

# Otmar Schmid

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6229866/publications.pdf>

Version: 2024-02-01

71  
papers

5,321  
citations

117619

34  
h-index

91872

69  
g-index

75  
all docs

75  
docs citations

75  
times ranked

6828  
citing authors

#	ARTICLE	IF	CITATIONS
1	Validation of in vitro models for smoke exposure of primary human bronchial epithelial cells. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2022, 322, L129-L148.	2.9	6
2	Aggregates Associated with Instability of Antibodies during Aerosolization Induce Adverse Immunological Effects. <i>Pharmaceutics</i> , 2022, 14, 671.	4.5	15
3	Aerosolâ€“Cell Exposure System Applied to Semi-Adherent Cells for Aerosolization of Lung Surfactant and Nanoparticles Followed by High Quality RNA Extraction. <i>Nanomaterials</i> , 2022, 12, 1362.	4.1	6
4	Development of a dynamic in vitro stretch model of the alveolar interface with aerosol delivery. <i>Biotechnology and Bioengineering</i> , 2021, 118, 690-702.	3.3	19
5	A Biomimetic, Copolymeric Membrane for Cellâ€™Stretch Experiments with Pulmonary Epithelial Cells at the Airâ€“Liquid Interface. <i>Advanced Functional Materials</i> , 2021, 31, 2004707.	14.9	28
6	A Bioinspired in vitro Lung Model to Study Particokinetics of Nano-/Microparticles Under Cyclic Stretch and Air-Liquid Interface Conditions. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 616830.	4.1	37
7	Gender specific airway gene expression in COPD sub-phenotypes supports a role of mitochondria and of different types of leukocytes. <i>Scientific Reports</i> , 2021, 11, 12848.	3.3	8
8	Calibration of gas flow meters using choked flow and an evacuated vessel. <i>Measurement Science and Technology</i> , 2021, 32, 105105.	2.6	0
9	A drug screen with approved compounds identifies amlexanox as a novel Wnt/ $\beta$ -catenin activator inducing lung epithelial organoid formation. <i>British Journal of Pharmacology</i> , 2021, 178, 4026-4041.	5.4	10
10	Retained particle surface area dose drives inflammation in rat lungs following acute, subacute, and subchronic inhalation of nanomaterials. <i>Particle and Fibre Toxicology</i> , 2021, 18, 29.	6.2	25
11	Anatomical considerations for inhaled aerosol deposition modeling: Methods, applications, challenges and opportunities. <i>Journal of Aerosol Science</i> , 2021, 156, 105786.	3.8	2
12	Flow Structure and Particle Deposition Analyses for Optimization of a Pressurized Metered Dose Inhaler (pMDI) in a Model of Tracheobronchial Airway. <i>European Journal of Pharmaceutical Sciences</i> , 2021, 164, 105911.	4.0	32
13	Pulsatile Bi-Directional Aerosol Flow Affects Aerosol Delivery to the Intranasal Olfactory Region: A Patient-Specific Computational Study. <i>Frontiers in Pharmacology</i> , 2021, 12, 746420.	3.5	11
14	Effects of physicochemical properties of TiO <sub>2</sub> nanomaterials for pulmonary inflammation, acute phase response and alveolar proteinosis in intratracheally exposed mice. <i>Toxicology and Applied Pharmacology</i> , 2020, 386, 114830.	2.8	66
15	Pulmonary toxicity of Fe <sub>2</sub> O <sub>3</sub> , ZnFe <sub>2</sub> O <sub>4</sub> , NiFe <sub>2</sub> O <sub>4</sub> and NiZnFe <sub>4</sub> O <sub>8</sub> nanomaterials: Inflammation and DNA strand breaks. <i>Environmental Toxicology and Pharmacology</i> , 2020, 74, 103303.	4.0	27
16	Prediction of Chronic Inflammation for Inhaled Particles: the Impact of Material Cycling and Quarantining in the Lung Epithelium. <i>Advanced Materials</i> , 2020, 32, e2003913.	21.0	14
17	Large eddy simulations of airflow and particle deposition in pulsating bi-directional nasal drug delivery. <i>Physics of Fluids</i> , 2020, 32, .	4.0	24
18	Quartz crystal microbalances (QCM) are suitable for real-time dosimetry in nanotoxicological studies using VITROCELLâ€™Cloud cell exposure systems. <i>Particle and Fibre Toxicology</i> , 2020, 17, 44.	6.2	41

