

REFERENCES

- Ahamed M., Karns M., Goodson M., Rowe J., Hussain S.M., Schlager J.J., Hong Y., 2008. DNA DAMAGE RESPONSE TO DIFFERENT SURFACE CHEMISTRY OF SILVER NANOPARTICLES IN MAMMALIAN CELLS. *Toxicol. Appl.Pharm.* 233 (3), 404-410
- Aitken R.J., Creely K.S., Tran C.L., 2004. NANOPARTICLES: AN OCCUPATIONAL HYGIENE REVIEW. Sudbury, UK: HSE Books RR274
- Aitken R.J., Chaudhry M.Q., Boxall A.B.A., Hull M., 2006. MANUFACTURE AND USE OF NANOMATERIALS: CURRENT STATUS IN THE UK AND GLOBAL TRENDS. *Occup. Med.* 56, 300 e306
- Albanese A., Tang P.S, Chan W.C., 2012. THE EFFECT OF NANOPARTICLE SIZE, SHAPE, AND SURFACE CHEMISTRY ON BIOLOGICAL SYSTEMS. *Annu Rev Biomed Eng.* 14, 1–16
- Ali D., Yadav P.G., Kumar S., Ali H., Alarifi S., Harrath A.H., 2013. SENSITIVITY OF FRESHWATER PULMONATE SNAIL LYMNAEA LUTEOLA L., TO SILVER NANOPARTICLES. *Chemosphere.* S0045-6535(13), 01541-5 [Epub ahead of print]
- Angilletta M.J. Jr., Huey R.B., Frazier M.R., 2010. THERMODYNAMIC EFFECTS ON ORGANISMAL PERFORMANCE: IS HOTTER BETTER?. *Physiological and Biochemical Zoology.* 83(2), 197–206
- Appeltans W., Bouchet P., Boxshall G., De Broyer C., de Voogd N., Gordon D., Hoeksema B., Horton T., Kennedy M., Mees J., Poore G., Read G., Stöhr S., Walter T., Costello M., 2012. WORLD REGISTER OF MARINE SPECIES
- Arrhenius S., 1889. OBER DIE REACKTIONSGESCHWINDIGKEIT BEI DER INVERSION VON ROHRZUCKER DURCH SAUREN. *Z. Physik. Chem.* 4, 226–248.
- Asghari S., Johari S.A., Lee J.H., Kim Y.S., Jeon Y.B., Choi H.J., Moon M.C., Yu I.J., 2012. TOXICITY OF VARIOUS SILVER NANOPARTICLES COMPARED TO SILVER IONS IN *DAPHNIA MAGNA*. *J. Nanobiotechnol.* 10, 14

- Attig H., Dagnino A., Negri A., Jebali J., Boussetta H., Viarengo A., Dondero F., Banni M., 2010. UPTAKE AND BIOCHEMICAL RESPONSES OF MUSSELS *MYTILUS GALLOPROVINCIALIS* EXPOSED TO SUBLETHAL NICKEL CONCENTRATIONS. *Ecotoxicol Environ Saf.* 73(7), 1712-1719
- Auffan M., Rose J., Wiesner M.R., Bottero J.Y., 2009. CHEMICAL STABILITY OF METALLIC NANOPARTICLES: A PARAMETER CONTROLLING THEIR POTENTIAL CELLULAR TOXICITY IN VITRO. *Environ Pollut.* 157(4),1127-33
- Awasthi K.K., Awasthi A., Kumar N., Roy P., Awasthi K., Jhon P.J., 2013. SILVER NANOPARTICLE INDUCED CYTOTOXICITY, OXIDATIVE STRESS, AND DNA DAMAGE IN CHO CELLS. *Journal of Nanoparticle Research.* 15, 1898
- Banni M., Dondero F., Jebali J., Guerbej H., Boussetta H., Viarengo A., 2007. ASSESSMENT OF HEAVY METAL CONTAMINATION USING REAL-TIME PCR ANALYSIS OF MUSSEL METALLOTHIONEIN MT10 AND MT20 EXPRESSION: A VALIDATION ALONG THE TUNISIAN COAST. *Biomarkers.* 2007. 12(4):369-83.
- Banni M., Negri A., Mignone F., Boussetta H., Viarengo A., Dondero F., 2011. GENE EXPRESSION RHYTHMS IN THE MUSSEL *MYTILUS GALLOPROVINCIALIS* (LAM.) ACROSS AN ANNUAL CYCLE. *PLoS One.* 6(5):e18904
- Barmo C., Ciacci C., Canonico B., Fabbri R., Cortese K., Balbi T., Marcomini A., Poiana G., Gallo G., Canesi L., 2013. *IN VIVO* EFFECTS OF N-TiO₂ ON DIGESTIVE GLAND AND IMMUNE FUNCTION OF THE MARINE BIVALVE *MYTILUS GALLOPROVINCIALIS*. *Aquatic Toxicology.* 132–133, 9–18
- Barsyte D., White K.N., Lovejoy D.A., 1999. CLONING AND CHARACTERIZATION OF METALLOTHIONEIN cDNAs IN THE MUSSEL *MYTILUS EDULIS* L DIGESTIVE GLAND. *Comp Biochem Physiol C.* 122, 287–296
- Baker T.J., Tyler C.R., Galloway T.S., 2013. IMPACTS OF METAL AND METAL OXIDE NANOPARTICLES ON MARINE ORGANISMS, ENVIRONMENTAL POLLUTION. *Environmental Pollution.* 186,257–271
- Barriada J.L., Tappin A.D., Evans E.H., Achterberg E.P., 2007. DISSOLVED SILVER MEASUREMENTS IN SEAWATER. *Trends Anal. Chem.* 26, 809–817.
- Baun A., Hartmann N.B., Grieger K., Kusk K.O., 2008. ECOTOXICITY OF ENGINEERED NANOPARTICLES TO AQUATIC INVERTEBRATES: A BRIEF REVIEW AND RECOMMENDATIONS FOR FUTURE TOXICITY TESTING. *Ecotoxicology.* 17, 387-395

- Bayne B.L., 1976. MARINE MUSSELS. THEIR ECOLOGY AND PHYSIOLOGY. *Cambridge university press*. 511 pages
- Beiras, R., Pérez-Camacho, A., Albentosa, M., 1994. INFLUENCE OF TEMPERATURE ON THE PHYSIOLOGY OF GROWTH IN RUDITAPES DECUSSATUS (L.) LARVAE. *J. Shellfish Res.* 13, 77–83
- Benn T.M. and Westerhoff P., 2008. NANOPARTICLE SILVER RELEASED INTO WATER FROM COMMERCIALY AVAILABLE SOCK FABRICS. *Environ. Sci. Technol.* 42, 4133–4139
- Bernhardt E.S., Colman B.P., Hochella M.F. Jr, Cardinale B.J., Nisbet R.M., Richardson C.J., Yin L., 2010. AN ECOLOGICAL PERSPECTIVE ON NANOMATERIAL IMPACTS IN THE ENVIRONMENT. *J. Environ. Qual.* 39(6), 1954-1965
- Bièche I., Olivi M., Champème M.H., Vidaud D., Lidereau R., Vidaud M., 1998. NOVEL APPROACH TO QUANTITATIVE POLYMERASE CHAIN REACTION USING REAL-TIME DETECTION: APPLICATION TO THE DETECTION OF GENE AMPLIFICATION IN BREAST CANCER. *Int J Cancer.* 78, 661–666.
- Bièche I., Laurendeau I., Tozlu S., Olivi M., Vidaud D., Lidereau R., Vidaud M., 1999. QUANTITATION OF *MYC* GENE EXPRESSION IN SPORADIC BREAST TUMORS WITH A REAL-TIME REVERSE TRANSCRIPTION-PCR ASSAY. *Cancer Res.* 59, 2759–2765.
- Bernhardt E.S., Colman B.P., Hochella M.F. Jr, Cardinale B.J., Nisbet R.M., Richardson C.J., Yin L., 2010. AN ECOLOGICAL PERSPECTIVE ON NANOMATERIAL IMPACTS IN THE ENVIRONMENT. *J Environ Qual.* 39, 1954–1965
- Blackmore G., Wang W.X., 2004. The transfer of cadmium, mercury, methylmercury, and zinc in an intertidal rocky shore food chain. *J Exp Mar Bio Ecol.* 307, 91–110.
- Blaise C., Gagné F., Ferard J.F., Eullaffroy P., 2008. ECOTOXICITY OF SELECTED NANO-MATERIALS TO AQUATIC ORGANISMS. *Envir Toxic.* 223, 591-598
- Blaser S.A., Scheringer M., Macleod M., Hungerbühler K., 2008. ESTIMATION OF CUMULATIVE AQUATIC EXPOSURE AND RISK DUE TO SILVER: CONTRIBUTION OF NANO-FUNCTIONALIZED PLASTICS AND TEXTILES. *Sci Total Environ.* 390,396-409
- Boatti L., Robotti E., Marengo E., Viarengo A., Marsano F., 2012. EFFECTS OF NICKEL, CHLORPYRIFOS AND THEIR MIXTURE ON THE DICTYOSTELIUM DISCOIDEUM PROTEOME. *Int. J. Mol. Sci.* 13, 15679-15705

