Robert Rallo

List of Publications by Year
in descending order

62 papers	3,098 citations	236612 25 h-index	155451 55 g-index
66 all docs	66 docs citations	66 times ranked	4100 citing authors

#	Article	IF	Citations
1	CATMoS: Collaborative Acute Toxicity Modeling Suite. Environmental Health Perspectives, 2021, 129, 47013.	2.8	63
2	Visualizing biomolecular electrostatics in virtual reality with UnityMolâ€APBS. Protein Science, 2020, 29, 237-246.	3.1	31
3	Distributed heterogeneous compute infrastructure for the study of additive manufacturing systems. MRS Advances, 2020, 5, 1547-1555.	0.5	3
4	Graph Analytics and Optimization Methods for Insights from the Uber Movement Data. , 2019, , .		1
5	Fouling indicators for field monitoring the effectiveness of operational strategies of ultrafiltration as pretreatment for seawater desalination. Desalination, 2018, 431, 86-99.	4.0	21
6	Fractal Dimension Calculation for Big Data Using Box Locality Index. Annals of Data Science, 2018, 5, 549-563.	1.7	3
7	Molecular dynamics simulations of zinc oxide solubility: From bulk down to nanoparticles. Food and Chemical Toxicology, 2018, 112, 518-525.	1.8	11
8	Perspectives from the NanoSafety Modelling Cluster on the validation criteria for (Q)SAR models used in nanotechnology. Food and Chemical Toxicology, 2018, 112, 478-494.	1.8	27
9	Toward computational and experimental characterisation for risk assessment of metal oxide nanoparticles. Environmental Science: Nano, 2018, 5, 2241-2251.	2.2	13
10	In Silico Design of Optimal Dissolution Kinetics of Feâ€Doped ZnO Nanoparticles Results in Cancerâ€Specific Toxicity in a Preclinical Rodent Model. Advanced Healthcare Materials, 2017, 6, 1601379.	3.9	29
11	An Integrated Data-Driven Strategy for Safe-by-Design Nanoparticles: The FP7 MODERN Project. Advances in Experimental Medicine and Biology, 2017, 947, 257-301.	0.8	6
12	Trends and challenges in smart healthcare research: A journey from data to wisdom. , 2017, , .		27
13	CompNanoTox2015: novel perspectives from a European conference on computational nanotoxicology on predictive nanotoxicology. Nanotoxicology, 2017, 11, 839-845.	1.6	15
14	Parametrization of nanoparticles: development of full-particle nanodescriptors. Nanoscale, 2016, 8, 16243-16250.	2.8	30
15	An ISA-TAB-Nano based data collection framework to support data-driven modelling of nanotoxicology. Beilstein Journal of Nanotechnology, 2015, 6, 1978-1999.	1.5	25
16	In silicoexploratory study using structureâ€“activity relationship models and metabolic information for prediction of mutagenicity based on the Ames test and rodent micronucleus assay. SAR and QSAR in Environmental Research, 2015, 26, 1017-1031.	1.0	8
17	Prioritization of in silico models and molecular descriptors for the assessment of ready biodegradability. Environmental Research, 2015, 142, 161-168.	3.7	11
18	Prediction of the Q-e parameters from structures of transfer chain agents. Journal of Polymer Research, 2015, 22, 1.	1.2	2

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19	Optimal descriptor as a translator of eclectic data into prediction of cytotoxicity for metal oxide nanoparticles under different conditions. Ecotoxicology and Environmental Safety, 2015, 112, 39-45.	2.9	83
20	Quantitative Structure-Activity Relationships for Cellular Uptake of Surface-Modified Nanoparticles. Combinatorial Chemistry and High Throughput Screening, 2015, 18, 365-375.	0.6	10
21	Use of Quasi-SMILES and Monte Carlo Optimization to Develop Quantitative Feature Property/Activity Relationships (QFPR/QFAR) for Nanomaterials. Current Topics in Medicinal Chemistry, 2015, 15, 1837-1844.	1.0	20
22	Predicting Cell Association of Surface-Modified Nanoparticles Using Protein Corona Structure - Activity Relationships (PCSAR). Current Topics in Medicinal Chemistry, 2015, 15, 1930-1937.	1.0	18
23	Association rule mining of cellular responses induced by metal and metal oxide nanoparticles. Analyst, The, 2014, 139, 943-953.	1.7	26
24	Fault Detection and Isolation in a Spiral-Wound Reverse Osmosis (RO) Desalination Plant. Industrial & Engineering Chemistry Research, 2014, 53, 3257-3271.	1.8	3
25	Hierarchical Rank Aggregation with Applications to Nanotoxicology. Journal of Agricultural, Biological, and Environmental Statistics, 2013, 18, 159-177.	0.7	13
26	A comparative survey of chemistry-driven in silico methods to identify hazardous substances under REACH. Regulatory Toxicology and Pharmacology, 2013, 66, 301-314.	1.3	42
27	Data-driven models of steady state and transient operations of spiral-wound RO plant. Desalination, 2013, 316, 154-161.	4.0	16
28	Modeling airborne benzene in space and time with self-organizing maps and Bayesian techniques. Environmental Modelling and Software, 2013, 41, 151-162.	1.9	18
29	Quantitative Structure-Activity-Relationships for cellular uptake of nanoparticles. , 2013, , .		1
30	HDAT: web-based high-throughput screening data analysis tools. Computational Science & Discovery, 2013, 6, 014006.	1.5	12
31	In Silico Analysis of Nanomaterials Hazard and Risk. Accounts of Chemical Research, 2013, 46, 802-812.	7.6	73
32	Nanoâ€SAR Development for Bioactivity of Nanoparticles with Considerations of Decision Boundaries. Small, 2013, 9, 1842-1852.	5.2	75
33	Development of structureâ€“activity relationship for metal oxide nanoparticles. Nanoscale, 2013, 5, 5644.	2.8	120
34	Chapter 6. Nanoinformatics for Safe-by-Design Engineered Nanomaterials. RSC Nanoscience and Nanotechnology, 2012, , 89-107.	0.2	2
35	Quantitative consensus of bioaccumulation models for integrated testing strategies. Environment International, 2012, 45, 51-58.	4.8	41
36	Automated Phenotype Recognition for Zebrafish Embryo Based In Vivo High Throughput Toxicity Screening of Engineered Nano-Materials. PLoS ONE, 2012, 7, e35014.	1.1	50

