

Robert Rallo

List of Publications by Year in descending order

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62
papers

3,098
citations

236612

25
h-index

155451

55
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66
all docs

66
docs citations

66
times ranked

4100
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Use of a High-Throughput Screening Approach Coupled with <i>In Vivo</i> Zebrafish Embryo Screening To Develop Hazard Ranking for Engineered Nanomaterials. ACS Nano, 2011, 5, 1805-1817.	7.3	306
3	Classification NanoSAR Development for Cytotoxicity of Metal Oxide Nanoparticles. Small, 2011, 7, 1118-1126.	5.2	156
4	No time to lose—high throughput screening to assess nanomaterial safety. Nanoscale, 2011, 3, 1345.	2.8	153
5	Development of structure–activity relationship for metal oxide nanoparticles. Nanoscale, 2013, 5, 5644.	2.8	120
6	Analysis of Nanoparticle Agglomeration in Aqueous Suspensions via Constant-Number Monte Carlo Simulation. Environmental Science & Technology, 2011, 45, 9284-9292.	4.6	112
7	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
8	Neural virtual sensor for the inferential prediction of product quality from process variables. Computers and Chemical Engineering, 2002, 26, 1735-1754.	2.0	84
9	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
10	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
11	NanoSAR Development for Bioactivity of Nanoparticles with Considerations of Decision Boundaries. Small, 2013, 9, 1842-1852.	5.2	75
12	<i>In Silico</i> Analysis of Nanomaterials Hazard and Risk. Accounts of Chemical Research, 2013, 46, 802-812.	7.6	73
13	PlanetSim: A New Overlay Network Simulation Framework. Lecture Notes in Computer Science, 2005, , 123-136.	1.0	66
14	CATMoS: Collaborative Acute Toxicity Modeling Suite. Environmental Health Perspectives, 2021, 129, 47013.	2.8	63
15	Neural network approach for modeling the performance of reverse osmosis membrane desalting. Journal of Membrane Science, 2009, 326, 408-419.	4.1	61
16	Mineral scale monitoring for reverse osmosis desalination via real-time membrane surface image analysis. Desalination, 2011, 273, 64-71.	4.0	61
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	The simulation and interpretation of free turbulence with a cognitive neural system. <i>Physics of Fluids</i> , 2000, 12, 1826-1835.	1.6	43
20	A comparative survey of chemistry-driven in silico methods to identify hazardous substances under REACH. <i>Regulatory Toxicology and Pharmacology</i> , 2013, 66, 301-314.	1.3	42
21	Quantitative consensus of bioaccumulation models for integrated testing strategies. <i>Environment International</i> , 2012, 45, 51-58.	4.8	41
22	Organic compounds passage through RO membranes. <i>Journal of Membrane Science</i> , 2008, 313, 23-43.	4.1	35
23	Visualizing biomolecular electrostatics in virtual reality with UnityMol&APBS. <i>Protein Science</i> , 2020, 29, 237-246.	3.1	31
24	Parametrization of nanoparticles: development of full-particle nanodescriptors. <i>Nanoscale</i> , 2016, 8, 16243-16250.	2.8	30
25	In Silico Design of Optimal Dissolution Kinetics of Fe&Doped ZnO Nanoparticles Results in Cancer&Specific Toxicity in a Preclinical Rodent Model. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601379.	3.9	29
26	Trends and challenges in smart healthcare research: A journey from data to wisdom. , 2017, , .		27
27	Perspectives from the NanoSafety Modelling Cluster on the validation criteria for (Q)SAR models used in nanotechnology. <i>Food and Chemical Toxicology</i> , 2018, 112, 478-494.	1.8	27
28	Association rule mining of cellular responses induced by metal and metal oxide nanoparticles. <i>Analyst</i> , The, 2014, 139, 943-953.	1.7	26
29	An ISA-TAB-Nano based data collection framework to support data-driven modelling of nanotoxicology. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1978-1999.	1.5	25
30	Fouling indicators for field monitoring the effectiveness of operational strategies of ultrafiltration as pretreatment for seawater desalination. <i>Desalination</i> , 2018, 431, 86-99.	4.0	21
31	Use of Quasi-SMILES and Monte Carlo Optimization to Develop Quantitative Feature Property/Activity Relationships (QFPR/QFAR) for Nanomaterials. <i>Current Topics in Medicinal Chemistry</i> , 2015, 15, 1837-1844.	1.0	20
32	UNSUPERVISED FEATURE SELECTION USING INCREMENTAL LEAST SQUARES. <i>International Journal of Information Technology and Decision Making</i> , 2011, 10, 967-987.	2.3	19
33	Modeling airborne benzene in space and time with self-organizing maps and Bayesian techniques. <i>Environmental Modelling and Software</i> , 2013, 41, 151-162.	1.9	18
34	Predicting Cell Association of Surface-Modified Nanoparticles Using Protein Corona Structure - Activity Relationships (PCSAR). <i>Current Topics in Medicinal Chemistry</i> , 2015, 15, 1930-1937.	1.0	18
35	Using an Ensemble of Neural Based QSARs for the Prediction of Toxicological Properties of Chemical Contaminants. <i>Chemical Engineering Research and Design</i> , 2005, 83, 387-392.	2.7	17
36	Uncertainty Reduction in Environmental Data with Conflicting Information. <i>Environmental Science & Technology</i> , 2009, 43, 5001-5006.	4.6	17

