William H Woodall

List of Publications by Year
in descending order

149 papers	10,412 citations	34105 52 h-index	36028 97 g-index
165 all docs	165 docs citations	165 times ranked	2649 citing authors

#	Article	IF	Citations
1	Research Issues and Ideas in Statistical Process Control. Journal of Quality Technology, 1999, 31, 376-386.	2.5	502
2	Effects of Parameter Estimation on Control Chart Properties: A Literature Review. Journal of Quality Technology, 2006, 38, 349-364.	2.5	460
3	The Use of Control Charts in Health-Care and Public-Health Surveillance. Journal of Quality Technology, 2006, 38, 89-104.	2.5	458
4	Using Control Charts to Monitor Process and Product Quality Profiles. Journal of Quality Technology, 2004, 36, 309-320.	2.5	426
5	On the Monitoring of Linear Profiles. Journal of Quality Technology, 2003, 35, 317-328.	2.5	411
6	Controversies and Contradictions in Statistical Process Control. Journal of Quality Technology, 2000, 32, 341-350.	2.5	391
7	Exact Results for Shewhart Control Charts With Supplementary Runs Rules. Technometrics, 1987, 29, 393-399.	1.9	342
8	Multivariate CUSUM Quality-Control Procedures. Technometrics, 1985, 27, 285-292.	1.9	289
9	Current research on profile monitoring. Production, 2007, 17, 420-425.	1.3	260
10	Some Current Directions in the Theory and Application of Statistical Process Monitoring. Journal of Quality Technology, 2014, 46, 78-94.	2.5	249
11	Control Charts Based on Attribute Data: Bibliography and Review. Journal of Quality Technology, 1997, 29, 172-183.	2.5	230
12	A Review and Analysis of Cause-Selecting Control Charts. Journal of Quality Technology, 1993, 25, 161-169.	2.5	218
13	An Overview of Six Sigma. International Statistical Review, 2008, 76, 329-346.	1.9	187
14	An Overview of Phase I Analysis for Process Improvement and Monitoring. Journal of Quality Technology, 2014, 46, 265-280.	2.5	183
15	The State of Statistical Process Control as We Proceed into the 21st Century. Journal of the American Statistical Association, 2000, 95, 992-998.	3.1	180
16	Weaknesses of the Economic Design of Control Charts. Technometrics, 1986, 28, 408.	1.9	163
17	Exact Results for Shewhart Control Charts with Supplementary Runs Rules. Technometrics, 1987, 29, 393.	1.9	153
18	Evaluating and Improving the Synthetic Control Chart. Journal of Quality Technology, 2002, 34, 200-208.	2.5	148

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19	A Probabilistic and Statistical View of Fuzzy Methods. Technometrics, 1995, 37, 249-261.	1.9	145
20	Performance evaluation of two methods for online monitoring of linear calibration profiles. International Journal of Production Research, 2006, 44, 1927-1942.	7.5	141
21	A Review and Analysis of the Mahalanobisâ€"Taguchi System. Technometrics, 2003, 45, 1-15.	1.9	131
22	The Difficulty in Designing ShewhartXÌ„andXControl Charts with Estimated Parameters. Journal of Quality Technology, 2015, 47, 127-138.	2.5	126
23	A New SPC Monitoring Method: The ARMA Chart. Technometrics, 2000, 42, 399-410.	1.9	122
24	The Distribution of the Run Length of One-Sided CUSUM Procedures for Continuous Random Variables. Technometrics, 1983, 25, 295-301.	1.9	120
25	Another Look at the EWMA Control Chart with Estimated Parameters. Journal of Quality Technology, 2015, 47, 363-382.	2.5	120
26	The Inertial Properties of Quality Control Charts. Technometrics, 2005, 47, 425-436.	1.9	118
27	The Statistical Design of Quality Control Charts. Journal of the Royal Statistical Society: Series D (the) Tj ETQq1 1 0.784314 rgBT /Ove	0.2	114
28	A Review and Perspective on Control Charting with Image Data. Journal of Quality Technology, 2011, 43, 83-98.	2.5	113
29	THE STATISTICAL DESIGN OF CUSUM CHARTS. Quality Engineering, 1993, 5, 559-570.	1.1	111
30	The effect of autocorrelation on the retrospectiveX-chart. Journal of Statistical Computation and Simulation, 1992, 40, 29-42.	1.2	108
31	An overview and perspective on social network monitoring. IISE Transactions, 2017, 49, 354-365.	2.4	97
32	Exponential CUSUM Charts with Estimated Control Limits. Quality and Reliability Engineering International, 2014, 30, 275-286.	2.3	96
33	The Design of CUSUM Quality Control Charts. Journal of Quality Technology, 1986, 18, 99-102.	2.5	85
34	A Spatiotemporal Method for the Monitoring of Image Data. Quality and Reliability Engineering International, 2012, 28, 967-980.	2.3	81
35	Performance of the Control Chart Trend Rule under Linear Shift. Journal of Quality Technology, 1988, 20, 260-262.	2.5	80
36	Geometric Charts with Estimated Control Limits. Quality and Reliability Engineering International, 2013, 29, 209-223.	2.3	76

