Andrea Saltelli

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9203081/publications.pdf

Version: 2024-02-01

140 papers	21,870 citations	30070 54 h-index	15732 125 g-index
159 all docs	159 docs citations	159 times ranked	15631 citing authors

#	Article	IF	Citations
1	Science, the endless frontier of regulatory capture. Futures, 2022, 135, 102860.	2.5	22
2	Large variations in global irrigation withdrawals caused by uncertain irrigation efficiencies. Environmental Research Letters, 2022, 17, 044014.	5.2	11
3	Changes in the Global Competitiveness Index 4.0 Methodology: The Improved Approach of Competitiveness Benchmarking. Journal of Competitiveness, 2022, 14, 118-135.	3.0	5
4	Improving the reliability of cohesion policy databases. PLoS ONE, 2022, 17, e0266823.	2.5	1
5	The delusive accuracy of global irrigation water withdrawal estimates. Nature Communications, 2022, 13, .	12.8	30
6	Variance-based sensitivity analysis: The quest for better estimators and designs between explorativity and economy. Reliability Engineering and System Safety, 2021, 206, 107300.	8.9	22
7	The Future of Sensitivity Analysis: An essential discipline for systems modeling and policy support. Environmental Modelling and Software, 2021, 137, 104954.	4.5	209
8	Variable Selection in Regression Models Using Global Sensitivity Analysis. Journal of Time Series Econometrics, 2021, .	0.4	2
9	Is VARS more intuitive and efficient than Sobolâ€™ indices?. Environmental Modelling and Software, 2021, 137, 104960.	4.5	11
10	Irrigated areas drive irrigation water withdrawals. Nature Communications, 2021, 12, 4525.	12.8	42
11	The opening of Central and Eastern European countries to free trade: A critical assessment. Structural Change and Economic Dynamics, 2021, 58, 23-34.	4.5	1
12	Sensitivity analysis: A discipline coming of age. Environmental Modelling and Software, 2021, 146, 105226.	4.5	30
13	Ethics of quantification or quantification of ethics?. Futures, 2020, 116, 102509.	2.5	19
14	Technoscience, policy and the new media. Nexus or vortex?. Futures, 2020, 115, 102491.	2.5	9
15	Current Models Underestimate Future Irrigated Areas. Geophysical Research Letters, 2020, 47, e2020GL087360.	4.0	36
16	A sensitivity analysis of the PAWN sensitivity index. Environmental Modelling and Software, 2020, 127, 104679.	4.5	21
17	The technique is never neutral. How methodological choices condition the generation of narratives for sustainability. Environmental Science and Policy, 2020, 106, 87-98.	4.9	69
18	Quantitative Storytelling in the Making of a Composite Indicator. Social Indicators Research, 2020, 149, 775-802.	2.7	61

#	Article	IF	Citations
19	Five ways to ensure that models serve society: a manifesto. Nature, 2020, 582, 482-484.	27.8	249
20	From sociology of quantification to ethics of quantification. Humanities and Social Sciences Communications, 2020, 7, .	2.9	11
21	Ethics of quantification: illumination, obfuscation and performative legitimation. Palgrave Communications, 2020, 6, .	4.7	19
22	Silver as a Constraint for a Large-Scale Development of Solar Photovoltaics? Scenario-Making to the Year 2050 Supported by Expert Engagement and Global Sensitivity Analysis. Frontiers in Energy Research, 2019, 7, .	2.3	13
23	A short comment on statistical versus mathematical modelling. Nature Communications, 2019, 10, 3870.	12.8	60
24	Views from a continent in flux. Nature, 2019, 569, 481-484.	27.8	3
25	Why so many published sensitivity analyses are false: A systematic review of sensitivity analysis practices. Environmental Modelling and Software, 2019, 114, 29-39.	4.5	381
26	New narratives for innovation. Journal of Cleaner Production, 2018, 197, 1849-1853.	9.3	52
27	Doing the Sum Right or the Right Sums? Techno-Optimist Numbers in Food Security Scenarios. Frontiers in Sustainable Food Systems, 2018, 2, .	3.9	2
28	Cargo-cult Statistics and Scientific Crisis. Significance, 2018, 15, 40-43.	0.4	46
29	Why scienceâ€™s crisis should not become a political battling ground. Futures, 2018, 104, 85-90.	2.5	22
30	Fixing statistics is more than a technical issue. Nature, 2018, 553, 281-281.	27.8	4
31	Post-normal institutional identities: Quality assurance, reflexivity and ethos of care. Futures, 2017, 91, 53-61.	2.5	14
32	What is wrong with evidence based policy, and how can it be improved?. Futures, 2017, 91, 62-71.	2.5	158
33	What is scienceâ€™s crisis really about?. Futures, 2017, 91, 5-11.	2.5	99
34	Do PISA data justify PISA-based education policy?. International Journal of Comparative Education and Development, 2017, 19, 20-34.	1.1	38
35	Problematic Quantifications: a Critical Appraisal of Scenario Making for a Global â€˜Sustainableâ€™ Food Production. Food Ethics, 2017, 1, 173-179.	1.9	11
36	Introduction to Sensitivity Analysis. , 2017, , 1103-1122.		34

