

PERSONAL INFORMATION

Maurizio Gualtieri

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WORK EXPERIENCE

1 September 2016 – Present

Researcher

ENEA - Italian National agency for new technologies, Energy and sustainable economic development, Rome (Italy) SSPT-MET-INAT (Bologna, IT)

Chemical characterization of air pollution by state of the art sampling approaches and off-line analyses and by high temporal resolution monitors for organic species and ions. Evaluation of the potential impacts of airborne pollutants on human health and environment. Communication of obtained results to scientific and general public, drafting of reports, publications and documents (scientific and administrative).

1 September 2015 – 31 August
2016

Professor in Toxicology

University of Littoral Côte D'Opale (ULCO) - Unit of Chemistry and Interaction with living organisms (France).

Head of the Laboratory of Chemistry and Toxicology of atmospheric emissions

Evaluation in *in vitro* models of the effects of indoor or outdoor air pollutants (particulate matter, PM2.5, UFP and VOCs); inflammation, genotoxicity mRNA and epigenetic modification of exposed cells. Communication of obtained results to scientific and general public, drafting of reports, publications and documents (scientific and administrative).

17 December 2012 – 31 August
2015

Researcher

ENEA - Italian National agency for new technologies, Energy and sustainable economic development, Rome (Italy)

Evaluation of the sustainability of biomass fired heaters and evaluation of particulate and gaseous emissions from biomass-fired boilers. Analysis of biomass burning emissions effects on biological models. Development of technologies for the particulate and gaseous emission abatement. Assessment of the sustainability energy/heat chain. Communication of obtained results to scientific and general public, drafting of reports, publications and documents (scientific and administrative).

01 February 2012 – 16 December
2012

Post-doc

University of Milano-Bicocca, Milan (Italy)

Research activities, project title "Human co-culture: *in vitro* blood air barrier preparation in biosafety level 2 lab and analysis of UFP and NPs". Analysis of the biological impacts of environmental ultrafine particles (UFP) and of engineered nanoparticles (NP) on human lung cell lines. Communication of obtained results to scientific and general public, drafting of reports, publications and documents (scientific and administrative).

10 January 2011 – 09 January
2012

High expertise Technician

University of Milano-Bicocca, Milan (Italy)

Supervision of the technical activities and support to the research of the bio-safety level 2 cell laboratory. Cell line cultures maintenance and treatment. Biochemical assays and immunocytochemistry analyses. Communication of obtained results to scientific and general public, drafting of reports, publications and documents (scientific and administrative).

01 January 2010 – 31 December

Post-doc

2010 University of Milano-Bicocca, Milan (Italy)
 Research activities, project title "Molecular markers of damage in A549 cell line exposed to particulate matter". Sampling of environmental particulate matter and evaluation of its biological effects of human lung epithelial cell lines.

Assistant Professor

University of Milano-Bicocca, Milan (Italy)

Temporary position (May 2010 – June 2010) as Assistant Professor for the teaching course of "Laboratory of applied cell biology". Teaching activities and laboratory application of cell biology techniques for master degree students in Biology and Environmental Sciences.

07 January 2009 – 31 December 2009

Post-doc

Norwegian Institute of Public Health, Division of Environmental Medicine, Dept. of Air Pollution and Noise, Oslo (Norway)

Research activity in Cell Biology and Nanotoxicology. Research project title "Nano-sized versus larger particles: Does extremely small size introduce unique mechanisms for particle-induced toxicity?". Setup of exposure condition to nanoparticles, evaluation of early marker of response (qPCR) and pro-inflammatory potential.

01 January 2006 – 31 December 2008

Post-doc

University of Milano-Bicocca, Milan (Italy)

Research activities, project title "Molecular markers of damage in A549 cell line exposed to particulate matter". Sampling of environmental particulate matter and evaluation of its biological effects of human lung epithelial cell lines.

Assistant Professor

University of Milano-Bicocca, Milan (Italy)

Temporary position (May 2008 – June 2008, April 2007 – June 2007 and April 2006 – June 2006) as Assistant Professor for the teaching course of "Laboratory of applied cell biology". Teaching activities and laboratory application of cell biology techniques for master degree students in Biology and Environmental Sciences.

