

Alison S Tomlin

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/776156/alison-s-tomlin-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

111
papers

3,137
citations

33
h-index

52
g-index

115
ext. papers

3,428
ext. citations

4.2
avg, IF

5.49
L-index

#	Paper	IF	Citations
111	Influence of Iso-Butanol Blending with a Reference Gasoline and Its Surrogate on Spark-Ignition Engine Performance. <i>Energy & Fuels</i> , 2021 , 35, 19665-19688	4.1	4
110	Auto-ignition and detonation of n-butanol and toluene reference fuel blends (TRF). <i>Combustion and Flame</i> , 2021 , 229, 111378	5.3	4
109	An experimental and kinetic modeling study of the ignition delay and heat release characteristics of a five component gasoline surrogate and its blends with iso-butanol within a rapid compression machine. <i>International Journal of Chemical Kinetics</i> , 2021 , 53, 787-808	1.4	4
108	Air Quality and Climate Impacts of Biomass Use as an Energy Source: A Review. <i>Energy & Fuels</i> , 2021 , 35, 14213-14240	4.1	5
107	Experimental and modelling study of the impacts of n-butanol blending on the auto-ignition behaviour of gasoline and its surrogate at low temperatures. <i>Proceedings of the Combustion Institute</i> , 2019 , 37, 501-509	5.9	16
106	Evolution of particle interactions between accidentally released aerosol particles generated from powdered engineered nanomaterials into a simulated workplace atmosphere. <i>Journal of Aerosol Science</i> , 2019 , 129, 98-115	4.3	2
105	Evacuation characteristics of released airborne TiO nanomaterial particles under different ventilation rates in a confined environment. <i>Journal of Environmental Management</i> , 2019 , 233, 417-426	7.9	0
104	Improved near surface wind speed predictions using Gaussian process regression combined with numerical weather predictions and observed meteorological data. <i>Renewable Energy</i> , 2018 , 126, 1043-1054	8.1	77
103	Chemical Kinetic Modeling Study on the Influence of n-Butanol Blending on the Combustion, Autoignition, and Knock Properties of Gasoline and Its Surrogate in a Spark-Ignition Engine. <i>Energy & Fuels</i> , 2018 , 32, 10065-10077	4.1	3
102	Experimental Study on the Influence of n-Butanol Blending on the Combustion, Autoignition, and Knock Properties of Gasoline and Its Surrogate in a Spark-Ignition Engine. <i>Energy & Fuels</i> , 2018 , 32, 10052-10064	4.1	5
101	Investigation of the effect of correlated uncertain rate parameters via the calculation of global and local sensitivity indices. <i>Journal of Mathematical Chemistry</i> , 2018 , 56, 864-889	2.1	4
100	Low temperature oxidation of n-butanol: Key uncertainties and constraints in kinetics. <i>Fuel</i> , 2017 , 207, 776-789	7.1	8
99	The influence of n -butanol blending on the ignition delay times of gasoline and its surrogate at high pressures. <i>Fuel</i> , 2017 , 187, 211-219	7.1	25
98	Urban case studies: general discussion. <i>Faraday Discussions</i> , 2016 , 189, 473-514	3.6	1
97	The treatment of uncertainties in reactive pollution dispersion models at urban scales. <i>Faraday Discussions</i> , 2016 , 189, 567-87	3.6	2
96	Methodologies for city-scale assessment of renewable energy generation potential to inform strategic energy infrastructure investment. <i>Cities</i> , 2016 , 54, 45-56	5.6	32
95	Timescales of mixing and of chemistry: general discussion. <i>Faraday Discussions</i> , 2016 , 189, 253-76	3.6	

