Urmila P Kodavanti

List of Publications by Year
in descending order

115	3,670	136950	161849
papers	citations	32 h-index	54 g-index

118	118	118	3347
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Spontaneously Hypertensive Rat as a Model of Human Cardiovascular Disease: Evidence of Exacerbated Cardiopulmonary Injury and Oxidative Stress from Inhaled Emission Particulate Matter. Toxicology and Applied Pharmacology, 2000, 164, 250-263.	2.8	178
2	Pulmonary Responses to Oil Fly Ash Particles in the Rat Differ by Virtue of Their Specific Soluble Metals. Toxicological Sciences, 1998, 43, 204-212.	3.1	171
3	Ozone Exposure Increases Circulating Stress Hormones and Lipid Metabolites in Humans. American Journal of Respiratory and Critical Care Medicine, 2016, 193, 1382-1391.	5.6	159
4	Outdoor Air Pollution and New-Onset Airway Disease. An Official American Thoracic Society Workshop Report. Annals of the American Thoracic Society, 2020, 17, 387-398.	3.2	120
5	Systemic Translocation of Particulate Matter-Associated Metals Following a Single Intratracheal Instillation in Rats. Toxicological Sciences, 2007, 98, 231-239.	3.1	109
6	Inhaled ozone (O3)-induces changes in serum metabolomic and liver transcriptomic profiles in rats. Toxicology and Applied Pharmacology, 2015, 286, 65-79.	2.8	109
7	TEMPORAL ASSOCIATION BETWEEN PULMONARY AND SYSTEMIC EFFECTS OF PARTICULATE MATTER IN HEALTHY AND CARDIOVASCULAR COMPROMISED RATS. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2002, 65, 1545-1569.	2.3	102
8	Influence of acid functionalization on the cardiopulmonary toxicity of carbon nanotubes and carbon black particles in mice. Toxicology and Applied Pharmacology, 2009, 239, 224-232.	2.8	97
9	Vascular and Cardiac Impairments in Rats Inhaling Ozone and Diesel Exhaust Particles. Environmental Health Perspectives, 2011, 119, 312-318.	6.0	97
10	Inhaled Environmental Combustion Particles Cause Myocardial Injury in the Wistar Kyoto Rat. Toxicological Sciences, 2003, 71, 237-245.	3.1	93
11	Neuroendocrine Regulation of Air Pollution Health Effects: Emerging Insights. Toxicological Sciences, 2018, 164, 9-20.	3.1	74
12	The Role of Particulate Matter-Associated Zinc in Cardiac Injury in Rats. Environmental Health Perspectives, 2008, 116, 13-20.	6.0	73
13	Pulmonary and Systemic Effects of Zinc-Containing Emission Particles in Three Rat Strains: Multiple Exposure Scenarios. Toxicological Sciences, 2002, 70, 73-85.	3.1	70
14	Manufactured and airborne nanoparticle cardiopulmonary interactions: a review of mechanisms and the possible contribution of mast cells. Inhalation Toxicology, 2012, 24, 320-339.	1.6	69
15	Acute Ozone-Induced Pulmonary and Systemic Metabolic Effects Are Diminished in Adrenalectomized Rats. Toxicological Sciences, 2016, 150, 312-322.	3.1	64
16	Stretching the stress boundary: Linking air pollution health effects to a neurohormonal stress response. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 2880-2890.	2.4	62
17	Pulmonary Responses to Oil Fly Ash Particles in the Rat Differ by Virtue of Their Specific Soluble Metals,. Toxicological Sciences, 1998, 43, 204-212.	3.1	61
18	Systemic metabolic derangement, pulmonary effects, and insulin insufficiency following subchronic ozone exposure in rats. Toxicology and Applied Pharmacology, 2016, 306, 47-57.	2.8	59