EDUCATION AND TRAINING

01 November 2002 – 31 October 2005

Ph.D. in Environmental Sciences

University of Milano-Bicocca, Milan (Italy)

Research project title "Evaluation of cell damage in pulmonary cell lines exposed to particulate matter" (Cell biology, biochemistry, transmission electron microscopy, environmental safety)

01 October 1997 – 12 March 2002

Master degree in Environmental Sciences

University of Milano-Bicocca, Milan (Italy)

English, Physic, Inorganic and Organic Chemistry, Biology, Applied Ecology.
 Dissertation thesis "Characterization of tire debris components with potential impact on human health".

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
[Common European Framework of Reference for Languages](#)

Awards, Patents and Membership

Member of the Scientific Committee for the EASA to “Cabin air quality assessment of long-term effects of contaminants [EASA.2020.HVP.17] – Support for the evaluation of offers and implementation of the contract” – 2021/2023 Expert contract NR. - 500011546

Reviewer for H2020 “SC1-BHC-36-2020: *Micro- and nano-plastics in our environment: Understanding exposures and impacts on human health*” call.

Member of the Scientific Committee for the EU-funded FACTS project (MOVE/B3/SER/2016-363/SI2.748114) – 2019/2020

National scientific qualification to function as **Associate Professor (BIO/06)** in Italian Universities released by The Italian Ministry of Education, Universities and Research (MIUR) February, 24, 2014.

National scientific qualification to function as **Associate Professor (BIO/06)** in Italian Universities released by The Italian Ministry of Education, Universities and Research (MIUR) August 06 2018- August 06/2027

Travel grant for young researcher from Lombardy Region “Sovvenzione Globale INGENIO” December, 19, 2006 (guest scientist at the Norwegian Institute of Public Health, Division of Environmental Medicine, Dept. of Air Pollution and Noise, Oslo – Norway).

Patent

Co-inventor of the Patent n. MI2012A001759, titled "Method and device for the detection and rapid quantification of atmospheric particulates in a sample and/or of the oxidative power".

Bibliometric information

H-Index: 29 (Scopus 2004 - 2021)
Total citations: 2314 (Scopus 2004 – 2019)

H Index: 31 (Google Scholar 2004 – 2021) / 26 (Google Scholar 2016 – 2021)
i10-index : 47 (Google Scholar 2004 – 2021) / 41 (Google Scholar 2016 – 2021)
Total Citations: 2989 (Google Scholar 2004 – 2021) / 2030 (Google Scholar 2016 – 2021)

Additional information

Reviewer for International Journals: such as, but not limited to, Toxicology in Vitro, Toxicology Letters, Plos One, Cytokine, Mutation Research, Nanotoxicology and Toxicological Sciences, Environmental Research, Chemosphere, Environmental Pollution.

ADDITIONAL INFORMATION

Publications and meetings

Appendix reports the list of publications and main oral presentation.

I authorize the use of personal data reported in this Curriculum vitae according art. 13 GDPR 679/16