94	A method for mapping the turbulence intensity and excess energy available to building mounted wind turbines over a UK City. <i>Wind Energy</i> , 2016 , 19, 1423-1438	3.4	3
93	Numerical modelling strategies for the urban atmosphere: general discussion. <i>Faraday Discussions</i> , 2016 , 189, 635-60	3.6	
92	Modelling of roof geometries from low-resolution LiDAR data for city-scale solar energy applications using a neighbouring buildings method. <i>Applied Energy</i> , 2015 , 148, 93-104	10.7	40
91	Emissions from a HGV Using Used Cooking Oil as a Fuel under Real World Driving Conditions 2015 ,		2
90	Global Uncertainty Propagation and Sensitivity Analysis in the CH ₃ OCH ₂ + O ₂ System: Combining Experiment and Theory To Constrain Key Rate Coefficients in DME Combustion. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 7430-8	2.8	19
89	Long-term wind resource assessment for small and medium-scale turbines using operational forecast data and measure-correlate-predict. <i>Renewable Energy</i> , 2015 , 81, 760-769	8.1	16
88	Urban wind: Characterisation of useful gust and energy capture. <i>Renewable Energy</i> , 2015 , 81, 162-172	8.1	31
87	Determining predictive uncertainties and global sensitivities for large parameter systems: A case study for n-butane oxidation. <i>Proceedings of the Combustion Institute</i> , 2015 , 35, 607-616	5.9	25
86	Evaluation of Combustion Mechanisms Using Global Uncertainty and Sensitivity Analyses: A Case Study for Low-Temperature Dimethyl Ether Oxidation. <i>International Journal of Chemical Kinetics</i> , 2014 , 46, 662-682	1.4	35
85	Low-cost wind resource assessment for small-scale turbine installations using site pre-screening and short-term wind measurements. <i>IET Renewable Power Generation</i> , 2014 , 8, 349-358	2.9	10
84	Methodology for the assessment of PV capacity over a city region using low-resolution LiDAR data and application to the City of Leeds (UK). <i>Applied Energy</i> , 2014 , 124, 28-34	10.7	31
83	Data efficient measure-correlate-predict approaches to wind resource assessment for small-scale wind energy. <i>Renewable Energy</i> , 2014 , 63, 162-171	8.1	25
82	Comparison between the bivariate Weibull probability approach and linear regression for assessment of the long-term wind energy resource using MCP. <i>Renewable Energy</i> , 2014 , 68, 529-539	8.1	14
81	Reduction of Reaction Mechanisms 2014 , 183-312		4
80	Reaction Kinetics Basics 2014 , 5-37		
79	Sensitivity and Uncertainty Analyses 2014 , 61-144		1
78	Timescale Analysis 2014 , 145-182		
77	Analysis of Kinetic Reaction Mechanisms 2014 ,		91

