Hans Bouwmeester

List of Publications by Year in descending order

74 papers	8,458 citations	76294 40 h-index	85498 71 g-index
77 all docs	77 docs citations	77 times ranked	10051 citing authors

#	Article	IF	Citations
1	Potential Health Impact of Environmentally Released Micro- and Nanoplastics in the Human Food Production Chain: Experiences from Nanotoxicology. Environmental Science & Technology, 2015, 49, 8932-8947.	4.6	810
2	Review of health safety aspects of nanotechnologies in food production. Regulatory Toxicology and Pharmacology, 2009, 53, 52-62.	1.3	647
3	Distribution, Elimination, and Toxicity of Silver Nanoparticles and Silver Ions in Rats after 28-Day Oral Exposure. ACS Nano, 2012, 6, 7427-7442.	7.3	624
4	Presence and risks of nanosilica in food products. Nanotoxicology, 2011, 5, 393-405.	1.6	459
5	Hippocampectomy disrupts auditory trace fear conditioning and contextual fear conditioning in the rat. , 1999, 8, 638-646.		349
6	Characterization of Titanium Dioxide Nanoparticles in Food Products: Analytical Methods To Define Nanoparticles. Journal of Agricultural and Food Chemistry, 2014, 62, 6285-6293.	2.4	328
7	Early developmental failure of substantia nigra dopamine neurons in mice lacking the homeodomain gene Pitx3. Development (Cambridge), 2004, 131, 1145-1155.	1.2	306
8	Nanomaterials for products and application in agriculture, feed and food. Trends in Food Science and Technology, 2016, 54, 155-164.	7.8	294
9	Regulatory aspects of nanotechnology in the agri/feed/food sector in EU and non-EU countries. Regulatory Toxicology and Pharmacology, 2015, 73, 463-476.	1.3	291
10	Presence of Nano-Sized Silica during In Vitro Digestion of Foods Containing Silica as a Food Additive. ACS Nano, 2012, 6, 2441-2451.	7.3	286
11	Hippocampal lesions prevent trace eyeblink conditioning in the freely moving rat. Behavioural Brain Research, 1999, 99, 123-132.	1.2	269
12	A Review of Analytical Methods for the Identification and Characterization of Nano Delivery Systems in Food. Journal of Agricultural and Food Chemistry, 2008, 56, 8231-8247.	2.4	213
13	Characterization of Translocation of Silver Nanoparticles and Effects on Whole-Genome Gene Expression Using an In Vitro Intestinal Epithelium Coculture Model. ACS Nano, 2011, 5, 4091-4103.	7.3	206
14	Behaviour of silver nanoparticles and silver ions in an in vitro human gastrointestinal digestion model. Nanotoxicology, 2013, 7, 1198-1210.	1.6	200
15	Single particle ICP-MS combined with a data evaluation tool as a routine technique for the analysis of nanoparticles in complex matrices. Journal of Analytical Atomic Spectrometry, 2015, 30, 1274-1285.	1.6	193
16	Sub-chronic toxicity study in rats orally exposed to nanostructured silica. Particle and Fibre Toxicology, 2014, 11, 8.	2.8	164
17	Detection of nanoparticles in Dutch surface waters. Science of the Total Environment, 2018, 621, 210-218.	3.9	157
18	Minimal analytical characterization of engineered nanomaterials needed for hazard assessment in biological matrices. Nanotoxicology, 2011, 5, 1-11.	1.6	141