#	Article	IF	Citations
37	Weights and Importance in Composite Indicators: Mind the Gap. , 2017, , 1187-1216.		14
38	Young statistician, you shall live in adventurous times. Significance, 2016, 13, 38-41.	0.4	0
39	Climate costing is politics not science. Nature, 2016, 532, 177-177.	27.8	5
40	Questioning the Ecological Footprint. Ecological Indicators, 2016, 69, 224-232.	6.3	100
41	Trends in sensitivity analysis practice in the last decade. Science of the Total Environment, 2016, 568, 666-670.	8.0	163
42	Introduction to Sensitivity Analysis. , 2015, , 1-20.		14
43	Weights and Importance in Composite Indicators: Mind the Gap. , 2015, , 1-30.		3
44	The future of public trust in science. Nature, 2015, 524, 161-161.	27.8	11
45	Footworking in circles. Ecological Indicators, 2014, 46, 260-263.	6.3	21
46	Footprints to nowhere. Ecological Indicators, 2014, 46, 610-621.	6.3	82
47	An estimate of potential threats levels to soil biodiversity in <scp>EU</scp>. Global Change Biology, 2013, 19, 1538-1548.	9.5	85
48	Ratings and Rankings: Voodoo or Science?. Journal of the Royal Statistical Society Series A: Statistics in Society, 2013, 176, 609-634.	1.1	201
49	What do I make of your latinorumc Sensitivity auditing of mathematical modelling. International Journal of Foresight and Innovation Policy, 2013, 9, 213.	0.2	57
50	Random and quasi-random designs in variance-based sensitivity analysis for partially ordered sets. Reliability Engineering and System Safety, 2012, 107, 184-189.	8.9	13
51	Update 1 of: Sensitivity Analysis for Chemical Models. Chemical Reviews, 2012, 112, PR1-PR21.	47.7	73
52	Rickety numbers: Volatility of university rankings and policy implications. Research Policy, 2011, 40, 165-177.	6.4	217
53	Indicators for European Union Policies. Business as Usual?. Social Indicators Research, 2011, 102, 197-207.	2.7	19
54	From screening to quantitative sensitivity analysis. A unified approach. Computer Physics Communications, 2011, 182, 978-988.	7.5	295

