

# Zhenbo Tong

## List of Publications by Year in descending order

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34  
papers

1,258  
citations

430442

18  
h-index

433756

31  
g-index

34  
all docs

34  
docs citations

34  
times ranked

970  
citing authors

#	ARTICLE	IF	CITATIONS
1	DEM/CFD-DEM Modelling of Non-spherical Particulate Systems: Theoretical Developments and Applications. Powder Technology, 2016, 302, 108-152.	2.1	437
2	CFD-DEM investigation of the dispersion mechanisms in commercial dry powder inhalers. Powder Technology, 2013, 240, 19-24.	2.1	97
3	Numerical modelling of the breakage of loose agglomerates of fine particles. Powder Technology, 2009, 196, 213-221.	2.1	82
4	Numerical study of the effects of particle size and polydispersity on the agglomerate dispersion in a cyclonic flow. Chemical Engineering Journal, 2010, 164, 432-441.	6.6	77
5	Effect of Device Design on the Aerosolization of a Carrier-Based Dry Powder Inhaler—a Case Study on Aerolizer® Foradile®. AAPS Journal, 2013, 15, 511-522.	2.2	62
6	Role of CFD based in silico modelling in establishing an in vitro-in vivo correlation of aerosol deposition in the respiratory tract. Advanced Drug Delivery Reviews, 2021, 170, 369-385.	6.6	45
7	Multi-Scale Modelling of Powder Dispersion in a Carrier-Based Inhalation System. Pharmaceutical Research, 2015, 32, 2086-2096.	1.7	38
8	CFD-DEM investigation of the effect of agglomerate collision on dry powder aerosolisation. Journal of Aerosol Science, 2016, 92, 109-121.	1.8	36
9	CFD modelling of air and particle flows in different airway models. Journal of Aerosol Science, 2019, 134, 14-28.	1.8	33
10	Agglomerate strength and dispersion of pharmaceutical powders. Journal of Aerosol Science, 2011, 42, 285-294.	1.8	32
11	Effects of mechanical impaction on aerosol performance of particles with different surface roughness. Powder Technology, 2013, 236, 164-170.	2.1	31
12	Numerical investigation of the de-agglomeration mechanisms of fine powders on mechanical impaction. Journal of Aerosol Science, 2011, 42, 811-819.	1.8	30
13	De-agglomeration Effect of the US Pharmacopeia and Alberta Throats on Carrier-Based Powders in Commercial Inhalation Products. AAPS Journal, 2015, 17, 1407-1416.	2.2	30
14	Computational investigation of dust mite allergens in a realistic human nasal cavity. Inhalation Toxicology, 2019, 31, 224-235.	0.8	29
15	Discrete Modelling of Powder Dispersion in Dry Powder Inhalers - A Brief Review. Current Pharmaceutical Design, 2015, 21, 3966-3973.	0.9	25
16	Does the United States Pharmacopeia Throat Introduce De-agglomeration of Carrier-Free Powder from Inhalers?. Pharmaceutical Research, 2012, 29, 1797-1807.	1.7	22
17	Numerical investigation of deposition mechanism in three mouth-throat models. Powder Technology, 2021, 378, 724-735.	2.1	21
18	Microfluidic spray dried and spray freeze dried uniform microparticles potentially for intranasal drug delivery and controlled release. Powder Technology, 2021, 379, 144-153.	2.1	21

#	ARTICLE	IF	CITATIONS
19	Impact angles as an alternative way to improve aerosolisation of powders for inhalation?. European Journal of Pharmaceutical Sciences, 2010, 41, 320-327.	1.9	19
20	CFD-DEM study of the aerosolisation mechanism of carrier-based formulations with high drug loadings. Powder Technology, 2017, 314, 620-626.	2.1	18
21	Numerical investigation of separation efficiency of the cyclone with supercritical fluidâ€“solid flow. Particuology, 2022, 62, 36-46.	2.0	15
22	Understanding the Different Effects of Inhaler Design on the Aerosol Performance of Drug-Only and Carrier-Based DPI Formulations. Part 1: Grid Structure. AAPS Journal, 2016, 18, 1159-1167.	2.2	14
23	Experimental and numerical study of particle velocity distribution in the vertical pipe after a 90Â° elbow. Powder Technology, 2017, 314, 500-509.	2.1	10
24	Computational fluid dynamics (CFD) investigation of the gasâ€“solid flow and performance of Andersen cascade impactor. Powder Technology, 2015, 285, 128-137.	2.1	8
25	Computational Fluid Dynamics (CFD) Investigation of Aerodynamic Characters inside Nasal Cavity towards Surgical Treatments for Secondary Atrophic Rhinitis. Mathematical Problems in Engineering, 2019, 2019, 1-8.	0.6	6
26	CFD analysis of the aerosolization of carrier-based dry powder inhaler formulations. , 2013, , .		4
27	Numerical and experimental study of tensile stresses of biomass combustion ash with temperature variation. Advanced Powder Technology, 2016, 27, 215-222.	2.0	4
28	Numerical study of effects of device design on drug delivery efficiency for an active dry powder inhaler. Journal of Aerosol Science, 2021, 157, 105801.	1.8	4
29	Evaluation of nasal function after endoscopic endonasal surgery for pituitary adenoma: a computational fluid dynamics study. Computer Methods in Biomechanics and Biomedical Engineering, 2021, , 1-10.	0.9	3
30	Numerical and Experimental Investigation on Key Parameters of the RespimatÂ® Spray Inhaler. Processes, 2021, 9, 44.	1.3	2
31	Remdesivir powders manufactured by jet milling for potential pulmonary treatment of COVID-19. Pharmaceutical Development and Technology, 2022, 27, 635-645.	1.1	2
32	CFD-DEM Study the Effect of Carrier-Drug Mass Ratio on the Aerosolisation Process in Original and Modified Dry Powder Inhalers. Springer Proceedings in Physics, 2017, , 957-965.	0.1	1
33	Numerical Study of Effects of Powder Size and Polydispersity on the Dispersion of Fine Powders in a Cyclonic Flow. , 2009, , .		0
34	Numerical Simulation of Aspergillus Niger Spore Deposition in Nasal Cavities of a Population in Northwest China. Atmosphere, 2022, 13, 911.	1.0	0