- Borković S.S., Saponjić J.S., Pavlović S.Z., Blagojević D.P., Milosević S.M., Kovacević T.B., Radojčić R.M., Spasić M.B., Zikić R.V., Sačić Z.S., 2005. THE ACTIVITY OF ANTIOXIDANT DEFENCE ENZYMES IN THE MUSSEL *MYTILUS GALLOPROVINCIALIS* FROM THE ADRIATIC SEA. *Comp Biochem Physiol C Toxicol Pharmacol.* 141(4):366-74
- Botta C., Labille J., Auffan M., Borschneck D., Miche H., Cabié M., Masion A., Rose J., Bottero J.Y., 2011. TiO₂-BASED NANOPARTICLES RELEASED IN WATER FROM COMMERCIALIZED SUNSCREENS IN A LIFE-CYCLE PERSPECTIVE: STRUCTURE AND QUANTITIES. *Environmental Pollution* 148, 1543-1550
- Bottero J.Y., Wiesner M.R., 2010. CONSIDERATIONS IN EVALUATING THE PHYSICOCHEMICAL PROPERTIES AND TRANSFORMATIONS OF INORGANIC NANOPARTICLES IN WATER. *Nanomedicine* 5(6), 1009-14
- Bozinovic F., Calosi P., Spicer J.I., 2011. PHYSIOLOGICAL CORRELATES OF GEOGRAPHIC RANGE IN ANIMALS. *Annu. Rev. Ecol. Evol. Syst.* 42, 155-79
- Brar S.K., Verma M., Tyagi R.D., Surampalli R.Y., 2010. ENGINEERED NANOPARTICLES IN WASTEWATER AND WASTEWATER SLUDGE- EVIDENCE AND IMPACTS. *Waste Management* 30, 504-520
- Buffet P.E., Zalouk-Vergnoux A., Châtel A., Berthet B., Métais I., Perrein-Ettajani H., Poirier L., Luna-Acosta A., Thomas-Guyon H., Risso-de Faverney C., Guibbolini M., Gilliland D., Valsami-Jones E., Mouneyrac C., 2014. A MARINE MESOCOSM STUDY ON THE ENVIRONMENTAL FATE OF SILVER NANOPARTICLES AND TOXICITY EFFECTS ON TWO ENDOBENTHIC SPECIES: THE RAGWORM *HEDISTE DIVERSICOLOR* AND THE BIVALVE MOLLUSC *SCROBICULARIA PLANA*. *Science of the Total Environment.* 470–471, 1151–1159
- Burnett N.P., Seabra R., de Pirro M., Wetthey D.S., Woodin S.A., Helmuth B., Zippay M.L., Sarà G., Monaco C., Lima F.P., 2013. AN IMPROVED NONINVASIVE METHOD FOR MEASURING HEARTBEAT OF INTERTIDAL ANIMALS. *Limnol. Oceanogr.: Methods.* 11, 91–100
- Byers J.E., Cuddington K., Jones C.G., Talley T.S., Hastings A., Lambrinos J.G., Crooks J.A., Wilson W.G., 2006. USING ECOSYSTEM ENGINEERS TO RESTORE ECOLOGICAL SYSTEMS. *Trends Ecol Evol.* 21, 493–500
- Canesi L., Viarengo A., Leonzio C., Filippelli M., Gallo G., 1999. HEAVY METALS AND GLUTATHIONE METABOLISM IN MUSSEL TISSUES. *Aquatic Toxicology.* 46, 67–76

- Canesi L., Ciacci C., Betti M., Fabbri R., Canonico B., Fantinati A., Marcomini A., Pojan G., 2008. IMMUNOTOXICITY OF CARBON BLACK NANOPARTICLES TO BLUE MUSSEL HEMOCYTES. *Environmental International* 34, 1114-1119
- Canesi L., Fabbri R., Gallo G., Vallotto D., Marcomini A., Pojana G., 2010a. BIOMARKERS IN *MYTILUS GALLOPROVINCIALIS* EXPOSED TO SUSPENSIONS OF SELECTED NANOPARTICLES (NANO CARBON BLACK, C60 FULLERENE, NANO-TiO₂, NANO-SiO₂). *Aquatic Toxicology* 100, 168-177
- Canesi L., Ciacci C., Vallotto D., Gallo G., Marcomini A., Pojana G., 2010b. *IN VITRO* EFFECTS OF SUSPENSIONS OF SELECTED NANOPARTICLES (C60 FULLERENE, TiO₂, SiO₂) ON MYTILUS HEMOCYTES. *Aquatic Toxicology* 96, 151-158
- Canesi L., Ciacci C., Fabbri R., Marcomini A., Pojana G., Gallo G., 2012. BIVALVE MOLLUSCS AS UNIQUE TARGET GROUP FOR NANOPARTICLES TOXICITY. *Marine Environmental Research*. 76, 16-21
- Cardoso J.F.M.F., Witte J.I.J., van der Veer H.W., 2006. INTRA- AND INTERSPECIES COMPARISON OF ENERGY FLOW IN BIVALVE SPECIES IN DUTCH COASTAL WATERS BY MEANS OF THE DYNAMIC ENERGY BUDGET (DEB) THEORY. *Journal of Sea Research*. 56, 182–197
- Carlson C., Hussain S.M., Schrand A.M., Braydich-Stolle L.K., Hess K.L., Jones R.L., Schlager J.J., 2008. UNIQUE CELLULAR INTERACTION OF SILVER NANOPARTICLES: SIZE-DEPENDENT GENERATION OF REACTIVE OXYGEN SPECIES. *J. Phys. Chem. B* 112 13608
- Cattaneo A.G., Gornati R., Chiriva-Internati M., Bernardini G., 2009. ECOTOXICOLOGY OF NANOMATERIALS: THE ROLE OF INVERTEBRATE TESTING. *Invertebrate Survival Journal*. 6, 78-97
- Cheng Y.W., Yin L.Y., Lin S.H., Wiesner M., Bernhardt E., Liu J., 2011. TOXICITY REDUCTION OF POLYMER-STABILIZED SILVER NANOPARTICLES BY SUNLIGHT. *J. Phys. Chem. C*. 115, 4425-4432
- Conover R.J., 1966. ASSIMILATION OF ORGANIC MATTER BY ZOOPLANKTON. *Limnol. Oceanogr.* 11, 338-354
- Coughlan J., 1969. THE ESTIMATION OF FILTERING RATE FROM THE CLEARANCE OF SUSPENSIONS. *Marine Biol.* 2, 356-358

- Croteau M.N., Dybowska A.D., Luoma S.N., Valsami-Jones E., 2011a. A NOVEL APPROACH REVEALS THAT ZINC OXIDE NANOPARTICLES ARE BIOAVAILABLE AND TOXIC AFTER DIETARY EXPOSURES. *Nanotoxicology*. 5, 79-90
- Croteau M.N., Misra S.K., Luoma S.N., Valsami-Jones E., 2011b. SILVER BIOACCUMULATION DYNAMICS IN A FRESHWATER INVERTEBRATE AFTER AQUEOUS AND DIETARY EXPOSURES TO NANOSIZED AND IONIC Ag. *Environ. Sci. Technol.* 45, 6600-6607
- D'Agata A., Fasulo S., Dallas L.J., Fisher A.S., Maisano M., Readman J.W., Jhaz A.N., 2013. ENHANCED TOXICITY OF 'BULK' TITANIUM DIOXIDE COMPARED TO 'FRESH' AND 'AGED' NANO-TiO₂ IN MARINE MUSSELS (MYTILUS GALLOPROVINCIALIS). *Nanotoxicology*. 8 (5), 549-558
- Dagnino A., Allen J.I., Moore M.N., Broeg K., Canesi L., Viarengo A., 2007. DEVELOPMENT OF AN EXPERT SYSTEM FOR THE INTEGRATION OF BIOMARKER RESPONSES IN MUSSELS INTO AN ANIMAL HEALTH INDEX. *Biomarkers*. 12, 155-172
- Darlington T.K., Neigh A.M., Spencer M.T., Nguyen O.T., Oldenburg S.J., 2009. NANOPARTICLE CHARACTERISTICS AFFECTING ENVIRONMENTAL FATE AND TRANSPORT THROUGH SOIL. *Environ. Toxicol. Chem.* 28, 1191-1199
- Dassenakis M., Scoullou M.J., Valavanidis A., 2007. INTEGRATED USE OF BIOMARKERS (SUPEROXIDE DISMUTASE, CATALASE AND LIPID PEROXIDATION) IN MUSSELS MYTILUS GALLOPROVINCIALIS FOR ASSESSING HEAVY METALS¹ POLLUTION IN COASTAL AREAS FROM THE SARONIKOS GULF OF GREECE. *Mar Pollut Bull.* 54 (9), 1361-1371
- Davis R.I., Etris S.F., 1997. DEVELOPMENT AND FUNCTIONS OF SILVER IN WATER-PURIFICATION AND DISEASE-CONTROL. *Catalysis Today* 36,107-114
- Defra, 2007. CHARACTERISING THE POTENTIAL RISKS POSED BY ENGINEERED NANOPARTICLES. Department for Environment, Food and Rural Affairs
- De M., Ghosh P.S., Rotello V.M., 2008. APPLICATIONS OF NANOPARTICLES IN BIOLOGY. *Adv. Mater.* 20, 4225
- Dineshram R., Subasri R., Somaraju K.R.C., Jayaraj K., Vedaprakash L., Ratnam K., Joshi S.V., Ventatesan R., 2009. BIOFOULING STUDIES ON NANOPARTICLES-BASED METAL OXIDE COATINGS ON