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37	Estimating the Standard Deviation in Quality-Control Applications. Journal of Quality Technology, 2010, 42, 348-357.	2.5	75
38	The most-cited statistical papers. Journal of Applied Statistics, 2005, 32, 461-474.	1.3	74
39	Multivariate CUSUM Quality-Control Procedures. Technometrics, 1985, 27, 285.	1.9	72
40	A Probabilistic and Statistical View of Fuzzy Methods. Technometrics, 1995, 37, 249.	1.9	72
41	A Review and perspective on surveillance of Bernoulli processes. Quality and Reliability Engineering International, 2011, 27, 735-752.	2.3	70
42	Guaranteed conditional performance of theS²control chart with estimated parameters. International Journal of Production Research, 2015, 53, 4405-4413.	7.5	70
43	A Reevaluation of the Adaptive Exponentially Weighted Moving Average Control Chart When Parameters are Estimated. Quality and Reliability Engineering International, 2015, 31, 1611-1622.	2.3	70
44	Alarm rates for quality control charts. Statistics and Probability Letters, 1995, 24, 219-224.	0.7	68
45	On the Markov Chain Approach to the Two-Sided CUSUM Procedure. Technometrics, 1984, 26, 41-46.	1.9	67
46	The monitoring of simple linear regression profiles with two observations per sample. Journal of Applied Statistics, 2010, 37, 1249-1263.	1.3	66
47	A oneâ€sided MEWMA chart for health surveillance. Quality and Reliability Engineering International, 2008, 24, 503-518.	2.3	64
48	Change-point detection of mean vector or covariance matrix shifts using multivariate individual observations. IIE Transactions, 2000, 32, 537-549.	2.1	60
49	Statistical monitoring of heteroscedastic dose-response profiles from high-throughput screening. Journal of Agricultural, Biological, and Environmental Statistics, 2007, 12, 216-235.	1.4	59
50	Control Charts for Poisson Count Data with Varying Sample Sizes. Journal of Quality Technology, 2010, 42, 260-275.	2.5	59
51	The Monitoring and Improvement of Surgical-Outcome Quality. Journal of Quality Technology, 2015, 47, 383-399.	2.5	59
52	Statistical process control with several components of common cause variability. IIE Transactions, 1995, 27, 757-764.	2.1	55
53	The Performance of Bootstrap Control Charts. Journal of Quality Technology, 1998, 30, 362-375.	2.5	54
54	A comparison of surveillance methods for small incidence rates. Statistics in Medicine, 2008, 27, 1225-1247.	1.6	48