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37	Mapping Cumulative Environmental Risks: Examples from the EU NoMiracle Project. Environmental Modeling and Assessment, 2011, 16, 119-133.	1.2	17
38	MOVE: , 2002, , .		16
39	Conscious worst case definition for risk assessment, part II. Science of the Total Environment, 2010, 408, 3860-3870.	3.9	16
40	Data-driven models of steady state and transient operations of spiral-wound RO plant. Desalination, 2013, 316, 154-161.	4.0	16
41	CompNanoTox2015: novel perspectives from a European conference on computational nanotoxicology on predictive nanotoxicology. Nanotoxicology, 2017, 11, 839-845.	1.6	15
42	Hierarchical Rank Aggregation with Applications to Nanotoxicology. Journal of Agricultural, Biological, and Environmental Statistics, 2013, 18, 159-177.	0.7	13
43	Toward computational and experimental characterisation for risk assessment of metal oxide nanoparticles. Environmental Science: Nano, 2018, 5, 2241-2251.	2.2	13
44	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
45	HDAT: web-based high-throughput screening data analysis tools. Computational Science & Discovery, 2013, 6, 014006.	1.5	12
46	Extraction of structures from turbulent signals. Advanced Engineering Informatics, 1997, 11, 413-419.	0.5	11
47	Prioritization of in silico models and molecular descriptors for the assessment of ready biodegradability. Environmental Research, 2015, 142, 161-168.	3.7	11
48	Molecular dynamics simulations of zinc oxide solubility: From bulk down to nanoparticles. Food and Chemical Toxicology, 2018, 112, 518-525.	1.8	11
49	Quantitative Structure-Activity Relationships for Cellular Uptake of Surface-Modified Nanoparticles. Combinatorial Chemistry and High Throughput Screening, 2015, 18, 365-375.	0.6	10
50	<i>In silico</i> exploratory study using structure-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
51	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
52	Multimedia environmental chemical partitioning from molecular information. Science of the Total Environment, 2010, 409, 412-422.	3.9	3
53	Fault Detection and Isolation in a Spiral-Wound Reverse Osmosis (RO) Desalination Plant. Industrial & Engineering Chemistry Research, 2014, 53, 3257-3271.	1.8	3
54	Fractal Dimension Calculation for Big Data Using Box Locality Index. Annals of Data Science, 2018, 5, 549-563.	1.7	3

#	ARTICLE	IF	CITATIONS
55	Distributed heterogeneous compute infrastructure for the study of additive manufacturing systems. MRS Advances, 2020, 5, 1547-1555.	0.5	3
56	The Planet Project: collaborative educational content repositories on structured peer-to-peer grids. , 2005, , .		2
57	Micro-SOM: A Linear-Time Multivariate Microaggregation Algorithm Based on Self-Organizing Maps. Lecture Notes in Computer Science, 2009, , 525-535.	1.0	2
58	Chapter 6. Nanoinformatics for Safe-by-Design Engineered Nanomaterials. RSC Nanoscience and Nanotechnology, 2012, , 89-107.	0.2	2
59	Prediction of the Q-e parameters from structures of transfer chain agents. Journal of Polymer Research, 2015, 22, 1.	1.2	2
60	Predicting Biodegradable Quality of Chemicals with the TGI+.3 Classifier. , 2011, , .		2
61	Quantitative Structure-Activity-Relationships for cellular uptake of nanoparticles. , 2013, , .		1
62	Graph Analytics and Optimization Methods for Insights from the Uber Movement Data. , 2019, , .		1