GLASS COUPONS EXPOSED TO MARINE ENVIRONMENT. *Colloids and Surfaces B: Biointerfaces* 74, 75-83

Dölken L., Schüler F., Dölken G., 1998. QUANTITATIVE DETECTION OF T-POSITIVE CELLS BY REAL-TIME QUANTITATIVE PCR USING FLUOROGENIC PROBES. *BioTechniques*. 25, 1058–1064

Dondero F., Piacentini L., Banni M., Rebelo M., Burlando B., Viarengo A., 2005. QUANTITATIVE PCR ANALYSIS OF TWO MOLLUSCAN METALLOTHIONEIN GENES UNVEILS DIFFERENTIAL EXPRESSION AND REGULATION. *Gene* 345, 259-270

Dondero F., Negri A., Boatti L., Marsano F., Mignone F., Viarengo A., 2010. TRANSCRIPTOMIC AND PROTEOMIC EFFECTS OF A NEONICOTINOID INSECTICIDE MIXTURE IN THE MARINE MUSSEL (*MYTILUS GALLOPROVINCIALIS*, LAM.). *Sc. Tot. Env.* 408, 3775–3786

Dondero F., Banni M., Negri A., Boatti L., Dagnino A., Viarengo A., 2011. INTERACTIONS OF A PESTICIDE/HEAVY METAL MIXTURE IN MARINE BIVALVES: A TRANSCRIPTOMIC ASSESSMENT. *BMC Genomics*. 12:195

Dunphy Guzman K., Finnegan M., Banfield J., 2006. INFLUENCE OF SURFACE POTENTIAL ON AGGREGATION AND TRANSPORT OF TITANIA NANOPARTICLES. *Envir Sc and Tech*. 40, 7688-7693

Eckert K.A., Kunkel T.A., 1991. DNA POLYMERASE FIDELITY AND THE POLYMERASE CHAIN REACTION. *PCR Methods Appl.* 1(1):17-24

Elechiguerra J.L., Larios-Lopez L., Liu C., Garcia-Gutierrez D., Camacho-Bragado A., Yacaman M. J., 2005. CORROSION AT THE NANOSCALE: THE CASE OF SILVER NANOWIRES AND NANOPARTICLES. *Chem. Mater.* 17, 6042-6052

Elzey S. and Grassian V., 2010. AGGLOMERATION, ISOLATION AND DISSOLUTION OF COMMERCIALY MANUFACTURED SILVER NANOPARTICLES IN AQUEOUS ENVIRONMENTS. *J. Nanopart. Res.* 12, 1945-1958

EPA, 2009. TOXICOLOGICAL REVIEW OF CERIUM OXIDE AND CERIUM COMPOUNDS. EPA/635/ R-08/002F

Fabbri E., Valbonesi P., Franzellitti S., 2008. HSP EXPRESSION IN BIVALVES. *Invertebr. Surviv. Journal*. 5, 135–161

- Fabrega J., Luoma S.N., Tyler C.R., Galloway T.S., Lead J.R., 2011. SILVER NANOPARTICLES: BEHAVIOUR AND EFFECTS IN THE AQUATIC ENVIRONMENT. *Environment International*. 37, 517–531
- Farkas J., Peter H., Christian P., Gallego Urrea J.A., Hassellöv M., Tuoriniemi J., Gustafsson S., Olsson E., Hylland K., Thomas K.V., 2011. CHARACTERIZATION OF THE EFFLUENT FROM A NANOSILVER PRODUCING WASHING MACHINE. *Environ Int*. 37(6), 1057-1062
- Farcy E., Voiseux C., Lebel J.M., Fiévet B., 2009. TRANSCRIPTIONAL EXPRESSION LEVELS OF CELL STRESS MARKER GENES IN THE PACIFIC OYSTER CRASSOSTREA GIGAS EXPOSED TO ACUTE THERMAL STRESS. *Cell Stress Chaperones*. 14(4):371-80.
- Food and Agriculture Organization of the United Nations (FAO), 2009. BIOSAFETY OF GENETICALLY MODIFIED ORGANISMS: BASIC CONCEPTS, METHODS AND ISSUES. Rome, FAO
- Franzellitti S., Buratti S., Donnini F., Fabbri E., 2010. EXPOSURE OF MUSSELS TO A POLLUTED ENVIRONMENT: INSIGHTS INTO THE STRESS SYNDROME DEVELOPMENT. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology*. 152 (1), 24-33
- Gauch A., Tuquan A., Assi H.A., 2009. ANTIBIOTIC REMOVAL FROM WATER: ELIMINATION OF AMOXICILLIN AND AMPICILLIN BY MICROSCALE AND NANOSCALE IRON PARTICLES. *Environmental Pollution*. 157, 1626–1635
- Gavanji S., Aziz H.A., Larki B., Mojiri A., 2013. BIOINFORMATICS PREDICTION OF INTERACTION OF SILVER NITRATE AND NANO SILVER ON CATALASE AND NITRAT REDUCTASE. *International Journal of Scientific Research in Environmental Sciences (IJSRES)*. 1(2), 26-35
- Gerard G.F., Fox D.K., Nathan M., D'Alessio J.M., 1997. REVERSE TRANSCRIPTASE. THE USE OF CLONED MOLONEY MURINE LEUKEMIA VIRUS REVERSE TRANSCRIPTASE TO SYNTHESIZE DNA FROM RNA. *Mol Biotechnol*. 8(1):61-77
- Ghosh Chaudhuri R., Paria S., 2012. CORE/SHELL NANOPARTICLES: CLASSES, PROPERTIES, SYNTHESIS MECHANISMS, CHARACTERIZATION, AND APPLICATIONS. *Chem. Rev*. 112 2373
- Gianguzza, P., Chemello, R., Raggio, S., 1996. DISTRIBUZIONE DI BRACHIDONTES PHARAONIS (P. FISHER, 1870) IN MEDITERRANEO. Proceedings of 57° Symposium of Italian Zoological Union, S. Benedetto del Tronto, Italy, 22 – 26 September 1996: 31

- Glover R.D., Miller J.M., Hutchison J.E., 2011. GENERATION OF METAL NANOPARTICLES FROM SILVER AND COPPER OBJECTS: NANOPARTICLE DYNAMICS ON SURFACES AND POTENTIAL SOURCES OF NANOPARTICLES IN THE ENVIRONMENT. *ACS Nano*. 5, 8950-8957
- Gomes T., Pereira C.G., Cardoso C., Pinheiro J.P., Cancio I., Bebianno M.J., 2012. ACCUMULATION AND TOXICITY OF COPPER OXIDE NANOPARTICLES IN THE DIGESTIVE GLAND OF *MYTILUS GALLOPROVINCIALIS*. *Aquat. Toxicol.* 118-119, 72-79
- Gomes T., Araújo O., Pereira R., Almeida A.C., Cravo A., Bebianno M.J., 2013a. GENOTOXICITY OF COPPER OXIDE AND SILVER NANOPARTICLES IN THE MUSSEL *MYTILUS GALLOPROVINCIALIS*. *Marine Environmental Research*. 84, 51-59
- Gomes T., Pereira C.G., Cardoso C., Bebianno M.J., 2013b. DIFFERENTIAL PROTEIN EXPRESSION IN MUSSELS *MYTILUS GALLOPROVINCIALIS* EXPOSED TO NANO AND IONIC AG. *Aquatic Toxicology*. 136–137, 79– 90
- Gosling E., 1992. THE MUSSEL *MYTILUS*: ECOLOGY, PHYSIOLOGY, GENETICS AND CULTURE. DEVELOPMENTS. In: GOSLING, E. (Ed.), *Aquaculture and Fishery Sciences*. Elsevier, Amsterdam, p. 589
- Gondikas A.P., Morris A., Reinsch B.C., Marinakos S.M., Lowry G.V., Hsu-Kim H., 2012. CYSTEINE-INDUCED MODIFICATIONS OF ZERO-VALENT SILVER NANOMATERIALS: IMPLICATIONS FOR PARTICLE SURFACE CHEMISTRY, AGGREGATION, DISSOLUTION, AND SILVER SPECIATION. *Environ. Sci. Technol.* 46, 7037-7045
- Gottschalk F., Sonderer T., Scholz R.W., Nowack B., 2009. Modeled ENVIRONMENTAL CONCENTRATIONS OF ENGINEERED NANOMATERIALS (TiO₂, ZnO, Ag, CNT, FULLERENES) FOR DIFFERENT REGIONS. *Environ. Sci. Technol.* 43 (24), 9216–9222
- Gottschalk F., Sonderer T., Scholz R.W., Nowack B., 2010. POSSIBILITIES AND LIMITATIONS OF MODELING ENVIRONMENTAL EXPOSURE TO ENGINEERED NANOMATERIALS BY PROBABILISTIC MATERIAL FLOW ANALYSIS. *Environmental Toxicology and Chemistry*. 29 (5), 1036-1048
- Gottschalk F., Nowack B., 2011. THE RELEASE OF ENGINEERED NANOMATERIALS TO THE ENVIRONMENT. *J. Environ. Monit.* 13, 1145
- Graedel T.E., 1992. CORROSION MECHANISMS FOR SILVER EXPOSED TO THE ATMOSPHERE. *J. Electrochem. Soc.* 139, 1963-1970