Bologna, 10/06/2021

APPENDIX A

Publications on peer-reviewed international journals

- 1) Milani M., Pucillo F.P., Ballerini M., Camatini M., Gualtieri M., Martino S.
First evidence of tire debris characterization at the nanoscale by focused ion beam. *Mater Characterization* 52 (4-5), (2004) 283-288.
- 2) Gualtieri M., Rigamonti L., Galeotti V., Camatini M.
Toxicity of tire debris extracts on human lung cell line A549. *Toxicology in Vitro* 19(7), (2005) 1001-1008.
- 3) Gualtieri M., Andrioletti M., Mantecca P., Vismara C., Camatini M.
Impact of tire debris on in vitro and in vivo systems.. *Particles and Fiber Toxicology*, (2005) 2:1.
- 4) Gualtieri M., Andrioletti M., Vismara C., Milani M., Camatini M.
Toxicity of tire debris leachates.. *Environment International* 31 (2005), 723-730.
- 5) Mantecca P., Gualtieri M., Vismara C., Andrioletti M., Bacchetta R., Vailati G., Camatini M.
Tire debris organic extract affects *Xenopus laevis* development. *Environment International* 33 (2007) 642–648.
- 6) Beretta E., Gualtieri M., Botto L., Palestini P., Miserocchi G., Camatini M.
Organic extract of tire debris causes localized damage in the plasma membrane of human lung epithelial cells. *Toxicology Letters* 173 (2007) 191–200.
- 7) Gualtieri M., Mantecca P., Cetta F., Camatini M.
Organic compounds in tire particle induce reactive oxygen species and heat-shock proteins in the human alveolar cell line A549
Environment International 34 (2008) 437–442.
- 8) Gualtieri M., Mantecca P., Corvaja V., Longhin E., Perrone MG, Bolzacchini E, Camatini M.
Winter fine particulate matter from Milan induces morphological and functional alterations in human pulmonary epithelial cells (A549).
Toxicol Lett. 188(1): (2009) 52-62.
- 9) Mantecca P, Sancini G, Moschini E, Farina F, Gualtieri M, Rohr A, Miserocchi G, Palestini P, Camatini M.
Lung toxicity induced by intratracheal instillation of size-fractionated tire particles. *Toxicol Lett.* 189(3): (2009) 206-14.
- 10) Gualtieri M., Øvrevik J., Holme JA., Perrone M.G., Bolzacchini E., Schwarze P E., Camatini M.
Differences in cytotoxicity versus pro-inflammatory potency of different PM fractions in human epithelial lung cells.
Toxicology in Vitro 24 (2010) 29–39
- 11) Perrone MG, Gualtieri M, Ferrero L, Lo Porto C, Udisti R, Bolzacchini E, Camatini M..
Seasonal variations in chemical composition and in vitro biological effects of fine PM from Milan
Chemosphere, , 78(11) (2010) 1368-77.
- 12) Mantecca P, Farina F, Moschini E, Gallinotti D, Gualtieri M, Rohr A, Sancini G, Palestini P, Camatini M.
Comparative acute lung inflammation induced by atmospheric PM and size-fractionated tire particles.
Toxicol Lett. 198 (2010) 244–254
- 13) Gualtieri M., Franzetti A., Mantecca P., Longhin E., Bestetti G., Bolzacchini E., Camatini M.
In vitro effects of chemical and microbiological characterized Milan particulate matter. *Procedia Environmental Sciences* 4, (2011) 192–197.
- 14) Gualtieri M., Øvrevik J., Mollerup S., Asare N., Longhin E., Dahlman H.J., Camatini M., Holme J.A.
Airborne urban particles (Milan winter-PM_{2.5}) cause mitotic arrest and cell death: Effects on DNA, mitochondria, AhR binding and spindle organization. *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis* 713, (2011) 18 – 31.
- 15) Camatini M., Corvaja V., Mantecca P., Gualtieri M.
PM₁₀-biogenic fraction drives the seasonal variation of pro-inflammatory response in A549 cells.
Environmental Toxicology 27, (2012) 63 – 73.
- 16) Gualtieri M., Longhin E., Mattioli M., Mantecca P., Tinaglia V., Mangano E., Proverbio MC., Bestetti G., Camatini M., Battaglia C.
Gene expression profiling of A549 cells exposed to Milan PM_{2.5}. *Toxicology Letters* 209 (2), (2012) 136 – 145.
- 17) Sironi L., Freddi S., Caccia M., Pozzi P, Rossetti L, Pallavicini P., Donà A., Cabrini E, Gualtieri M., Rivolta I, Panariti A., D'Alfonso L., Collini M., Chirico G.
Gold Branched Nanoparticles for Cellular Treatments. *J. Phys. Chem. C* (2012), 116, 18407–18418
- 18) Sandberg W.J., Låg M., Holme JA., Friede B., Gualtieri M., Kruszewski M., Schwarze PE., Skuland T., Refsnes M.
Comparison of non-crystalline silica nanoparticles in IL-1 β release from macrophages. *Particle and Fibre Toxicology* (2012), 9:32

