Raffaele Marotta

List of Publications by Year
in descending order

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105 papers	9,448 citations	81900 39 h-index	37204 96 g-index
109 all docs	109 docs citations	109 times ranked	9963 citing authors

#	Article	IF	Citations
1	Visible light â€“ driven photocatalytic hydrogen production using Cu2O/TiO2 composites prepared by facile mechanochemical synthesis. Journal of Environmental Chemical Engineering, 2022, 10, 107735.	6.7	23
2	Microwave-assisted condensation of bio-based hydroxymethylfurfural and acetone over recyclable hydrotalcite-related materials. Applied Catalysis B: Environmental, 2021, 282, 119599.	20.2	17
3	Recovery of palladium (II) from aqueous solution through photocatalytic deposition in presence of ZnO under UV/Visible-light radiation. Journal of Environmental Chemical Engineering, 2021, 9, 106523.	6.7	13
4	Photoactivated Fe(III)/Fe(II)/WO3â€“Pd fuel cell for electricity generation using synthetic and real effluents under visible light. Renewable Energy, 2020, 147, 1070-1081.	8.9	14
5	Efficient acetaldehyde production and recovery upon selective Cu/TiO2-photocatalytic oxidation of ethanol in aqueous solution. Chemical Engineering Journal, 2020, 393, 123425.	12.7	12
6	Ultrafast photodegradation of isoxazole and isothiazolinones by UV254 and UV254/H2O2 photolysis in a microcapillary reactor. Water Research, 2020, 169, 115203.	11.3	15
7	Hydrogen production upon UV-light irradiation of Cu/TiO2 photocatalyst in the presence of alkanol-amines. International Journal of Hydrogen Energy, 2020, 45, 26701-26715.	7.1	16
8	Hydrogen production through photoreforming processes over Cu2O/TiO2 composite materials: A mini-review. International Journal of Hydrogen Energy, 2020, 45, 28531-28552.	7.1	51
9	Tuning crystal structure in a micro-scale reactive flow. Chemical Engineering Science, 2019, 207, 581-587.	3.8	5
10	Chronic toxicity of treated and untreated aqueous solutions containing imidazole-based ionic liquids and their oxydized by-products. Ecotoxicology and Environmental Safety, 2019, 180, 466-472.	6.0	28
11	Near UVâ€irradiation of CuO_xâ€impregnated TiO₂ Providing Active Species for H₂ Production Through Methanol Photoreforming. ChemCatChem, 2019, 11, 4314-4326.	3.7	25
12	Assessment of optimal conditions for the restoration and recovery of agricultural soil. Journal of Hazardous Materials, 2019, 373, 801-809.	12.4	14
13	Modeling and validation of a modular multi-lamp photo-reactor for cetylpyridinium chloride degradation by UV and UV/H2O2 processes. Chemical Engineering Journal, 2019, 376, 120380.	12.7	9
14	Selective photo-oxidation of ethanol to acetaldehyde and acetic acid in water in presence of TiO2 and cupric ions under UVâ€“simulated solar radiation. Chemical Engineering Journal, 2019, 361, 1524-1534.	12.7	17
15	LIGHT INTENSITIES MAXIMIZING PHOTOSYNTHESIS AND KINETICS OF PHOTOCHEMICAL STEPS IN Graesiella emersonii UNDER DIFFERENT CULTIVATION STRATEGIES. Environmental Engineering and Management Journal, 2019, 18, 1519-1526.	0.6	2
16	Removal of antiretroviral drugs stavudine and zidovudine in water under UV254 and UV254/H2O2 processes: Quantum yields, kinetics and ecotoxicology assessment. Journal of Hazardous Materials, 2018, 349, 195-204.	12.4	33
17	Evidencing opposite charge-transfer processes at TiO2/graphene-related materials interface through a combined EPR, photoluminescence and photocatalysis assessment. Catalysis Today, 2018, 315, 19-30.	4.4	42
18	Ternary HNO₃â€“H₂SO₄â€“H₂O Mixtures: A Simplified Approach for the Calculation of the Equilibrium Composition. Industrial & Engineering Chemistry Research, 2018, 57, 1696-1704.	3.7	3