#	ARTICLE	IF	CITATIONS
19	Organâ€Restricted Vascular Delivery of Nanoparticles for Lung Cancer Therapy. <i>Advanced Therapeutics</i> , 2020, 3, 2000017.	3.2	7
20	Innovative preclinical models for pulmonary drug delivery research. <i>Expert Opinion on Drug Delivery</i> , 2020, 17, 463-478.	5.0	45
21	Simulation of patient-specific bi-directional pulsating nasal aerosol dispersion and deposition with clockwise 45° and 90° nosepieces. <i>Computers in Biology and Medicine</i> , 2020, 123, 103816.	7.0	22
22	Disease Prediction: Prediction of Chronic Inflammation for Inhaled Particles: the Impact of Material Cycling and Quarantining in the Lung Epithelium ( <i>Adv. Mater.</i> 47/2020). <i>Advanced Materials</i> , 2020, 32, .	21.0	0
23	Evolution of Bioengineered Lung Models: Recent Advances and Challenges in Tissue Mimicry for Studying the Role of Mechanical Forces in Cell Biology. <i>Advanced Functional Materials</i> , 2019, 29, 1903114.	14.9	40
24	Multimodal Precision Imaging of Pulmonary Nanoparticle Delivery in Mice: Dynamics of Application, Spatial Distribution, and Dosimetry. <i>Small</i> , 2019, 15, e1904112.	10.0	21
25	Visualizing treatment delivery and deposition in mouse lungs using in vivo x-ray imaging. <i>Journal of Controlled Release</i> , 2019, 307, 282-291.	9.9	27
26	Ranking of nanomaterial potency to induce pathway perturbations associated with lung responses. <i>NanoImpact</i> , 2019, 14, 100158.	4.5	30
27	Three-Dimensional Quantitative Co-Mapping of Pulmonary Morphology and Nanoparticle Distribution with Cellular Resolution in Nondissected Murine Lungs. <i>ACS Nano</i> , 2019, 13, 1029-1041.	14.6	42
28	In vivo x-ray imaging of the respiratory system using synchrotron sources and a compact light source. , 2019, , .		0
29	In vivo Dynamic Phase-Contrast X-ray Imaging using a Compact Light Source. <i>Scientific Reports</i> , 2018, 8, 6788.	3.3	28
30	Nasal high flow reduces dead space. <i>Journal of Applied Physiology</i> , 2017, 122, 191-197.	2.5	168
31	A comprehensive screening platform for aerosolizable protein formulations for intranasal and pulmonary drug delivery. <i>International Journal of Pharmaceutics</i> , 2017, 532, 537-546.	5.2	50
32	Biokinetics of Aerosolized Liposomal Ciclosporin A in Human Lung Cells In Vitro Using an Air-Liquid Cell Interface Exposure System. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2017, 30, 411-424.	1.4	18
33	Early pulmonary response is critical for extra-pulmonary carbon nanoparticle mediated effects: comparison of inhalation versus intra-arterial infusion exposures in mice. <i>Particle and Fibre Toxicology</i> , 2017, 14, 19.	6.2	38
34	On the pivotal role of dose for particle toxicology and risk assessment: exposure is a poor surrogate for delivered dose. <i>Particle and Fibre Toxicology</i> , 2017, 14, 52.	6.2	51
35	Surface area is the biologically most effective dose metric for acute nanoparticle toxicity in the lung. <i>Journal of Aerosol Science</i> , 2016, 99, 133-143.	3.8	283
36	Bridging the Gap Between Science and Clinical Efficacy: Physiology, Imaging, and Modeling of Aerosols in the Lung. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2016, 29, 107-126.	1.4	70

#	ARTICLE	IF	CITATIONS
37	Nasal high flow clears anatomical dead space in upper airway models. <i>Journal of Applied Physiology</i> , 2015, 118, 1525-1532.	2.5	216
38	Quantitative detection of drug dose and spatial distribution in the lung revealed by Cryoslicing Imaging. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 102, 129-136.	2.8	14
39	An in vitro testing strategy towards mimicking the inhalation of high aspect ratio nanoparticles. <i>Particle and Fibre Toxicology</i> , 2014, 11, 40.	6.2	91
40	The composition of cigarette smoke determines inflammatory cell recruitment to the lung in COPD mouse models. <i>Clinical Science</i> , 2014, 126, 207-221.	4.3	76
41	Drug Delivery to Paranasal Sinuses Using Pulsating Aerosols. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2014, 27, 255-263.	1.4	37
42	Effects of ultrafine particles on the allergic inflammation in the lung of asthmatics: results of a double-blinded randomized cross-over clinical pilot study. <i>Particle and Fibre Toxicology</i> , 2014, 11, 39.	6.2	26
43	Efficient Bioactive Delivery of Aerosolized Drugs to Human Pulmonary Epithelial Cells Cultured in Air-Liquid Interface Conditions. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2014, 51, 526-535.	2.9	92
44	Measurement Techniques for Respiratory Tract Deposition of Airborne Nanoparticles: A Critical Review. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2014, 27, 229-254.	1.4	111
45	Exposure of silver-nanoparticles and silver-ions to lung cells in vitro at the air-liquid interface. <i>Particle and Fibre Toxicology</i> , 2013, 10, 11.	6.2	118
46	Gold nanoparticle aerosols for rodent inhalation and translocation studies. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	1.9	14
47	Inflammatory and Oxidative Stress Responses of an Alveolar Epithelial Cell Line to Airborne Zinc Oxide Nanoparticles at the Air-Liquid Interface: A Comparison with Conventional, Submerged Cell-Culture Conditions. <i>BioMed Research International</i> , 2013, 2013, 1-12.	1.9	118
48	Efficient internalization and intracellular translocation of inhaled gold nanoparticles in rat alveolar macrophages. <i>Nanomedicine</i> , 2012, 7, 855-865.	3.3	35
49	In-vitro cell exposure studies for the assessment of nanoparticle toxicity in the lung—A dialog between aerosol science and biology. <i>Journal of Aerosol Science</i> , 2011, 42, 668-692.	3.8	264
50	Generation and characterization of stable, highly concentrated titanium dioxide nanoparticle aerosols for rodent inhalation studies. <i>Journal of Nanoparticle Research</i> , 2011, 13, 511-524.	1.9	26
51	Occupational and consumer risk estimates for nanoparticles emitted by laser printers. <i>Journal of Nanoparticle Research</i> , 2010, 12, 91-99.	1.9	28
52	Effects and uptake of gold nanoparticles deposited at the air-liquid interface of a human epithelial airway model. <i>Toxicology and Applied Pharmacology</i> , 2010, 242, 56-65.	2.8	167
53	Quantitative Evaluation of Cellular Uptake and Trafficking of Plain and Polyethylene Glycol-Coated Gold Nanoparticles. <i>Small</i> , 2010, 6, 1669-1678.	10.0	313
54	Deducing <i>in Vivo</i> Toxicity of Combustion-Derived Nanoparticles from a Cell-Free Oxidative Potency Assay and Metabolic Activation of Organic Compounds. <i>Environmental Health Perspectives</i> , 2009, 117, 54-60.	6.0	97

