Aalbert Jan Hendriks

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2632116/publications.pdf

Version: 2024-02-01

109321 95266 5,257 128 35 68 citations g-index h-index papers 128 128 128 6912 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Delineation of the exposure-response causality chain of chronic copper toxicity to the zebra mussel, Dreissena polymorpha, with a TK-TD model based on concepts of biotic ligand model and subcellular metal partitioning model. Chemosphere, 2022, 286, 131930.	8.2	4
2	A generic model based on the properties of nanoparticles and cells for predicting cellular uptake. Colloids and Surfaces B: Biointerfaces, 2022, 209, 112155.	5.0	7
3	Ibuprofen exposure in Europe; ePiE as an alternative to costly environmental monitoring. Environmental Research, 2022, 209, 112777.	7.5	7
4	Stoichiometric ratios for biotics and xenobiotics capture effective metabolic coupling to re(de)fine biodegradation. Water Research, 2022, 217, 118333.	11.3	2
5	A Generalized Physiologically Based Kinetic Model for Fish for Environmental Risk Assessment of Pharmaceuticals. Environmental Science & Environmental Risk Assessment of Environmental Risk Assessment of Pharmaceuticals.	10.0	12
6	Simulating changes in polar bear subpopulation growth rate due to legacy persistent organic pollutants – Temporal and spatial trends. Science of the Total Environment, 2021, 754, 142380.	8.0	3
7	The importance of over-the-counter-sales and product format in the environmental exposure assessment of active pharmaceutical ingredients. Science of the Total Environment, 2021, 752, 141624.	8.0	4
8	Modelling copper toxicokinetics in the zebra mussel, Dreissena polymorpha, under chronic exposures at various pH and sodium concentrations. Chemosphere, 2021, 267, 129278.	8.2	10
9	Dreissenids' breaking loose: differential attachment as a possible driver of the dominance shift between two invasive mussel species. Biological Invasions, 2021, 23, 2125-2141.	2.4	1
10	Towards an ecosystem service-based method to quantify the filtration services of mussels under chemical exposure. Science of the Total Environment, 2021, 763, 144196.	8.0	11
11	Internal and Maternal Distribution of Persistent Organic Pollutants in Sea Turtle Tissues: A Meta-Analysis. Environmental Science & Technology, 2021, 55, 10012-10024.	10.0	12
12	Do initial concentration and activated sludge seasonality affect pharmaceutical biotransformation rate constants?. Applied Microbiology and Biotechnology, 2021, 105, 6515-6527.	3.6	11
13	Rewilding the Sea with Domesticated Seagrass. BioScience, 2021, 71, 1171-1178.	4.9	13
14	Modelling chronic toxicokinetics and toxicodynamics of copper in mussels considering ionoregulatory homeostasis and oxidative stress. Environmental Pollution, 2021, 287, 117645.	7.5	8
15	Dropping the microbead: Source and sink related microplastic distribution in the Black Sea and Caspian Sea basins. Marine Pollution Bulletin, 2021, 173, 112982.	5.0	11
16	Development of a toxicokinetic-toxicodynamic model simulating chronic copper toxicity to the Zebra mussel based on subcellular fractionation. Aquatic Toxicology, 2021, 241, 106015.	4.0	4
17	Variability in nitrogen-derived trophic levels of Arctic marine biota. Polar Biology, 2021, 44, 119-131.	1.2	5
18	Disentanglement of the chemical, physical, and biological processes aids the development of quantitative structure-biodegradation relationships for aerobic wastewater treatment. Science of the Total Environment, 2020, 708, 133863.	8.0	19

