

List of publications

- 1) **M.G. Lionetto** (2023) Carbonic Anhydrase and Biomarker Research: New Insights. International Journal of Molecular Science, Article number 9687.
- 2) Giordano M.E., Udayan G., Guascito M.R., De Bartolomeo A.R., Carlino A., Conte M., Contini D., **Lionetto M.G.**, 2023. Apoptotic volume decrease (AVD) in A549 cells exposed to water-soluble fraction of particulate matter (PM10). *Frontier in Physiology*, 14: 1218687.
- 3) Giordano M.E.; **Lionetto M.G.** Intracellular Redox Behavior of Quercetin and Resveratrol Singly and in Mixtures. *Molecules* 2023, 28, 4682.
- 4) Calisi A., Giordano M.E., Dondero F., Maisano M., Fasulo S., **Lionetto M.G.** (2023). Morphological and functional alterations in hemocytes of *Mytilus galloprovincialis* exposed in high-impact anthropogenic sites. *Marine Environmental Research*, 188, Article number 105988.
- 5) Carlino A., Romano M.P., **Lionetto M.G.**, Contini D., Guascito M.R. (2023). An Overview of the Automated and On-Line Systems to Assess the Oxidative Potential of Particulate Matter. *Atmosphere*, 14, Article number 256
- 6) Guascito M.R., **Lionetto M.G.**, Mazzotta F., Conte M., Giordano M.E., Caricato R., De Bartolomeo A.R., Dinoi A., Cesari D., Merico E., Mazzotta L., Contini D. (2023). Characterisation of the correlations between oxidative potential and in vitro biological effects of PM10 at three sites in the central Mediterranean. *Journal of Hazardous Materials*, 448, Article number 130872
- 7) Athanasios B., Romano M.P., Serafeim E., Avgenikou A., Athanasios K., **Lionetto M.G.** Guascito M.R., De Bartolomeo A.R., Giordano M.E., Mangone A., Contini D, Samara C. (2023). Size-Resolved Redox Activity and Cytotoxicity of Water-Soluble Urban Atmospheric Particulate Matter: Assessing Contributions from Chemical Components. *Toxics*, 11, Article number 59
- 8) M.P. Romano, **M.G. Lionetto**, A.R. Mangone, A.R. De Bartolomeo, M.E. Giordano, D. Contini, M.R. Guascito (2022). Development and characterization of a gold nanoparticles glassy carbon modified electrode for dithiotreitol (DTT) detection suitable to be applied for determination of atmospheric particulate oxidative potential. *Analytica Chimica Acta*, 1206, 339556
- 9) Lionetto, F.; **Lionetto, M.G.**; Mele, C.; Corcione, C.E.; Bagheri, S.; Udayan, G.; Maffezzoli, A. Autofluorescence of Model Polyethylene Terephthalate Nanoplastics for Cell Interaction Studies. *Nanomaterials* 2022, 12, 1560
- 10) **Lionetto M.G.**, Caricato R., Giordano M.E. (2021). Pollution Biomarkers in the Framework of Marine Biodiversity Conservation: State of Art and Perspectives. *Water*, 13, 1847.
- 11) **M.G. Lionetto**, M. R. Guascito, M.E. Giordano, R. Caricato, A.R. De Bartolomeo, M.P. Romano, M. Conte, A. Dinoi, D. Contini (2021). Oxidative Potential, Cytotoxicity, and Intracellular Oxidative Stress Generating Capacity of PM10: A Case Study in South of Italy. *Atmosphere*, 12, 464. <https://doi.org/10.3390/atmos12040464>
- 12) **Lionetto M.G.**, Caricato R., Giordano M.E. (2020). Carbonic Anhydrase Sensitivity to Pesticides: Perspectives for Biomarker Development. *International Journal of Molecular Sciences*. 21, 3562; doi:10.3390/ijms21103562
- 13) Giordano M.E., Caricato R., **Lionetto M.G.** (2020). Concentration Dependence of the Antioxidant and Prooxidant Activity of Trolox in HeLa Cells: Involvement in the Induction of Apoptotic Volume Decrease. (2020). *Antioxidants*, 9, 1058; doi:10.3390/antiox9111058
- 14) Giordano M.E., Caricato R., Verri T., **Lionetto M.G.** (2020). The colon epithelium as a target for the intracellular antioxidant activity of hydroxytyrosol: a study on rat colon explants. Accettato per la pubblicazione su *JOURNAL OF FUNCTIONAL FOODS*, 64, 103604, ISSN: 1756-4646.
- 15) S. Romano, M.R. Perrone, S. Becagli, M.C. Pietrogrande, M. Russo, R. Caricato, M.G. Lionetto (2020). Ecotoxicity, genotoxicity, and oxidative potential tests of atmospheric PM10 particles. *Atmospheric Environment*, 221, 117085.
- 16) Piras F., Santoro O., Pastore T., Pio I., De Dominicis E., Gritti E., Caricato R., **Lionetto M.G.**, Mele G., Santoro D. (2020). Controlling micropollutants in tertiary municipal wastewater by O₃/H₂O₂, granular biofiltration and UV254/H₂O₂ for potable reuse applications. *CHEMOSPHERE*, 239, 124635, ISSN: 0045-6535, doi: 10.1016/j.chemosphere.2019.124635.
- 17) Lionetto M.G., Caricato R., Giordano M.E. (2019). Pollution Biomarkers in Environmental and Human Biomonitoring. *The Open Biomarkers Journal*, 2019, 9: 1-9.