76	Evaluation of the Effect of Fuel Properties on the Fuel Spray and Jet Characteristics in a HGV DI Diesel Engine Operated by Used Cooking Oils. <i>Applied Mechanics and Materials</i> , 2014 , 694, 3-12	0.3	3
75	An overview of the potential environmental impacts of large-scale microalgae cultivation. <i>Biofuels</i> , 2014 , 5, 331-349	2	79
74	Aerodynamic Parameters of a UK City Derived from Morphological Data. <i>Boundary-Layer Meteorology</i> , 2013 , 146, 447-468	3.4	23
73	Assessing the potential of urban wind energy in a major UK city using an analytical model. <i>Renewable Energy</i> , 2013 , 60, 701-710	8.1	42
72	Evaluation of a semi-empirical model for predicting the wind energy resource relevant to small-scale wind turbines. <i>Renewable Energy</i> , 2013 , 50, 280-288	8.1	21
71	Uncertainty propagation in the derivation of phenomenological rate coefficients from theory: A case study of n-propyl radical oxidation. <i>Proceedings of the Combustion Institute</i> , 2013 , 34, 177-185	5.9	56
70	Mapping the wind resource over UK cities. <i>Renewable Energy</i> , 2013 , 55, 202-211	8.1	20
69	The role of sensitivity and uncertainty analysis in combustion modelling. <i>Proceedings of the Combustion Institute</i> , 2013 , 34, 159-176	5.9	85
68	Investigation and Improvement of Reaction Mechanisms Using Sensitivity Analysis and Optimization. <i>Green Energy and Technology</i> , 2013 , 411-445	0.6	8
67	Mechanism Reduction to Skeletal Form and Species Lumping. <i>Green Energy and Technology</i> , 2013 , 447-466	66	5
66	Time-Scale Splitting-Based Mechanism Reduction. <i>Green Energy and Technology</i> , 2013 , 467-484	0.6	13
65	Improvement of the modeling of the low-temperature oxidation of n-butane: study of the primary reactions. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 6142-58	2.8	59
64	The predictability of above roof wind resource in the urban roughness sublayer. <i>Wind Energy</i> , 2012 , 15, 225-243	3.4	26
63	The Use of Global Sensitivity Methods for the Analysis, Evaluation and Improvement of Complex Modelling Systems. <i>Lecture Notes in Computational Science and Engineering</i> , 2011 , 9-36	0.3	8
62	Estimating Aerodynamic Parameters of Urban-Like Surfaces with Heterogeneous Building Heights. <i>Boundary-Layer Meteorology</i> , 2011 , 141, 443-465	3.4	57
61	Global sensitivity analysis of chemical-kinetic reaction mechanisms: construction and deconstruction of the probability density function. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 1556-78	2.8	41
60	Uncertainty driven theoretical kinetics studies for CH ₃ OH ignition: HO ₂ + CH ₃ OH and O ₂ + CH ₃ OH. <i>Proceedings of the Combustion Institute</i> , 2011 , 33, 351-357	5.9	134
59	Theoretical validation of chemical kinetic mechanisms: combustion of methanol. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 8286-301	2.8	61

58	In-Street Wind Direction Variability in the Vicinity of a Busy Intersection in Central London. <i>Boundary-Layer Meteorology</i> , 2010 , 136, 489-513	3.4	33
57	Urban tracer dispersion experiment in London (DAPPLE) 2003: field study and comparison with empirical prediction. <i>Atmospheric Science Letters</i> , 2010 , 11, 241-248	2.4	19
56	A field study of factors influencing the concentrations of a traffic-related pollutant in the vicinity of a complex urban junction. <i>Atmospheric Environment</i> , 2009 , 43, 5027-5037	5.3	35
55	The effects of parametric uncertainties in simulations of a reactive plume using a Lagrangian stochastic model. <i>Atmospheric Environment</i> , 2009 , 43, 5978-5988	5.3	8
54	Short-range urban dispersion experiments using fixed and moving sources. <i>Atmospheric Science Letters</i> , 2009 , 10, 59-65	2.4	19
53	The application of the QSSA via reaction lumping for the reduction of complex hydrocarbon oxidation mechanisms. <i>Proceedings of the Combustion Institute</i> , 2009 , 32, 543-551	5.9	29
52	GUI@DMR A software tool for global sensitivity analysis of complex models. <i>Environmental Modelling and Software</i> , 2009 , 24, 775-785	5.2	174
51	A global sensitivity study of cyclohexane oxidation under low temperature fuel-rich conditions using HDMR methods. <i>Combustion Theory and Modelling</i> , 2009 , 13, 589-605	1.5	45
50	High temporal resolution measurements of roadside particle size distributions and their implications for exposure. <i>Journal of Physics: Conference Series</i> , 2009 , 151, 012025	0.3	
49	Modelling photochemical air pollutant formation in Hungary using an adaptive grid technique. <i>International Journal of Environment and Pollution</i> , 2009 , 36, 44	0.7	10
48	Effect of the soil wetness state on the stomatal ozone fluxes over Hungary. <i>International Journal of Environment and Pollution</i> , 2009 , 36, 180	0.7	5
47	Dispersion Experiments in Central London: The 2007 DAPPLE project. <i>Bulletin of the American Meteorological Society</i> , 2009 , 90, 955-970	6.1	82
46	Global sensitivity analysis of a 3D street canyon model Part I: The development of high dimensional model representations. <i>Atmospheric Environment</i> , 2008 , 42, 1857-1873	5.3	51
45	Global sensitivity analysis of a 3D street canyon model Part II: Application and physical insight using sensitivity analysis. <i>Atmospheric Environment</i> , 2008 , 42, 1874-1891	5.3	11
44	Suppression of nucleation mode particles by biomass burning in an urban environment: a case study. <i>Journal of Environmental Monitoring</i> , 2008 , 10, 979-88		16
43	Spatial dynamics of steady flames 1. Phase space structure and the dynamics of individual trajectories. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 7768-83	2.8	6
42	Spatial dynamics of steady flames 2. Low-dimensional manifolds and the role of transport processes. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 7784-805	2.8	5
41	The influence of background wind direction on the roadside turbulent velocity field within a complex urban street. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2008 , 134, 1371-1384	6.4	7

