Clement Kleinstreuer

List of Publications by Year in descending order

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68 papers

3,683 citations

34 h-index 60 g-index

71 all docs

71 docs citations

71 times ranked

2596 citing authors

#	Article	IF	CITATIONS
1	Analysis of improved oral drug delivery with different helical stream inhalation modes. Computers in Biology and Medicine, 2022, 141, 105132.	7.0	2
2	Helical fluid-particle flow dynamics for controlling micron-particle deposition in a representative human upper lung-airway model. Journal of Aerosol Science, 2021, 151, 105656.	3.8	13
3	Comparison of micron- and nano-particle transport in the human nasal cavity with a focus on the olfactory region. Computers in Biology and Medicine, 2021, 128, 104103.	7.0	13
4	Improving Pulmonary Nano-Therapeutics Using Helical Aerosol Streams - An In-Silico Study. Journal of Biomechanical Engineering, 2021, 143, .	1.3	0
5	Heterogeneous blood flow in microvessels with applications to nanodrug transport and mass transfer into tumor tissue. Biomechanics and Modeling in Mechanobiology, 2019, 18, 99-110.	2.8	6
6	Mice-to-men comparison of inhaled drug-aerosol deposition and clearance. Respiratory Physiology and Neurobiology, 2019, 260, 82-94.	1.6	28
7	Modeling Airflow and Particle Deposition in a Human Acinar Region. Computational and Mathematical Methods in Medicine, 2019, 2019, 1-13.	1.3	24
8	Direct nanodrug delivery for tumor targeting subject to shear-augmented diffusion in blood flow. Medical and Biological Engineering and Computing, 2018, 56, 1949-1958.	2.8	15
9	Effects of thermal airflow and mucus-layer interaction on hygroscopic droplet deposition in a simple mouth–throat model. Aerosol Science and Technology, 2018, 52, 900-912.	3.1	26
10	Potential Use of Multifunctional Nanoparticles for the Treatment of Cardiovascular Diseases. Journal of Cardiology and Cardiovascular Sciences, 2018, 2, 30-36.	0.4	12
11	Computational analysis of aerosol-dynamics in a human whole-lung airway model. Journal of Aerosol Science, 2017, 114, 301-316.	3.8	79
12	Nanomedicine for Treatment of Acute Lung Injury and Acute Respiratory Distress Syndrome. Biomedicine Hub, 2017, 2, 1-12.	1.2	18
13	Computationally efficient analysis of particle transport and deposition in a human whole-lung-airway model. Part II: Dry powder inhaler application. Computers in Biology and Medicine, 2017, 84, 247-253.	7.0	43
14	Hemodynamic Parameters and Early Intimal Thickening in Branching Blood Vessels. Critical Reviews in Biomedical Engineering, 2017, 45, 319-382.	0.9	12
15	Mathematical Modeling and Computer Simulations of Nanofluid Flow with Applications to Cooling and Lubrication. Fluids, 2016, 1, 16.	1.7	39
16	Computationally efficient analysis of particle transport and deposition in a human whole-lung-airway model. Part I: Theory and model validation. Computers in Biology and Medicine, 2016, 79, 193-204.	7.0	50
17	Solid Tumor Embolotherapy in Hepatic Arteries with an Anti-reflux Catheter System. Annals of Biomedical Engineering, 2016, 44, 1036-1046.	2.5	18
18	Computationally Efficient Fluid-Particle Dynamics Simulations of Arterial Systems. Communications in Computational Physics, 2015, 17, 401-423.	1.7	10