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55	Control Charts for Monitoring Linear Profiles with Within-Profile Correlation Using Gaussian Process Models. Quality and Reliability Engineering International, 2014, 30, 487-501.	2.3	47
56	Assessing the Statistical Analyses Used in Basic and Applied Social Psychology After Their p-Value Ban. American Statistician, 2019, 73, 374-384.	1.6	47
57	Cumulative Sum Control Charts for Monitoring Weibull-distributed Time Between Events. Quality and Reliability Engineering International, 2015, 31, 839-849.	2.3	46
58	Some relationships between gage R&R criteria. Quality and Reliability Engineering International, 2008, 24, 99-106.	2.3	45
59	Dynamic probability control limits for risk-adjusted Bernoulli CUSUM charts. Statistics in Medicine, 2015, 34, 3336-3348.	1.6	45
60	An Analysis of Taguchi's On-Line Process-Control Procedure Under a Random-Walk Model. Technometrics, 1989, 31, 401-413.	1.9	44
61	Improvement of an Industrial Thermostat Using Designed Experiments. Journal of Quality Technology, 1993, 25, 262-270.	2.5	44
62	Methods for Monitoring Multiple Proportions When Inspecting Continuously. Journal of Quality Technology, 2011, 43, 237-248.	2.5	44
63	Performance Metrics for Surveillance Schemes. Quality Engineering, 2008, 20, 451-464.	1.1	43
64	Rethinking control chart design and evaluation. Quality Engineering, 2019, 31, 596-605.	1.1	43
65	CUSUM Charts for Monitoring the Characteristic Life of Censored Weibull Lifetimes. Journal of Quality Technology, 2014, 46, 340-358.	2.5	42
66	A Review of Some Sampling and Aggregation Strategies for Basic Statistical Process Monitoring. Journal of Quality Technology, 2021, 53, 1-16.	2.5	42
67	The Effect of Parameter Estimation on Upperâ€sided Bernoulli Cumulative Sum Charts. Quality and Reliability Engineering International, 2013, 29, 639-651.	2.3	41
68	The State of Statistical Process Control as We Proceed into the 21st Century. Journal of the American Statistical Association, 2000, 95, 992.	3.1	41
69	A Comparison of the Performance of Phase II Simple Linear Profile Control Charts when Parameters are Estimated. Communications in Statistics Part B: Simulation and Computation, 2015, 44, 1432-1440.	1.2	40
70	The Distribution of the Run Length of One-Sided CUSUM Procedures for Continuous Random Variables. Technometrics, 1983, 25, 295.	1.9	40
71	CUSUM charts for monitoring a zeroâ€inflated poisson process. Quality and Reliability Engineering International, 2012, 28, 181-192.	2.3	38
72	Performance of the zone control chart. Communications in Statistics - Theory and Methods, 1990, 19, 1581-1587.	1.0	37

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73	Detecting a rate increase using a Bernoulli scan statistic. Statistics in Medicine, 2008, 27, 2555-2575.	1.6	36
74	CUSUM charts with controlled conditional performance under estimated parameters. Quality Engineering, 2016, 28, 402-415.	1.1	36
75	An Evaluation of the Double Exponentially Weighted Moving Average Control Chart. Communications in Statistics Part B: Simulation and Computation, 2010, 39, 933-949.	1.2	35
76	The Monitoring of Linear Profiles with a GLR Control Chart. Journal of Quality Technology, 2012, 44, 348-362.	2.5	35
77	Modeling and detecting change in temporal networks via the degree corrected stochastic block model. Quality and Reliability Engineering International, 2019, 35, 1363-1378.	2.3	35
78	A cyber-physical attack taxonomy for production systems: a quality control perspective. Journal of Intelligent Manufacturing, 2019, 30, 2489-2504.	7.3	35
79	Innovation, Quality Engineering, and Statistics. Quality Engineering, 2012, 24, 20-29.	1.1	32
80	A New SPC Monitoring Method: The ARMA Chart. Technometrics, 2000, 42, 399.	1.9	32
81	An Analysis of Taguchi's On-Line Process-Control Procedure under a Random-Walk Model. Technometrics, 1989, 31, 401.	1.9	31
82	An Analysis of Taguchi's On-Line Quality-Monitoring Procedures for Attributes. Technometrics, 1993, 35, 53-60.	1.9	30
83	A Review of Statistical and Fuzzy Quality Control Charts Based on Categorical Data. , 1997, , 83-89.		30
84	Detecting node propensity changes in the dynamic degree corrected stochastic block model. Social Networks, 2018, 54, 209-227.	2.1	28
85	The Use (and Misuse) of False Alarm Probabilities in Control Chart Design. , 1992, , 155-168.		27
86	A critique of a variety of â€œmemory-basedâ€•process monitoring methods. Journal of Quality Technology, 2023, 55, 18-42.	2.5	27
87	Optimal Monitoring of Multivariate Data for Fault Patterns. Journal of Quality Technology, 2007, 39, 159-172.	2.5	26
88	A review and comparison of likelihood-based charting methods. IIE Transactions, 2012, 44, 724-743.	2.1	26
89	The Conditional In-Control Performance of Self-Starting Control Charts. Quality Engineering, 2015, 27, 488-499.	1.1	26
90	The impracticality of homogeneously weighted moving average and progressive mean control chart approaches. Quality and Reliability Engineering International, 2021, 37, 3779-3794.	2.3	26