#	Article	IF	CITATIONS
19	Mechanistic simulation of bioconcentration kinetics of waterborne Cd, Ag, Pd, and Pt in the zebra mussel Dreissena polymorpha. Chemosphere, 2020, 242, 124967.	8.2	5
20	Reliable and representative in silico predictions of freshwater ecotoxicological hazardous concentrations. Environment International, 2020, 134, 105334.	10.0	14
21	Oxygen limitation may affect the temperature and size dependence of metabolism in aquatic ectotherms. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31963-31968.	7.1	115
22	Mean Species Abundance as a Measure of Ecotoxicological Risk. Environmental Toxicology and Chemistry, 2020, 39, 2304-2313.	4.3	7
23	Bioconcentration of Organotin Cations during Molting Inhibits <i>Heterocypris incongruens </i> Growth. Environmental Science &	10.0	5
24	Implications of Trophic Variability for Modeling Biomagnification of POPs in Marine Food Webs in the Svalbard Archipelago. Environmental Science & Env	10.0	8
25	Chemical fate of persistent organic pollutants in the arctic: Evaluation of simplebox. Science of the Total Environment, 2020, 720, 137579.	8.0	25
26	Thermochemical unification of molecular descriptors to predict radical hydrogen abstraction with low computational cost. Physical Chemistry Chemical Physics, 2020, 22, 23215-23225.	2.8	4
27	In response to "An allometric tragedy of the commons: Response to the article  Evaluation of models capacity to predict size spectra parameters in ecosystems under stress'― Ecological Indicators, 2019, 96, 747-749.	6.3	0
28	Confronting variability with uncertainty in the ecotoxicological impact assessment of down-the-drain products. Environment International, 2019, 126, 37-45.	10.0	18
29	Relating plant height to demographic rates and extinction vulnerability. Biological Conservation, 2018, 220, 104-111.	4.1	5
30	Deriving Field-Based Ecological Risks for Bird Species. Environmental Science & Environmental Science	10.0	6
31	Quantitative structure–activity relationships for primary aerobic biodegradation of organic chemicals in pristine surface waters: starting points for predicting biodegradation under acclimatization. Environmental Sciences: Processes and Impacts, 2018, 20, 157-170.	3.5	21
32	Development of a PBPK Model for Silver Accumulation in Chub Infected with Acanthocephalan Parasites. Environmental Science & E	10.0	12
33	Sensitivity of native and alien freshwater bivalve species in Europe to climateâ€related environmental factors. Ecosphere, 2018, 9, e02184.	2.2	7
34	Timeâ€varying effects of aromatic oil constituents on the survival of aquatic species: Deviations between model estimates and observations. Environmental Toxicology and Chemistry, 2017, 36, 128-136.	4.3	5
35	Developing and testing a global-scale regression model to quantify mean annual streamflow. Journal of Hydrology, 2017, 544, 479-487.	5.4	19
36	The toxicity of plastic nanoparticles to green algae as influenced by surface modification, medium hardness and cellular adsorption. Aquatic Toxicology, 2017, 183, 11-20.	4.0	298

