Inequality-Constrained Multivariate Smoothing Splines with Application to the Estimation of Posterior Probabilities. Journal of the American Statistical Association, 1987, 82, 239-248.	1.8	72
25	Adaptive Tuning of Numerical Weather Prediction Models: Randomized GCV in Three- and Four-Dimensional Data Assimilation. Monthly Weather Review, 1995, 123, 3358-3370.	0.5	71
26	CONSTRAINED REGULARIZATION FOR ILL POSED LINEAR OPERATOR EQUATIONS, WITH APPLICATIONS IN METEOROLOGY AND MEDICINE11This work was supported by the Office of Naval Research under Contract No. N00014-77-C-0675.. , 1982, , 383-418.		70
27	Soft and hard classification by reproducing kernel Hilbert space methods. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16524-16530.	3.3	69
28	A cross validated bayesian retrieval algorithm for nonlinear remote sensing experiments. Journal of Computational Physics, 1985, 59, 441-455.	1.9	63
29	Convergence rates of certain approximate solutions to Fredholm integral equations of the first kind. Journal of Approximation Theory, 1973, 7, 167-185.	0.5	61
30	Cloud Classification of Satellite Radiance Data by Multicategory Support Vector Machines. Journal of Atmospheric and Oceanic Technology, 2004, 21, 159-169.	0.5	61
31	Smoothing Spline ANOVA with Component-Wise Bayesian â€œConfidence Intervalsâ€․ Journal of Computational and Graphical Statistics, 1993, 2, 97-117.	0.9	60
32	Cross-Validated Spline Methods for the Estimation of Three-Dimensional Tumor Size Distributions from Observations on Two-Dimensional Cross Sections. Journal of the American Statistical Association, 1984, 79, 832-846.	1.8	54
33	Bootstrap confidence intervals for smoothing splines and their comparison to bayesian confidence intervals. Journal of Statistical Computation and Simulation, 1995, 51, 263-279.	0.7	51
34	Partial Spline Models for the Inclusion of Tropopause and Frontal Boundary Information in Otherwise Smooth Two- and Three-Dimensional Objective Analysis. Journal of Atmospheric and Oceanic Technology, 1986, 3, 714-725.	0.5	50
35	When is the optimal regularization parameter insensitive to the choice of the loss function?. Communications in Statistics - Theory and Methods, 1990, 19, 1685-1700.	0.6	49
36	Variable Selection and Model Building via Likelihood Basis Pursuit. Journal of the American Statistical Association, 2004, 99, 659-672.	1.8	46

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37	On the Distribution of Some Statistics Useful in the Analysis of Jointly Stationary Time Series. Annals of Mathematical Statistics, 1968, 39, 1849-1862.	0.5	45
38	Hybrid Adaptive Splines. , 0, .		40
39	Framework for kernel regularization with application to protein clustering. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12332-12337.	3.3	36
40	On the Estimation of Functions of Several Variables from Aggregated Data. SIAM Journal on Mathematical Analysis, 1982, 13, 134-152.	0.9	35
41	Smoothing Spline ANOVA with Component-Wise Bayesian "Confidence Intervals". Journal of Computational and Graphical Statistics, 1993, 2, 97.	0.9	35
42	Smoothing Spline ANOVA for Multivariate Bernoulli Observations With Application to Ophthalmology Data. Journal of the American Statistical Association, 2001, 96, 127-160.	1.8	33
43	A class of approximate solutions to linear operator equations. Journal of Approximation Theory, 1973, 9, 61-77.	0.5	32
44	Optimal Smoothing of Density Estimates. , 1977, , 423-458.		31
45	Smoothing spline ANOVA models for large data sets with Bernoulli observations and the randomized GACV. Annals of Statistics, 2000, 28, .	1.4	31
46	Automatic Smoothing of the Log Periodogram. , 0, .		31
47	Statistical Properties and Adaptive Tuning of Support Vector Machines. Machine Learning, 2002, 48, 115-136.	3.4	30
48	THREE TOPICS IN ILL-POSED PROBLEMS. , 1987, , 37-51.		27
49	Semiparametric Analysis of Variance with Tensor Product Thin Plate Splines. Journal of the Royal Statistical Society Series B: Methodological, 1993, 55, 353-368.	0.8	26
50	Statistical tests and identifiability conditions for pooling and analyzing multisite datasets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1481-1486.	3.3	26
51	Using distance covariance for improved variable selection with application to learning genetic risk models. Statistics in Medicine, 2015, 34, 1708-1720.	0.8	25
52	Using distance correlation and SS-ANOVA to assess associations of familial relationships, lifestyle factors, diseases, and mortality. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20352-20357.	3.3	23
53	Vector Splines on the Sphere, with Application to the Estimation of Vorticity and Divergence from Discrete, Noisy Data. , 1982, , 407-429.		23
54	Numerical experiments with the thin plate histospline. Communications in Statistics - Theory and Methods, 1981, 10, 2475-2514.	0.6	21

