Nicklas Raun Jacobsen

List of Publications by Year
in descending order

100 papers	6,750 citations	38742 50 h-index	62596 80 g-index
101 all docs	101 docs citations	101 times ranked	6502 citing authors

#	Article	IF	Citations
1	Role of oxidative damage in toxicity of particulates. Free Radical Research, 2010, 44, 1-46.	3.3	361
2	Genotoxicity, cytotoxicity, and reactive oxygen species induced by singleâ€walled carbon nanotubes and C₆₀ fullerenes in the FE1â€Mutaâ„¢Mouse lung epithelial cells. Environmental and Molecular Mutagenesis, 2008, 49, 476-487.	2.2	343
3	Lung inflammation and genotoxicity following pulmonary exposure to nanoparticles in ApoE-/- mice. Particle and Fibre Toxicology, 2009, 6, 2.	6.2	269
4	Bioaccumulation and ecotoxicity of carbon nanotubes. Chemistry Central Journal, 2013, 7, 154.	2.6	229
5	Tissue distribution and elimination after oral and intravenous administration of different titanium dioxide nanoparticles in rats. Particle and Fibre Toxicology, 2014, 11, 30.	6.2	229
6	Oxidatively Damaged DNA in Rats Exposed by Oral Gavage to C ₆₀ Fullerenes and Single-Walled Carbon Nanotubes. Environmental Health Perspectives, 2009, 117, 703-708.	6.0	215
7	MWCNTs of different physicochemical properties cause similar inflammatory responses, but differences in transcriptional and histological markers of fibrosis in mouse lungs. Toxicology and Applied Pharmacology, 2015, 284, 16-32.	2.8	159
8	Carbon black nanoparticle instillation induces sustained inflammation and genotoxicity in mouse lung and liver. Particle and Fibre Toxicology, 2012, 9, 5.	6.2	158
9	Pulmonary exposure to carbon black by inhalation or instillation in pregnant mice: Effects on liver DNA strand breaks in dams and offspring. Nanotoxicology, 2012, 6, 486-500.	3.0	135
10	Biodistribution of gold nanoparticles in mouse lung following intratracheal instillation. Chemistry Central Journal, 2009, 3, 16.	2.6	133
11	Engineered nanomaterial risk. Lessons learnt from completed nanotoxicology studies: potential solutions to current and future challenges. Critical Reviews in Toxicology, 2013, 43, 1-20.	3.9	130
12	Increased mutant frequency by carbon black, but not quartz, in thelacZ andcII transgenes of mutaâ„¢mouse lung epithelial cells. Environmental and Molecular Mutagenesis, 2007, 48, 451-461.	2.2	125
13	Inflammatory and genotoxic effects of nanoparticles designed for inclusion in paints and lacquers. Nanotoxicology, 2012, 6, 453-471.	3.0	118
14	A Multilaboratory Toxicological Assessment of a Panel of 10 Engineered Nanomaterials to Human Healthâ€"ENPRA Projectâ€"The Highlights, Limitations, and Current and Future Challenges. Journal of Toxicology and Environmental Health - Part B: Critical Reviews, 2016, 19, 1-28.	6.5	112
15	Nanotitanium dioxide toxicity in mouse lung is reduced in sanding dust from paint. Particle and Fibre Toxicology, 2012, 9, 4.	6.2	108
16	Role of oxidative stress in carbon nanotube-generated health effects. Archives of Toxicology, 2014, 88, 1939-1964.	4.2	99
17	Particle-Induced Pulmonary Acute Phase Response Correlates with Neutrophil Influx Linking Inhaled Particles and Cardiovascular Risk. PLoS ONE, 2013, 8, e69020.	2.5	98
18	Hepatic and Pulmonary Toxicogenomic Profiles in Mice Intratracheally Instilled With Carbon Black Nanoparticles Reveal Pulmonary Inflammation, Acute Phase Response, and Alterations in Lipid Homeostasis. Toxicological Sciences, 2012, 127, 474-484.	3.1	96

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19	Two regions in chromosome 19q13.2-3 are associated with risk of lung cancer. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2004, 546, 65-74.	1.0	94