- 19) Mantecca P., Gualtieri M., Longhin E., Bestetti G., Palestini P., Bolzacchini E., Camatini M.
Adverse biological effects of milan urban pm looking for suitable molecular markers of exposure
Chemical Industry & Chemical Engineering Quarterly 18 (4) (2012) 635–641.
- 20) Gualtieri M., Skuland T., Iversen TG, Låg M., Schwarze P., Bilanicova D., Pojana G., Refsnes M.
Importance of agglomeration state and exposure conditions for uptake and pro-inflammatory responses to amorphous silica nanoparticles in bronchial epithelial cells. *Nanotoxicology*, 6(7), (2012) 700–712;
- 21) Bengalli R, Mantecca P, Camatini M, Gualtieri M
Effect of nanoparticles and environmental particles on a coculture model of the air-blood barrier
BioMed Research International, Volume 2013, Article ID 801214, <http://dx.doi.org/10.1155/2013/801214>
- 22) Bengalli R, Molteni E, Longhin E, Refsnes M, Camatini M, Gualtieri M.
Release of IL-1 β Triggered by Milan Summer PM10: Molecular Pathways Involved in the Cytokine Release,
BioMed Research International Volume 2013 (2013), Article ID 158093 <http://dx.doi.org/10.1155/2013/158093>
- 23) Longhin E, Pezzolato E, Mantecca P, Holme JA, Franzetti A, Camatini M, Gualtieri M
Season linked responses to fine and quasi-ultrafine Milan PM in cultured cells. *Toxicology in Vitro* 27 (2013) 551-559, doi:
<http://dx.doi.org/10.1016/j.tiv.2012.10.018>.
- 24) Perrone M.G., Gualtieri M., Consonni V., Ferrero L., Sangiorgi G., Longhin E., Ballabio D., Bolzacchini E., Camatini M.
Particle size, chemical composition, seasons of the year and urban, rural or remote site origins as determinants of biological effects of particulate matter on pulmonary cells. *Environmental Pollution* 176 (2013) 215 – 227
- 25) Moschini E., Gualtieri M., Colombo M., Fascio U., Camatini M., Mantecca P.
The modality of cell–particle interactions drives the toxicity of nanosized CuO and TiO₂ in human alveolar epithelial cells.
Toxicology Letters 222 (2013) 102– 116
- 26) Longhin E., Holme J.A., Gutzkow K. B., Art V.M., Kucab J.E., Camatini M., Gualtieri M.
Cell cycle alterations induced by urban PM_{2.5} in bronchial epithelial cells: characterization of the process and possible mechanisms involved
Particle and Fibre Toxicology 2013, 10:63
- 27) Capasso L., Camatini M., Gualtieri M.
Nickel oxide nanoparticles induce inflammation and genotoxic effect in lung epithelial cells. *Toxicology Letters* 226 (2014) 28–34
- 28) Gualtieri M., Capasso L., D’Anna A., Camatini M.
Organic nanoparticles from different fuel blends: in vitro toxicity and inflammatory potential. *Journal of Applied Toxicology*, 34 (2014), 1247–1255
- 29) Ciriello F., Gualtieri M., Longhin E., Ruffo R., Camatini M., Parenti P.
A new method and tool for detection and quantification of PM oxidative potential
Environmental Science and Pollution Research, 2015 DOI 10.1007/s11356-015-4551-2
- 30) Capasso L., Longhin E., Caloni F., Camatini M., Gualtieri M.
Synergistic inflammatory effect of PM₁₀ with mycotoxin deoxynivalenol on human lung epithelial cells. *Toxicol* 104 (2015) 65-72
- 31) Longhin E., Capasso L., Battaglia C., Proverbio MC., Cosentino C., Cifola I., Mangano E., Camatini M., Gualtieri M.
Integrative transcriptomic and protein analysis of human bronchial BEAS-2B exposed to seasonal urban particulate matter
Environmental Pollution, 209 (2016) 87-98
- 32) Lucotti A., Catelani T., Ciriello F., Gualtieri M., Parenti P., Camatini M., Zerbi G.
Resonant Raman-based cytochrome C biosensor as a tool for evaluating the oxidative properties of the diesel exhaust particulate matter. *J. Raman Spectrosc.* (2016) DOI 10.1002/jrs.4905
- 33) Longhin E., Gualtieri M., Capasso L., Bengalli R., Mollerup S., Holme AJ., Ovrevik J., Casadei S., Di Benedetto C., Parenti P., Camatini M.
Physico-chemical properties and biological effects of diesel and biomass particles. *Environmental Pollution* 215 (2016) 366-375
- 34) Landkocz Y., Ledoux F., André V., Cazier F., Genevray P., Dewaele D., Martin P.J., Lepers C., Verdin A., Courcot L., Boushina S., Sichel F., Gualtieri M., Shirali P., Courcot D., Billet S.
Fine and ultrafine atmospheric particulate matter at a multi-influenced urban site: Physicochemical characterization, mutagenicity and cytotoxicity. *Environmental Pollution* 221 (2017) 130 – 140.
- 35) Bengalli, R., Gualtieri, M., Capasso, L., Urani, C., Camatini, M.
Impact of zinc oxide nanoparticles on an in vitro model of the human air-blood barrier. *Toxicology Letters* 279 (2017) 22 – 32.
- 36) Zerbi G., Barbon A., Bengalli R., Lucotti A., Catelani T., Tampieri F., Gualtieri M., D’Arienzo M., Morazzioni F., Camatini M.