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19	Consistent Pulmonary and Systemic Responses from Inhalation of Fine Concentrated Ambient Particles: Roles of Rat Strains Used and Physicochemical Properties. Environmental Health Perspectives, 2005, 113, 1561-1568.	6.0	58
20	Acute Pulmonary and Systemic Effects of Inhaled Coal Fly Ash in Rats: Comparison to Ambient Environmental Particles. Toxicological Sciences, 2006, 93, 390-399.	3.1	55
21	Pulmonary Structural and Extracellular Matrix Alterations in Fischer 344 Rats Following Subchronic Phosgene Exposure, ,. Fundamental and Applied Toxicology, 1997, 37, 54-63.	1.8	54
22	One-Month Diesel Exhaust Inhalation Produces Hypertensive Gene Expression Pattern in Healthy Rats. Environmental Health Perspectives, 2009, 117, 38-46.	6.0	54
23	Inhaled Diesel Emissions Generated with Cerium Oxide Nanoparticle Fuel Additive Induce Adverse Pulmonary and Systemic Effects. Toxicological Sciences, 2014, 142, 403-417.	3.1	52
24	The Effect of Composition, Size, and Solubility on Acute Pulmonary Injury in Rats Following Exposure to Mexico City Ambient Particulate Matter Samples. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2014, 77, 1164-1182.	2.3	51
25	Differential pulmonary and cardiac effects of pulmonary exposure to a panel of particulate matter-associated metals. Toxicology and Applied Pharmacology, 2009, 241, 71-80.	2.8	49
26	Adrenergic and glucocorticoid receptor antagonists reduce ozone-induced lung injury and inflammation. Toxicology and Applied Pharmacology, 2018, 339, 161-171.	2.8	47
27	Cardiovascular Responses in Unrestrained WKY Rats to Inhaled Ultrafine Carbon Particles. Inhalation Toxicology, 2005, 17, 29-42.	1.6	46
28	Cardiopulmonary Responses of Intratracheally Instilled Tire Particles and Constituent Metal Components. Inhalation Toxicology, 2008, 20, 473-484.	1.6	43
29	Exposure to ultrafine carbon particles at levels below detectable pulmonary inflammation affects cardiovascular performance in spontaneously hypertensive rats. Particle and Fibre Toxicology, 2008, 5, 19.	6.2	41
30	ACUTE LUNG INJURY FROM INTRATRACHEAL EXPOSURE TO FUGITIVE RESIDUAL OIL FLY ASH AND ITS CONSTITUENT METALS IN NORMOAND SPONTANEOUSLY HYPERTENSIVE RATS. Inhalation Toxicology, 2001, 13, 37-54.	1.6	39
31	Ozone-Induced Dysregulation of Neuroendocrine Axes Requires Adrenal-Derived Stress Hormones. Toxicological Sciences, 2019, 172, 38-50.	3.1	36
32	Subchronic inhalation of zinc sulfate induces cardiac changes in healthy rats. Toxicology and Applied Pharmacology, 2008, 232, 69-77.	2.8	35
33	Adrenal-derived stress hormones modulate ozone-induced lung injury and inflammation. Toxicology and Applied Pharmacology, 2017, 329, 249-258.	2.8	35
34	Respiratory Effects and Systemic Stress Response Following Acute Acrolein Inhalation in Rats. Toxicological Sciences, 2017, 158, 454-464.	3.1	35
35	Hypertensive Rats are Susceptible to TLR4-Mediated Signaling Following Exposure to Combustion Source Particulate Matter. Inhalation Toxicology, 2004, 16, 5-18.	1.6	34
36	The Spontaneously Hypertensive Rat: An Experimental Model of Sulfur Dioxide-Induced Airways Disease. Toxicological Sciences, 2006, 94, 193-205.	3.1	32