#	Article	IF	Citations
55	Partial order investigation of multiple indicator systems using variance-based sensitivity analysis. Environmental Modelling and Software, 2011, 26, 950-958.	4.5	44
56	Rankings and Ratings: Instructions for Use. Hague Journal on the Rule of Law, 2011, 3, 247-268.	2.0	43
57	How to avoid a perfunctory sensitivity analysis. Procedia, Social and Behavioral Sciences, 2010, 2, 7592-7594.	0.5	13
58	Variance based sensitivity analysis of model output. Design and estimator for the total sensitivity index. Computer Physics Communications, 2010, 181, 259-270.	7.5	2,138
59	How to avoid a perfunctory sensitivity analysis. Environmental Modelling and Software, 2010, 25, 1508-1517.	4.5	711
60	Sensitivity analysis didnâ€™t help. A practitionerâ€™s critique of the Stern review. Global Environmental Change, 2010, 20, 298-302.	7.8	36
61	Screening important inputs in models with strong interaction properties. Reliability Engineering and System Safety, 2009, 94, 1149-1155.	8.9	34
62	Sensitivity Analysis for Hydraulic Models. Journal of Hydraulic Engineering, 2009, 135, 959-969.	1.5	78
63	Recommended practices in global sensitivity analysis. NATO Science for Peace and Security Series C: Environmental Security, 2009, , 183-202.	0.2	2
64	Global Sensitivity Analysis: The Primer by Andrea Saltelli, Marco Ratto, Terry Andres, Francesca Campolongo, Jessica Cariboni, Debora Gatelli, Michaela Saisana, Stefano Tarantola. International Statistical Review, 2008, 76, 452-452.	1.9	59
65	Sensitivity analysis and uncertainty estimation for tephra dispersal models. Journal of Geophysical Research, 2008, 113, .	3.3	75
66	Creating composite indicators with DEA and robustness analysis: the case of the Technology Achievement Index. Journal of the Operational Research Society, 2008, 59, 239-251.	3.4	234
67	Expert Panel Opinion and Global Sensitivity Analysis for Composite Indicators. Lecture Notes in Computational Science and Engineering, 2008, , 251-275.	0.3	7
68	Uncertainty, sensitivity analysis and the role of data based mechanistic modeling in hydrology. Hydrology and Earth System Sciences, 2007, 11, 1249-1266.	4.9	84
69	An effective screening design for sensitivity analysis of large models. Environmental Modelling and Software, 2007, 22, 1509-1518.	4.5	1,354
70	Settings and methods for global sensitivity analysis â€“ a short guide. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2140013-2140014.	0.2	5
71	The role of sensitivity analysis in ecological modelling. Ecological Modelling, 2007, 203, 167-182.	2.5	455
72	Composite Indicators between Analysis and Advocacy. Social Indicators Research, 2007, 81, 65-77.	2.7	314

#	Article	IF	Citations
73	Creating Composite Indicators with DEA and Robustness Analysis: The Case of the Technology Achievement Index. SSRN Electronic Journal, 2006, , .	0.4	18
74	Sensitivity Analysis of Model Output: SAMO 2004. Reliability Engineering and System Safety, 2006, 91, 1105-1108.	8.9	24
75	Sensitivity analysis practices: Strategies for model-based inference. Reliability Engineering and System Safety, 2006, 91, 1109-1125.	8.9	432
76	Hydrocarbon exploration risk evaluation through uncertainty and sensitivity analyses techniques. Reliability Engineering and System Safety, 2006, 91, 1155-1162.	8.9	17
77	Uncertainty and sensitivity analysis techniques as tools for the quality assessment of composite indicators. Journal of the Royal Statistical Society Series A: Statistics in Society, 2005, 168, 307-323.	1.1	547
78	Sensitivity Analysis for Chemical Models. ChemInform, 2005, 36, no.	0.0	8
79	The Precautionary Principle: Implications for Risk Management Strategies. Human and Ecological Risk Assessment (HERA), 2005, 11, 69-83.	3.4	9
80	Local and Global Uncertainty Analyses of a Methane Flame Model. Journal of Physical Chemistry A, 2005, 109, 9795-9807.	2.5	90
81	Sensitivity Analysis for Chemical Models. Chemical Reviews, 2005, 105, 2811-2828.	47.7	555
82	Uncertainty and global sensitivity analysis of road transport emission estimates. Atmospheric Environment, 2004, 38, 6609-6620.	4.1	72
83	Global Uncertainty and Sensitivity Analysis and Neighbourhoods. , 2004, , 277-283.		0
84	Comparison of global sensitivity analysis techniques and importance measures in PSA. Reliability Engineering and System Safety, 2003, 79, 175-185.	8.9	76
85	On the Relative Importance of Input Factors in Mathematical Models. Journal of the American Statistical Association, 2002, 97, 702-709.	3.1	378
86	Can global sensitivity analysis steer the implementation of models for environmental assessments and decision-making?. Stochastic Environmental Research and Risk Assessment, 2002, 16, 63-76.	4.0	66
87	Sensitivity Analysis for Importance Assessment. Risk Analysis, 2002, 22, 579-590.	2.7	864
88	Making best use of model evaluations to compute sensitivity indices. Computer Physics Communications, 2002, 145, 280-297.	7.5	1,466
89	An Efficient Approach to Deal with the Curse of Dimensionality in Sensitivity Analysis Computations. Lecture Notes in Computer Science, 2002, , 196-205.	1.3	0
90	Sensitivity analysis in model calibration: GSA-GLUE approach. Computer Physics Communications, 2001, 136, 212-224.	7.5	141