40	A global sensitivity study of sulfur chemistry in a premixed methane flame model using HDMR. <i>International Journal of Chemical Kinetics</i> , 2008 , 40, 742-753	1.4	96
39	Factors influencing particle number concentrations, size distributions and modal parameters at a roof-level and roadside site in Leicester, UK. <i>Science of the Total Environment</i> , 2007 , 386, 65-82	10.2	31
38	Evaluation of models for the low temperature combustion of alkanes through interpretation of pressure-temperature ignition diagrams. <i>Physical Chemistry Chemical Physics</i> , 2006 , 8, 3197-210	3.6	23
37	Observations of urban airborne particle number concentrations during rush-hour conditions: analysis of the number based size distributions and modal parameters. <i>Journal of Environmental Monitoring</i> , 2006 , 8, 1203-18		32
36	The use of global uncertainty methods for the evaluation of combustion mechanisms. <i>Reliability Engineering and System Safety</i> , 2006 , 91, 1219-1231	6.3	40
35	A polynomial repro-model applied to propane cracking. <i>Computer Aided Chemical Engineering</i> , 2005 , 20, 373-378	0.6	0
34	The spatial variability in concentrations of a traffic-related pollutant in two street canyons in York, UK Part II: The influence of traffic characteristics. <i>Atmospheric Environment</i> , 2005 , 39, 3163-3176	5.3	22
33	Genotoxicity of size-fractionated samples of urban particulate matter. <i>Environmental and Molecular Mutagenesis</i> , 2005 , 45, 380-7	3.2	28
32	Introduction to the DAPPLE Air Pollution Project. <i>Science of the Total Environment</i> , 2004 , 332, 139-53	10.2	92
31	Modelling ozone fluxes over Hungary. <i>Atmospheric Environment</i> , 2004 , 38, 6211-6222	5.3	15
30	Simulation of the dispersion of nuclear contamination using an adaptive Eulerian grid model. <i>Journal of Environmental Radioactivity</i> , 2004 , 75, 59-82	2.4	27
29	Systematic reduction of complex tropospheric chemical mechanisms, Part I: sensitivity and time-scale analyses. <i>Atmospheric Chemistry and Physics</i> , 2004 , 4, 2025-2056	6.8	35
28	Reduction of a chemical kinetic scheme for carbon monoxide-hydrogen oxidation. <i>Computer Aided Chemical Engineering</i> , 2003 , 14, 581-586	0.6	
27	Atmospheric lifetime as a probe of radical chemistry in the boundary layer. <i>Atmospheric Environment</i> , 2003 , 37, 2193-2205	5.3	10
26	Resolution of Pollutant Concentrations Using a Fully 3D Adaptive Method. <i>The IMA Volumes in Mathematics and Its Applications</i> , 2002 , 61-79	0.5	
25	The Estimation of Intrinsic Low Dimensional Manifold Dimension in Atmospheric Chemical Reaction Systems 2002 , 245-263		1
24	Modelling Photochemical Air Pollution in Hungary Using an Adaptive Grid Model 2002 , 264-273		1
23	An investigation of important gas-phase reactions of nitrogenous species from the simulation of experimental measurements in combustion systems. <i>Combustion and Flame</i> , 2001 , 124, 573-589	5.3	51

