Marcello Brigante

List of Publications by Year
in descending order

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99 papers	4,123 citations	87723 38 h-index	133063 59 g-index
99 all docs	99 docs citations	99 times ranked	4019 citing authors

#	Article	IF	Citations
1	Assessment of the Fe(III)â€“EDDS Complex in Fenton-Like Processes: From the Radical Formation to the Degradation of Bisphenol A. Environmental Science & Technology, 2013, 47, 1952-1959.	4.6	310
2	Atmospheric photochemistry at a fatty acidâ€“coated air-water interface. Science, 2016, 353, 699-702.	6.0	133
3	Performance and selectivity of the terephthalic acid probe for OH as a function of temperature, pH and composition of atmospherically relevant aqueous media. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 222, 70-76.	2.0	125
4	Development of a new homogenous photo-Fenton process using Fe(III)-EDDS complexes. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 239, 17-23.	2.0	122
5	Assessing the photochemical transformation pathways of acetaminophen relevant to surface waters: Transformation kinetics, intermediates, and modelling. Water Research, 2014, 53, 235-248.	5.3	106
6	Sulfate Radical Photogeneration Using Fe-EDDS: Influence of Critical Parameters and Naturally Occurring Scavengers. Environmental Science & Technology, 2015, 49, 14343-14349.	4.6	100
7	Activation of persulfate by Fe(III) species: Implications for 4-tert-butylphenol degradation. Journal of Hazardous Materials, 2017, 322, 380-386.	6.5	99
8	UVA-UVB activation of hydrogen peroxide and persulfate for advanced oxidation processes: Efficiency, mechanism and effect of various water constituents. Journal of Hazardous Materials, 2018, 347, 279-287.	6.5	93
9	Classification of clouds sampled at the puy de DÃ´me (France) based on 10 yr of monitoring of their physicochemical properties. Atmospheric Chemistry and Physics, 2014, 14, 1485-1506.	1.9	92
10	Phototransformation and ecotoxicity of the drug Naproxen-Na. Environmental Chemistry Letters, 2003, 1, 237-241.	8.3	76
11	Mechanism of carboxylic acid photooxidation in atmospheric aqueous phase: Formation, fate and reactivity. Atmospheric Environment, 2012, 56, 1-8.	1.9	76
12	Photoenhanced Reaction of Ozone with Chlorophyll at the Seawater Surface. Journal of Physical Chemistry C, 2009, 113, 2071-2077.	1.5	73
13	Photoenhanced Uptake of NO₂ by Pyrene Solid Films. Journal of Physical Chemistry A, 2008, 112, 9503-9508.	1.1	71
14	Disinfection of water inoculated with Enterococcus faecalis using solar/Fe(III)EDDS-H2O2 or S2O82â˜ process. Water Research, 2017, 118, 249-260.	5.3	69
15	Rapid oxidation of paracetamol by Cobalt(II) catalyzed sulfite at alkaline pH. Catalysis Today, 2018, 313, 155-160.	2.2	69
16	Photochemical degradation of sunscreen agent 2-phenylbenzimidazole-5-sulfonic acid in different water matrices. Water Research, 2013, 47, 5865-5875.	5.3	67
17	Assessing the phototransformation of diclofenac, clofibric acid and naproxen in surface waters: Model predictions and comparison with field data. Water Research, 2016, 105, 383-394.	5.3	67
18	Mechanistic Insights on the Photosensitized Chemistry of a Fatty Acid at the Air/Water Interface. Environmental Science & Technology, 2016, 50, 11041-11048.	4.6	64

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19	Degradation of lansoprazole and omeprazole in the aquatic environment. Chemosphere, 2006, 63, 1087-1093.	4.2	62
20	Photochemical processes involving the UV absorber benzophenone-4 (2-hydroxy-4-methoxybenzophenone-5-sulphonic acid) in aqueous solution: Reaction pathways and implications for surface waters. Water Research, 2013, 47, 5943-5953.	5.3	62