- 18) Caricato R., Giordano M.E., Schettino T., Maisano M., Mauceri A., Giannetto A., Cappello T., Parrino V., Ancora S., Caliani I., Bianchi N., Leonzio C., Mancini G., Cappello S., Fasulo S., **Lionetto M.G.** (2019) Carbonic anhydrase integrated into a multimarker approach for the detection of the stress status induced by pollution exposure in *Mytilus galloprovincialis*: A field case study. *SCIENCE OF THE TOTAL ENVIRONMENT*, 690: 140-150, ISSN: 0048-9697, doi: 10.1016/j.scitotenv.2019.06.446.
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- 21) Caricato R., Giordano M.E., Schettino T., **Lionetto M.G.** (2018). Functional involvement of carbonic anhydrase in the lysosomal response to cadmium exposure in *Mytilus galloprovincialis* digestive gland. *Frontiers in Physiology*, vol. 9, article 319, ISSN: 1664-042X, doi: 10.3389/fphys.2018.00319.
- 22) Cavallo A., Madaghiele M., Masullo U., **Lionetto M.G.**, SANNINO A. (2017). Photo-crosslinked poly(ethylene glycol) diacrylate (PEGDA) hydrogels from low molecular weight prepolymer: Swelling and permeation studies. *JOURNAL OF APPLIED POLYMER SCIENCE*, vol. 134, p. 44380, ISSN: 0021-8995, doi: 10.1002/app.44380
- 23) Lionetto M.G., Caricato R., Calisi A., Giordano M.E., E. Erroi, T. Schettino (2016). Biomonitoring of water and soil quality: a case study of ecotoxicological methodology application to the assessment of reclaimed agroindustrial wastewaters used for irrigation. *RENDICONTI LINCEI. SCIENZE FISICHE E NATURALI*, vol. 27, p. 105-112, ISSN: 2037-4631, doi: 10.1007/s12210-015-0486-2
- 24) **M. G. Lionetto**, R. Caricato, M. E. Giordano, T. Schettino (2016). Carbonic Anhydrase Based Biomarkers: Potential Application in Human Health and Environmental Sciences. *RECENT PATENTS ON BIOMARKERS*, vol. 6, p. 40-46, ISSN: 2210-3090, doi: 10.2174/2468422806666161116143730
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- 26) Leomanni A., Schettino T., Calisi A., and **Lionetto M.G.** (2016). Mercury induced haemocyte alterations in the terrestrial snail *Cantareus apertus* as novel biomarker. *Comparative Biochemistry and Physiology, Part C*, 183–184: 20–27
- 27) Giordano M.E., Inghrosso I., T. Schettino T., Giovinazzo G., and **Lionetto M.G.** (2016). Intracellular Antioxidant Activity of Grape Skin Polyphenolic Extracts in Rat Superficial Colonocytes: In situ Detection by Confocal Fluorescence Microscopy. *Frontiers in Physiology*, 7: 177, doi: 10.3389/fphys.2016.00177
- 28) Leomanni A., Schettino T., Calisi A., **Lionetto M.G.** (2016). Mercury induced haemocyte alterations in the terrestrial snail *Cantareus apertus* as novel biomarker. *Comparative Biochemistry and Physiology, Part C*, 183–184: 20–27
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- 31) **Lionetto M.G.**, Caricato R., Calisi A., Giordano M.E., Erroi E, Schettino T. (2015) Biomonitoring of water and soil quality: a case study of ecotoxicological methodology application to the assessment of reclaimed agroindustrial wastewaters used for irrigation" *Rendiconti Lincei*, DOI: 10.1007/s12210-015-0486-2.
- 32) Schettino T, Lionetto MG, Erroi E In vitro test for measuring the general toxicity and the amount of general toxicity due to non-metallic chemical pollutants in environmental samples. 2015; patent n. WO 2015011736 A1.
- 33) Fellingine S., Carbone M., Caricato R., Cutignano A., D'Aniello B., D'Errico G., Ferramosca A., Giuliani M.E., Gorbi S., Grauso L., **Lionetto M.G.**, Magliozzi L., Mollo E., Pittura L., Polese G., Regoli F., Zara V., Terlizzi A. (2014). *Caulerpa racemosa* var. *cylindracea* and *Dyplodus sargus*: a model for an integrated study of invasive pest metabolites impact on Mediterranean coastal marine systems. *Biol. Mar. Mediterr.*, 21: 85-88.
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- 35) Calisi A., **Lionetto M.G.**, Lemanni A., De Lorenzis E., Schettino T. (2014) Metallothionein induction in the coelomic fluid of the earthworm *Lumbricus terrestris* following heavy metal exposure: a short report. *Biomed Research International*, Volume 2014, Article ID 109386, pp.1-6, ISSN: 2314-6141, doi: 10.1155/2014/109386.
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