#	ARTICLE	IF	CITATIONS
55	Performance Evaluation of a Fast Mobility-Based Particle Spectrometer for Aircraft Exhaust. <i>Journal of Propulsion and Power</i> , 2009, 25, 628-634.	2.2	15
56	A dose-controlled system for air-liquid interface cell exposure and application to zinc oxide nanoparticles. <i>Particle and Fibre Toxicology</i> , 2009, 6, 32.	6.2	199
57	Derivation of the Density and Refractive Index of Organic Matter and Elemental Carbon from Closure between Physical and Chemical Aerosol Properties. <i>Environmental Science &amp; Technology</i> , 2009, 43, 1166-1172.	10.0	25
58	Optical properties and chemical composition of the atmospheric aerosol in urban Guangzhou, China. <i>Atmospheric Environment</i> , 2008, 42, 6335-6350.	4.1	248
59	Quality control and quality assurance for particle size distribution measurements at an urban monitoring station in Augsburg, Germany. <i>Journal of Environmental Monitoring</i> , 2008, 10, 1017.	2.1	38
60	Seasonal and Diurnal Variation of PM <sub>2.5</sub> Apparent Particle Density in Urban Air in Augsburg, Germany. <i>Environmental Science &amp; Technology</i> , 2008, 42, 5087-5093.	10.0	81
61	Model for the Deposition of Aerosol Particles in the Respiratory Tract of the Rat. I. Nonhygroscopic Particle Deposition. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2008, 21, 291-308.	1.4	37
62	Aerosol optical properties in a rural environment near the mega-city Guangzhou, China: implications for regional air pollution, radiative forcing and remote sensing. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 5161-5186.	4.9	150
63	On the effective density of non-spherical particles as derived from combined measurements of aerodynamic and mobility equivalent size. <i>Journal of Aerosol Science</i> , 2007, 38, 431-443.	3.8	66
64	Chemical Investigation of Eight Different Types of Carbonaceous Particles Using Thermoanalytical Techniques. <i>Environmental Science &amp; Technology</i> , 2007, 41, 8406-8411.	10.0	23
65	Inflammatory Response to TiO <sub>2</sub> and Carbonaceous Particles Scales Best with BET Surface Area. <i>Environmental Health Perspectives</i> , 2007, 115, A290-1; author reply A291-2.	6.0	44
66	Comparison of three methods of fractal analysis applied to soot aggregates from wood combustion. <i>Journal of Aerosol Science</i> , 2006, 37, 820-838.	3.8	89
67	Spectral light absorption by ambient aerosols influenced by biomass burning in the Amazon Basin. I: Comparison and field calibration of absorption measurement techniques. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 3443-3462.	4.9	285
68	Optical properties of humic-like substances (HULIS) in biomass-burning aerosols. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 3563-3570.	4.9	566
69	Mass spectrometric analysis and aerodynamic properties of various types of combustion-related aerosol particles. <i>International Journal of Mass Spectrometry</i> , 2006, 258, 37-49.	1.5	260
70	Methodology for Particle Characterization in the Exhaust Flows of Gas Turbine Engines. <i>Aerosol Science and Technology</i> , 2004, 38, 1108-1122.	3.1	16
71	Investigation of Volatility Method for Measuring Aqueous Sulfuric Acid on Mixed Aerosols. <i>Aerosol Science and Technology</i> , 2002, 36, 877-889.	3.1	17