22	Low-dimensional manifolds in tropospheric chemical systems. <i>Faraday Discussions</i> , 2001 , 125-46; discussion 197-213	3.6	18
21	Experimental and modelling study of sulfur and nitrogen doped premixed methane flames at low pressure. <i>Faraday Discussions</i> , 2001 , 337-52; discussion 353-70	3.6	37
20	The Simulation of Photochemical Smog Episodes in Hungary and Central Europe Using Adaptive Gridding Models. <i>Lecture Notes in Computer Science</i> , 2001 , 67-76	0.9	5
19	3-D Multi-scale air pollution modelling using adaptive unstructured meshes. <i>Environmental Modelling and Software</i> , 2000 , 15, 681-692	5.2	11
18	The application of repro-modelling to a tropospheric chemical model. <i>Environmental Modelling and Software</i> , 2000 , 15, 611-618	5.2	7
17	Low-dimensional manifolds and reduced chemical models for tropospheric chemistry simulations. <i>Atmospheric Environment</i> , 2000 , 34, 2425-2436	5.3	24
16	3D adaptive unstructured meshes for air pollution modelling. <i>Management of Environmental Quality</i> , 1999 , 10, 267-275		6
15	The Use of 3-D Adaptive Unstructured Meshes in Air Pollution Modelling 1999 , 339-348		2
14	Multi-scale Atmospheric Dispersion Modelling by Use of Adaptive Gridding Techniques. <i>Environmental Monitoring and Assessment</i> , 1998 , 52, 225-238	3.1	14
13	Mechanism reduction techniques applied to tropospheric chemistry. <i>Atmospheric Environment</i> , 1998 , 32, 1059-1073	5.3	35
12	Chapter 4 Mathematical tools for the construction, investigation and reduction of combustion mechanisms. <i>Comprehensive Chemical Kinetics</i> , 1997 , 293-437	0.7	142
11	The use of algebraic sets in the approximation of inertial manifolds and lumping in chemical kinetic systems. <i>Physica D: Nonlinear Phenomena</i> , 1995 , 83, 421-449	3.3	35
10	Reduced Mechanisms for Propane Pyrolysis. <i>Industrial & Engineering Chemistry Research</i> , 1995 , 34, 3749-3760	3.9	46
9	A general analysis of approximate nonlinear lumping in chemical kinetics. II. Constrained lumping. <i>Journal of Chemical Physics</i> , 1994 , 101, 1188-1201	3.9	38
8	A general analysis of approximate nonlinear lumping in chemical kinetics. I. Unconstrained lumping. <i>Journal of Chemical Physics</i> , 1994 , 101, 1172-1187	3.9	41
7	From feedback to chaos in chemical systems. <i>Analytical Proceedings</i> , 1993 , 30, 307		3
6	On the error of the quasi-steady-state approximation. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 163-172		144
5	Determination of approximate lumping schemes by a singular perturbation method. <i>Journal of Chemical Physics</i> , 1993 , 99, 3562-3574	3.9	33

4	Mechanism reduction for the oscillatory oxidation of hydrogen: Sensitivity and quasi-steady-state analyses. <i>Combustion and Flame</i> , 1992 , 91, 107-130	5.3	114
3	Modelling complex oscillations for the H ₂ + O ₂ reaction in an open system. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1991 , 87, 2539		18
2	Development of oscillations in closed systems. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1990 , 86, 3365		6
1	Quadratic autocatalysis in a non-isothermal CSTR. <i>Chemical Engineering Science</i> , 1989 , 44, 1129-1137	4.4	14