Gretchen J Mahler

List of Publications by Year
in descending order

36 papers	2,236 citations	331642 21 h-index	361001 35 g-index
38 all docs	38 docs citations	38 times ranked	3389 citing authors

#	Article	IF	Citations
1	Oral exposure to polystyrene nanoparticles affects iron absorption. Nature Nanotechnology, 2012, 7, 264-271.	31.5	293
2	Characterization of Caco-2 and HT29-MTX cocultures in an in vitro digestion/cell culture model used to predict iron bioavailabilityâ˜†. Journal of Nutritional Biochemistry, 2009, 20, 494-502.	4.2	246
3	Body-on-a-chip simulation with gastrointestinal tract and liver tissues suggests that ingested nanoparticles have the potential to cause liver injury. Lab on A Chip, 2014, 14, 3081-3092.	6.0	225
4	Characterization of a gastrointestinal tract microscale cell culture analog used to predict drug toxicity. Biotechnology and Bioengineering, 2009, 104, 193-205.	3.3	199
5	Inflammatory Cytokines Promote Mesenchymal Transformation in Embryonic and Adult Valve Endothelial Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 121-130.	2.4	176
6	Aortic valve disease and treatment: The need for naturally engineered solutions. Advanced Drug Delivery Reviews, 2011, 63, 242-268.	13.7	168
7	Titanium dioxide nanoparticle ingestion alters nutrient absorption in an in vitro model of the small intestine. NanoImpact, 2017, 5, 70-82.	4.5	136
8	Effects of shear stress pattern and magnitude on mesenchymal transformation and invasion of aortic valve endothelial cells. Biotechnology and Bioengineering, 2014, 111, 2326-2337.	3.3	110
9	Modeling Barrier Tissues In Vitro: Methods, Achievements, and Challenges. EBioMedicine, 2016, 5, 30-39.	6.1	94
10	Silicon dioxide nanoparticle exposure affects small intestine function in an<i>in vitro</i>model. Nanotoxicology, 2018, 12, 485-508.	3.0	63
11	Titanium dioxide nanoparticle exposure alters metabolic homeostasis in a cell culture model of the intestinal epithelium and <i>Drosophila melanogaster</i>. Nanotoxicology, 2018, 12, 390-406.	3.0	46
12	Inflammatory Regulation of Valvular Remodeling: The Good(?), the Bad, and the Ugly. International Journal of Inflammation, 2011, 2011, 1-13.	1.5	41
13	Endothelial to mesenchymal transformation is induced by altered extracellular matrix in aortic valve endothelial cells. Journal of Biomedical Materials Research - Part A, 2017, 105, 2729-2741.	4.0	40
14	A human proximal tubule-on-a-chip to study renal disease and toxicity. Biomicrofluidics, 2019, 13, 014107.	2.4	39
15	The role of shear stress and altered tissue properties on endothelial to mesenchymal transformation and tumor-endothelial cell interaction. Biomicrofluidics, 2017, 11, 044104.	2.4	34
16	Effect of dietary additives on intestinal permeability in both <i>Drosophila</i> and a human cell co-culture. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	34
17	A novel microfluidic device to model the human proximal tubule and glomerulus. RSC Advances, 2017, 7, 4216-4225.	3.6	31
18	TiO₂ Nanoparticles and Commensal Bacteria Alter Mucus Layer Thickness and Composition in a Gastrointestinal Tract Model. Small, 2020, 16, e2000601.	10.0	29

#	Article	IF	Citations
19	Nanoparticle size-specific actin rearrangement and barrier dysfunction of endothelial cells. Nanotoxicology, 2017, 11, 846-856.	3.0	27
20	ZnO nanoparticles affect nutrient transport in an in vitro model of the small intestine. Food and Chemical Toxicology, 2019, 124, 112-127.	3.6	26
21	Endothelial barrier dysfunction induced by nanoparticle exposure through actin remodeling via caveolae/raft-regulated calcium signalling. NanoImpact, 2018, 11, 82-91.	4.5	22
22	Cardiac developmental toxicity. Birth Defects Research Part C: Embryo Today Reviews, 2011, 93, 291-297.	3.6	18
23	Detection of outer membrane vesicles in<i>Synechocystis</i>PCC 6803. FEMS Microbiology Letters, 2015, 362, fnv163.	1.8	18
24	Critical Considerations for the Design of Multi-Organ Microphysiological Systems (MPS). Frontiers in Cell and Developmental Biology, 2021, 9, 721338.	3.7	17
25	Intra-amniotic administration (Gallus gallus) of TiO2, SiO2, and ZnO nanoparticles affect brush border membrane functionality and alters gut microflora populations. Food and Chemical Toxicology, 2020, 135, 110896.	3.6	16
26	Shear stress magnitude and transforming growth factor-Î²eta 1 regulate endothelial to mesenchymal transformation in a three-dimensional culture microfluidic device. RSC Advances, 2016, 6, 85457-85467.	3.6	14
27	Electronicâ€ECM: A Permeable Microporous Elastomer for an Advanced Bioâ€Integrated Continuous Sensing Platform. Advanced Materials Technologies, 2020, 5, 2000242.	5.8	14
28	Body-on-a-Chip Systems for Animal-free Toxicity Testing. ATLA Alternatives To Laboratory Animals, 2016, 44, 469-478.	1.0	12
29	The role of metal oxide nanoparticles, Escherichia coli, and Lactobacillus rhamnosus on small intestinal enzyme activity. Environmental Science: Nano, 2020, 7, 3940-3964.	4.3	11
30	Bacteria Remediate the Effects of Food Additives on Intestinal Function in an in vitro Model of the Gastrointestinal Tract. Frontiers in Nutrition, 2020, 7, 131.	3.7	10
31	Modelling Renal Filtration and Reabsorption Processes in a Human Glomerulus and Proximal Tubule Microphysiological System. Micromachines, 2021, 12, 983.	2.9	8
32	Shear and endothelial induced late-stage calcific aortic valve disease-on-a-chip develops calcium phosphate mineralizations. Lab on A Chip, 2022, 22, 1374-1385.	6.0	6
33	Chondroitin Sulfate Promotes Interstitial Cell Activation and Calcification in an In Vitro Model of the Aortic Valve. Cardiovascular Engineering and Technology, 2021, , 1.	1.6	4
34	Biofluidâ€Permeable Electronics: Electronicâ€ECM: A Permeable Microporous Elastomer for an Advanced Bioâ€Integrated Continuous Sensing Platform (Adv. Mater. Technol. 7/2020). Advanced Materials Technologies, 2020, 5, 2070043.	5.8	1
35	Microfluidic modeling of the glomerulus and tubular appartus. , 2022, , 353-366.		0
36	Paracellular Transport of Soybean Î²â€Conglycinin using a Cacoâ€2/HT29â€MTX Coâ€Culture. FASEB Journal, 2013, 27, 794.10.	0.5	0