#	Article	IF	Citations
91	Derivation of Elastic Properties of Thin Films from Measured Acoustic Velocities. , 2001, , 152-167.		0
92	Sensitivity and uncertainty analysis in spatial modelling based on GIS. Agriculture, Ecosystems and Environment, 2000, 81, 71-79.	5.3	199
93	Winding Stairs: A sampling tool to compute sensitivity indices. Statistics and Computing, 2000, 10, 187-196.	1.5	57
94	Sensitivity Anaysis as an Ingredient of Modeling. Statistical Science, 2000, 15, 377.	2.8	513
95	Design of surface Brillouin scattering experiments by sensitivity analysis. Surface Science, 2000, 468, 37-50.	1.9	20
96	Tackling quantitatively large dimensionality problems. Computer Physics Communications, 1999, 117, 75-85.	7.5	86
97	Scenario and parametric uncertainty in GESAMAC: A methodological study in nuclear waste disposal risk assessment. Computer Physics Communications, 1999, 117, 142-155.	7.5	43
98	Title is missing!. Journal of Atmospheric Chemistry, 1999, 32, 327-356.	3.2	63
99	A role for sensitivity analysis in presenting the results from MCDA studies to decision makers. Journal of Multi-Criteria Decision Analysis, 1999, 8, 139-145.	1.9	43
100	Sensitivity analysis: Could better methods be used?. Journal of Geophysical Research, 1999, 104, 3789-3793.	3.3	139
101	A Quantitative Model-Independent Method for Global Sensitivity Analysis of Model Output. Technometrics, 1999, 41, 39-56.	1.9	1,521
102	A Quantitative Model-Independent Method for Global Sensitivity Analysis of Model Output. Technometrics, 1999, 41, 39.	1.9	424
103	A role for sensitivity analysis in presenting the results from MCDA studies to decision makers. Journal of Multi-Criteria Decision Analysis, 1999, 8, 139-145.	1.9	1
104	Presenting Results from Model Based Studies to Decision-Makers: Can Sensitivity Analysis Be a Defogging Agent?. Risk Analysis, 1998, 18, 799-803.	2.7	20
105	An alternative way to compute Fourier amplitude sensitivity test (FAST). Computational Statistics and Data Analysis, 1998, 26, 445-460.	1.2	284
106	Presenting Results from Model Based Studies to Decision-Makers: Can Sensitivity Analysis be a Defogging Agent?. Risk Analysis, 1998, 18, 799-803.	2.7	1
107	Sensitivity analysis of model output. , 1997, , .		165
108	Sensitivity measures,anova-like Techniques and the use of bootstrap. Journal of Statistical Computation and Simulation, 1997, 58, 99-120.	1.2	392