- Guy R.A., Payment P., Krull U.J., Horgen P.A., 2003. REAL-TIME PCR FOR QUANTIFICATION OF *GIARDIA* AND *CRYPTOSPORIDIUM* IN ENVIRONMENTAL WATER SAMPLES AND SEWAGE. *Appl. Environ. Microbiol.* 69 (9), 5178-5185
- Gut M., Leutenegger C.M., Huder J.B., Pedersen N.C., Lutz H., 1999. ONE-TUBE FLUOROGENIC REVERSE TRANSCRIPTION-POLYMERASE CHAIN REACTION FOR THE QUANTITATION OF FELINE CORONAVIRUSES. *J. Virol. Methods.* 77, 37–46
- Hanna S.K., Miller R.J., Muller E.B., Nisbet R.M., Lenihan H.S., 2013. IMPACT OF ENGINEERED ZINC OXIDE NANOPARTICLES ON THE INDIVIDUAL PERFORMANCE OF *MYTILUS GALLOPROVINCIALIS*. *PLoS One.* 8(4), e61800.
- Hartmann N.B., Baun A., 2010. THE NANO COCKTAIL: ECOTOXICOLOGICAL EFFECTS OF ENGINEERED NANOPARTICLES IN CHEMICAL MIXTURES. *Integrative Environmental Assessment Management.* 6, 311-314
- Hasselov M., Readman J.W., Ranville J.F., Tiede K., 2008. NANOPARTICLE ANALYSIS AND CHARACTERIZATION METHODOLOGIES IN ENVIRONMENTAL RISK ASSESSMENT OF ENGINEERED NANOPARTICLES. *Ecotoxicology.* 17(5), 344-61
- Hasselov M., Kaegi R., 2009. ANALYSIS AND CHARACTERIZATION OF MANUFACTURED NANOPARTICLES IN AQUATIC ENVIRONMENTS. In: *Lead, J.R., Smith, E. (Eds.), Envir and Hu Hea Imp of Nanot.* John Wiley & Sons, Inc., United Kingdom, 211-266
- Haven D.S., Morales-Alamo R., 1966. ASPECTS OF BIODEPOSITION BY OYSTERS AND OTHER INVERTEBRATE FILTER FEEDERS. *Limnol Oceanogr.* 11, 487–498
- Heid C.A., Stevens J., Livak K.J., Williams P.M., 1996. REAL TIME QUANTITATIVE PCR. *Genome Res.* 6,986-994
- Hochella Jr. M.F., Lower S.K., Maurice P.A., Penn R.L., Sahai N., Sparks D.L., Twining B.S., 2008. NANOMINERALS, MINERAL NANOPARTICLES, AND EARTH SYSTEMS. *Science* 319, 1631-1635
- Hochella Jr M.F., Aruguete D., Kim B., Madden A.S., 2012. NATURALLY OCCURRING INORGANIC NANOPARTICLES: GENERAL ASSESSMENT AND A GLOBAL BUDGET FOR ONE OF EARTH'S LAST UNEXPLORED GEOCHEMICAL COMPONENTS. In: *Nature's Nanostructures.* Pan Stanford Publishing, Australia. 1-42

- Holden P.A., Nisbet R.M., Lenihan H.S., Miller R.J., Cherr G.N., Schimel J.P., Gardea-Torresdey J.L., 2013. ECOLOGICAL NANOTOXICOLOGY: INTEGRATING NANOMATERIAL HAZARD CONSIDERATIONS ACROSS THE SUBCELLULAR, POPULATION, COMMUNITY, AND ECOSYSTEMS LEVELS. *Acc Chem Res.* 46(3), 813-22
- Holland P.M., Abramson R.D., Watson R., Gelfand D.H., 1991. DETECTION OF SPECIFIC POLYMERASE CHAIN REACTION PRODUCT BY UTILIZING THE 5'-3' EXONUCLEASE ACTIVITY OF THERMUS AQUATICUS DNA POLYMERASE. *Proceedings of the National Academy of Sciences of the United States of America.* 88 (16), 7276–7280
- Holling C.S., 1959. SOME CHARACTERISTICS OF SIMPLE TYPES OF PREDATION AND PARASITISM. *Canadian Entomologist.* 91, 385–398
- Hyung H., Fortner J., Hughes J., Kim J., 2007. NATURAL ORGANIC MATTER STABILIZE CARBON NANOTUBES IN THE AQUEOUS PHASE. *Envir. Sc. and Tech.* 41, 179-184
- Hussain S.M., Hess K.L., Gearhart J.M., Geiss K.T., Schlager J.J., 2005. IN VITRO TOXICITY OF NANOPARTICLES IN BRL 3A RAT LIVER CELLS. *Toxicol. In Vitro* 19, 975–983
- Impellitteri C.A., Tolaymat T.M., Scheckel K.G., 2009. THE SPECIATION OF SILVER NANOPARTICLES IN ANTIMICROBIAL FABRIC BEFORE AND AFTER EXPOSURE TO A HYPOCHLORITE/DETERGENT SOLUTION. *J. Environ. Qual.* 38, 1528-1530
- Jackim, E., Hamlin J. M., Sonis S.. 1970. EFFECTS OF METAL POISONING ON 5 LIVER ENZYMES IN THE KILLIFISH (FUNDULUS HETEROCLITUS). *J. Fish Res. Bd. Can.* 27, 383-390
- Jager T., Alvarez O.A., Kammenga J.E., Kooijman S.A.L.M., 2005. MODELLING NEMATODE LIFE CYCLES USING DYNAMIC ENERGY BUDGETS. *Funct Ecol.* 19, 136–144.
- Jager T., Vandenbrouck T., Baas J., Coen W., Kooijman S.A.L.M., 2010. A BIOLOGYBASED APPROACH FOR MIXTURE TOXICITY OF MULTIPLE ENDPOINTS OVER THE LIFE CYCLE. *Ecotoxicology.* 19, 351–361.
- Jeong S.H., Hwang Y.H., Yi S.C., 2005. ANTIBACTERIAL PROPERTIES OF PADDED PP/PENONWOVENS INCORPORATING NANO-SIZED SILVER COLLOIDS. *J. Mat. Sci.* 40, 5413-5418
- Jiang J., Oberdorster G., Biswas P., 2009. CHARACTERIZATION OF SIZE, SURFACE CHARGE, AND AGGLOMERATION STATE OF NANOPARTICLE DISPERSIONS FOR TOXICOLOGICAL STUDIES. *J Nanopart Res.* 11, 77-89

- Josefsson A., Livak K., Gyllenstein U., 1999. DETECTION AND QUANTITATION OF HUMAN PAPILLOMAVIRUS BY USING THE FLUORESCENT 5' EXONUCLEASE ASSAY. *J Clin Microbiol.* 37, 490–496
- JRC-IRMM, 2011. ZINC OXIDE NM-110, NM-111, NM-112, NM-113 CHARACTERISATION AND TEST ITEM PREPARATION NM-SERIES OF REPRESENTATIVE MANUFACTURED NANOMATERIALS
- Ju-Nam Y., Lead J.R.. 2008. MANUFACTURED NANOPARTICLES: AN OVERVIEW OF THEIR CHEMISTRY, INTERACTIONS AND POTENTIAL ENVIRONMENTAL IMPLICATIONS. *Sci Total Environ.* 400, 396-414
- Kach D.J., Ward J.E., 2008. THE ROLE OF MARINE AGGREGATES IN THE INGESTION OF PICOPLANKTON-SIZE PARTICLES BY SUSPENSION-FEEDING MOLLUSCS. *Mar. Biol.* 153, 797-805
- Kádár E., Lowe D., Solé M., Fisher A., Jha A., Readman J.W., Hutchinson T.H., 2010. UPTAKE AND BIOLOGICAL RESPONSES TO NANO-Fe VERSUS SOLUBLE FeCl₃ IN EXCISED MUSSEL GILLS. *Anal Bioanal Chem.* 396, 657–666.
- Kaegi R., Voegelin A., Sinnet B., Zuleeg S., Hagendorfer H., Burkhardt M., Siegrist H., 2008. BEHAVIOR OF METALLIC SILVER NANOPARTICLES IN A PILOT WASTEWATER TREATMENT PLANT. *Environ. Sci. Technol.* 45, 3902-3908
- Kaegi R., Sinnet B., Zuleeg S., Hagendorfer H., Mueller E., Vonbank R., Boller M., Burkhardt M. 2010. RELEASE OF SILVER NANOPARTICLES FROM OUTDOOR FACADES. *Environ Pollut.* 158(9), 2900-2905
- Kafert S., Krauter J., Ganser A., Eder M., 1999. DIFFERENTIAL QUANTITATION OF ALTERNATIVELY SPLICED MESSENGER RNAs USING ISOFORM-SPECIFIC REAL-TIME RT-PCR. *Anal Biochem.* 269, 210–213
- Kamel N., Attig H., Dagnino A., Boussetta H., Banni M., 2012. INCREASED TEMPERATURES AFFECT OXIDATIVE STRESS MARKERS AND DETOXIFICATION RESPONSE TO BENZO[A]PYRENE EXPOSURE IN MUSSEL MYTILUS GALLOPROVINCIALIS. *Arch Environ Contam Toxicol* 63(4), 534–43
- Kaplan E.L., Meier P., 1958. NONPARAMETRIC ESTIMATION FROM INCOMPLETE OBSERVATIONS. *Journal of the American Statistical Association.* 53, 457-481
- Kearney M., Simpson S.J., Raubenheimer D., Helmuth B., 2010. MODELLING THE ECOLOGICAL NICHE FROM FUNCTIONAL TRAITS. *Phil. Trans. Soc. B.* 365, 3469-3483