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19	Translocation of differently sized and charged polystyrene nanoparticles in in vitro intestinal cell models of increasing complexity. Nanotoxicology, 2015, 9, 453-461.	1.6	133
20	Development and validation of single particle ICP-MS for sizing and quantitative determination of nano-silver in chicken meat. Analytical and Bioanalytical Chemistry, 2014, 406, 3875-85.	1.9	126
21	Progress and future of in vitro models to study translocation of nanoparticles. Archives of Toxicology, 2015, 89, 1469-1495.	1.9	117
22	Bioavailability and biodistribution of differently charged polystyrene nanoparticles upon oral exposure in rats. Journal of Nanoparticle Research, 2015, 17, 231.	0.8	116
23	Neonatal development of projections to the basolateral amygdala from prefrontal and thalamic structures in rat. Journal of Comparative Neurology, 2002, 450, 241-255.	0.9	105
24	State of the safety assessment and current use of nanomaterials in food and food production. Trends in Food Science and Technology, 2014, 40, 200-210.	7.8	105
25	Utility of models of the gastrointestinal tract for assessment of the digestion and absorption of engineered nanomaterials released from food matrices. Nanotoxicology, 2015, 9, 523-542.	1.6	102
26	Neonatal development of projections from the basolateral amygdala to prefrontal, striatal, and thalamic structures in the rat. Journal of Comparative Neurology, 2002, 442, 239-249.	0.9	97
27	Identification and characterization of organic nanoparticles in food. TrAC - Trends in Analytical Chemistry, 2011, 30, 100-112.	5.8	84
28	In vitrogastrointestinal digestion increases the translocation of polystyrene nanoparticles in anin vitrointestinal co-culture model. Nanotoxicology, 2015, 9, 886-894.	1.6	79
29	Novel insights into the risk assessment of the nanomaterial synthetic amorphous silica, additive E551, in food. Nanotoxicology, 2015, 9, 442-452.	1.6	77
30	Effects of foodâ€borne nanomaterials on gastrointestinal tissues and microbiota. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2018, 10, e1481.	3.3	76
31	Decision tree models to classify nanomaterials according to the DF4nanoGrouping scheme. Nanotoxicology, 2018, 12, 1-17.	1.6	71
32	Impact of nanoparticle surface functionalization on the protein corona and cellular adhesion, uptake and transport. Journal of Nanobiotechnology, 2018, 16, 70.	4.2	70
33	A study of the uptake and biodistribution of nano-titanium dioxide using in vitro and in vivo models of oral intake. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	66
34	Knowledge gaps in risk assessment of nanosilica in food: evaluation of the dissolution and toxicity of different forms of silica. Nanotoxicology, 2013, 7, 367-377.	1.6	62
35	Application of Bayesian networks for hazard ranking of nanomaterials to support human health risk assessment. Nanotoxicology, 2017, 11, 123-133.	1.6	60
36	Inter-laboratory comparison of nanoparticle size measurements using dynamic light scattering and differential centrifugal sedimentation. NanoImpact, 2018, 10, 97-107.	2.4	59

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37	Inventory of Nanotechnology applications in the agricultural, feed and food sector. EFSA Supporting Publications, 2014, 11, 621E.	0.3	57
38	Different responses of Caco-2 and MCF-7 cells to silver nanoparticles are based on highly similar mechanisms of action. Nanotoxicology, 2016, 10, 1431-1441.	1.6	49
39	Sulforaphane formation and bioaccessibility are more affected by steaming time than meal composition during in vitro digestion of broccoli. Food Chemistry, 2017, 214, 580-586.	4.2	47
40	Microfluidic chip for culturing intestinal epithelial cell layers: Characterization and comparison of drug transport between dynamic and static models. Toxicology in Vitro, 2020, 65, 104815.	1.1	45
41	Translocation of positively and negatively charged polystyrene nanoparticles in an in vitro placental model. Toxicology in Vitro, 2015, 29, 1701-1710.	1.1	44
42	Dynamic in vitro intestinal barrier model coupled to chip-based liquid chromatography mass spectrometry for oral bioavailability studies. Analytical and Bioanalytical Chemistry, 2020, 412, 1111-1122.	1.9	44
43	Digestion-on-a-chip: a continuous-flow modular microsystem recreating enzymatic digestion in the gastrointestinal tract. Lab on A Chip, 2019, 19, 1599-1609.	3.1	42
44	Impact of in vitro digestion on gastrointestinal fate and uptake of silver nanoparticles with different surface modifications. Nanotoxicology, 2020, 14, 111-126.	1.6	40
45	Implementation of a dynamic intestinal gut-on-a-chip barrier model for transport studies of lipophilic dioxin congeners. RSC Advances, 2018, 8, 32440-32453.	1.7	36
46	Non-animal approaches for toxicokinetics in risk evaluations of food chemicals. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 501-514.	0.9	33
47	The gut barrier and the fate of engineered nanomaterials: a view from comparative physiology. Environmental Science: Nano, 2020, 7, 1874-1898.	2.2	32
48	New approach methodologies (NAMs) for human-relevant biokinetics predictions. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 607-622.	0.9	31
49	Research recommendations to better understand the potential health impacts of microplastics to humans and aquatic ecosystems. Microplastics and Nanoplastics, 2022, 2, .	4.1	31
50	A Tractable Method for Measuring Nanomaterial Risk Using Bayesian Networks. Nanoscale Research Letters, 2016, 11, 503.	3.1	28
51	The Essential Elements of a Risk Governance Framework for Current and Future Nanotechnologies. Risk Analysis, 2018, 38, 1321-1331.	1.5	27
52	Online and in situ analysis of organs-on-a-chip. TrAC - Trends in Analytical Chemistry, 2019, 115, 138-146.	5.8	27
53	Risk Management Framework for Nano-Biomaterials Used in Medical Devices and Advanced Therapy Medicinal Products. Materials, 2020, 13, 4532.	1.3	26
54	Suitability of analytical methods to measure solubility for the purpose of nanoregulation. Nanotoxicology, 2016, 10, 1-12.	1.6	25