3

#	Article	IF	CITATIONS
37	Evaluation of models capacity to predict size spectra parameters in ecosystems under stress. Ecological Indicators, 2017, 79, 114-121.	6.3	14
38	Development and Validation of a Biodynamic Model for Mechanistically Predicting Metal Accumulation in Fish-Parasite Systems. PLoS ONE, 2016, 11, e0161091.	2.5	11
39	Dietary Toxicity Thresholds and Ecological Risks for Birds and Mammals Based on Species Sensitivity Distributions. Environmental Science & Environment	10.0	10
40	Crude oil affecting the biomass of the marine copepod Calanus finmarchicus: Comparing a simple and complex population model. Marine Environmental Research, 2016, 119, 197-206.	2.5	6
41	Review of the partitioning of chemicals into different plastics: Consequences for the risk assessment of marine plastic debris. Marine Pollution Bulletin, 2016, 113, 17-24.	5.0	104
42	Development and application of the SSD approach in scientific case studies for ecological risk assessment. Environmental Toxicology and Chemistry, 2016, 35, 2149-2161.	4.3	77
43	Surviving in Changing Seascapes: Sediment Dynamics as Bottleneck for Long-Term Seagrass Presence. Ecosystems, 2016, 19, 296-310.	3.4	38
44	QSARs for estimating intrinsic hepatic clearance of organic chemicals in humans. Environmental Toxicology and Pharmacology, 2016, 42, 190-197.	4.0	16
45	Environmental contamination due to shale gas development. Science of the Total Environment, 2016, 550, 431-438.	8.0	67
46	Diagnosis of Basal Cell Carcinoma by Reflectance Confocal Microscopy: Study Design and Protocol of a Randomized Controlled Multicenter Trial. JMIR Research Protocols, 2016, 5, e114.	1.0	6
47	Calcifying Species Sensitivity Distributions for Ocean Acidification. Environmental Science & Emp; Technology, 2015, 49, 1495-1500.	10.0	41
48	A dominance shift from the zebra mussel to the invasive quagga mussel may alter the trophic transfer of metals. Environmental Pollution, 2015, 203, 183-190.	7. 5	20
49	A semiâ€empirical model for transport of inorganic nanoparticles across a lipid bilayer: Implications for uptake by living cells. Environmental Toxicology and Chemistry, 2015, 34, 488-496.	4.3	17
50	The utilisation of structural descriptors to predict metabolic constants of xenobiotics in mammals. Environmental Toxicology and Pharmacology, 2015, 39, 247-258.	4.0	18
51	Mechanistically-based QSARs to Describe Metabolic Constants in Mammals. ATLA Alternatives To Laboratory Animals, 2014, 42, 59-69.	1.0	8
52	Experimental and Theoretical Studies in the EU FP7 Marie Curie Initial Training Network Project, Environmental ChemOinformatics (ECO). ATLA Alternatives To Laboratory Animals, 2014, 42, 7-11.	1.0	3
53	Toxicokinetic Toxicodynamic (TKTD) Modeling of Ag Toxicity in Freshwater Organisms: Whole-Body Sodium Loss Predicts Acute Mortality Across Aquatic Species. Environmental Science & amp; Technology, 2014, 48, 14481-14489.	10.0	20
54	Delineating ionâ€ion interactions by electrostatic modeling for predicting rhizotoxicity of metal mixtures to lettuce <i>Lactuca sativa</i> . Environmental Toxicology and Chemistry, 2014, 33, 1988-1995.	4.3	8

#	Article	IF	CITATIONS
55	Size relationships of water discharge in rivers: scaling of discharge with catchment area, mainâ€stem length and precipitation. Hydrological Processes, 2014, 28, 5769-5775.	2.6	24
56	Effects of desiccation on native and nonâ€native molluscs in rivers. Freshwater Biology, 2014, 59, 41-55.	2.4	38
57	Cellular uptake of nanoparticles as determined by particle properties, experimental conditions, and cell type. Environmental Toxicology and Chemistry, 2014, 33, 481-492.	4.3	322
58	Including carrier-mediated transport in oral uptake prediction of nutrients and pharmaceuticals in humans. Environmental Toxicology and Pharmacology, 2014, 38, 938-947.	4.0	3
59	Evaluating the contribution of ingested oil droplets to the bioaccumulation of oil components — A modeling approach. Science of the Total Environment, 2014, 499, 99-106.	8.0	12
60	Modeling the Impacts of Multiple Environmental Stress Factors on Estuarine Copepod Populations. Environmental Science & Enviro	10.0	10
61	Multimedia Modeling of Engineered Nanoparticles with SimpleBox4nano: Model Definition and Evaluation. Environmental Science & Evaluation. Environmental Science & Evaluation. Environmental Science & Evaluation.	10.0	169
62	Uncertainties associated with lacking data for predictions of solid-solution partitioning of metals in soil. Science of the Total Environment, 2014, 490, 44-49.	8.0	10
63	Half-saturation constants in functional responses. Global Ecology and Conservation, 2014, 2, 161-169.	2.1	37
64	Species richness–phosphorus relationships for lakes and streams worldwide. Global Ecology and Biogeography, 2013, 22, 1304-1314.	5.8	42
65	Modelling interactions of toxicants and density dependence in wildlife populations. Journal of Applied Ecology, 2013, 50, 1469-1478.	4.0	15
66	Sensitivity of species to chemicals: Dose–response characteristics for various test types (LC50, LR50) Tj ETQq0	0.0,rgBT /	Oyerlock 10
67	Modeling toxicity of binary metal mixtures (Cu ²⁺ –Ag ⁺ ,) Tj ETQq1 1 0.784314 rgBT / Environmental Toxicology and Chemistry, 2013, 32, 137-143.	Overlock : 4.3	10 Tf 50 267 38
68	Modelling bioaccumulation of oil constituents in aquatic species. Marine Pollution Bulletin, 2013, 76, 178-186.	5.0	19
69	Statistical uncertainty in hazardous terrestrial concentrations estimated with aquatic ecotoxicity data. Chemosphere, 2013, 93, 366-372.	8.2	6
70	Predicting the oral uptake efficiency of chemicals in mammals: Combining the hydrophilic and lipophilic range. Toxicology and Applied Pharmacology, 2013, 266, 150-156.	2.8	18
71	How To Deal with 100,000+ Substances, Sites, and Species: Overarching Principles in Environmental Risk Assessment. Environmental Science & Environmental & Environment	10.0	33
72	Relationships between absorption efficiency of elements in mammals and chemical properties. Critical Reviews in Toxicology, 2013, 43, 800-809.	3.9	3