- Keller A.A., Wang H., Zhou D., Lenihan H.S., Cherr G., Cardinale B.J., Miller R., Ji Z., 2010. STABILITY AND AGGREGATION OF METAL OXIDE NANOPARTICLES IN NATURAL AQUEOUS MATRICES. *Environ. Sci. Technol.* 44, 1962–1967
- Keller A.A., Garner K., Miller R.J., Lenihan H.S., 2012. TOXICITY OF NANO-ZERO VALENT IRON TO FRESHWATER AND MARINE ORGANISMS. *PLoS One.* 7, e43983
- Kester, D. R., Duedall, I. W., Connors, D. N. and Pytkowicz, R. M., 1967. PREPARATION OF ARTIFICIAL SEAWATER. *Limnology & Oceanography.* 12, 176–179.
- Kim S., Choi J.E., Choi J., Chung K.H., Park K., Yi J., Ryu D.Y., 2009. OXIDATIVE STRESS-DEPENDENT TOXICITY OF SILVER NANOPARTICLES IN HUMAN HEPATOMA CELLS. *Toxicol in Vitro.* 23 (6), 1076-1084
- Kim B., Park C.S., Murayama M., Hochella M.F., 2010. DISCOVERY AND CHARACTERIZATION OF SILVER SULFIDE NANOPARTICLES IN FINAL SEWAGE SLUDGE PRODUCTS. *Environ. Sci. Technol.* 44, 7509-7514
- Kim B., Murayama M., Colman B.P., Hochella M.F., 2012. CHARACTERIZATION AND ENVIRONMENTAL IMPLICATIONS OF NANO- AND LARGER TiO₂ PARTICLES IN SEWAGE SLUDGE, AND SOILS AMENDED WITH SEWAGE SLUDGE. *J. Environ. Monit.* 14, 1128–1136
- Klaine S.J., Alvarez P.J.J., Batley G.E., Fernandes T.F., Handy R.D., Lyon D.Y., Mahendra S., McLaughlin M.J., Lead J.R., 2008. NANOMATERIALS IN THE ENVIRONMENT: BEHAVIOR, FATE, BIOAVAILABILITY, AND EFFECTS. *Environ. Toxicol. Chem.* 27, 1825–1851
- Koehler A., Marx U., Broeg K., Bahns S., Bressling J., 2008. EFFECTS OF NANOPARTICLES IN *MYTILUS EDULIS* GILLS AND HEPATOPANCREAS: A NEW THREAT TO MARINE LIFE? *Mar. Environ. Res.* 66, 12-14
- Kooijman S.A.L.M., 2000. DYNAMIC ENERGY AND MASS BUDGETS IN BIOLOGICAL SYSTEMS. *Cambridge University Press*, Great Britain
- Kooijman S.A.L.M., 2010. DYNAMIC ENERGY BUDGET THEORY FOR METABOLIC ORGANISATION. *Cambridge University Press*, Great Britain
- Kotewicz M.L., Sampson C.M., D'Alessio J.M., Gerard G.F., 1988. ISOLATION OF CLONED MOLONEY MURINE LEUKEMIA VIRUS REVERSE TRANSCRIPTASE LACKING RIBONUCLEASE H ACTIVITY. *Nucleic Acid*

- Krutuyakov Y.A., Kudrynskiy A.A., Olenin A.Y., Lisichkin G.V., 2008. SYNTHESIS AND PROPERTIES OF SILVER NANOPARTICLES: ADVANCES AND PROSPECTS. *Russ. Chem. Rev.* 77, 233
- Kühnel D., Nickel C., 2014. THE OECD EXPERT MEETING ON ECOTOXICOLOGY AND ENVIRONMENTAL FATE - TOWARDS THE DEVELOPMENT OF IMPROVED OECD GUIDELINES FOR THE TESTING OF NANOMATERIALS. *Science of The Total Environment.* 472, 347-353
- Labille J., Feng J., Botta C., Borschneck D., Sammut M., Cabie M., Auffan M., Rose J., Bottero J.Y., 2010. AGING OF TiO₂ NANOCOMPOSITES USED IN SUNSCREEN. DISPERSION AND FATE OF THE DEGRADATION PRODUCTS IN AQUEOUS ENVIRONMENT. *Environmental Pollution* 158, 3482-3489
- Lacoste A., De Cian M.C., Cueff A., Poulet S.A., 2001. NORADRENALINE AND ALPHA-ADRENERGIC SIGNALING INDUCE THE HSP70 GENE PROMOTER IN MOLLUSC IMMUNE CELLS. *J. Cell. Sci.* 114, 3557-3564
- Lee D., Cohen R.E., Rubner M.F., 2005. ANTIBACTERIAL PROPERTIES OF AG NANOPARTICLE LOADED MULTILAYERS AND FORMATION OF MAGNETICALLY DIRECTED ANTIBACTERIAL MICROPARTICLES. *Langmuir.* 21, 9651-9659
- Lika K., Kearney M.R., Freitas V., van der Veer H. W., van der Meer J., Wijsman J,W.M., Pecquerie I., Kooijman S.A.L.M., 2011. THE COVARIATION METHOD FOR ESTIMATING THE PARAMETERS OF THE STANDARD DYNAMIC ENERGY BUDGET MODEL I: PHILOSOPHY AND APPROACH. *Journal of Sea Research.* 66, 270-277
- Lilliefors H.W., 1967. ON THE KOLMOGOROV-SMIRNOV TEST FOR NORMALITY WITH MEAN AND VARIANCE UNKNOWN. *Journal of the American Statistical Association.* 62 (318) 399-402.
- Liu J., Hurt R.H., 2010. ION RELEASE KINETICS AND PARTICLE PERSISTENCE IN AQUEOUS NANO-SILVER COLLOIDS. *Environ. Sci. Technol.* 44, 2169-2175
- Liu J.Y., Pennell K.G., Hurt R.H., 2011. KINETICS AND MECHANISMS OF NANOSILVER OXYSULFIDATION. *Environ. Sci. Technol.* 45, 7345-7353
- Livingstone D.R., 2001. CONTAMINANT-STIMULATED REACTIVE OXYGEN SPECIES PRODUCTION AND OXIDATIVE DAMAGE IN AQUATIC ORGANISMS. *Mar. Pollut. Bull.* 42, 656-666

- Lyamichev V., Brow M.A.D., Dahlberg J.E., 1993. STRUCTURE-SPECIFIC ENDONUCLEOLYTIC CLEAVAGE OF NUCLEIC ACIDS BY EUBACTERIAL DNA POLYMERASES. *Science* 260:778-783
- Lockwood B.L., Sanders J.G., Somero G.N., 2010. TRANSCRIPTOMIC RESPONSES TO HEAT STRESS IN INVASIVE AND NATIVE BLUE MUSSELS (GENUS MYTILUS): MOLECULAR CORRELATES OF INVASIVE SUCCESS. *J Exp Biol.* 213,3548-58
- Luoma S.N., 2008. SILVER NANOTECHNOLOGIES AND THE ENVIRONMENT: OLD PROBLEMS OR NEW CHALLENGES? *PEN 15*
- Machado S., Stawiński W., Slonina P., Pinto A.R., Grosso J.P., Nouws H.P.A., Albergaria J.T., Delerue-Matos C., 2013. APPLICATION OF GREEN ZERO-VALENT IRON NANOPARTICLES TO THE REMEDIATION OF SOILS CONTAMINATED WITH IBUPROFEN. *Science of The Total Environment.* 461–462, 323–329
- Makino S.I., Cheun H.I., Watarai M., Uchida I., Takeshi K., 2001. DETECTION OF ANTHRAX SPORES FROM THE AIR BY REAL-TIME PCR. *Lett Appl Microbiol.* 33(3), 237-240
- Marchi B., Burlando B., Panfoli I., Viarengo A. 2000. INTERFERENCE OF HEAVY METAL CATIONS WITH FLUORESCENT Ca^{2+} PROBES DOES NOT AFFECT Ca^{2+} MEASUREMENTS IN LIVING CELLS. *Cell Calcium.* 28 (4), 225–231
- Marsano F., Boatti L., Ranzato E., Cavaletto M., Magnelli V., Dondero F., Viarengo A., 2009. EFFECTS OF MERCURY ON DICTYOSTELIUM DISCOIDEUM: PROTEOMICS REVEALS THE MOLECULAR MECHANISMS OF PHYSIOLOGICAL ADAPTATION AND TOXICITY. *J. Proteome Res.* 9, 2839-2854
- Martell M., Gómez J., Esteban J.I., Sauleda S., Quer J., Cabot B., Esteban R., Guardia J., 1999. HIGH-THROUGHPUT REAL-TIME REVERSE TRANSCRIPTION-PCR QUANTITATION OF HEPATITIS C VIRUS RNA. *J Clin Microbiol.* 37, 327–332
- Martin B.D.,Parsons S.A.,Jefferson B, 2009. REMOVAL AND RECOVERY OF PHOSPHATE FROM MUNICIPAL WASTEWATERS USING A POLYMERIC ANION EXCHANGER BOUND WITH HYDRATED FERRIC OXIDE NANOPARTICLES. *Water Science and Technology*, 60 (10), 2637-2645
- Massey F.J., 1951. THE KOLMOGOROV-SMIRNOV TEST FOR GOODNESS OF FIT. *Journal of the American Statistical Association.* 46 (253), 68-78
- Matranga V., Corsi I., 2012. TOXIC EFFECTS OF ENGINEERED NANOPARTICLES IN THE MARINE ENVIRONMENT:

