Maura Tomatis

List of Publications by Year
in descending order

71 papers	2,771 citations	172457 29 h-index	189892 50 g-index
73 all docs	73 docs citations	73 times ranked	3343 citing authors

#	Article	IF	Citations
1	Chrysotile asbestos migration in air from contaminated water: An experimental simulation. Journal of Hazardous Materials, 2022, 424, 127528.	12.4	8
2	Morphological and chemical properties of fibrous antigorite from lateritic deposit of New Caledonia in view of hazard assessment. Science of the Total Environment, 2021, 777, 146185.	8.0	9
3	Identification and Preliminary Toxicological Assessment of a Non-Regulated Mineral Fiber: Fibrous Antigorite from New Caledonia. Environmental and Engineering Geoscience, 2020, 26, 89-97.	0.9	7
4	Hydroxyl radicals and oxidative stress: the dark side of Fe corrosion. Colloids and Surfaces B: Biointerfaces, 2020, 185, 110542.	5.0	29
5	New Tools for the Evaluation of Asbestos-Related Risk during Excavation in an NOA-Rich Geological Setting. Environmental and Engineering Geoscience, 2020, 26, 113-120.	0.9	2
6	Nearly free surface silanols are the critical molecular moieties that initiate the toxicity of silica particles. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27836-27846.	7.1	76
7	Thermal inertization of amphibole asbestos modulates Fe topochemistry and surface reactivity. Journal of Hazardous Materials, 2020, 398, 123119.	12.4	13
8	Cytotoxicity of fractured quartz on THP-1 human macrophages: role of the membranolytic activity of quartz and phagolysosome destabilization. Archives of Toxicology, 2020, 94, 2981-2995.	4.2	20
9	Quantitative Flow Cytometric Evaluation of Oxidative Stress and Mitochondrial Impairment in RAW 264.7 Macrophages after Exposure to Pristine, Acid Functionalized, or Annealed Carbon Nanotubes. Nanomaterials, 2020, 10, 319.	4.1	8
10	LiCoO2 particles used in Li-ion batteries induce primary mutagenicity in lung cells via their capacity to generate hydroxyl radicals. Particle and Fibre Toxicology, 2020, 17, 6.	6.2	15
11	Iron from a geochemical viewpoint. Understanding toxicity/pathogenicity mechanisms in iron-bearing minerals with a special attention to mineral fibers. Free Radical Biology and Medicine, 2019, 133, 21-37.	2.9	30
12	Î– potential evidences silanol heterogeneity induced by metal contaminants at the quartz surface: Implications in membrane damage. Colloids and Surfaces B: Biointerfaces, 2017, 157, 449-455.	5.0	16
13	Surface reactivity of amphibole asbestos: a comparison between crocidolite and tremolite. Scientific Reports, 2017, 7, 14696.	3.3	27
14	Assessment of the potential respiratory hazard of volcanic ash from future Icelandic eruptions: a study of archived basaltic to rhyolitic ash samples. Environmental Health, 2017, 16, 98.	4.0	19
15	The iron-catalysed surface reactivity and health-pertinent physical characteristics of explosive volcanic ash from Mt. Etna, Italy. Journal of Applied Volcanology, 2017, 6, .	2.0	19
16	Assessment of asbestos exposure during a simulated agricultural activity in the proximity of the former asbestos mine of Balangero, Italy. Journal of Hazardous Materials, 2016, 308, 321-327.	12.4	27
17	Gallic acid grafting modulates the oxidative potential of ferrimagnetic bioactive glass-ceramic SC-45. Colloids and Surfaces B: Biointerfaces, 2016, 148, 592-599.	5.0	7
18	Editor's Highlight: Abrasion of Artificial Stones as a New Cause of an Ancient Disease. Physicochemical Features and Cellular Responses. Toxicological Sciences, 2016, 153, 4-17.	3.1	29