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37	Systemic Imbalance of Essential Metals and Cardiac Gene Expression in Rats Following Acute Pulmonary Zinc Exposure. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2006, 69, 2011-2032.	2.3	32
38	Systemic translocation of 70Zinc: Kinetics following intratracheal instillation in rats. Toxicology and Applied Pharmacology, 2009, 234, 25-32.	2.8	32
39	Pulmonary Oxidative Stress, Inflammation, and Dysregulated Iron Homeostasis in Rat Models of Cardiovascular Disease. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2010, 73, 641-656.	2.3	32
40	Cardiovascular and blood coagulative effects of pulmonary zinc exposure. Toxicology and Applied Pharmacology, 2006, 211, 41-52.	2.8	30
41	Myocardial Mitochondrial Injury Induced by Pulmonary Exposure to Particulate Matter in Rats. Toxicologic Pathology, 2012, 40, 779-788.	1.8	29
42	Beta-2 Adrenergic and Glucocorticoid Receptor Agonists Modulate Ozone-Induced Pulmonary Protein Leakage and Inflammation in Healthy and Adrenalectomized Rats. Toxicological Sciences, 2018, 166, 288-305.	3.1	28
43	Ozone-induced tissue injury and changes in antioxidant homeostasis in normal and ascorbate-deficient guinea pigs. Biochemical Pharmacology, 1995, 50, 243-251.	4.4	27
44	Air Pollution and Insulin Resistance: Do All Roads Lead to Rome?. Diabetes, 2015, 64, 712-714.	0.6	27
45	Diesel exhaust induced pulmonary and cardiovascular impairment: The role of hypertension intervention. Toxicology and Applied Pharmacology, 2013, 268, 232-240.	2.8	26
46	Early and Delayed Effects of Naturally Occurring Asbestos on Serum Biomarkers of Inflammation and Metabolism. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2014, 77, 1024-1039.	2.3	26
47	Variability in ozone-induced pulmonary injury and inflammation in healthy and cardiovascular-compromised rat models. Inhalation Toxicology, 2015, 27, 39-53.	1.6	26
48	Pulmonary Inflammatory and Fibrotic Responses in Fischer 344 Rats After Intratracheal Instillation Exposure to Libby Amphibole. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2011, 74, 1111-1132.	2.3	24
49	Cardiopulmonary Responses of Wistar Kyoto, Spontaneously Hypertensive, and Stroke-prone Spontaneously Hypertensive Rats to Particulate Matter (PM) Exposure. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2007, 70, 1912-1922.	2.3	23
50	Ozone-Induced Vascular Contractility and Pulmonary Injury Are Differentially Impacted by Diets Enriched With Coconut Oil, Fish Oil, and Olive Oil. Toxicological Sciences, 2018, 163, 57-69.	3.1	23
51	Comparative cardiopulmonary toxicity of exhausts from soy-based biofuels and diesel in healthy and hypertensive rats. Inhalation Toxicology, 2015, 27, 545-556.	1.6	22
52	Subchronic Pulmonary Pathology, Iron Overload, and Transcriptional Activity after Libby Amphibole Exposure in Rat Models of Cardiovascular Disease. Environmental Health Perspectives, 2012, 120, 85-91.	6.0	21
53	Aging and Susceptibility to Toluene in Rats: A Pharmacokinetic, Biomarker, and Physiological Approach. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2009, 73, 301-318.	2.3	19
54	Ultrafine carbon particle mediated cardiovascular impairment of aged spontaneously hypertensive rats. Particle and Fibre Toxicology, 2014, 11, 36.	6.2	19

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55	Acute phase response, inflammation and metabolic syndrome biomarkers of Libby asbestos exposure. Toxicology and Applied Pharmacology, 2012, 260, 105-114.	2.8	18
56	Uterine Artery Flow and Offspring Growth in Long-Evans Rats following Maternal Exposure to Ozone during Implantation. Environmental Health Perspectives, 2017, 125, 127005.	6.0	18
57	Acute inhalation of ozone induces DNA methylation of apelin in lungs of Long-Evans rats. Inhalation Toxicology, 2018, 30, 178-186.	1.6	18
58	Susceptibility Variations in Air Pollution Health Effects: Incorporating Neuroendocrine Activation. Toxicologic Pathology, 2019, 47, 962-975.	1.8	18
59	Whole body plethysmography reveals differential ventilatory responses to ozone in rat models of cardiovascular disease. Inhalation Toxicology, 2015, 27, 14-25.	1.6	17
60	Sex and strain-based inflammatory response to repeated tobacco smoke exposure in spontaneously hypertensive and Wistar Kyoto rats. Inhalation Toxicology, 2016, 28, 677-685.	1.6	17
61	Age-related differences in pulmonary effects of acute and subchronic episodic ozone exposures in Brown Norway rats. Inhalation Toxicology, 2016, 28, 313-323.	1.6	17
62	The dynamicity of acute ozone-induced systemic leukocyte trafficking and adrenal-derived stress hormones. Toxicology, 2021, 458, 152823.	4.2	17
63	The bidirectional lung brain-axis of amyloid-Î² pathology: ozone dysregulates the peri-plaque microenvironment. Brain, 2023, 146, 991-1005.	7.6	17
64	Rodent models of susceptibility: what is their place in inhalation toxicology?. Respiration Physiology, 2001, 128, 57-70.	2.7	16
65	Acute Tobacco Smoke-Induced Airways Inflammation in Spontaneously Hypertensive Rats. Inhalation Toxicology, 2008, 20, 623-633.	1.6	16
66	The role of iron in Libby amphibole-induced acute lung injury and inflammation. Inhalation Toxicology, 2011, 23, 313-323.	1.6	16
67	Cardiovascular and thermoregulatory responses of unrestrained rats exposed to filtered or unfiltered diesel exhaust. Inhalation Toxicology, 2012, 24, 296-309.	1.6	16
68	Long-term toxicity of naturally occurring asbestos in male Fischer 344 rats. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2016, 79, 49-60.	2.3	16
69	Sumas Mountain Chrysotile Induces Greater Lung Fibrosis in Fischer 344 Rats Than Libby Amphibole, El Dorado Tremolite, and Ontario Ferroactinolite. Toxicological Sciences, 2012, 130, 405-415.	3.1	15
70	Lung transcriptional profiling: insights into the mechanisms of ozone-induced pulmonary injury in Wistar Kyoto rats. Inhalation Toxicology, 2015, 27, 80-92.	1.6	15
71	Mitochondrial Bioenergetics in Brain Following Ozone Exposure in Rats Maintained on Coconut, Fish and Olive Oil-Rich Diets. International Journal of Molecular Sciences, 2019, 20, 6303.	4.1	15
72	Ozone-induced changes in oxidative stress parameters in brain regions of adult, middle-age, and senescent Brown Norway rats. Toxicology and Applied Pharmacology, 2021, 410, 115351.	2.8	15