- Maurer-Jones M.A., Mousavi M.P.S., Chen L.D., Buhlmann P., Haynes C.L., 2013. CHARACTERIZATION OF SILVER ION DISSOLUTION FROM SILVER NANOPARTICLES USING FLUOROUS-PHASE ION-SELECTIVE ELECTRODES AND ASSESSMENT OF RESULTANT TOXICITY TO *SHEWANELLA ONEIDENSIS*. *Chem. Sci.*, 4, 2564
- McCarthy M.P., Carroll D.L., Ringwood A.H., 2013. TISSUE SPECIFIC RESPONSES OF OYSTERS, *CRASSOSTREA VIRGINICA*, TO SILVER NANOPARTICLES. *Aquat. Toxicol.* 138-139, 123-128
- McMahon M., Lopez R., Meyer H.M., Feldman L.C., Haglund R.F., 2005. RAPID TARNISHING OF SILVER NANOPARTICLES IN AMBIENT LABORATORY AIR. *Appl. Phys. B: Lasers Opt.* 80, 915-921
- McQuillan J.S., Infante H.G., Stokes E., Shaw A.M., 2012. SILVER NANOPARTICLE ENHANCED SILVER ION STRESS RESPONSE IN *ESCHERICHIA COLI K12*. *Nanotoxicology.* 6, 857-866
- Meyhofer E., 1985. COMPARATIVE PUMPING RATES IN SUSPENSION-FEEDING BIVALVES. *Mar. Biol.* 85, 137-142
- Mo X., Qiao Y., Sun Z., Sun X., Li Y., 2012. MOLECULAR TOXICITY OF EARTHWORMS INDUCED BY CADMIUM CONTAMINATED SOIL AND BIOMARKERS SCREENING. *J Environ Sci (China)*. 24(8), 1504-1510.
- Montes M.O., Hanna S.K., Lenihan H.S., Keller A.A., 2012. UPTAKE, ACCUMULATION, AND BIOTRANSFORMATION OF METAL OXIDE NANOPARTICLES BY A MARINE SUSPENSION FEEDER. *J Hazard Mater.* 225–226, 139–145.
- Moore M.N., 2006. DO NANOPARTICLES PRESENT ECOTOXICOLOGICAL RISKS FOR THE HEALTH OF THE AQUATIC ENVIRONMENT? *Environmental international.* 32, 967-976
- Moore M.N., Icarus Allen J., McVeigh A., 2006. ENVIRONMENTAL PROGNOSTICS: AN INTEGRATED MODEL SUPPORTING LYSOSOMAL STRESS RESPONSES AS PREDICTIVE BIOMARKERS OF ANIMAL HEALTH STATUS. *Marine Environmental Research.* 61, 278-304
- Muller E.B., Osenberg C.W., Schmitt R.J., Holbrook S.J., Nisbet R.M., 2010. SUBLETHAL TOXICANT EFFECTS WITH DYNAMIC ENERGY BUDGET THEORY: APPLICATION TO MUSSEL OUTPLANTS. *Ecotoxicology.* 19, 38-47

- Nason J.A., McDowell S.A., Callahan T.W., 2012. EFFECTS OF NATURAL ORGANIC MATTER TYPE AND CONCENTRATION ON THE AGGREGATION OF CITRATE-STABILIZED GOLD NANOPARTICLES. *J. Environ. Monit.* 14, 1885-1892
- Navarro E., Baun A., Behra R., Hartmann N.B., Filser J., Miao A.J., Quigg A., Santschi P.H., Sigg L., 2008. ENVIRONMENTAL BEHAVIOR AND ECOTOXICITY OF ENGINEERED NANOPARTICLES TO ALGAE, PLANTS, AND FUNGI. *Ecotoxicology* 17, 372-386
- Nel A., Xia T., Mädler L., Li N., 2006. TOXIC POTENTIAL OF MATERIALS AT THE NANOLEVEL. *Science*. 311, 622-627
- Nel A.E., Mädler L., Velegol D., Xia T., Hoek E.M.V., Somasundaran P., Klaessig F., Castranova V., Thompson M., 2009. UNDERSTANDING BIOPHYSICO-CHEMICAL INTERACTIONS AT THE NANO-BIO INTERFACE. *Nature Mater.* 8, 543-557
- Negri A., Oliveri C., Sforzini S., Mignione F., Viarengo A., Banni M., 2013. TRANSCRIPTIONAL RESPONSE OF THE MUSSEL *MYTILUS GALLOPROVINCIALIS* (LAM.) FOLLOWING EXPOSURE TO HEAT STRESS AND COPPER. *PLoS One*. 8(6):e66802.
- Nowack B., Bucheli T.D., 2007. OCCURRENCE, BEHAVIOR AND EFFECTS OF NANOPARTICLES IN THE ENVIRONMENT. *Environ. Pollut.* 150, 5-22
- Oberdorster E., 2004. MANUFACTURED NANOMATERIALS (FULLERENES, C60) INDUCE OXIDATIVE STRESS IN THE BRAIN OF JUVENILE LARGEMOUTH BASS. *Environmental Health Perspectives* 112, 1058-1062
- OECD, 2009. NANOTECHNOLOGY: AN OVERVIEW BASED ON INDICATORS AND STATISTICS (DSTI/DOC(2009)7eJT03267289)
- Okano Y., Krassimira R.H., Leutenegger C.M., Jackson L.E., Denison R.F., Gebreyesus B., Lebauer D., Scow K.M., 2004. APPLICATION OF REAL-TIME PCR TO STUDY EFFECTS OF AMMONIUM ON POPULATION SIZE OF AMMONIA-OXIDIZING BACTERIA IN SOIL. *Appl Environ Microbiol.* 70(2), 1008-1016
- Oliver P.G., 1992. BIVALVED SEASHELLS OF THE RED SEA. Verlag Christa Hemmen & National Museum of Wales, Cardiff. 330 pp

- Panyala N.R., Pena-Mendez E.M., Havel J., 2008. SILVER OR SILVER NANOPARTICLES: A HAZARDOUS THREAT TO THE ENVIRONMENT AND HUMAN HEALTH? *J. Appl. Biomed.* 6, 117-129
- Park B., Donaldson K., Duffin R., Tran L., Kelly F., Mudway I., Morin J.P., Guest R., Jenkinson P., Samaras Z., Giannouli M., Kouridis H., Martin P., 2008. HAZARD AND RISK ASSESSMENT OF A NANOPARTICULATE CERIUM OXIDE-BASED DIESEL FUEL ADDITIVE E A CASE STUDY. *Inhal. Toxicol.* 20, 547-566
- PEN (Project on emerging Nanotechnologies), 2012. SILVER NANOTECHNOLOGY: A DATABASE OF SILVER NANOTECHNOLOGY IN COMMERCIAL PRODUCTS
- Peralta-Videa J.R., Zhao L., Lopez-Moreno M.L., de la Rosa G., Hong J., Gardea-Torresdey J.L., 2011. NANOMATERIALS AND THE ENVIRONMENT: A REVIEW FOR THE BIENNIUM 2008–2010. *J Hazard Mater* 186, 1-15
- Pfaffl M.W., Horgan G.W., Dempfle L., 2002. RELATIVE EXPRESSION SOFTWARE TOOL (REST) FOR GROUPWISE COMPARISON AND STATISTICAL ANALYSIS OF RELATIVE EXPRESSION RESULTS IN REAL-TIME PCR. *Nucleic Acids Res.* 30 (9) e36
- Poulton S.W., Raiswell R., 2005. CHEMICAL AND PHYSICAL CHARACTERISTICS OF IRON OXIDES IN RIVERINE AND GLACIAL MELTWATER SEDIMENTS. *Chemical Geology.* 218, 203–221
- Pouvreau S., Bourles Y., Lefebvre S., Gangnery A., Alunno-Bruscia M., 2006. APPLICATION OF A DYNAMIC ENERGY BUDGET MODEL TO THE PACIFIC OYSTER, *CRASSOSTREA GIGAS*, REARED UNDER VARIOUS ENVIRONMENTAL CONDITIONS. *Journal of Sea Research.* 52 (2), 156-167
- Raiswell R., Tranter M., Benning L.G., Siegert M., De'ath R., Huybrechts P., Payne T., 2006. CONTRIBUTIONS FROM GLACIALLY DERIVED SEDIMENT TO THE GLOBAL IRON (OXYHYDR)OXIDE CYCLE: IMPLICATIONS FOR IRON DELIVERY TO THE OCEANS. *Geochimica et Cosmochimica Acta.* 70, 2765–2780
- Recillas S., Colón J., Casals E., Gonzales E., Puntès V., Sanchez A., Font X., 2010. CHROMIUM VI ADSORPTION ON CERIUM OXIDE NANOPARTICLES AND MORPHOLOGY CHANGES DURING THE PROCESS. *Journal of Hazardous Materials.* 184, 425–431