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19	Gallic acid grafting to a ferrimagnetic bioactive glass-ceramic. Journal of Non-Crystalline Solids, 2016, 432, 167-175.	3.1	26
20	Physico-chemical properties of quartz from industrial manufacturing and its cytotoxic effects on alveolar macrophages: The case of green sand mould casting for iron production. Journal of Hazardous Materials, 2016, 312, 18-27.	12.4	5
21	Revisiting the paradigm of silica pathogenicity with synthetic quartz crystals: the role of crystallinity and surface disorder. Particle and Fibre Toxicology, 2015, 13, 32.	6.2	77
22	Why does the hemolytic activity of silica predict its pro-inflammatory activity?. Particle and Fibre Toxicology, 2014, 11, 76.	6.2	62
23	Toxicity of boehmite nanoparticles: impact of the ultrafine fraction and of the agglomerates size on cytotoxicity and pro-inflammatory response. Inhalation Toxicology, 2014, 26, 545-553.	1.6	12
24	The surface reactivity and implied toxicity of ash produced from sugarcane burning. Environmental Toxicology, 2014, 29, 503-516.	4.0	10
25	The behaviour of an old catalyst revisited in a wet environment: Co ions in APO-5 split water under mild conditions. Physical Chemistry Chemical Physics, 2014, 16, 7074-7082.	2.8	7
26	In vitro cellular responses to silicon carbide particles manufactured through the Acheson process: Impact of physico-chemical features on pro-inflammatory and pro-oxidative effects. Toxicology in Vitro, 2014, 28, 856-865.	2.4	12
27	Imogolite: An Aluminosilicate Nanotube Endowed with Low Cytotoxicity and Genotoxicity. Chemical Research in Toxicology, 2014, 27, 1142-1154.	3.3	26
28	In Search of the Chemical Basis of the Hemolytic Potential of Silicas. Chemical Research in Toxicology, 2013, 26, 1188-1198.	3.3	72
29	Carbon in Intimate Contact with Quartz Reduces the Biological Activity of Crystalline Silica Dusts. Chemical Research in Toxicology, 2013, 26, 46-54.	3.3	10
30	Physicochemical and toxicological profiling of ash from the 2010 and 2011 eruptions of EyjafjallajÃ¶kull and GrÃmsvÃ¶tn volcanoes, Iceland using a rapid respiratory hazard assessment protocol. Environmental Research, 2013, 127, 63-73.	7.5	60
31	The respiratory health hazard of tephra from the 2010 Centennial eruption of Merapi with implications for occupational mining of deposits. Journal of Volcanology and Geothermal Research, 2013, 261, 376-387.	2.1	52
32	In vitro cellular responses to silicon carbide nanoparticles: impact of physico-chemical features on pro-inflammatory and pro-oxidative effects. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	29
33	Surface Reactivity and Cell Responses to Chrysotile Asbestos Nanofibers. Chemical Research in Toxicology, 2012, 25, 884-894.	3.3	21
34	Hematite Nanoparticles Larger than 90 nm Show No Sign of Toxicity in Terms of Lactate Dehydrogenase Release, Nitric Oxide Generation, Apoptosis, and Comet Assay in Murine Alveolar Macrophages and Human Lung Epithelial Cells. Chemical Research in Toxicology, 2012, 25, 850-861.	3.3	47
35	Sakurajima volcano: a physico-chemical study of the health consequences of long-term exposure to volcanic ash. Bulletin of Volcanology, 2012, 74, 913-930.	3.0	39
36	Model System to Study the Influence of Aggregation on the Hemolytic Potential of Silica Nanoparticles. Chemical Research in Toxicology, 2011, 24, 1869-1875.	3.3	48

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37	Interaction of Spherical Silica Nanoparticles with Neuronal Cells: Sizeâ€Dependent Toxicity and Perturbation of Calcium Homeostasis. Small, 2011, 7, 766-774.	10.0	88
38	The Ironâ€Related Molecular Toxicity Mechanism of Synthetic Asbestos Nanofibres: A Model Study for Highâ€Aspectâ€Ratio Nanoparticles. Chemistry - A European Journal, 2011, 17, 350-358.	3.3	65
39	Effect of chemical composition and state of the surface on the toxic response to high aspect ratio nanomaterials. Nanomedicine, 2011, 6, 899-920.	3.3	81
40	Mineralogical analyses and in vitro screening tests for the rapid evaluation of the health hazard of volcanic ash at Rabaul volcano, Papua New Guinea. Bulletin of Volcanology, 2010, 72, 1077-1092.	3.0	22
41	High aspect ratio materials: role of surface chemistry vs. length in the historical â€œlong and short amosite asbestos fibersâ€. Inhalation Toxicology, 2010, 22, 984-998.	1.6	40
42	New Detoxification Processes for Asbestos Fibers in the Environment. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2010, 73, 368-377.	2.3	16
43	The Effect of Weathering on Ecopersistence, Reactivity, and Potential Toxicity of Naturally Occurring Asbestos and Asbestiform Minerals. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2009, 72, 305-314.	2.3	23
44	Role of Associated Mineral Fibres in Chrysotile Asbestos Health Effects: The Case of Balangeroite. Annals of Occupational Hygiene, 2009, 53, 491-7.	1.9	18
45	Weathering of chrysotile asbestos by the serpentine rock-inhabiting fungus Verticillium leptobactrum. FEMS Microbiology Ecology, 2009, 69, 132-141.	2.7	39
46	A new approach to the decontamination of asbestos-polluted waters by treatment with oxalic acid under power ultrasound. Ultrasonics Sonochemistry, 2008, 15, 420-427.	8.2	29
47	Bioweathering of chrysotile by fungi isolated in ophiolitic sites. FEMS Microbiology Letters, 2008, 285, 242-249.	1.8	41
48	Structural Defects Play a Major Role in the Acute Lung Toxicity of Multiwall Carbon Nanotubes: Physicochemical Aspects. Chemical Research in Toxicology, 2008, 21, 1690-1697.	3.3	210
49	The combination of oxalic acid with power ultrasound fully degrades chrysotile asbestos fibres. Journal of Environmental Monitoring, 2007, 9, 1064.	2.1	23
50	Iron-Loaded Synthetic Chrysotile:â€‰ A New Model Solid for Studying the Role of Iron in Asbestos Toxicity. Chemical Research in Toxicology, 2007, 20, 380-387.	3.3	81
51	A Biomimetic Approach to the Chemical Inactivation of Chrysotile Fibres by Lichen Metabolites. Chemistry - A European Journal, 2007, 13, 4081-4093.	3.3	42
52	Soil Fungi Reduce the Iron Content and the DNA Damaging Effects of Asbestos Fibers. Environmental Science & Technology, 2006, 40, 5793-5798.	10.0	47
53	Reactivity of carbon nanotubes: Free radical generation or scavenging activity?. Free Radical Biology and Medicine, 2006, 40, 1227-1233.	2.9	279
54	Different cellular responses evoked by natural and stoichiometric synthetic chrysotile asbestos. Toxicology and Applied Pharmacology, 2005, 206, 356-364.	2.8	50