21	The pH-dependent photochemistry of anthraquinone-2-sulfonate. Photochemical and Photobiological Sciences, 2010, 9, 323-330.	1.6	61
22	Reactive Uptake of Ozone by Chlorophyll at Aqueous Surfaces. Environmental Science & Technology, 2008, 42, 1138-1143.	4.6	60
23	Fe(III)â€“EDDS complex in Fenton and photo-Fenton processes: from the radical formation to the degradation of a target compound. Environmental Science and Pollution Research, 2014, 21, 12154-12162.	2.7	59
24	Enhanced oxidation of aniline using Fe(III)-S(IV) system: Role of different oxysulfur radicals. Chemical Engineering Journal, 2019, 362, 183-189.	6.6	57
25	New insights into the environmental photochemistry of 5-chloro-2-(2,4-dichlorophenoxy)phenol (triclosan): Reconsidering the importance of indirect photoreactions. Water Research, 2015, 72, 271-280.	5.3	56
26	Photochemical production of organic matter triplet states in water samples from mountain lakes, located below or above the tree line. Chemosphere, 2012, 88, 1208-1213.	4.2	55
27	Humic acid in ice: Photo-enhanced conversion of nitrogen dioxide into nitrous acid. Atmospheric Environment, 2010, 44, 5443-5450.	1.9	54
28	Photochemistry of 1-Nitronaphthalene: A Potential Source of Singlet Oxygen and Radical Species in Atmospheric Waters. Journal of Physical Chemistry A, 2010, 114, 2830-2836.	1.1	53
29	Effect of dissolved organic compounds on the photodegradation of the herbicide MCPA in aqueous solution. Water Research, 2010, 44, 6053-6062.	5.3	53
30	Assessing the occurrence of the dibromide radical (Br2â•) in natural waters: Measures of triplet-sensitised formation, reactivity, and modelling. Science of the Total Environment, 2012, 439, 299-306.	3.9	50
31	A better understanding of hydroxyl radical photochemical sources in cloud waters collected at the puy de DÃ´me station â€“ experimental versus modelled formation rates. Atmospheric Chemistry and Physics, 2015, 15, 9191-9202.	1.9	50
32	Phototransformation of anthraquinone-2-sulphonate in aqueous solution. Photochemical and Photobiological Sciences, 2012, 11, 1445-1453.	1.6	49
33	Hydroxyl and sulfate radicals activated by Fe(III)-EDDS/UV: Comparison of their degradation efficiencies and influence of critical parameters. Applied Catalysis B: Environmental, 2019, 245, 271-278.	10.8	49
34	Toward a Better Understanding of Fe(III)â€“EDDS Photochemistry: Theoretical Stability Calculation and Experimental Investigation of 4-tert-Butylphenol Degradation. Journal of Physical Chemistry A, 2014, 118, 396-403.	1.1	48
35	Formation of hydroxyl radicals by irradiated 1-nitronaphthalene (1NN): oxidation of hydroxyl ions and water by the 1NN triplet state. Photochemical and Photobiological Sciences, 2011, 10, 1817-1824.	1.6	47
36	Effect of ethylenediamine-N,Nâ€²-disuccinic acid on Fenton and photo-Fenton processes using goethite as an iron source: optimization of parameters for bisphenol A degradation. Environmental Science and Pollution Research, 2013, 20, 39-50.	2.7	47

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37	Phototransformation of fibrate drugs in aqueous media. Environmental Chemistry Letters, 2005, 3, 43-47.	8.3	46
38	Photochemical Formation of Nitrite and Nitrous Acid (HONO) upon Irradiation of Nitrophenols in Aqueous Solution and in Viscous Secondary Organic Aerosol Proxy. Environmental Science & Technology, 2017, 51, 7486-7495.	4.6	42
39	Hydrogen peroxide in natural cloud water: Sources and photoreactivity. Atmospheric Research, 2011, 101, 256-263.	1.8	40
40	Phototransformation of the Herbicide Propanil in Paddy Field Water. Environmental Science & Technology, 2017, 51, 2695-2704.	4.6	40