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73	Executive Summary: variation in susceptibility to ozone-induced health effects in rodent models of cardiometabolic disease. Inhalation Toxicology, 2015, 27, 105-115.	1.6	14
74	Rat models of cardiometabolic diseases: baseline clinical chemistries, and rationale for their use in examining air pollution health effects. Inhalation Toxicology, 2015, 27, 2-13.	1.6	14
75	Atypical microglial response to biodiesel exhaust in healthy and hypertensive rats. NeuroToxicology, 2017, 59, 155-163.	3.0	14
76	Exacerbation of ozone-induced pulmonary and systemic effects by Î²2-adrenergic and/or glucocorticoid receptorÂagonist/s. Scientific Reports, 2019, 9, 17925.	3.3	14
77	Effects of Simulated Smog Atmospheres in Rodent Models of Metabolic and Immunologic Dysfunction. Environmental Science & Technology, 2018, 52, 3062-3070.	10.0	13
78	Diesel exhaust impairs TREM2 to dysregulate neuroinflammation. Journal of Neuroinflammation, 2020, 17, 351.	7.2	13
79	Offspring susceptibility to metabolic alterations due to maternal high-fat diet and the impact of inhaled ozone used as a stressor. Scientific Reports, 2020, 10, 16353.	3.3	13
80	Toxic responses of the lung to inhaled pollutants: benefits and limitations of lung-disease models. Toxicology Letters, 2003, 140-141, 195-203.	0.8	12
81	Differential Pulmonary Retention of Diesel Exhaust Particles in Wistar Kyoto and Spontaneously Hypertensive Rats. Toxicological Sciences, 2009, 111, 392-401.	3.1	12
82	Persistent effects of Libby amphibole and amosite asbestos following subchronic inhalation in rats. Particle and Fibre Toxicology, 2015, 13, 17.	6.2	12
83	Ozone-induced fetal growth restriction in rats is associated with sexually dimorphic placental and fetal metabolic adaptation. Molecular Metabolism, 2020, 42, 101094.	6.5	11
84	Rodent Models of Cardiopulmonary Disease: Their Potential Applicability in Studies of Air Pollutant Susceptibility. Environmental Health Perspectives, 1998, 106, 111.	6.0	10
85	Clinical and pathological manifestations of cardiovascular disease in rat models: the influence of acute ozone exposure. Inhalation Toxicology, 2015, 27, 26-38.	1.6	10
86	Acute peat smoke inhalation sensitizes rats to the postprandial cardiometabolic effects of a high fat oral load. Science of the Total Environment, 2018, 643, 378-391.	8.0	10
87	Ozone Exposure During Implantation Increases Serum Bioactivity in HTR-8/SVneo Trophoblasts. Toxicological Sciences, 2019, 168, 535-550.	3.1	10
88	Strain differences in antioxidants in rat models of cardiovascular disease exposed to ozone. Inhalation Toxicology, 2015, 27, 54-62.	1.6	9
89	Pulmonary sensitivity to ozone exposure in sedentary versus chronically trained, female rats. Inhalation Toxicology, 2016, 28, 293-302.	1.6	9
90	Aspirin pre-treatment modulates ozone-induced fetal growth restriction and alterations in uterine blood flow in rats. Reproductive Toxicology, 2019, 83, 63-72.	2.9	8