#	Article	IF	Citations
73	Environmental exposure assessment of engineered nanoparticles: Why REACH needs adjustment. Integrated Environmental Assessment and Management, 2013, 9, e15-26.	2.9	28
74	MODELING TOXIC STRESS BY ATRAZINE IN A MARINE CONSUMERâ€RESOURCE SYSTEM. Environmental Toxicology and Chemistry, 2013, 32, 1088-1095.	4.3	13
75	Compound Lipophilicity as a Descriptor to Predict Binding Affinity (1/ <i>K</i> _m) in Mammals. Environmental Science & Environmental Science	10.0	7
76	Delayed logistic and Rosenzweig–MacArthur models with allometric parameter setting estimate population cycles at lower trophic levels well. Ecological Complexity, 2012, 9, 43-54.	2.9	12
77	Multimetal accumulation in crustaceans in surface water related to body size and water chemistry. Environmental Toxicology and Chemistry, 2012, 31, 2269-2280.	4.3	11
78	Comparing the ecological footprint with the biodiversity footprint of products. Journal of Cleaner Production, 2012, 37, 107-114.	9.3	33
79	Natural colloids are the dominant factor in the sedimentation of nanoparticles. Environmental Toxicology and Chemistry, 2012, 31, 1019-1022.	4.3	141
80	Ranking ecological risks of multiple chemical stressors on amphibians. Environmental Toxicology and Chemistry, 2012, 31, 1416-1421.	4.3	36
81	Including ecotoxic impacts on warmâ€blooded predators in life cycle impact assessment. Integrated Environmental Assessment and Management, 2012, 8, 372-378.	2.9	9
82	Size relationships of water inflow into lakes: Empirical regressions suggest geometric scaling. Journal of Hydrology, 2012, 414-415, 482-490.	5.4	13
83	Predicting effects of cations on copper toxicity to lettuce (<i>Lactuca sativa</i>) by the biotic ligand model. Environmental Toxicology and Chemistry, 2012, 31, 355-359.	4.3	45
84	Modelling the impact of toxic and disturbance stress on white-tailed eagle (Haliaeetus albicilla) populations. Ecotoxicology, 2012, 21, 27-36.	2.4	14
85	Power-Law Relationships for Estimating Mass, Fuel Consumption and Costs of Energy Conversion Equipments. Environmental Science & Equipments. Environmental Science & Equipments. Environmental Science & Equipments.	10.0	56
86	Sensitivity of Polar and Temperate Marine Organisms to Oil Components. Environmental Science & Environmental Science & Technology, 2011, 45, 9017-9023.	10.0	52
87	A QICAR approach for quantifying binding constants for metal–ligand complexes. Ecotoxicology and Environmental Safety, 2011, 74, 1036-1042.	6.0	27
88	How allometric scaling relates to soil abiotics. Oikos, 2011, 120, 529-536.	2.7	29
89	The distribution of a threatened migratory bird species in a patchy landscape: a multi-scale analysis. Landscape Ecology, 2011, 26, 397-410.	4.2	15
90	Parameter uncertainty in modeling bioaccumulation factors of fish. Environmental Toxicology and Chemistry, 2011, 30, 403-412.	4.3	20