41	Degradation of hydrochlorothiazide in water. Environmental Chemistry Letters, 2005, 2, 195-198.	8.3	39
42	Hydrogen peroxide and persulfate activation using UVA-UVB radiation: Degradation of estrogenic compounds and application in sewage treatment plant waters. Journal of Hazardous Materials, 2021, 405, 124693.	6.5	37
43	Photoenhanced ozone loss on solid pyrene films. Physical Chemistry Chemical Physics, 2009, 11, 7876.	1.3	35
44	Exploring the ionic strength effects on the photochemical degradation of pyruvic acid in atmospheric deliquescent aerosol particles. Atmospheric Environment, 2018, 185, 237-242.	1.9	35
45	Heterogeneous photochemistry of gaseous NO2 on solid fluoranthene films: A source of gaseous nitrous acid (HONO) in the urban environment. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 273, 23-28.	2.0	34
46	Improving the characterization of dissolved organic carbon in cloud water: Amino acids and their impact on the oxidant capacity. Scientific Reports, 2016, 6, 37420.	1.6	34
47	Phenol transformation and dimerisation, photosensitised by the triplet state of 1-nitronaphthalene: A possible pathway to humic-like substances (HULIS) in atmospheric waters. Atmospheric Environment, 2013, 70, 318-327.	1.9	33
48	Siderophores in Cloud Waters and Potential Impact on Atmospheric Chemistry: Photoreactivity of Iron Complexes under Sun-Simulated Conditions. Environmental Science & Technology, 2016, 50, 9324-9332.	4.6	33
49	Formation of substances with humic-like fluorescence properties, upon photoinduced oligomerization of typical phenolic compounds emitted by biomass burning. Atmospheric Environment, 2019, 206, 197-207.	1.9	33
50	Formation and reactivity of the dichloride radical (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 237 Td (xmlns:mml="http://www.w Chemosphere, 2014, 95, 464-469.	4.2	32
51	Photoenhanced transformation of nicotine in aquatic environments: Involvement of naturally occurring radical sources. Water Research, 2014, 55, 106-114.	5.3	32
52	Photochemistry of the Cloud Aqueous Phase: A Review. Molecules, 2020, 25, 423.	1.7	32
53	Properties of the humic-like material arising from the photo-transformation of l -tyrosine. Science of the Total Environment, 2016, 545-546, 434-444.	3.9	31
54	New Insights on the Photodegradation of Caffeine in the Presence of Bio-Based Substances-Magnetic Iron Oxide Hybrid Nanomaterials. Materials, 2018, 11, 1084.	1.3	31

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55	Significant role of iron on the fate and photodegradation of enrofloxacin. Chemosphere, 2021, 270, 129791.	4.2	31
56	Phenanthrene degradation using Fe(III)-EDDS photoactivation under simulated solar light: A model for soil washing effluent treatment. Chemosphere, 2019, 236, 124366.	4.2	28
57	Cubic cobalt and zinc co-doped magnetite nanoparticles for persulfate and hydrogen peroxide activation towards the effective photodegradation of Sulfalene. Chemical Engineering Journal, 2021, 404, 126391.	6.6	27
58	Evaluation of modeled cloud chemistry mechanism against laboratory irradiation experiments: The HxOy/iron/carboxylic acid chemical system. Atmospheric Environment, 2013, 77, 686-695.	1.9	26
59	CÃ©zeaux-Aulnat-Opme-Puy De DÃme: a multi-site for the long-term survey of the tropospheric composition and climate change. Atmospheric Measurement Techniques, 2020, 13, 3413-3445.	1.2	26
60	Could triplet-sensitised transformation of phenolic compounds represent a source of fulvic-like substances in natural waters?. Chemosphere, 2013, 90, 881-884.	4.2	25
61	Tryptophan and tryptophan-like substances in cloud water: Occurrence and photochemical fate. Atmospheric Environment, 2016, 137, 53-61.	1.9	25