Graphite particles induce ROS formation in cell free systems and human cells. *Nanoscale* (2017) 9, 13640

37) Costabile F., Alas H., Aufderheide M., Avino P., Amato F., Argentini S., Barnaba F., Berico M., Bernardoni V., Biondi R., Calzolari G., Canepari S., Casasanta G., Ciampichetti S., Conidi A., Cordelli E., Di Ianni A., Di Liberto L., Facchini MC., Facci A., Frasca D., Gilardoni S., Grollino MG., Gualtieri M., Lucarelli F., Malaguti A., Manigrasso M., Montagnoli M., Nava S., Padoan E., Perrino C., Petralia E., Petenko I., Querol X., Giulia Simonetti G., Tranfo G., Ubertini S., Valli G., Valentini S., Vecchi R., Volpi F., Weinhold K., Wiedensohler A., Zanini G., Gobbi GP.

First Results of the “Carbonaceous Aerosol in Rome and Environs (CARE)” Experiment: Beyond Current Standards for PM₁₀. *Atmosphere* 8 (2017), 249

38) Grilli A., Bengalli R., Longhin E., Capasso L., Proverbio MC., Forcato M., Biccato S., Gualtieri M., Battaglia C., Camatini M. Transcriptional profiling of human bronchial epithelial cell BEAS-2B exposed to diesel and biomass ultrafine particles. *BMC Genomics* 19 (2018), 302

39) Gualtieri M., Grollino MG., Consales C., Costabile F., Manigrasso M., Avino P., Aufderheide M., Cordelli E., Di Liberto L., Petralia E., Raschella G., Stracquadanio M., Wiedensohler A., Pacchierotti F., Zanini G.

Is it the time to study air pollution effects under environmental conditions? A case study to support the shift of in vitro toxicology from the bench to the field. *Chemosphere* 207 (2018) 552 – 564.

40) Longhin E., Holme J., Gualtieri M., Camatini M., Ovrevik J. Milan winter fine particulate matter (wPM_{2.5}) induces IL-6 and IL-8 synthesis in human bronchial BEAS-2B cells, but specifically impairs IL-8 release. *Toxicology in Vitro* 52 (2018) 365–373.

41) Adani M., Mircea M., D'Isidoro M., Gualtieri M. Impact of Emissions, Meteorology and Grid Resolution on Changes of HMs and PAHs Concentrations between 2005 and 2010 in Italy. *Aerosol and Air Quality Research* 18(12) (2018).

42) Ndong Ba A., Cazier F., Verdin A., Garcon G., Cabral M., Courcot L., Diouf A., Courcot D., Gualtieri M., Fall M. Physico-chemical characterization and in vitro inflammatory and oxidative potency of atmospheric particles collected in Dakar city's (Senegal). *Environmental Pollution* 245 (2019) 568-581

43) De Marco A., Proietti C., Anav A., Ciancarella L., D'Elia I., Fares S., Fornasier M. F., Fusaro L., Gualtieri M., Manes F., Marchetto A., Mircea M., Paoletti E., Piersanti A., Rogora M., Salvati L., Salvatori E., Screpanti A., Vialetto G., Vitale M., Leonardi C. Impacts of air pollution on human and ecosystem health, and implications for the National Emission Ceilings Directive: Insights from Italy-NC-ND license. *Environment International* 125 (2019) 320–333