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55	Inorganic Materials and Living Organisms: Surface Modifications and Fungal Responses to Various Asbestos Forms. Chemistry - A European Journal, 2005, 11, 5611-5618.	3.3	34
56	POTENTIAL TOXICITY OF NONREGULATED ASBESTIFORM MINERALS: BALANGEROITE FROM THE WESTERN ALPS. PART 3: DEPLETION OF ANTIOXIDANT DEFENSES. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2005, 68, 41-49.	2.3	34
57	POTENTIAL TOXICITY OF NONREGULATED ASBESTIFORM MINERALS: BALANGEROITE FROM THE WESTERN ALPS. PART 1: IDENTIFICATION AND CHARACTERIZATION. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2005, 68, 1-19.	2.3	83
58	POTENTIAL TOXICITY OF NONREGULATED ASBESTIFORM MINERALS: BALANGEROITE FROM THE WESTERN ALPS. PART 2: OXIDANT ACTIVITY OF THE FIBERS. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2005, 68, 21-39.	2.3	28
59	Chrysotile asbestos is progressively converted into a non-fibrous amorphous material by the chelating action of lichen metabolites. Journal of Environmental Monitoring, 2005, 7, 764.	2.1	51
60	Relationship between the state of the surface of four commercial quartz flours and their biological activity in vitro and in vivo. International Journal of Hygiene and Environmental Health, 2004, 207, 89-104.	4.3	73
61	Long and short fiber amosite asbestos alters at a different extent the redox metabolism in human lung epithelial cells. Toxicology and Applied Pharmacology, 2003, 193, 106-115.	2.8	39
62	Ascorbic Acid Modifies the Surface of Asbestos:â€‰ Possible Implications in the Molecular Mechanisms of Toxicity. Chemical Research in Toxicology, 2003, 16, 328-335.	3.3	31
63	SURFACE REACTIVITY, CYTOTOXICITY, AND TRANSFORMING POTENCY OF IRON-COVERED COMPARED TO UNTREATED REFRACTORY CERAMIC FIBERS. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2002, 65, 2007-2027.	2.3	20
64	Loss of Surface Reactivity upon Heating Amphibole Asbestos. Langmuir, 2002, 18, 4345-4350.	3.5	23
65	Spontaneous polymerisation on amphibole asbestos: relevance to asbestos removal. Chemical Communications, 2001, , 2182-2183.	4.1	6
66	Free radical activity of natural and heat treated amphibole asbestos. Journal of Inorganic Biochemistry, 2001, 83, 211-216.	3.5	16
67	Iron inhibits the nitric oxide synthesis elicited by asbestos in murine macrophages. Free Radical Biology and Medicine, 2001, 31, 412-417.	2.9	26
68	Free radical generation in the toxicity of inhaled mineral particles: the role of iron speciation at the surface of asbestos and silica. Redox Report, 2001, 6, 235-241.	4.5	76
69	Surface Properties of Vitreous Fibers. Journal of Colloid and Interface Science, 2000, 224, 169-178.	9.4	10
70	The Role of Mechanochemistry in the Pulmonary Toxicity Caused by Particulate Minerals. Journal of Materials Synthesis and Processing, 2000, 8, 145-153.	0.3	18
71	Reactive Sites at the Surface of Crocidolite Asbestosâ€. Langmuir, 1999, 15, 5742-5752.	3.5	28