#	Article	IF	CITATIONS
91	Modeling metal bioaccumulation in the invasive mussels <i>Dreissena polymorpha</i> and <i>Dreissena rostriformis bugensis</i> in the rivers Rhine and Meuse. Environmental Toxicology and Chemistry, 2011, 30, 2825-2830.	4.3	19
92	Application of the tissue residue approach in ecological risk assessment. Integrated Environmental Assessment and Management, 2011, 7, 116-140.	2.9	41
93	Integration of Biotic Ligand Models (BLM) and Bioaccumulation Kinetics into a Mechanistic Framework for Metal Uptake in Aquatic Organisms. Environmental Science & Environmental Science & Pechnology, 2010, 44, 5022-5028.	10.0	34
94	Alternative Stable States Driven by Density-Dependent Toxicity. Ecosystems, 2010, 13, 841-850.	3.4	33
95	Using datasets of different taxonomic detail to assess the influence of floodplain characteristics on terrestrial arthropod assemblages. Biodiversity and Conservation, 2010, 19, 2087-2110.	2.6	16
96	Modeled and monitored variation in space and time of PCB-153 concentrations in air, sediment, soil and aquatic biota on a European scale. Science of the Total Environment, 2010, 408, 3831-3839.	8.0	14
97	Eco-SpaCE: An object-oriented, spatially explicit model to assess the risk of multiple environmental stressors on terrestrial vertebrate populations. Science of the Total Environment, 2010, 408, 3908-3917.	8.0	30
98	Cumulative Energy Demand As Predictor for the Environmental Burden of Commodity Production. Environmental Science & Environmen	10.0	323
99	Response to Comment on "Ecotoxicogenomics: Bridging the Gap between Genes and Populations― Environmental Science & December 1.00 (2010, 44, 9241-9241).	10.0	2
100	Stakeholder Value Orientations in Water Management. Society and Natural Resources, 2010, 23, 805-821.	1.9	48
101	Ecotoxicogenomics: Bridging the Gap between Genes and Populations. Environmental Science & Emp; Technology, 2010, 44, 4328-4333.	10.0	54
102	Bioaccumulation potential of air contaminants: Combining biological allometry, chemical equilibrium and mass-balances to predict accumulation of air pollutants in various mammals. Toxicology and Applied Pharmacology, 2009, 238, 47-55.	2.8	16
103	Towards a coherent allometric framework for individual home ranges, key population patches and geographic ranges. Ecography, 2009, 32, 929-942.	4.5	26
104	The impact of an additional ecotoxicity test on ecological quality standards. Ecotoxicology and Environmental Safety, 2009, 72, 2037-2045.	6.0	10
105	Urban drainage systems: An undervalued habitat for aquatic macroinvertebrates. Biological Conservation, 2009, 142, 1105-1115.	4.1	94
106	Effects of a drought period on physico-chemical surface water quality in a regional catchment area. Journal of Environmental Monitoring, 2009, 11, 1298.	2.1	15
107	Scaling of offspring number and mass to plant and animal size: model and meta-analysis. Oecologia, 2008, 155, 705-716.	2.0	69
108	Characterisation factors for greenhouse gases at a midpoint level including indirect effects based on calculations with the IMAGE model. International Journal of Life Cycle Assessment, 2008, 13, 191-201.	4.7	20