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19	Drug-targeting methodologies with applications: A review. World Journal of Clinical Cases, 2014, 2, 742.	0.8	64
20	Computationally Efficient Particle Release Map Determination for Direct Tumor-Targeting in a Representative Hepatic Artery System. Journal of Biomechanical Engineering, 2014, 136, 011012.	1.3	21
21	Impact of Fluid–Structure Interaction on Direct Tumor-Targeting in a Representative Hepatic Artery System. Annals of Biomedical Engineering, 2014, 42, 461-474.	2.5	21
22	Analysis of non-spherical particle transport in complex internal shear flows. Physics of Fluids, 2013, 25, .	4.0	64
23	Nanoparticle Mass Transfer From Lung Airways to Systemic Regions—Part II: Multi-Compartmental Modeling. Journal of Biomechanical Engineering, 2013, 135, 121004.	1.3	23
24	Nanoparticle Mass Transfer From Lung Airways to Systemic Regionsâ€"Part I: Whole-Lung Aerosol Dynamics. Journal of Biomechanical Engineering, 2013, 135, 121003.	1.3	38
25	Computational Analysis of Non-Spherical Particle Transport and Deposition in Shear Flow With Application to Lung Aerosol Dynamics—A Review. Journal of Biomechanical Engineering, 2013, 135, 021008.	1.3	70
26	Lung Deposition Analyses of Inhaled Toxic Aerosols in Conventional and Less Harmful Cigarette Smoke: A Review. International Journal of Environmental Research and Public Health, 2013, 10, 4454-4485.	2.6	46
27	A New Catheter for Tumor Targeting With Radioactive Microspheres in Representative Hepatic Artery Systems. Part I: Impact of Catheter Presence on Local Blood Flow and Microsphere Delivery. Journal of Biomechanical Engineering, 2012, 134, 051004.	1.3	40
28	Experimental Microsphere Targeting in a Representative Hepatic Artery System. IEEE Transactions on Biomedical Engineering, 2012, 59, 198-204.	4.2	35
29	Laminarâ€toâ€turbulent fluid–nanoparticle dynamics simulations: Model comparisons and nanoparticleâ€deposition applications. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1930-1950.	2.1	81
30	Analysis of Multi-Layer Immiscible Fluid Flow in a Microchannel. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	20
31	Influence of aspect ratio on the dynamics of a freely moving circular disk. Journal of Fluid Mechanics, 2010, 653, 463-487.	3.4	21
32	Computer Modeling of Controlled Microsphere Release and Targeting in a Representative Hepatic Artery System. Annals of Biomedical Engineering, 2010, 38, 1862-1879.	2.5	78
33	Airflow and Particle Transport in the Human Respiratory System. Annual Review of Fluid Mechanics, 2010, 42, 301-334.	25.0	275
34	An Adjustable Triple-Bifurcation Unit Model for Air-Particle Flow Simulations in Human Tracheobronchial Airways. Journal of Biomechanical Engineering, 2009, 131, 021007.	1.3	60
35	Computational mechanics of Nitinol stent grafts. Journal of Biomechanics, 2008, 41, 2370-2378.	2.1	216
36	Dilute suspension flow with nanoparticle deposition in a representative nasal airway model. Physics of Fluids, 2008, 20, .	4.0	49

