# Stefano Tarantola

List of Publications by Year
in descending order

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|---|---|---|---|
| 34 papers | 8,279 citations | 257357<br>24 h-index | 414303<br>32 g-index |
| 40 all docs | 40 docs citations | 40 times ranked | 8423 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Variance based sensitivity analysis of model output. Design and estimator for the total sensitivity index. Computer Physics Communications, 2010, 181, 259-270. | 3.0 | 2,138 |
| 2 | Detecting vegetation leaf water content using reflectance in the optical domain. Remote Sensing of Environment, 2001, 77, 22-33. | 4.6 | 828 |
| 3 | Designing a spectral index to estimate vegetation water content from remote sensing data: Part 1. Remote Sensing of Environment, 2002, 82, 188-197. | 4.6 | 564 |
| 4 | Sensitivity Analysis for Chemical Models. Chemical Reviews, 2005, 105, 2811-2828. | 23.0 | 555 |
| 5 | Sensitivity analysis practices: Strategies for model-based inference. Reliability Engineering and System Safety, 2006, 91, 1109-1125. | 5.1 | 432 |
| 6 | On the Relative Importance of Input Factors in Mathematical Models. Journal of the American Statistical Association, 2002, 97, 702-709. | 1.8 | 378 |
| 7 | Uncertainty and sensitivity analysis: tools for GIS-based model implementation. International Journal of Geographical Information Science, 2001, 15, 415-437. | 2.2 | 244 |
| 8 | The Future of Sensitivity Analysis: An essential discipline for systems modeling and policy support. Environmental Modelling and Software, 2021, 137, 104954. | 1.9 | 209 |
| 9 | Sensitivity analysis of spatial models. International Journal of Geographical Information Science, 2009, 23, 151-168. | 2.2 | 202 |
| 10 | Sensitivity and uncertainty analysis in spatial modelling based on GIS. Agriculture, Ecosystems and Environment, 2000, 81, 71-79. | 2.5 | 199 |
| 11 | Variance-based sensitivity indices for models with dependent inputs. Reliability Engineering and System Safety, 2012, 107, 115-121. | 5.1 | 171 |
| 12 | Trends in sensitivity analysis practice in the last decade. Science of the Total Environment, 2016, 568, 666-670. | 3.9 | 163 |
| 13 | Moment Independent Importance Measures: New Results and Analytical Test Cases. Risk Analysis, 2011, 31, 404-428. | 1.5 | 132 |
| 14 | Application of global sensitivity analysis of model output to building thermal simulations. Building Simulation, 2008, 1, 290-302. | 3.0 | 82 |
| 15 | Sensitivity Analysis for Hydraulic Models. Journal of Hydraulic Engineering, 2009, 135, 959-969. | 0.7 | 78 |
| 16 | Sensitivity analysis and uncertainty estimation for tephra dispersal models. Journal of Geophysical Research, 2008, 113, . | 3.3 | 75 |
| 17 | Update 1 of: Sensitivity Analysis for Chemical Models. Chemical Reviews, 2012, 112, PR1-PR21. | 23.0 | 73 |
| 18 | Uncertainty and global sensitivity analysis of road transport emission estimates. Atmospheric Environment, 2004, 38, 6609-6620. | 1.9 | 72 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 19 | Non-parametric methods for global sensitivity analysis of model output with dependent inputs. Environmental Modelling and Software, 2015, 72, 173-183. | 1.9 | 66 |
| 20 | Winding Stairs: A sampling tool to compute sensitivity indices. Statistics and Computing, 2000, 10, 187-196. | 0.8 | 57 |
| 21 | A comparison of two sampling methods for global sensitivity analysis. Computer Physics Communications, 2012, 183, 1061-1072. | 3.0 | 46 |
| 22 | Scenario and parametric uncertainty in GESAMAC: A methodological study in nuclear waste disposal risk assessment. Computer Physics Communications, 1999, 117, 142-155. | 3.0 | 43 |
| 23 | Sensitivity analysis techniques applied to a system of hyperbolic conservation laws. Reliability Engineering and System Safety, 2012, 107, 157-170. | 5.1 | 34 |
| 24 | Variance-based sensitivity analysis of a wind risk model - Model behaviour and lessons for forest modelling. Environmental Modelling and Software, 2017, 87, 84-109. | 1.9 | 30 |
| 25 | A new estimator for sensitivity analysis of model output: An application to the e-business readiness composite indicator. Reliability Engineering and System Safety, 2006, 91, 1135-1141. | 5.1 | 22 |
| 26 | Modelling wind risk to Eucalyptus globulus (Labill.) stands. Forest Ecology and Management, 2016, 365, 159-173. | 1.4 | 22 |
| 27 | Evaluation of MARS modeling technique for sensitivity analysis of model output. Procedia, Social and Behavioral Sciences, 2010, 2, 7737-7738. | 0.5 | 17 |
| 28 | Variance-Based Sensitivity Analysis: Theory and Estimation Algorithms. , 2017, , 1217-1239. |  | 13 |
| 29 | NUSS-RF: stochastic sampling-based tool for nuclear data sensitivity and uncertainty quantification. Journal of Nuclear Science and Technology, 2015, 52, 1000-1007. | 0.7 | 11 |
| 30 | Sensitivity Analysis for Chemical Models. ChemInform, 2005, 36, no. | 0.1 | 8 |
| 31 | Sensitivity Analysis: A Necessary Ingredient for Measuring the Quality of a Teaching Activity Index. Social Indicators Research, 2017, 131, 931-946. | 1.4 | 8 |
| 32 | Sensitivity analysis for reliable design verification of nuclear turbosets. Reliability Engineering and System Safety, 2011, 96, 391-397. | 5.1 | 7 |
| 33 | Sensitivity Analysis Methods. , 0, , 259-284. |  | 1 |
| 34 | Metamodelling and Global Sensitivity Analysis of Models with Dependent Variables. , 2011, , . |  | 1 |