#	Article	IF	Citations
109	Sensitivity analysis of an environmental model: an application of different analysis methods. Reliability Engineering and System Safety, 1997, 57, 49-69.	8.9	224
110	Guest editorial: The role of sensitivity analysis in the corroboration of models and itslink to model structural and parametric uncertainty. Reliability Engineering and System Safety, 1997, 57, 1-4.	8.9	86
111	Importance measures in global sensitivity analysis of nonlinear models. Reliability Engineering and System Safety, 1996, 52, 1-17.	8.9	1,442
112	Uncertainty and sensitivity analyses of OH-initiated dimethyl sulphide (DMS) oxidation kinetics. Journal of Atmospheric Chemistry, 1995, 21, 187-221.	3.2	59
113	Sensitivity analysis of model output. Performance of the iterated fractional factorial design method. Computational Statistics and Data Analysis, 1995, 20, 387-407.	1.2	53
114	About the use of rank transformation in sensitivity analysis of model output. Reliability Engineering and System Safety, 1995, 50, 225-239.	8.9	261
115	Use of Sobol's Quasirandom Sequence Generator for Integration of Modified Uncertainty Importance Measure. Journal of Nuclear Science and Technology, 1995, 32, 1164-1173.	1.3	24
116	Use of Sobol's Quasirandom Sequence Generator for Integration of Modified Uncertainty Importance Measure.. Journal of Nuclear Science and Technology, 1995, 32, 1164-1173.	1.3	15
117	Sensitivity analysis of model output. Computational Statistics and Data Analysis, 1993, 15, 211-238.	1.2	140
118	Cloud Condensation Nuclei from Dimethyl Sulphide in the Natural Marine Boundary Layer: Remote VS. In-Situ Production. , 1993, , 311-322.		24
119	Modelling of the Sulphur Cycle. From DMS to Cloud Particles. , 1993, , 355-373.		1
120	Trace element reference values in tissues from inhabitants of the European Community. II. Examples of strategy adopted and trace element analysis of blood, lymph nodes and cerebrospinal fluid of Italian subjects. Science of the Total Environment, 1992, 120, 39-61.	8.0	63
121	Modelling formation and growth of H2SO4-H2O aerosols: Uncertainty analysis and experimental evaluation. Journal of Aerosol Science, 1992, 23, 759-771.	3.8	68
122	Sensitivity analysis for model output. Computational Statistics and Data Analysis, 1992, 13, 73-94.	1.2	53
123	Non-parametric statistics in sensitivity analysis for model output: A comparison of selected techniques. Reliability Engineering and System Safety, 1990, 28, 229-253.	8.9	222
124	Techniques for Uncertainty and Sensitivity Analyses. , 1989, , 69-95.		0
125	The Role of the Code Intercomparison Exercises: Activities of The Probabilistic System Assessment Codes Group. , 1989, , 129-160.		0
126	Neptunium migration in oxidizing clayey sand. Applied Geochemistry, 1987, 2, 275-284.	3.0	20

#	Article	IF	Citations
127	About the modelling of transport with chemical reaction. Chemical Engineering Science, 1986, 41, 3227-3229.	3.8	0
128	Americium Filtration in Glauconitic Sand Columns. Nuclear Technology, 1984, 67, 245-254.	1.2	64
129	An Experimental and Modelling Approach of the Near Field Release and Transport Processes. Materials Research Society Symposia Proceedings, 1983, 26, 605.	0.1	0
130	An assessment of carburization-decarburizatton behaviour of Fe-9Cr-Mo steels in a sodium environment. Journal of Nuclear Materials, 1982, 110, 1-10.	2.7	13
131	Modelling for The Carburization of The Alloy - 800 in Liquid Sodium. , 1982, , 533-542.		0
132	Observations on the structural characterization of the di-.mu.-hydroxo-octaaquodiiron(III) dimer. Inorganic Chemistry, 1981, 20, 3564-3565.	4.0	11
133	Susceptibility to the Intergranular Corrosion of Alloy 800. Corrosion, 1981, 37, 498-505.	1.1	13
134	About the corrosion mechanism for the stainless steel exposed in high temperature flowing sodium by a computer simulation approach. Journal of Nuclear Materials, 1979, 87, 203-206.	2.7	1
135	Transfer rate of K+ ions from aqueous picrate solutions into 1,2 dichloroethane solutions of the macrocyclic polyether dibenzo-18-crown-6. Journal of Inorganic and Nuclear Chemistry, 1978, 40, 1119-1123.	0.5	22
136	Transfer rate of some tervalent cations in the biphasic system HClO4, water-dinonylnaphthalenesulfonic acid, tolueneâ€"I. Journal of Inorganic and Nuclear Chemistry, 1976, 38, 1687-1693.	0.5	22
137	PSACOIN level 0 intercomparison-an international verification exercise on a hypothetical safety assessment case study. , 0, , .		5
138	Science, the Endless Frontier of Regulatory Capture. SSRN Electronic Journal, 0, , .	0.4	1
139	Is Time Ripe for an Ethic of Quantification?. SSRN Electronic Journal, 0, , .	0.4	0
140	Pandemic Luhmann. SSRN Electronic Journal, 0, , .	0.4	1