20	Vascular Effects of Multiwalled Carbon Nanotubes in Dyslipidemic ApoEâˆ'/âˆ' Mice and Cultured Endothelial Cells. Toxicological Sciences, 2014, 138, 104-116.	3.1	94
21	Intratracheally instilled titanium dioxide nanoparticles translocate to heart and liver and activate complement cascade in the heart of C57BL/6 mice. Nanotoxicology, 2015, 9, 1013-1022.	3.0	92
22	Oxidative Stress, Inflammation, and DNA Damage in Rats after Intratracheal Instillation or Oral Exposure to Ambient Air and Wood Smoke Particulate Matter. Toxicological Sciences, 2010, 118, 574-585.	3.1	91
23	Pulmonary instillation of low doses of titanium dioxide nanoparticles in mice leads to particle retention and gene expression changes in the absence of inflammation. Toxicology and Applied Pharmacology, 2013, 269, 250-262.	2.8	91
24	Particleâ€induced pulmonary acute phase response may be the causal link between particle inhalation and cardiovascular disease. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2014, 6, 517-531.	6.1	91
25	Acute and subacute pulmonary toxicity and mortality in mice after intratracheal instillation of ZnO nanoparticles in three laboratories. Food and Chemical Toxicology, 2015, 85, 84-95.	3.6	87
26	Pulmonary exposure to carbon black nanoparticles and vascular effects. Particle and Fibre Toxicology, 2010, 7, 33.	6.2	85
27	Modest effect on plaque progression and vasodilatory function in atherosclerosis-prone mice exposed to nanosized TiO2. Particle and Fibre Toxicology, 2011, 8, 32.	6.2	85
28	No cytotoxicity or genotoxicity of graphene and graphene oxide in murine lung epithelial FE1 cells in vitro. Environmental and Molecular Mutagenesis, 2016, 57, 469-482.	2.2	82
29	Genotoxicity of unmodified and organo-modified montmorillonite. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2010, 700, 18-25.	1.7	81
30	Transcriptomic Analysis Reveals Novel Mechanistic Insight into Murine Biological Responses to Multi-Walled Carbon Nanotubes in Lungs and Cultured Lung Epithelial Cells. PLoS ONE, 2013, 8, e80452.	2.5	80
31	Inflammatory and genotoxic effects of sanding dust generated from nanoparticle-containing paints and lacquers. Nanotoxicology, 2012, 6, 776-788.	3.0	77
32	Validation of freezing tissues and cells for analysis of DNA strand break levels by comet assay. Mutagenesis, 2013, 28, 699-707.	2.6	74
33	DNA damage following pulmonary exposure by instillation to low doses of carbon black (Printex 90) nanoparticles in mice. Environmental and Molecular Mutagenesis, 2015, 56, 41-49.	2.2	72
34	Multi-walled carbon nanotube-induced genotoxic, inflammatory and pro-fibrotic responses in mice: Investigating the mechanisms of pulmonary carcinogenesis. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2017, 823, 28-44.	1.7	72
35	Biodistribution of Carbon Nanotubes in Animal Models. Basic and Clinical Pharmacology and Toxicology, 2017, 121, 30-43.	2.5	72
36	Physicochemical predictors of Multiâ€Walled Carbon Nanotubeâ€"induced pulmonary histopathology and toxicity one year after pulmonary deposition of 11 different Multiâ€Walled Carbon Nanotubes in mice. Basic and Clinical Pharmacology and Toxicology, 2019, 124, 211-227.	2.5	72

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37	Differences in inflammation and acute phase response but similar genotoxicity in mice following pulmonary exposure to graphene oxide and reduced graphene oxide. PLoS ONE, 2017, 12, e0178355.	2.5	71