#	ARTICLE	IF	CITATIONS
55	USING SMOOTHING SPLINE ANOVA TO EXAMINE THE RELATION OF RISK FACTORS TO THE INCIDENCE AND PROGRESSION OF DIABETIC RETINOPATHY. Statistics in Medicine, 1997, 16, 1357-1376.	0.8	21
56	Doubly penalized likelihood estimator in heteroscedastic regression. Statistics and Probability Letters, 2004, 69, 11-20.	0.4	20
57	Cross-Validated Spline Methods for the Estimation of Three-Dimensional Tumor Size Distributions from Observations on Two-Dimensional Cross Sections. , 0, .		19
58	Examining the relative influence of familial, genetic, and environmental covariate information in flexible risk models. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8128-8133.	3.3	17
59	Inequality-Constrained Multivariate Smoothing Splines with Application to the Estimation of Posterior Probabilities. , 0, .		16
60	On the Minimization of a Quadratic Functional Subject to a Continuous Family of Linear Inequality Constraints. SIAM Journal on Control and Optimization, 1973, 11, 64-79.	1.6	9
61	Some Tests of Independence for Stationary Multivariate Time Series. Journal of the Royal Statistical Society Series B: Methodological, 1971, 33, 153-166.	0.8	8
62	Multivariate thin plate spline estimates for the posterior probabilities in the classification problem. Communications in Statistics - Theory and Methods, 1983, 12, 1449-1479.	0.6	8
63	An introduction to reproducing kernel hilbert spaces and why they are so useful. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 525-528.	0.4	7
64	Group Variable Selection via Convex Log-Exp-Sum Penalty with Application to a Breast Cancer Survivor Study. Biometrics, 2015, 71, 53-62.	0.8	7
65	Simulation studies of smoothing parameter estimates and bayesian confidence intervals in bernoulli ss anova models. Communications in Statistics Part B: Simulation and Computation, 1995, 24, 1037-1059.	0.6	6
66	On the optimal choice of nodes in the collocation-projection method for solving linear operator equations. Journal of Approximation Theory, 1976, 16, 175-186.	0.5	4
67	Optimal Properties and Adaptive Tuning of Standard and Nonstandard Support Vector Machines. Lecture Notes in Statistics, 2003, , 129-147.	0.1	4
68	Rates of convergence of some estimators for a semiparametric model. Communications in Statistics Part B: Simulation and Computation, 1988, 17, 1117-1133.	0.6	3
69	An introduction to smoothing spline ANOVA models in RKHS, with examples in geographical data, medicine, atmospheric sciences and machine learning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 531-536.	0.4	3
70	Determination of an optimal mesh for a collocation-projection method for solving two-point boundary value problems. Journal of Approximation Theory, 1979, 25, 38-49.	0.5	2
71	Getting better contour plots with S and GCVPACK. Computational Statistics and Data Analysis, 1993, 15, 329-342.	0.7	2
72	23 Statistical Learning in Medical Data Analysis. Handbook of Statistics, 2007, 27, 679-711.	0.4	2

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73	Multivariate Model Building With Additive Interaction and Tensor Product Thin Plate Splines. , 1991, , 491-504.		2
74	Encoding dissimilarity data for statistical model building. Journal of Statistical Planning and Inference, 2010, 140, 3580-3596.	0.4	1
75	A New Approach to the Numerical Evaluation of the Inverse Radon Transform with Discrete, Noisy Data. Lecture Notes in Medical Informatics, 1981, , 189-203.	0.1	1
76	Backward multiple imputation estimation of the conditional lifetime expectancy function with application to censored human longevity data. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12069-12074.	3.3	0