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37	Use of Metal Oxide Nanoparticle Band Gap To Develop a Predictive Paradigm for Oxidative Stress and Acute Pulmonary Inflammation. ACS Nano, 2012, 6, 4349-4368.	7.3	718
38	Differential Expression of Syndecan-1 Mediates Cationic Nanoparticle Toxicity in Undifferentiated versus Differentiated Normal Human Bronchial Epithelial Cells. ACS Nano, 2011, 5, 2756-2769.	7.3	86
39	No time to loseâ€"high throughput screening to assess nanomaterial safety. Nanoscale, 2011, 3, 1345.	2.8	153
40	Self-Organizing Map Analysis of Toxicity-Related Cell Signaling Pathways for Metal and Metal Oxide Nanoparticles. Environmental Science & Technology, 2011, 45, 1695-1702.	4.6	80
41	Analysis of Nanoparticle Agglomeration in Aqueous Suspensions via Constant-Number Monte Carlo Simulation. Environmental Science & Technology, 2011, 45, 9284-9292.	4.6	112
42	Use of a High-Throughput Screening Approach Coupled with In Vivo Zebrafish Embryo Screening To Develop Hazard Ranking for Engineered Nanomaterials. ACS Nano, 2011, 5, 1805-1817.	7.3	306
43	Mapping Cumulative Environmental Risks: Examples from the EU NoMiracle Project. Environmental Modeling and Assessment, 2011, 16, 119-133.	1.2	17
44	Classification NanoSAR Development for Cytotoxicity of Metal Oxide Nanoparticles. Small, 2011, 7, 1118-1126.	5.2	156
45	Mineral scale monitoring for reverse osmosis desalination via real-time membrane surface image analysis. Desalination, 2011, 273, 64-71.	4.0	61
46	UNSUPERVISED FEATURE SELECTION USING INCREMENTAL LEAST SQUARES. International Journal of Information Technology and Decision Making, 2011, 10, 967-987.	2.3	19
47	Predicting Biodegradable Quality of Chemicals with the TGI+.3 Classifier. , 2011, , .		2
48	Conscious worst case definition for risk assessment, part II. Science of the Total Environment, 2010, 408, 3860-3870.	3.9	16
49	Multimedia environmental chemical partitioning from molecular information. Science of the Total Environment, 2010, 409, 412-422.	3.9	3
50	Coupled 3-D hydrodynamics and mass transfer analysis of mineral scaling-induced flux decline in a laboratory plate-and-frame reverse osmosis membrane module. Journal of Membrane Science, 2009, 339, 39-48.	4.1	45
51	Neural network approach for modeling the performance of reverse osmosis membrane desalting. Journal of Membrane Science, 2009, 326, 408-419.	4.1	61
52	Uncertainty Reduction in Environmental Data with Conflicting Information. Environmental Science & Technology, 2009, 43, 5001-5006.	4.6	17
53	Micro-SOM: A Linear-Time Multivariate Microaggregation Algorithm Based on Self-Organizing Maps. Lecture Notes in Computer Science, 2009, , 525-535.	1.0	2
54	Organic compounds passage through RO membranes. Journal of Membrane Science, 2008, 313, 23-43.	4.1	35

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55	PlanetSim: A New Overlay Network Simulation Framework. Lecture Notes in Computer Science, 2005, , 123-136.	1.0	66
56	Using an Ensemble of Neural Based QSARs for the Prediction of Toxicological Properties of Chemical Contaminants. Chemical Engineering Research and Design, 2005, 83, 387-392.	2.7	17
57	The Planet Project: collaborative educational content repositories on structured peer-to-peer grids. , 2005, , .		2
58	MOVE:. , 2002, , .		16
59	Neural virtual sensor for the inferential prediction of product quality from process variables. Computers and Chemical Engineering, 2002, 26, 1735-1754.	2.0	84
60	The simulation and interpretation of free turbulence with a cognitive neural system. Physics of Fluids, 2000, 12, 1826-1835.	1.6	43
61	Extraction of structures from turbulent signals. Advanced Engineering Informatics, 1997, 11, 413-419.	0.5	11
62	IDENTIFICATION OF COHERENT STRUCTURES IN TURBULENT SHEAR FLOWS WITH A FUZZY ARTMAP NEURAL NETWORK. International Journal of Neural Systems, 1996, 07, 559-568.	3.2	12