- Reidy B., Haase A., Lunch a., Dawson K.A., Lynch I., 2013. MECHANISMS OF SILVER NANOPARTICLE RELEASE, TRANSFORMATION AND TOXICITY: A CRITICAL REVIEW OF CURRENT KNOWLEDGE AND RECOMMENDATIONS FOR FUTURE STUDIES AND APPLICATIONS. *Materials*. 6, 2295-2350
- Reijnders L., 2009. THE RELEASE OF TiO₂ AND SiO₂ NANOPARTICLES FROM NANOCOMPOSITES. *Polym Degradation Stab.* 94, 873-876
- Richir J., Gobert S., 2014. THE EFFECT OF SIZE, WEIGHT, BODY COMPARTMENT, SEX AND REPRODUCTIVE STATUS ON THE BIOACCUMULATION OF 19 TRACE ELEMENTS IN ROPE-GROWN MYTILUS GALLOPROVINCIALIS. *Ecological Indicators*. 36, 33-47
- Ringwood A.H., McCarthy M., Bates T.C., Carroll D.L., 2010. THE EFFECTS OF SILVER NANOPARTICLES ON OYSTER EMBRYOS. *Mar. Environ. Res.* 69 (Suppl.), S49-S51
- Rodríguez-Ortega M.J., Grøsvik B.E., Rodríguez-Ariza A., Goksøyr A., López-Barea J., 2003. CHANGES IN PROTEIN EXPRESSION PROFILES IN BIVALVE MOLLUSCS (*CHAMAELEA GALLINA*) EXPOSED TO FOUR MODEL ENVIRONMENTAL POLLUTANTS. *Proteomics*. 3, 1535–1543
- Roh Y., Park Y., Park K., Choi J., 2010. ECOTOXICOLOGICAL INVESTIGATION OF CeO₂ AND TiO₂ NANOPARTICLES ON THE SOIL NEMATODE *CAENORHABDITIS ELEGANS* USING GENE EXPRESSION, GROWTH, FERTILITY AND SURVIVAL ENDPOINTS. *Environmental Toxicology and Pharmacology* 29, 167-172
- Royal Society and Royal Academy of Engineering, 2004. NANOSCIENCE AND NANOTECHNOLOGIES: OPPORTUNITIES AND UNCERTAINTIES. *RS policy document 19/04*. London: *The Royal Society*
- Rosenkranz P., Chaudhry Q., Stone V., Fernandes T.F., 2009. A COMPARISON OF NANOPARTICLE AND FINE PARTICLE UPTAKE BY *DAPHNIA MAGNA*. *Environ. Toxicol. Chem.* 28, 2142-2149
- Safriel U.N., Sasson-frostig Z., 1988. CAN COLONISING MUSSEL OUTCOMPETE INDIGENOUS MUSSEL? *J. Exp. Mar. Biol. Ecol.* 117, 211 – 226
- Sambrook J., Fritsch E.F., Maniatis T. 1989. MOLECULAR CLONING: A LABORATORY MANUAL. 2nd ed. N.Y., cold spring harbor laboratory, cold spring harbor laboratory press, pp.1659
- Sánchez A., Recillas S., Font X., Casals E., Gonzalez E., Puentes V., 2011. ECOTOXICITY OF, AND REMEDIATION WITH, ENGINEERED INORGANIC NANOPARTICLES IN THE ENVIRONMENT. *Trends in Analytical Chemistry*. 30 (3), 507-516

- Santini G., De Pirro M., Chelazzi G., 1999. IN SITU AND LABORATORY ASSESSMENT OF HEART RATE IN A MEDITERRANEAN LIMPET USING A NON-INVASIVE TECHNIQUE. *Physiol. Biochem. Zool.* 72, 198-204
- Santore, R.C. and C.T. Driscoll, 1995. THE CHESS MODEL FOR CALCULATING CHEMICAL EQUILIBRIA IN SOILS AND SOLUTIONS. *Chemical Equilibrium and Reaction Models*, SSSA Special Publication 42, The Soil Society of America, American Society of Agronomy
- Sarà G., Lo Martire M., Buffa G., Mannino A.M., Badalamenti, F., 2007. THE FOULING COMMUNITY AS AN INDICATOR OF FISH FARMING IMPACT IN MEDITERRANEAN. *Aquac. Res.* 38, 66 – 75
- Sarà G., De Pirro M., 2011. HEART BEAT RATE OF INVASIVE BRACHIDONTES PHARAONIS WITH RESPECT TO THE NATIVE MYTILASTER MINIMUS WITHIN THE MEDITERRANEAN SEA AT VARYING SALINITIES. *Ital. J. Zool.* 78, 193-197
- Sarà G., Reid G.K., Rinaldi A., Palmeri V., Troell M., Kooijman S.A.L.M., 2012. GROWTH AND REPRODUCTIVE SIMULATION OF CANDIDATE SHELLFISH SPECIES AT FISH CAGES IN THE SOUTHERN MEDITERRANEAN: DYNAMIC ENERGY BUDGET (DEB) MODELLING FOR INTEGRATED MULTI-TROPHIC AQUACULTURE. *Aquaculture*. 324-325, 259-266
- Saraiva S., van der Meer J., Kooijman S.A.L.M., Sousa T., 2011. DEB PARAMETERS ESTIMATION FOR MYTILUS EDULIS. *Journal of Sea Research*. 66, 289–296
- Scown T.M., van Aerle R., Tyler C.R., 2010. REVIEW: DO ENGINEERED NANOPARTICLES POSE A SIGNIFICANT THREAT TO THE AQUATIC ENVIRONMENT? *Crit. Rev. Toxicol.* 40, 653–670
- Shaw B.J., Handy R.D., 2011. PHYSIOLOGICAL EFFECTS OF NANOPARTICLES ON FISH: A COMPARISON OF NANOMETALS VERSUS METAL IONS. *Environmental international*. 37, 1083-1097
- Sharma V.K., Yngard R.A., Lin Y., 2009. SILVER NANOPARTICLES: GREEN SYNTHESIS AND THEIR ANTIMICROBIAL ACTIVITIES. *Adv. Colloid Sur. Interface* 145, 83
- Shrivastava S., Bera T., Roy A., Singh G., Ramachandrarao P., Dash D., 2007. CHARACTERIZATION OF ENHANCED ANTIBACTERIAL EFFECTS OF NOVEL SILVER NANOPARTICLES. *Nanotechnology* 18, 225103
- Snape J.R., Maund S.J., Pickford D.B., Hutchinson T.H., 2004. ECOTOXICOGENOMICS: THE CHALLENGE OF INTEGRATING GENOMICS INTO AQUATIC AND TERRESTRIAL ECOTOXICOLOGY. *Aquatic Toxicology* 67, 143-154

- Stadtman E.R., 1992. PROTEIN OXIDATION AND AGING. *Science* 257, 1220–1224
- Stadtman E.R., Starke-Reed P.E., Oliver C.N., Carney J.M., Floyd R.A., 1992. PROTEIN MODIFICATIONS IN AGING. In: Emerit, I., Chance, B. (Eds.), *Free Radicals and Aging*. Birkhäuser, Basel, pp. 64–72
- Stensberg M.C., Wei O., McLamore E.S., Porterfield D.M., Wei A., Sepulveda M.S., 2011. TOXICOLOGICAL STUDIES ON SILVER NANOPARTICLES: CHALLENGES AND OPPORTUNITIES IN ASSESSMENT, MONITORING AND IMAGING. *Nanomedicine (Lond)*. 6(5), 879–898
- Stolpe B., Hasselöv M., 2007. CHANGES IN SIZE DISTRIBUTION OF FRESH WATER NANOSCALE COLLOIDAL MATTER AND ASSOCIATED ELEMENTS ON MIXING IN SEAWATER. *Geochimica and Cosmochimica Acta*. 71, 3292-3301
- Stone V., Nowack B., Baun A., van den Brink N., Kammer F., Dusinska M., Handy R., Hankin S., Hasselöv M., Jøner E., Fernandes TF., 2010. NANOMATERIALS FOR ENVIRONMENTAL STUDIES: CLASSIFICATION, REFERENCE MATERIAL ISSUES, AND STRATEGIES FOR PHYSICO-CHEMICAL CHARACTERISATION. *Sci Total Environ*. 408(7), 1745-54
- Suchanek T.H., 1986. MUSSELS AND THEIR ROLE IN STRUCTURING ROCKY SHORE COMMUNITIES. In: Moore PG, Seed R, editors. *The Ecology of Rocky Coasts*. New York: Columbia University Press.
- Suliman Y.A.O., Ali D., Alarifi S., Harrath A.H., Mansour L., Alwasel S.H., 2013. EVALUATION OF CYTOTOXIC, OXIDATIVE STRESS, PROINFLAMMATORY AND GENOTOXIC EFFECT OF SILVER NANOPARTICLES IN HUMAN LUNG EPITHELIAL CELLS. *Environ Toxicol*. [Epub ahead of print]
- Sun T.Y., Gottschalk F., Hungerbühler K., Nowack B. COMPREHENSIVE PROBABILISTIC MODELLING OF ENVIRONMENTAL EMISSIONS OF ENGINEERED NANOMATERIALS. *Environmental Pollution*. 185, 69–76
- Suzuki T., Higgins P.J., Crawford D.R., 2000. CONTROL SELECTION FOR RNA QUANTITATION. *BioTechniques*. 29, 332-337.
- Tedesco S., Doyle H., Redmond G., Sheehan D., 2008. GOLD NANOPARTICLES AND OXIDATIVE STRESS IN *MYTILUS EDULIS*. *Mar. Environ. Res*. 66, 131-133
- Tedesco S., Doyle H., Blasco J., Redmond G., Sheehan D., 2010. OXIDATIVE STRESS AND TOXICITY OF GOLD NANOPARTICLES IN *MYTILUS EDULIS*. *Aquat. Toxicol*. 100, 178-186