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55	Bioaccessibility of vitamin A, vitamin C and folic acid from dietary supplements, fortified food and infant formula. International Journal of Food Sciences and Nutrition, 2014, 65, 426-435.	1.3	23
56	Transcriptome comparisons of in vitro intestinal epithelia grown under static and microfluidic gut-on-chip conditions with in vivo human epithelia. Scientific Reports, 2021, 11, 3234.	1.6	22
57	A versatile, compartmentalised gut-on-a-chip system for pharmacological and toxicological analyses. Scientific Reports, 2021, 11, 4920.	1.6	21
58	Implementing organ-on-chip in a next-generation risk assessment of chemicals: a review. Archives of Toxicology, 2022, 96, 711-741.	1.9	21
59	Combination of the BeWo b30 placental transport model and the embryonic stem cell test to assess the potential developmental toxicity of silver nanoparticles. Particle and Fibre Toxicology, 2020, 17, 11.	2.8	20
60	Risk analysis and technology assessment in support of technology development: Putting responsible innovation in practice in a case study for nanotechnology. Integrated Environmental Assessment and Management, 2018, 14, 9-16.	1.6	17
61	Integrating in vitro data and physiologically based kinetic modeling-facilitated reverse dosimetry to predict human cardiotoxicity of methadone. Archives of Toxicology, 2020, 94, 2809-2827.	1.9	17
62	Surface PEG Grafting Density Determines Magnetic Relaxation Properties of Gd-Loaded Porous Nanoparticles for MR Imaging Applications. ACS Applied Materials & Interfaces, 2017, 9, 23458-23465.	4.0	14
63	Expert opinions on the acceptance of alternative methods in food safety evaluations: Formulating recommendations to increase acceptance of non-animal methods for kinetics. Regulatory Toxicology and Pharmacology, 2018, 92, 145-151.	1.3	14
64	Evaluation of in vitro models of stem cell-derived cardiomyocytes to screen for potential cardiotoxicity of chemicals. Toxicology in Vitro, 2020, 67, 104891.	1.1	14
65	Neonatal basolateral amygdala lesions affect monoamine and cannabinoid brain systems in adult rats. International Journal of Neuropsychopharmacology, 2007, 10, 727-39.	1.0	11
66	Nanotechnology and Food Safety. , 2010, , 263-280.		8
67	Exploring the development of a decision support system (DSS) to prioritize engineered nanoparticles for risk assessment. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	8
68	Responses of increasingly complex intestinal epithelium in vitro models to bacterial toll-like receptor agonists. Toxicology in Vitro, 2022, 79, 105280.	1.1	8
69	Release and intestinal translocation of chemicals associated with microplastics in an in vitro human gastrointestinal digestion model. Microplastics and Nanoplastics, 2022, 2, .	4.1	8
70	A new approach methodology (NAM) for the prediction of (nor)ibogaine-induced cardiotoxicity in humans. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 636-652.	0.9	7
71	Comparative study of the transcriptomes of Caco-2 cells cultured under dynamic vs. static conditions following exposure to titanium dioxide and zinc oxide nanomaterials. Nanotoxicology, 2021, 15, 1233-1252.	1.6	5
72	In vitroâ€“in silico-based prediction of inter-individual and inter-ethnic variations in the dose-dependent cardiotoxicity of R- and S-methadone in humans. Archives of Toxicology, 2022, 96, 2361-2380.	1.9	4

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73	Effects of neonatal amygdala lesions on [125I] neurotensin binding in specific brain areas of adult rat. European Journal of Neuroscience, 2003, 17, 1319-1322.	1.2	3
74	Nanotechnology and food safety. , 2022, , 325-340.		3