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91	On the Equivalence of the Bernoulli and Geometric CUSUM Charts. Journal of Quality Technology, 2012, 44, 54-62.	2.5	25
92	A head-to-head comparative study of the conditional performance of control charts based on estimated parameters. Quality Engineering, 2017, 29, 244-253.	1.1	25
93	The impact of varying patient populations on the in-control performance of the risk-adjusted CUSUM chart. International Journal for Quality in Health Care, 2015, 27, 31-36.	1.8	24
94	An overview and critique of the use of cumulative sum methods with surgical learning curve data. Statistics in Medicine, 2021, 40, 1400-1413.	1.6	24
95	Adapting control charts for the preliminary analysis of multivariate observations. Communications in Statistics Part B: Simulation and Computation, 1998, 27, 953-979.	1.2	23
96	The Effect of Aggregating Data When Monitoring a Poisson Process. Journal of Quality Technology, 2013, 45, 260-272.	2.5	23
97	Performance evaluation of social network anomaly detection using a moving windowâ€“based scan method. Quality and Reliability Engineering International, 2018, 34, 1699-1716.	2.3	23
98	CUSUM procedures with probability control limits for monitoring processes with variable sample sizes. IIE Transactions, 2016, 48, 759-771.	2.1	22
99	A framework for variation visualization and understanding in complex manufacturing systems. Journal of Intelligent Manufacturing, 2012, 23, 2025-2036.	7.3	20
100	On the Markov Chain Approach to the Two-Sided CUSUM Procedure. Technometrics, 1984, 26, 41.	1.9	19
101	Surveillance of Nonhomogeneous Poisson Processes. Technometrics, 2015, 57, 388-394.	1.9	18
102	The effect of temporal aggregation level in social network monitoring. PLoS ONE, 2018, 13, e0209075.	2.5	17
103	Use of the local Knox statistic for the prospective monitoring of disease occurrences in space and time. Statistics in Medicine, 2007, 26, 1579-1593.	1.6	16
104	Self-Starting Monitoring Scheme for Poisson Count Data With Varying Population Sizes. Technometrics, 2016, 58, 460-471.	1.9	16
105	Reduction of the Effect of Estimation Error on In-control Performance for Risk-adjusted Bernoulli CUSUM Chart with Dynamic Probability Control Limits. Quality and Reliability Engineering International, 2017, 33, 381-386.	2.3	16
106	Dynamic probability control limits for riskâ€adjusted CUSUM charts based on multiresponses. Statistics in Medicine, 2017, 36, 2547-2558.	1.6	16
107	On the design of control charts with guaranteed conditional performance under estimated parameters. Quality and Reliability Engineering International, 2020, 36, 2610-2620.	2.3	16
108	Performance comparison of some likelihood ratio-based statistical surveillance methods. Journal of Applied Statistics, 2008, 35, 783-798.	1.3	15

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109	A Note on the ARL of Two-Sided Bernoulli-Based CUSUM Control Charts. Journal of Quality Technology, 2011, 43, 43-49.	2.5	15
110	Dynamic Probability Control Limits for Lower and Twoâ€Sided Riskâ€Adjusted Bernoulli CUSUM Charts. Quality and Reliability Engineering International, 2017, 33, 607-616.	2.3	15
111	Control charts for accident frequency: a motivation for real-time occupational safety monitoring. International Journal of Injury Control and Safety Promotion, 2014, 21, 154-162.	2.0	14
112	The Maximum Size of Standardized and Internally Studentized Residuals in Regression Analysis. American Statistician, 1994, 48, 111-113.	1.6	13
113	ON THE ECONOMIC DESIGN OF MULTIVARIATE CONTROL CHARTS. Communications in Statistics - Theory and Methods, 2002, 31, 1665-1673.	1.0	13
114	Debate: what is the best method to monitor surgical performance?. BMC Surgery, 2016, 16, 15.	1.3	13
115	Multivariate time-between-events monitoring: An overview and some overlooked underlying complexities. Quality Engineering, 2021, 33, 13-25.	1.1	13
116	Bridging the Gap between Theory and Practice in Basic Statistical Process Monitoring. Quality Engineering, 0, , 00-00.	1.1	12
117	An Analysis of Taguchi's On-Line Quality-Monitoring Procedures for Attributes. Technometrics, 1993, 35, 53.	1.9	12
118	Some Recent Results on Monitoring the Rate of a Rare Event. , 2015, , 15-27.		11
119	Improved implementation of the risk-adjusted Bernoulli CUSUM chart to monitor surgical outcome quality. International Journal for Quality in Health Care, 2017, 29, 343-348.	1.8	11
120	Dynamic probability control limits for CUSUM charts for monitoring proportions with timeâ€varying sample sizes. Quality and Reliability Engineering International, 2020, 36, 592-603.	2.3	11
121	The role of the normal distribution in statistical process monitoring. Quality Engineering, 2021, 33, 497-510.	1.1	10
122	The case against generally weighted moving average (GWMA) control charts. Quality Engineering, 2022, 34, 75-81.	1.1	10
123	Controlling the conditional false alarm rate for the MEWMA control chart. Journal of Quality Technology, 2022, 54, 487-502.	2.5	9
124	Comparison of the early aberration reporting system (EARS) W2 methods to an adaptive threshold method. Statistics in Medicine, 2011, 30, 489-504.	1.6	8
125	Using the predictive distribution to determine control limits for the Bayesian MEWMA chart. Communications in Statistics Part B: Simulation and Computation, 2017, 46, 7818-7826.	1.2	7
126	The value of summary statistics for anomaly detection in temporally evolving networks: A performance evaluation study. Applied Stochastic Models in Business and Industry, 2020, 36, 980-1013.	1.5	7