44) Stracquadanio M., Petralia E., Berico M., La Torretta T.M.G., Malaguti A., Mircea M., Gualtieri M., Ciancarella L. Source Apportionment and Macro Tracer: Integration of Independent Methods for Quantification of Woody Biomass Burning Contribution to PM₁₀. *Aerosol and Air Quality Research*, 19(20) (2019): 711 – 723. <https://doi.org/10.4209/aaqr.2018.05.0186>

45) Ndong Ba A., Verdin A., Cazier F., Garcon G., Thomas J., Cabral M., Dewaele D., Genevray P., Garat A., Allorge D., Diouf A., Loguidice J.M., Courcot D., Fall M., Gualtieri M. Individual exposure level following indoor and outdoor air pollution exposure in Dakar (Senegal). *Environmental Pollution* 248 (2019) 397-407

46) Costabile F., Gualtieri M., Canepari S., Tranfo G., Consales C., Grollino M.G., Paci E., Petralia E., Pigiini D., Simonetti G. Evidence of association between aerosol properties and in-vitro cellular oxidative response to PM₁, oxidative potential of PM_{2.5}, a biomarker of RNA oxidation, and its dependency on combustion sources. *Atmospheric Environment* 213 (2019) 444–455

47) Feng Z., De Marco A., Anav A., Gualtieri M., Sicard P., Tian H., Fornasier F., Tao F., Guo A., Paoletti E. Economic losses due to ozone impacts on human health, forest productivity and crop yield across China. *Environment International* 131 (2019) 104966

48) Sicard P., Khaniabadi Y. O., Perez S., Gualtieri M., De Marco A. Effect of O₃, PM₁₀ and PM_{2.5} on cardiovascular and respiratory diseases in cities of France, Iran and Italy. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-019-06445-8>

49) Marchetti S., Hassan S.K., Shetaya W. H., El-Mekawy A., Mohamed E.F., Mohammed A. M. F., El-Abssawy A. A., Bengalli R., Colombo A., Gualtieri M., Mantecca P. Seasonal Variation in the Biological Effects of PM_{2.5} from Greater Cairo. *International Journal of Molecular Science* 20 (2019), 4970; doi:10.3390/ijms20204970

50) Valentini S., Barnaba F., Bernardoni V., Calzolari G., Costabile F., Di Liberto L., Forello A.C., Gobbi G.P., Gualtieri M., Lucarelli F., Nava S., Petralia E., Valli G., Wiedensohler A., Vecchi R. Classifying aerosol particles through the combination of optical and physical-chemical properties: Results from a wintertime campaign in Rome (Italy). *Atmospheric Research* 235 (2020) 104799.

51) Longhin E., Mantecca P., Gualtieri M. Fifteen Years of Airborne Particulates in Vitro Toxicology in Milano: Lessons and Perspectives Learned. *International Journal of Molecular Science* 21 (2020) 2489; doi:10.3390/ijms21072489.

52) Costabile F., Gualtieri M., Ancona C., Canepari S., Decesari S. Ultrafine Particle Features Associated with Pro-Inflammatory and Oxidative Responses: Implications for Health Studies. *Atmosphere* 11 (2020) 414. doi:10.3390/atmos11040414

- 53) Manigrasso M., Costabile F., Di Liberto L., Gobbi G.P., Gualtieri M., Zanini G., Avino P. Size resolved aerosol respiratory doses in a Mediterranean urban area: From PM10 to ultrafine particles. *Environment International* 141 (2020) 105714
- 54) Forello A.C., Amato F., Bernardoni V., Calzolari G., Canepari S., Costabile F., Di Liberto L., Gualtieri M., Lucarelli F., Nava S., Perrino C., Petralia E., Valentini S., Valli G., Vecchi R. Gaining knowledge on source contribution to aerosol optical absorption properties and organics by receptor modelling. *Atmospheric Environment* 243 (2020) 117873
- 55) Piersanti A., D'Elia I., Gualtieri M., Briganti G., Cappelletti A., Zanini G., Ciancarella L. The Italian National Air Pollution Control Programme: Air Quality, Health Impact and Cost Assessment. *Atmosphere* (2021) 12, 196. <https://doi.org/10.3390/atmos12020196>