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91	Peat smoke inhalation alters blood pressure, baroreflex sensitivity, and cardiac arrhythmia risk in rats. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2020, 83, 748-763.	2.3	8
92	Independent roles of beta-adrenergic and glucocorticoid receptors in systemic and pulmonary effects of ozone. Inhalation Toxicology, 2020, 32, 155-169.	1.6	8
93	The contribution of the neuroendocrine system to adaption after repeated daily ozone exposure in rats. Toxicology and Applied Pharmacology, 2022, 447, 116085.	2.8	8
94	The role of cardiovascular disease-associated iron overload in Libby amphibole-induced acute pulmonary injury and inflammation. Inhalation Toxicology, 2011, 23, 129-141.	1.6	7
95	Pulmonary transcriptional response to ozone in healthy and cardiovascular compromised rat models. Inhalation Toxicology, 2015, 27, 93-104.	1.6	7
96	Fetal growth outcomes following peri-implantation exposure of Long-Evans rats to noise and ozone differ by sex. Biology of Sex Differences, 2019, 10, 54.	4.1	7
97	Ozone Reacts With Carbon Black to Produce a Fulvic Acid-Like Substance and Increase an Inflammatory Effect. Toxicologic Pathology, 2020, 48, 887-898.	1.8	7
98	Iron and zinc homeostases in female rats with physically active and sedentary lifestyles. BioMetals, 2021, 34, 97-105.	4.1	7
99	The Role of Hepatic Vagal Tone in Ozone-Induced Metabolic Dysfunction in the Liver. Toxicological Sciences, 2021, 181, 229-245.	3.1	7
100	Adrenergic and Glucocorticoid Receptors in the Pulmonary Health Effects of Air Pollution. Toxics, 2021, 9, 132.	3.7	7
101	Adrenal stress hormone regulation of hepatic homeostatic function after an acute ozone exposure in Wistar-Kyoto male rats. Toxicological Sciences, 0, , .	3.1	7
102	Respiratory toxicity biomarkers. , 2014, , 217-239.		6
103	The influence of maternal and perinatal high-fat diet on ozone-induced pulmonary responses in offspring. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2019, 82, 86-98.	2.3	6
104	Fish oil and olive oil-enriched diets alleviate acute ozone-induced cardiovascular effects in rats. Toxicology and Applied Pharmacology, 2020, 409, 115296.	2.8	6
105	Peripheral metabolic effects of ozone exposure in healthy and diabetic rats on normal or high-cholesterol diet. Toxicology and Applied Pharmacology, 2021, 415, 115427.	2.8	6
106	Left ventricular gene expression profile of healthy and cardiovascular compromised rat models used in air pollution studies. Inhalation Toxicology, 2015, 27, 63-79.	1.6	5
107	Diets enriched with coconut, fish, or olive oil modify peripheral metabolic effects of ozone in rats. Toxicology and Applied Pharmacology, 2021, 410, 115337.	2.8	4
108	Pulmonary and vascular effects of acute ozone exposure in diabetic rats fed an atherogenic diet. Toxicology and Applied Pharmacology, 2021, 415, 115430.	2.8	4

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109	Perinatal High-Fat Diet Influences Ozone-Induced Responses on Pulmonary Oxidant Status and the Molecular Control of Mitophagy in Female Rat Offspring. International Journal of Molecular Sciences, 2021, 22, 7551.	4.1	4
110	A single exposure to eucalyptus smoke sensitizes rats to the postprandial cardiovascular effects of a high carbohydrate oral load. Inhalation Toxicology, 2020, 32, 342-353.	1.6	3
111	The Use of Standardized Diesel Exhaust Particles in Alzheimerâ€™s Disease Research. Journal of Alzheimer's Disease, 2021, 84, 607-608.	2.6	3
112	Ozone-induced acute phase response in lung versus liver: the role of adrenal-derived stress hormones. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2021, 84, 235-248.	2.3	3
113	Respiratory Toxicity Biomarkers. , 2019, , 229-250.		2
114	12-hydroxy oleic acid impairs endothelium-dependent vasorelaxation. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2019, 82, 383-386.	2.3	1
115	Bioavailability of Particle-Associated Air Pollutants and Relationship to Cardiopulmonary Injury. Lung Biology in Health and Disease, 2005, , 75-133.	0.1	0