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127	Discussion of â€œStatistical methods for network surveillanceâ€• Applied Stochastic Models in Business and Industry, 2018, 34, 446-448.	1.5	6
128	A note on GLR charts for monitoring count processes. Quality and Reliability Engineering International, 2018, 34, 1041-1044.	2.3	6
129	Use of Conditional False Alarm Metric in Statistical Process Monitoring. , 2021, , 3-12.		6
130	A Note on the Poisson Likelihood Ratio Test Statistic for Kulldorff's Scan Methods. Communications in Statistics - Theory and Methods, 2008, 37, 998-1001.	1.0	5
131	Monitoring foreclosure rates with a spatially risk-adjusted Bernoulli CUSUM chart for concurrent observations. Journal of Applied Statistics, 2017, 44, 325-341.	1.3	5
132	Statistical evaluation of spectral methods for anomaly detection in static networks. Network Science, 2019, 7, 319-352.	1.0	5
133	Letter on statistical process monitoring research: Misdirections and recommendations. Quality and Reliability Engineering International, 2022, 38, 2198-2199.	2.3	4
134	Monitoring proportions with two components of common cause variation. Journal of Quality Technology, 2022, 54, 324-337.	2.5	3
135	Efficacy of a Web-Based Intervention (Smart Choices 4 Teens) for Facilitating Parent-Adolescent Communication About Relationships and Sexuality: Randomized Controlled Trial. JMIR Pediatrics and Parenting, 2021, 4, e19114.	1.6	3
136	A runs rule alternative to level crossings in statistical process control. Journal of Statistical Computation and Simulation, 1997, 59, 315-331.	1.2	2
137	Comments on â€˜Some methodological issues in biosurveillanceâ€™. Statistics in Medicine, 2011, 30, 430-433.	1.6	2
138	An overview of George Box's contributions to process monitoring and feedback adjustment. Applied Stochastic Models in Business and Industry, 2014, 30, 53-61.	1.5	2
139	Discussion of â€œLatent Structures-Based Multivariate Statistical Process Control: A Paradigm Shiftâ€• Quality Engineering, 2014, 26, 92-95.	1.1	2
140	Discussion of â€œScaling-up process characterizationâ€• Quality Engineering, 2018, 30, 88-92.	1.1	2
141	Learning curve for completely thoracoscopic anatomic sublobar resection. Minerva Surgery, 2021, , .	0.6	2
142	Discussion on â€œOptimal Sequential Surveillance for Finance, Public Health, and Other Areasâ€•by Marianne FrisÃ©n. Sequential Analysis, 2009, 28, 338-341.	0.5	1
143	An Evaluation of Wheeler's Method for Monitoring the Rate of Rare Events. Quality and Reliability Engineering International, 2017, 33, 503-513.	2.3	1
144	A study of parabolic control limits for the ewma control chart. Communications in Statistics Part B: Simulation and Computation, 1994, 23, 17-26.	1.2	0

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145	A simple probabilistic representation of the product-sum fuzzy logic controller. Stochastic Models, 1999, 15, 201-225.	0.3	0
146	Title is missing!. IIE Transactions, 2000, 32, 537-549.	2.1	0
147	A Conversation with Donald J. Wheeler. Quality Engineering, 2009, 21, 357-365.	1.1	0
148	Discussion on â€œLife and Work of Bhaskar Kumar Ghoshâ€•by Pranab Kumar Sen. Sequential Analysis, 2010, 29, 19-21.	0.5	0
149	Can long-term historical data from electronic medical records improve surveillance for epidemics of acute respiratory infections? A systematic evaluation. PLoS ONE, 2018, 13, e0191324.	2.5	0