62	Synthesis of a magnetically separable LDH-based S-scheme nano-heterojunction for the activation of peroxymonosulfate towards the efficient visible-light photodegradation of diethyl phthalate. Applied Surface Science, 2021, 559, 149906.	3.1	25
63	Phototransformation of 4-phenoxyphenol sensitised by 4-carboxybenzophenone: Evidence of new photochemical pathways in the bulk aqueous phase and on the surface of aerosol deliquescent particles. Atmospheric Environment, 2013, 81, 569-578.	1.9	24
64	Mineralization Enhancement of Pharmaceutical Contaminants by Radical-Based Oxidation Promoted by Oxide-Bound Metal Ions. Environmental Science & Technology, 2020, 54, 476-485.	4.6	22
65	Phenanthrene decomposition in soil washing effluents using UVB activation of hydrogen peroxide and peroxydisulfate. Chemosphere, 2021, 263, 127996.	4.2	22
66	Abiotic Degradation of Iodosulfuron-methyl-ester in Aqueous Solution. Journal of Agricultural and Food Chemistry, 2005, 53, 5347-5352.	2.4	21
67	Irradiation of fluvastatin in water. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 189, 264-271.	2.0	21
68	Phosphate-Linked Silibinin Dimers (PLSd): New Promising Modified Metabolites. Molecules, 2017, 22, 1323.	1.7	21
69	Degradation of Acetaminophen via UVA-induced advanced oxidation processes (AOPs). Involvement of different radical species: HO , SO4â˙ and HO2/O2â˙. Chemosphere, 2020, 258, 127268.	4.2	21
70	Formation of Toxic Unsaturated Multifunctional and Organosulfur Compounds From the Photosensitized Processing of Fluorene and DMSO at the Airâ€Water Interface. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031839.	1.2	19
71	Efficient removal of estrogenic compounds in water by MnIII-activated peroxymonosulfate: Mechanisms and application in sewage treatment plant water. Environmental Pollution, 2021, 288, 117728.	3.7	18
72	Enhancement by anthraquinone-2-sulphonate of the photonitration of phenol by nitrite: Implication for the photoproduction of nitrogen dioxide by coloured dissolved organic matter in surface waters. Chemosphere, 2010, 81, 1401-1406.	4.2	17

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73	Photochemical and photosensitised reactions involving 1-nitronaphthalene and nitrite in aqueous solution. Photochemical and Photobiological Sciences, 2011, 10, 601-609.	1.6	17
74	An experimental methodology to measure the reaction rate constants of processes sensitised by the triplet state of 4-carboxybenzophenone as a proxy of the triplet states of chromophoric dissolved organic matter, under steady-state irradiation conditions. Environmental Sciences: Processes and Impacts, 2018, 20, 1007-1019.	1.7	17
75	Photochemical fate and eco-genotoxicity assessment of the drug etodolac. Science of the Total Environment, 2015, 518-519, 258-265.	3.9	16
76	Formation of highly oxygenated multifunctional compounds from cross-reactions of carbonyl compounds in the atmospheric aqueous phase. Atmospheric Environment, 2019, 219, 117046.	1.9	16
77	Enhancement of iron-mediated activation of persulfate using catechin: From generation of reactive species to atenolol degradation in water. Science of the Total Environment, 2019, 697, 134188.	3.9	16
78	A new source of ammonia and carboxylic acids in cloud water: The first evidence of photochemical process involving an iron-amino acid complex. Atmospheric Environment, 2018, 195, 179-186.	1.9	15
79	Fe2.5Co0.3Zn0.2O4/CuCr-LDH as a visible-light-responsive photocatalyst for the degradation of caffeine, bisphenol A, and simazine in pure water and real wastewater under photo-Fenton-like degradation process. Chemosphere, 2022, 291, 132920.	4.2	15