- Thompson E.L., Taylor D.A., Nair S.V., Birch G., Haynes P.A., Raftos D.A., 2012. PROTEOMIC DISCOVERY OF BIOMARKERS OF METAL CONTAMINATION IN SYDNEY ROCK OYSTERS (*SACCOSTREA GLOMERATA*). *Aquatic Toxicology*. 109, 202–212
- Tiede K., Tear S.P., David H., Boxall A.B., 2009. IMAGING OF ENGINEERED NANOPARTICLES AND THEIR AGGREGATES UNDER FULLY LIQUID CONDITIONS IN ENVIRONMENTAL MATRICES. *Water Res.* 43(13), 3335-3343
- Underwood A.J., 1997. EXPERIMENTS IN ECOLOGY: THEIR LOGICAL DESIGN AND INTERPRETATION USING ANALYSIS OF VARIANCE. *Cambridge University Press*, 504 pages
- Uno H., Cai T., Pencina M.J., D'Agostino R.B., Wei L.J., 2009. ON THE C-STATISTICS FOR EVALUATING OVERALL ADEQUACY OF RISK PREDICTION PROCEDURES WITH CENSORED SURVIVAL DATA. *Harvard University Biostatistics Working Paper Series*. Paper 101
- Upadhyayula V.K.K., Gaghamshetty V., 2010. APPRECIATING THE ROLE OF CARBON NANOTUBE COMPOSITES IN PREVENTING BIOFOULING AND PROMOTING BIOFILMS ON MATERIAL SURFACES IN ENVIRONMENTAL ENGINEERING. *Biotechnology Advances* 28, 802-816
- Valko M., Morris H., Cronin M.T., 2005. METALS, TOXICITY AND OXIDATIVE STRESS. *Curr Med Chem.* 12 (10), 1161-1208
- VanGuilder H.D., Vrana K.E., Freeman W.M., 2002. TWENTY-FIVE YEARS OF QUANTITATIVE PCR FOR GENE EXPRESSION ANALYSIS. *Nucleic Acids Res.* 30(9): e36
- VanGuilder H.D., Vrana K.E., Freeman W.M., 2008. TWENTY-FIVE YEARS OF QUANTITATIVE PCR FOR GENE EXPRESSION ANALYSIS. *BioTechniques* 44: 619–626
- Vergani L., Grattarola M., Grasselli E., Dondero F., Viarengo A., 2007. MOLECULAR CHARACTERIZATION AND FUNCTION ANALYSIS OF MT-10 AND MT-20 METALLOTHIONEIN ISOFORMS FROM *MYTILUS GALLOPROVINCIALIS*. *Archives of Biochemistry and Biophysics*. 465 (1), 247-253
- Viarengo A., Canesi L., Pertica M., Mancinelli G., Accomando R., Smaal A.C., Orunesu M., 1995. STRESS ON STRESS RESPONSE: A SIMPLE MONITORING TOOL IN THE ASSESSMENT OF A GENERAL STRESS SYNDROME IN MUSSELS. *Marine Environmental Research*. 39, 245-248

- Viarengo A., Ponzano E., Dondero F., Fabbri R., 1997. A SIMPLE SPECTROPHOTOMETRIC METHOD FOR METALLOTHIONEIN EVALUATION IN MARINE ORGANISMS: AN APPLICATION TO MEDITERRANEAN AND ANTARCTIC MOLLUSCS. *Marine Environmental Research*. 44, 69-84
- Viarengo A., Lowe D., Bolognesi C., E., Koehler A., 2007. THE USE OF BIOMARKERS IN BIOMONITORING: A 2-TIER APPROACH ASSESSING THE LEVEL OF POLLUTANT-INDUCED STRESS SYNDROME IN SENTINEL ORGANISMS. *Comp Biochem Physiol C Toxicol Pharmacol*. 146(3), 281-300
- Vlahogianni T., Dassenakis M., Scoullou M. J., Valavanidis A., 2007. INTEGRATED USE OF BIOMARKERS (SUPEROXIDE DISMUTASE, CATALASE AND LIPID PEROXIDATION) IN MUSSELS *MYTILUS GALLOPROVINCIALIS* FOR ASSESSING HEAVY METALS' POLLUTION IN COASTAL AREAS FROM THE SARONIKOS GULF OF GREECE. *Mar. Pollut. Bull.*, 54, 1361–1371
- Von der Kammer F., Ferguson P.L., Holden P.A, Masion A., Rogers K.R., Klaine S.J., Koelmans A.A., Horne N., Unrine J.M., 2012. ANALYSIS OF ENGINEERED NANOMATERIALS IN COMPLEX MATRICES (ENVIRONMENT AND BIOTA): GENERAL CONSIDERATIONS AND CONCEPTUAL CASE STUDIES. *Environ. Toxicol. Chem.* 31, 32–49
- Wang W.X., 2001. COMPARISON OF METAL UPTAKE RATE AND ABSORPTION EFFICIENCY IN MARINE BIVALVES. *Environmental Toxicology and Chemistry*. 20 (6), 1367–1373
- Ward E.J., Shumway S.E., 2004. SEPARATING THE GRAIN FROM THE CHAFF: PARTICLE SELECTION IN SUSPENSION- AND DEPOSIT-FEEDING BIVALVES. *J. Exp. Mar. Biol. Ecol.* 300, 83-130
- Ward J.E., Kach D.J., 2009. MARINE AGGREGATES FACILITATE INGESTION OF NANOPARTICLES BY SUSPENSION FEEDING BIVALVES. *Mar. Environ. Res.* 68, 137-42
- Weydert C.J., Cullen J.J., 2010. MEASUREMENT OF SUPEROXIDE DISMUTASE, CATALASE AND GLUTATHIONE PEROXIDASE IN CULTURED CELLS AND TISSUE. *Nat Protoc.* 5(1):51-66
- Widdows J., Donkin P., 1992. MUSSELS AND ENVIRONMENTAL CONTAMINANTS: BIOACCUMULATION AND PHYSIOLOGICAL ASPECTS. In: *Gosling E (ed) The mussel Mytilus: ecology, physiology, genetics and culture*. Elsevier, Amsterdam, p 383–424
- Widdows J., Staff F., 2006. BIOLOGICAL EFFECTS OF CONTAMINANTS: MEASUREMENT OF SCOPE FOR GROWTH IN MUSSELS. *ICES Techniques in marine environmental sciences*. Plymouth Marine Laboratory, Plymouth, UK

- Wood C.M., Playle R.C., Hogstrand C., 1993. PHYSIOLOGY AND MODELING OF MECHANISMS OF SILVER UPTAKE AND TOXICITY IN FISH. *Environ. Toxicol. Chem.* 18, 71–83
- Xie B., Xu Z., Guo W., Li Q., 2008. IMPACT OF NATURAL ORGANIC MATTER ON THE PHYSICOCHEMICAL PROPERTIES OF AQUEOUS C60 NANOPARTICLES. *Envir Sci and Tech.* 42, 2853-2859
- Yan L.J., Forster M.J., 2011. CHEMICAL PROBES FOR ANALYSIS OF CARBOXYLATED PROTEINS: A REVIEW. *J Chromatogr B Analyt Technol Biomed Life Sci.* 879(17-18):1308-15
- Yan L.J., Liu L., Forster M.J., 2012. REVERSIBLE INACTIVATION OF DIHYDROLIPOAMIDE DEHYDROGENASE BY ANGEL'S SALT. *Sheng Wu Wu Li Hsueh Bao* 28(4):341-350
- Yang H.L., Zeng Q.Y., Li E.Q., Zhu S.G., Zhou X.W., 2004. MOLECULAR CLONING, EXPRESSION AND CHARACTERIZATION OF GLUTATHIONE S-TRANSFERASE FROM *MYTILUS EDULIS*. *Comp.Bioc.Phis.* 139(2), 175-182
- Yu S.J., Yin Y.G., Liu J.F., 2013. SILVER NANOPARTICLES IN THE ENVIRONMENT. *Environ. Sci.:Processes Impacts.* 15, 78
- Zhao C.M., Wang W.X., 2011. COMPARISON OF ACUTE AND CHRONIC TOXICITY OF SILVER NANOPARTICLES AND SILVER NITRATE TO *DAPHNIA MAGNA*. *Environ. Toxicol. Chem.* 30, 885-892
- Zhu X., Chang Y., Chen Y., 2010. TOXICITY AND BIOACCUMULATION OF TiO₂ NANOPARTICLE AGGREGATES IN *DAPHNIA MAGNA*. *Chemosphere* 78, 209-221
- Zuykov M., Pelletier E., Demers S., 2011a. COLLOIDAL COMPLEXED SILVER AND SILVER NANOPARTICLES IN EXTRAPALLIAL FLUID OF *MYTILUS EDULIS*. *Marine Environmental Research* 71, 17-21
- Zuykov M., Pelletier E., Belzile C., Demers S., 2011b. ALTERATION OF SHELL NACRE MICROMORPHOLOGY IN BLUE MUSSEL *MYTILUS EDULIS* AFTER EXPOSURE TO FREE-IONIC SILVER AND SILVER NANOPARTICLES. *Chemosphere.* 84, 701–706.