#	Article	IF	CITATIONS
109	ESTIMATING BIOCONCENTRATION FACTORS, LETHAL CONCENTRATIONS AND CRITICAL BODY RESIDUES OF METALS IN THE MOLLUSKS PERNA VIRIDIS AND MYTILUS EDULIS USING ION CHARACTERISTICS. Environmental Toxicology and Chemistry, 2008, 27, 272.	4.3	18
110	Ecological footprint accounting in the life cycle assessment of products. Ecological Economics, 2008, 64, 798-807.	5.7	180
111	Cadmium bioaccumulation factors for terrestrial species: Application of the mechanistic bioaccumulation model OMEGA to explain field data. Science of the Total Environment, 2008, 406, 413-418.	8.0	19
112	Metal Bioaccumulation in Aquatic Species: Quantification of Uptake and Elimination Rate Constants Using Physicochemical Properties of Metals and Physiological Characteristics of Species. Environmental Science & Environment	10.0	74
113	Aboveground Herbivory Shapes the Biomass Distribution and Flux of Soil Invertebrates. PLoS ONE, 2008, 3, e3573.	2.5	37
114	Metal accumulation in the earthworm Lumbricus rubellus. Model predictions compared to field data. Environmental Pollution, 2007, 146, 428-436.	7. 5	43
115	A new twist on an old regression: Transfer of chemicals to beef and milk in human and ecological risk assessment. Chemosphere, 2007, 70, 46-56.	8.2	19
116	Including Sorption to Black Carbon in Modeling Bioaccumulation of Polycyclic Aromatic Hydrocarbons:Â Uncertainty Analysis and Comparison to Field Data. Environmental Science & Emp; Technology, 2007, 41, 2738-2744.	10.0	37
117	Modeling Decreased Food Chain Accumulation of PAHs Due to Strong Sorption to Carbonaceous Materials and Metabolic Transformation. Environmental Science & Eamp; Technology, 2007, 41, 6185-6191.	10.0	29
118	The power of size: A meta-analysis reveals consistency of allometric regressions. Ecological Modelling, 2007, 205, 196-208.	2.5	68
119	Is Cumulative Fossil Energy Demand a Useful Indicator for the Environmental Performance of Products?. Environmental Science & Environmental Performance of Products?	10.0	356
120	Organotin accumulation in an estuarine food chain: Comparing field measurements with model estimations. Marine Environmental Research, 2006, 61, 511-530.	2.5	34
121	META-ANALYSIS OF INTRINSIC RATES OF INCREASE AND CARRYING CAPACITY OF POPULATIONS AFFECTED BY TOXIC AND OTHER STRESSORS. Environmental Toxicology and Chemistry, 2005, 24, 2267.	4.3	40
122	Comparison of three fish bioaccumulation models for ecological and human risk assessment and validation with field data. SAR and QSAR in Environmental Research, 2005, 16, 483-493.	2.2	9
123	Critical Body Residues Linked to Octanolâ^'Water Partitioning, Organism Composition, and LC50QSARs:Â Meta-analysis and Model. Environmental Science &	10.0	71
124	Temperature-Dependent Effects of Cadmium onDaphnia magna:Â Accumulation versus Sensitivity. Environmental Science & Environmen	10.0	194
125	Responses in sediment bioassays used in the Netherlands: can observed toxicity be explained by routinely monitored priority pollutants?. Water Research, 2003, 37, 1691-1710.	11.3	53
126	Use of semi-permeable membrane devices and solid-phase extraction for the wide-range screening of microcontaminants in surface water by GC-AED/MS. Water Research, 2002, 36, 4455-4470.	11.3	41

#	Article	lF	CITATIONS
127	A Review of the Effects of Multiple Stressors on Aquatic Organisms and Analysis of Uncertainty Factors for Use in Risk Assessment. Critical Reviews in Toxicology, 2001, 31, 247-284.	3.9	451
128	The Variation in Slope of Concentration–Effect Relationships. Ecotoxicology and Environmental Safety, 2001, 48, 43-50.	6.0	41