38	Mutation spectrum in FE1â€MUTA^{TM}Mouse lung epithelial cells exposed to nanoparticulate carbon black. Environmental and Molecular Mutagenesis, 2011, 52, 331-337.	2.2	66
39	Effects of physicochemical properties of TiO2 nanomaterials for pulmonary inflammation, acute phase response and alveolar proteinosis in intratracheally exposed mice. Toxicology and Applied Pharmacology, 2020, 386, 114830.	2.8	66
40	XRCC3 polymorphisms and risk of lung cancer. Cancer Letters, 2004, 213, 67-72.	7.2	65
41	Measurement of oxidative damage to <scp>DNA</scp> in nanomaterial exposed cells and animals. Environmental and Molecular Mutagenesis, 2015, 56, 97-110.	2.2	64
42	Towards FAIR nanosafety data. Nature Nanotechnology, 2021, 16, 644-654.	31.5	61
43	Pulmonary toxicity of silver vapours, nanoparticles and fine dusts: A review. Regulatory Toxicology and Pharmacology, 2020, 115, 104690.	2.7	60
44	Black tattoo inks induce reactive oxygen species production correlating with aggregation of pigment nanoparticles and product brand but not with the polycyclic aromatic hydrocarbon content. Experimental Dermatology, 2013, 22, 464-469.	2.9	58
45	Changes in cholesterol homeostasis and acute phase response link pulmonary exposure to multi-walled carbon nanotubes to risk of cardiovascular disease. Toxicology and Applied Pharmacology, 2015, 283, 210-222.	2.8	57
46	Primary genotoxicity in the liver following pulmonary exposure to carbon black nanoparticles in mice. Particle and Fibre Toxicology, 2018, 15, 2.	6.2	57
47	Diesel exhaust particles are mutagenic in FE1-Mutaâ„¢Mouse lung epithelial cells. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2008, 641, 54-57.	1.0	56
48	Transcriptional profiling identifies physicochemical properties of nanomaterials that are determinants of the in vivo pulmonary response. Environmental and Molecular Mutagenesis, 2015, 56, 245-264.	2.2	54
49	Atherosclerosis and vasomotor dysfunction in arteries of animals after exposure to combustion-derived particulate matter or nanomaterials. Critical Reviews in Toxicology, 2016, 46, 437-476.	3.9	54
50	Cytokine expression in mice exposed to diesel exhaust particles by inhalation. Role of tumor necrosis factor. Particle and Fibre Toxicology, 2006, 3, 4.	6.2	52
51	Comparative Hazard Identification by a Single Dose Lung Exposure of Zinc Oxide and Silver Nanomaterials in Mice. PLoS ONE, 2015, 10, e0126934.	2.5	51
52	Impact of serum as a dispersion agent for in vitro and in vivo toxicological assessments of TiO2 nanoparticles. Archives of Toxicology, 2017, 91, 353-363.	4.2	51
53	Influence of dispersion medium on nanomaterial-induced pulmonary inflammation and DNA strand breaks: investigation of carbon black, carbon nanotubes and three titanium dioxide nanoparticles. Mutagenesis, 2017, 32, 581-597.	2.6	47
54	Carbon black nanoparticles induce biphasic gene expression changes associated with inflammatory responses in the lungs of C57BL/6 mice following a single intratracheal instillation. Toxicology and Applied Pharmacology, 2015, 289, 573-588.	2.8	45

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55	Carbon black nanoparticle intratracheal installation results in large and sustained changes in the expression of miRâ€135b in mouse lung. Environmental and Molecular Mutagenesis, 2012, 53, 462-468.	2.2	44
56	Genotoxicity, inflammation and physico-chemical properties of fine particle samples from an incineration energy plant and urban air. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2007, 633, 95-111.	1.7	42