Publications on peer-reviewed national journals

- 1) Zerbi G., Ferruggiari A., Fustella G., Tommasini M., Mantecca P., Gualtieri M., Cetta F., Camatini M.
Preliminary observation on the interactions between fine atmospheric particulate matter (PM_{2.5}) and human alveolar epithelial cells (A549).
Chemical Engineering Transaction 16, 387 – 94, 2008.
- 2) Gualtieri M., Mantecca P., Corvaja V., Bolzacchini E., Fustella G., Zerbi G., Camatini M. Fine PM and health: in vitro results.
Chemical Engineering Transaction 16, 411 – 18, 2008.
- 3) Zerbi G., Cetta F., Bottani C., Ferruggiari A., Tommasini M., Mantecca P., Dharmo A., Gualtieri M., Camatini M.
Host-particle interactions in the pathogenesis of health injury from air pollution: Use of Raman Scattering Spectroscopy in the analysis of the mutual relationships between PM and cell membranes.
GIMT - Giornale Italiano delle Malattie del Torace 63, Issue 6, 2009, 431-437.
- 3) Camatini M., Gualtieri M., Mantecca P.
Particles and health: state of the research.
Chemical Engineering Transaction 22, 1 – 14, 2010. DOI 10.3303/CET1022001
- 4) Longhin E., Pezzolato E., Mantecca P., Bolzacchini E., Camatini M.
Biological effects of Milan PM: the role of particles dimension and season of sampling.
Chemical Engineering Transaction 22, 23 – 28, 2010. DOI 10.3303/CET1022003
- 5) Moschini E., Gualtieri M., Gallinotti D., Pezzolato E., Fascio U., Camatini M., Mantecca P. Metal oxide nanoparticles induce cytotoxic effects on human lung epithelial cells A549
Chemical Engineering Transaction 22, 29 – 34, 2010. DOI 10.3303/CET1022004
- 6) Magatti G., Bellantoni C., Cavallotti M., Benocci R., Gualtieri M., Camatini M.
Energy consumption analysis and carbon footprint of a building of the University of Milano-Bicocca: starting point for a sustainability report
Energia, Ambiente e Innovazione 3-4/2013
- 7) Stoppiello, G., Palma, V., Hugony, F., Meloni, E., Gualtieri, M.
Catalytic wall flow filters for the reduction of biomass boilers emissions
Chemical Engineering Transactions Volume 37, 2014, Pages 19-24

Chapter in books

- 1) Camatini M. and Gualtieri M. "The cytoskeleton and cell movement" in "The cell: a molecular approach, III" ed. 2004, Cooper and R.E. Hausman.
Piccin editore, 435-483.
- 2) Camatini M., Gualtieri M., Mantecca P. "Gli aspetti tossicologici in-vitro e in-vivo" in "Particelle in Atmosfera Conosciamole Meglio" Ed. Villaggio Globale 2010.
- 3) Camatini M., Gualtieri M., Sancini G. Impact of the Airborne Particulate Matter on the Human Health
November 2016 DOI: 10.1002/9783527336449.ch10
In book: Atmospheric Aerosols: Life Cycles and Effects on Air Quality and Climate, pp.597-643
- 4) Gualtieri M., Ledoux F., Verdin A., Billet S., Martin P., Courcot D. Particulate Matter Physico-Chemical Characterization and in vitro Toxicological Effects. In Airborne Particles: Origin, Emissions and Health Impacts, Chapter: 12, Publisher: Nova Science Publisher, Editors: Dr. Prashant Kumar. 2017

Oral presentation to international congress

- Gualtieri M., Rigamonti L.M., Palestini P., Camatini M.
Cytotoxicity of tyre debris organic extract assessed by the MTT, the Comet assay and the ultrastructure on A549 cells
Invitox XIII workshop, p. 41, 2004
- Gualtieri M., Rigamonti L., Andrioletti M., Vismara C., Mantecca P., Camatini M.
Evaluation of the damage produced by particulate matter (PM₁₀) on in vitro systems. 50th Meeting of the Italian Embryological Group Italian group. Pavia 2004
- Gualtieri M., Grittini M., Camatini M.
Toxic effects of tire particles and their extracts on human alveolar epithelial cells A549.
46th ETCS International meeting, 3rd International joint meeting AICC – CELLTOX. 2006
- Gualtieri M., Mantecca P., Grittini M., Camatini M.
Tire wear derived particles are toxic to the human lung cell line A549.
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