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37	Modeling airflow and particle transport/deposition in pulmonary airways. Respiratory Physiology and Neurobiology, 2008, 163, 128-138.	1.6	130
38	Flow over a thin circular disk at low to moderate Reynolds numbers. Journal of Fluid Mechanics, 2008, 605, 253-262.	3.4	73
39	Targeted Drug-Aerosol Delivery in the Human Respiratory System. Annual Review of Biomedical Engineering, 2008, 10, 195-220.	12.3	218
40	Fluid-Structure Interaction Analyses of Stented Abdominal Aortic Aneurysms. Annual Review of Biomedical Engineering, 2007, 9, 169-204.	12.3	46
41	Computational Analyses of a Pressurized Metered Dose Inhaler and a New Drug–Aerosol Targeting Methodology. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2007, 20, 294-309.	1.2	77
42	Analysis and computer program for rupture-risk prediction of abdominal aortic aneurysms. BioMedical Engineering OnLine, 2006, 5, 19.	2.7	81
43	Water Vapor Transport and Its Effects on the Deposition of Hygroscopic Droplets in a Human Upper Airway Model. Aerosol Science and Technology, 2006, 40, 1-16.	3.1	53
44	Comparison of micro- and nano-size particle depositions in a human upper airway model. Journal of Aerosol Science, 2005, 36, 211-233.	3.8	277
45	Computational Models for Simulating Multicomponent Aerosol Evaporation in the Upper Respiratory Airways. Aerosol Science and Technology, 2005, 39, 124-138.	3.1	48
46	Airflow structures and nano-particle deposition in a human upper airway model. Journal of Computational Physics, 2004, 198, 178-210.	3.8	217
47	Targeted Drug Aeroso Deposition Analysis for a Four-Generation Lung Airway Model With Hemispherical Tumors. Journal of Biomechanical Engineering, 2003, 125, 197-206.	1.3	56
48	Computational Thermodynamics Analysis of Vaporizing Fuel Droplets in the Human Upper Airways. JSME International Journal Series B, 2003, 46, 563-571.	0.3	3
49	Transient airflow structures and particle transport in a sequentially branching lung airway model. Physics of Fluids, 2002, 14, 862-880.	4.0	165
50	Flow structures and particle deposition patterns in double-bifurcation airway models. Part 1. Air flow fields. Journal of Fluid Mechanics, 2001, 435, 25-54.	3.4	169
51	Effect of Particle Inlet Distributions on Deposition in a Triple Bifurcation Lung Airway Model. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2001, 14, 13-29.	1.2	70
52	A New Near-wall Residence Time Model Applied to Three Arterio-venous Graft End-to-side Anastomoses. Computer Methods in Biomechanics and Biomedical Engineering, 2001, 4, 379-397.	1.6	9
53	Rheological effects on pulsatile hemodynamics in a stenosed tube. Computers and Fluids, 2000, 29, 695-724.	2.5	139
54	Analytical Solution to Flux Enhancement in Laminar Concentrically Stratified Pipe Flow of Bingham and Newtonian Fluids. Journal of Fluids Engineering, Transactions of the ASME, 1998, 120, 629-631.	1.5	0

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55	Flow Input Waveform Effects on the Temporal and Spatial Wall Shear Stress Gradients in a Femoral Graft-Artery Connector. Journal of Biomechanical Engineering, 1996, 118, 506-510.	1.3	53
56	A Numerical Investigation of Laminar Flow Past Nonspherical Solids and Droplets. Journal of Fluids Engineering, Transactions of the ASME, 1995, 117, 170-175.	1.5	20
57	MIXED CONVECTION FROM A ROTATING CONE WITH VARIABLE SURFACE TEMPERATURE. Numerical Heat Transfer; Part A: Applications, 1994, 25, 75-83.	2.1	10
58	Computational Analysis of Interacting Vaporizing Fuel Droplets on a One-Dimensional Trajectory. Combustion Science and Technology, 1992, 86, 289-309.	2.3	16
59	Laminar Flow Past Colinear Spheres With Fluid Injection. Journal of Fluids Engineering, Transactions of the ASME, 1991, 113, 176-182.	1.5	5
60	Hemodynamics Analysis of a Stenosed Carotid Bifurcation and its Plaque-Mitigating Design. Journal of Biomechanical Engineering, 1991, 113, 330-335.	1.3	41
61	Forced-Convection Cooling of a Linear Array of Blocks in Open and Porous Matrix Channels. Heat Transfer Engineering, 1991, 12, 40-47.	1.9	27
62	Mixed Thermal Convection of Power-Law Fluids Past Bodies With Uniform Fluid Injection or Suction. Journal of Heat Transfer, 1990, 112, 151-156.	2.1	7
63	Similarity Solution of Combined Convection Heat Transfer From a Rotating Cone or Disk to Non-Newtonian Fluids. Journal of Heat Transfer, 1990, 112, 939-944.	2.1	12
64	Analysis of a Porous-Medium Solar Collector. Heat Transfer Engineering, 1990, 11, 45-55.	1.9	22
65	FREE CONVECTION HEAT TRANSFER BETWEEN A PERMEABLE VERTICAL WALL AND A POWER-LAW FLUID. Numerical Heat Transfer, 1987, 12, 367-379.	0.5	6
66	Virtual prototyping of branching blood vessels. , 0, , .		0
67	Numerical Analysis of Enhanced Nano-Drug Delivery to the Olfactory Bulb. Aerosol Science and Technology, 0, , 1-15.	3.1	0
68	Computer simulation of aerosol transport and deposition in multi-generation airway models. , 0, , .		1