57	Epoxy composite dusts with and without carbon nanotubes cause similar pulmonary responses, but differences in liver histology in mice following pulmonary deposition. Particle and Fibre Toxicology, 2015, 13, 37.	6.2	42
58	DNA strand breaks, acute phase response and inflammation following pulmonary exposure by instillation to the diesel exhaust particle NIST1650b in mice. Mutagenesis, 2015, 30, 499-507.	2.6	42
59	Acute phase response and inflammation following pulmonary exposure to low doses of zinc oxide nanoparticles in mice. Nanotoxicology, 2019, 13, 1275-1292.	3.0	42
60	Nanomaterial grouping: Existing approaches and future recommendations. NanoImpact, 2019, 16, 100182.	4.5	42
61	Association of chromosome 19q13.2-3 haplotypes with basal cell carcinoma: tentative delineation of an involved region using data for single nucleotide polymorphisms in two cohorts. Carcinogenesis, 2002, 23, 1149-1153.	2.8	40
62	Weight of evidence analysis for assessing the genotoxic potential of carbon nanotubes. Critical Reviews in Toxicology, 2017, 47, 871-888.	3.9	40
63	Cardiovascular health effects of oral and pulmonary exposure to multi-walled carbon nanotubes in ApoE-deficient mice. Toxicology, 2016, 371, 29-40.	4.2	39
64	Surface modification does not influence the genotoxic and inflammatory effects of TiO2nanoparticles after pulmonary exposure by instillation in mice. Mutagenesis, 2017, 32, 47-57.	2.6	39
65	In vitro-in vivo correlations of pulmonary inflammogenicity and genotoxicity of MWCNT. Particle and Fibre Toxicology, 2021, 18, 25.	6.2	39
66	Particle characterization and toxicity in C57BL/6 mice following instillation of five different diesel exhaust particles designed to differ in physicochemical properties. Particle and Fibre Toxicology, 2020, 17, 38.	6.2	37
67	Acute Phase Response as a Biological Mechanismâ€ofâ€Action of (Nano)particleâ€Induced Cardiovascular Disease. Small, 2020, 16, e1907476.	10.0	37
68	Monocyte adhesion induced by multi-walled carbon nanotubes and palmitic acid in endothelial cells and alveolarâ€"endothelial co-cultures. Nanotoxicology, 2016, 10, 1-10.	3.0	32
69	Insights into possibilities for grouping and read-across for nanomaterials in EU chemicals legislation. Nanotoxicology, 2019, 13, 119-141.	3.0	32
70	Time-Dependent Subcellular Distribution and Effects of Carbon Nanotubes in Lungs of Mice. PLoS ONE, 2015, 10, e0116481.	2.5	27
71	Pulmonary toxicity of Fe2O3, ZnFe2O4, NiFe2O4 and NiZnFe4O8 nanomaterials: Inflammation and DNA strand breaks. Environmental Toxicology and Pharmacology, 2020, 74, 103303.	4.0	27
72	A transcriptomic overview of lung and liver changes one day after pulmonary exposure to graphene and graphene oxide. Toxicology and Applied Pharmacology, 2021, 410, 115343.	2.8	26

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73	Modest vasomotor dysfunction induced by low doses of C60 fullerenes in apolipoprotein E knockout mice with different degree of atherosclerosis. Particle and Fibre Toxicology, 2009, 6, 5.	6.2	24
74	FIB-SEM imaging of carbon nanotubes in mouse lung tissue. Analytical and Bioanalytical Chemistry, 2014, 406, 3863-3873.	3.7	24
75	Identification of Gene Transcription Start Sites and Enhancers Responding to Pulmonary Carbon Nanotube Exposure <i>in Vivo</i>. ACS Nano, 2017, 11, 3597-3613.	14.6	23
76	Toxicity of pristine and paint-embedded TiO₂ nanomaterials. Human and Experimental Toxicology, 2019, 38, 11-24.	2.2	23
77	Hepatic Hazard Assessment of Silver Nanoparticle Exposure in Healthy and Chronically Alcohol Fed Mice. Toxicological Sciences, 2017, 158, 176-187.	3.1	22