80	The impact of the hydroxyl radical photochemical sources on the rivastigmine drug transformation inÂmimic and natural waters. Water Research, 2013, 47, 5422-5430.	5.3	14
81	First evaluation of the effect of microorganisms on steady state hydroxyl radical concentrations in atmospheric waters. Chemosphere, 2018, 212, 715-722.	4.2	14
82	Caffeine degradation using peroxydisulfate and peroxymonosulfate in the presence of Mn2O3. Efficiency, reactive species formation and application in sewage treatment plant water. Journal of Cleaner Production, 2021, 328, 129652.	4.6	14
83	Evidence of an Important Role of Photochemistry in the Attenuation of the Secondary Contaminant 3,4-Dichloroaniline in Paddy Water. Environmental Science & Technology, 2018, 52, 6334-6342.	4.6	13
84	Photo-activation of persulfate and hydrogen peroxide by humic acid coated magnetic particles for Bisphenol A degradation. Catalysis Today, 2021, 361, 43-49.	2.2	13
85	Effect of positional isomerism on the abiotic degradation of pesticides: Case of m- and p-imazamethabenz-methyl. Chemosphere, 2007, 68, 464-471.	4.2	12
86	A Review of Manganese(III) (Oxyhydr)Oxides Use in Advanced Oxidation Processes. Molecules, 2021, 26, 5748.	1.7	11
87	Bismuth catalyst mediated degradation of p-hydroxyphenylacetic acid: Photoactivation, interfacial mechanism, and influence of some critical parameters. Chemical Engineering Journal, 2018, 349, 822-828.	6.6	10
88	A new insight into ethoxyquin fate in surface waters: Stability, direct and indirect photochemical behaviour and the identification of main products. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 311, 118-126.	2.0	9
89	Photochemical processes induced by the irradiation of 4-hydroxybenzophenone in different solvents. Photochemical and Photobiological Sciences, 2015, 14, 2087-2096.	1.6	9
90	Photochemical transformation of benzotriazole, relevant to sunlit surface waters: Assessing the possible role of triplet-sensitised processes. Science of the Total Environment, 2016, 566-567, 712-721.	3.9	9

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91	Multiphase Chemistry of Ozone on Fulvic Acids Solutions. Environmental Science & Technology, 2008, 42, 9165-9170.	4.6	8
92	Impacts of environmental levels of hydrogen peroxide and oxyanions on the redox activity of MnO₂ particles. Environmental Sciences: Processes and Impacts, 2021, 23, 1351-1361.	1.7	7
93	Photosensitized Degradation of DMSO Initiated by PAHs at the Airâ€Water Interface, as an Alternative Source of Organic Sulfur Compounds to the Atmosphere. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035346.	1.2	7
94	Atmospheric Aqueousâ€Phase Photoreactivity: Correlation Between the Hydroxyl Radical Photoformation and Pesticide Degradation Rate in Atmospherically Relevant Waters. Photochemistry and Photobiology, 2012, 88, 32-37.	1.3	5
95	Toward a better understanding of ferric-oxalate complex photolysis: The role of the aqueous/air interface of droplet. Chemosphere, 2022, 289, 133127.	4.2	4
96	Phototransformation of the drug rivastigmine: Photoinduced cleavage of benzyl-nitrogen sigma bond. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 239, 1-6.	2.0	3
97	Innovative depollution treatment using multi-valent iron species: from fundamental study to application in municipal wastewater. Environmental Science and Pollution Research, 2020, 27, 19736-19745.	2.7	3
98	Synthesis of dimeric phenylethanoids isolated from olive oil mill wastewaters. Natural Product Research, 2006, 20, 792-797.	1.0	2
99	Enhanced Degradation of Paracetamol by the Fe(III)-Sulfite System under UVA Irradiation. Molecules, 2022, 27, 2248.	1.7	2