78	Safe(r) by design implementation in the nanotechnology industry. NanoImpact, 2020, 20, 100267.	4.5	22
79	Carbon Black Nanoparticles and Other Problematic Constituents of Black Ink and Their Potential to Harm Tattooed Humans. Current Problems in Dermatology, 2015, 48, 170-175.	0.7	20
80	Commentary: the chronic inhalation study in rats for assessing lung cancer risk may be better than its reputation. Particle and Fibre Toxicology, 2019, 16, 44.	6.2	20
81	Pulmonary toxicity of synthetic amorphous silica â€“ effects of porosity and copper oxide doping. Nanotoxicology, 2021, 15, 96-113.	3.0	20
82	Genotoxicity of multi-walled carbon nanotube reference materials in mammalian cells and animals. Mutation Research - Reviews in Mutation Research, 2021, 788, 108393.	5.5	20
83	Reactive oxygen species production, genotoxicity and telomere length in FE1-Mutaâ„¢Mouse lung epithelial cells exposed to carbon nanotubes. Nanotoxicology, 2021, 15, 661-672.	3.0	18
84	Pro-inflammatory response and genotoxicity caused by clay and graphene nanomaterials in A549 and THP-1 cells. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2021, 872, 503405.	1.7	18
85	Effect of Renewable Fuels and Intake O2 Concentration on Diesel Engine Emission Characteristics and Reactive Oxygen Species (ROS) Formation. Atmosphere, 2020, 11, 641.	2.3	17
86	Inflammation and Vascular Effects after Repeated Intratracheal Instillations of Carbon Black and Lipopolysaccharide. PLoS ONE, 2016, 11, e0160731.	2.5	17
87	Carbon Black Nanoparticle Intratracheal Instillation Does Not Alter Cardiac Gene Expression. Cardiovascular Toxicology, 2013, 13, 406-412.	2.7	14
88	Development of a standard operating procedure for the DCFH₂-DA acellular assessment of reactive oxygen species produced by nanomaterials. Toxicology Mechanisms and Methods, 2022, 32, 439-452.	2.7	14
89	Reactive Oxygen Species in the Adverse Outcome Pathway Framework: Toward Creation of Harmonized Consensus Key Events. Frontiers in Toxicology, 0, 4, .	3.1	14
90	Organomodified nanoclays induce less inflammation, acute phase response, and genotoxicity than pristine nanoclays in mice lungs. Nanotoxicology, 2020, 14, 869-892.	3.0	13

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91	Inflammatory Response, Reactive Oxygen Species Production and DNA Damage in Mice After Intrapleural Exposure to Carbon Nanotubes. Toxicological Sciences, 2021, 183, 184-194.	3.1	11
92	Hepatic toxicity assessment of cationic liposome exposure in healthy and chronic alcohol fed mice. Heliyon, 2017, 3, e00458.	3.2	9
93	Accelerated atherosclerosis caused by serum amyloid A response in lungs of ApoE ^{â^’/â^’} mice. FASEB Journal, 2021, 35, e21307.	0.5	8
94	A Review of the Current State of Nanomedicines for Targeting and Treatment of Cancers: Achievements and Future Challenges. Advanced Therapeutics, 2021, 4, 2000186.	3.2	7
95	Mutagenicity of Carbon Nanomaterials. Journal of Biomedical Nanotechnology, 2011, 7, 29-29.	1.1	5
96	Distribution, metabolism, excretion, and toxicity of implanted silver: a review. Drug and Chemical Toxicology, 2022, 45, 2388-2397.	2.3	5
97	A response to the letter to the editor by Driscoll et al.. Particle and Fibre Toxicology, 2020, 17, 32.	6.2	2
98	Developmental Toxicity of Engineered Nanomaterials. , 2017, , 333-357.		1
99	Acute hazard assessment of silver nanoparticles following intratracheal instillation, oral and intravenous injection exposures. Nanotoxicology, 2022, , 1-17.	3.0	1
100	Developmental toxicity of engineered nanomaterials. , 2022, , 285-305.		0