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19	Treatment of saline produced water through photocatalysis using rGO-TiO2 nanocomposites. Catalysis Today, 2018, 315, 194-204.	4.4	44
20	Scenedesmus vacuolatus cultures for possible combined laccase-like phenoloxidase activity and biodiesel production. Annals of Microbiology, 2018, 68, 9-15.	2.6	7
21	Metal-based semiconductor nanomaterials for photocatalysis. , 2018, , 187-213.		3
22	Kinetic modeling of hydrogen generation over nano-Cu (s) /TiO 2 catalyst through photoreforming of alcohols. Catalysis Today, 2017, 281, 117-123.	4.4	44
23	Solar photocatalytic processes for treatment of soil washing wastewater. Chemical Engineering Journal, 2017, 318, 10-18.	12.7	21
24	Photocatalytic processes assisted by artificial solar light for soil washing effluent treatment. Environmental Science and Pollution Research, 2017, 24, 6353-6360.	5.3	19
25	Intensification of Nitrobenzaldehydes Synthesis from Benzyl Alcohol in a Microreactor. Organic Process Research and Development, 2017, 21, 357-364.	2.7	14
26	Sacrificial photocatalysis: removal of nitrate and hydrogen production by nano-copper-loaded P25 titania. A kinetic and ecotoxicological assessment. Environmental Science and Pollution Research, 2017, 24, 5898-5907.	5.3	12
27	Homogeneous photo-Fenton processes at near neutral pH: A review. Applied Catalysis B: Environmental, 2017, 209, 358-371.	20.2	621
28	Photodegradation and ecotoxicology of acyclovir in water under UV254 and UV254/H2O2 processes. Water Research, 2017, 122, 591-602.	11.3	50
29	Effect of surface properties of copper-modified commercial titanium dioxide photocatalysts on hydrogen production through photoreforming of alcohols. International Journal of Hydrogen Energy, 2017, 42, 28349-28362.	7.1	34
30	Removal of nitrate and simultaneous hydrogen generation through photocatalytic reforming of glycerol over â€œin situâ€•prepared zero-valent nano copper/P25. Applied Catalysis B: Environmental, 2017, 202, 539-549.	20.2	76
31	Benzaldehyde nitration by mixed acid under homogeneous condition: A kinetic modeling. Chemical Engineering Journal, 2017, 307, 1076-1083.	12.7	12
32	Hydrogen Generation through Solar Photocatalytic Processes: A Review of the Configuration and the Properties of Effective Metal-Based Semiconductor Nanomaterials. Energies, 2017, 10, 1624.	3.1	56
33	Removal of benzoylecgonine from water matrices through UV254/H2O2 process: Reaction kinetic modeling, ecotoxicity and genotoxicity assessment. Journal of Hazardous Materials, 2016, 318, 515-525.	12.4	29
34	Alkaline direct transesterification of different species of Stichococcus for bio-oil production. New Biotechnology, 2016, 33, 797-806.	4.4	10
35	Biodegradation, ecotoxicity and UV254/H2O2 treatment of imidazole, 1-methyl-imidazole and N,N'-alkyl-imidazolium chlorides in water. Water Research, 2016, 106, 450-460.	11.3	37
36	Copper and zinc removal from contaminated soils through soil washing process using ethylenediaminedisuccinic acid as a chelating agent: A modeling investigation. Journal of Environmental Chemical Engineering, 2016, 4, 2878-2891.	6.7	39

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37	Investigation on the removal of the major cocaine metabolite (benzoylecgonine) in water matrices by UV 254 /H 2 O 2 process by using a flow microcapillary film array photoreactor as an efficient experimental tool. Water Research, 2016, 89, 375-383.	11.3	25
38	In situ photodeposited nanoCu on TiO2 as a catalyst for hydrogen production under UV/visible radiation. Applied Catalysis A: General, 2016, 518, 142-149.	4.3	44
39	Direct photolysis of benzoylecgonine under UV irradiation at 254nm in a continuous flow microcapillary array photoreactor. Chemical Engineering Journal, 2016, 283, 243-250.	12.7	29
40	The role of superficial radicals in the kinetic modeling of 3-pyridinemethanol and 3-pyridinecarboxyaldehyde selective oxidation to vitamin B3 in water by means of a TiO2/Cu(II)/UV-solar photocatalytic system. Chemical Engineering Journal, 2016, 283, 1176-1186.	12.7	5
41	Simultaneous removal of heavy metals from field-polluted soils and treatment of soil washing effluents through combined adsorption and artificial sunlight-driven photocatalytic processes. Chemical Engineering Journal, 2016, 283, 1484-1493.	12.7	66
42	Photocatalytic reforming of formic acid for hydrogen production in aqueous solutions containing cupric ions and TiO2 suspended nanoparticles under UV-simulated solar radiation. Applied Catalysis A: General, 2016, 518, 181-188.	4.3	18
43	Solar photocatalysis: Materials, reactors, some commercial, and pre-industrialized applications. A comprehensive approach. Applied Catalysis B: Environmental, 2015, 170-171, 90-123.	20.2	541
44	A kinetic study of the simultaneous removal of EDDS and cupric ions from acidic aqueous solutions by TiO2-based photocatalysis under artificial solar light irradiation and deaerated batch conditions. Chemical Engineering Journal, 2015, 270, 519-527.	12.7	13
45	Kinetic characterization of the photosynthetic reaction centres in microalgae by means of fluorescence methodology. Journal of Biotechnology, 2015, 212, 1-10.	3.8	8
46	Production of pyridinecarboxy aldehydes, nicotinic and isonicotinic and picolinic acids by TiO2-sacrificial photocatalysis at ambient conditions and in aqueous solution through artificial solar radiation. Applied Catalysis B: Environmental, 2015, 163, 248-257.	20.2	17
47	Kinetic modeling of partial oxidation of benzyl alcohol in water by means of Fe(III)/O2/UVâ€“solar simulated process. Chemical Engineering Journal, 2014, 249, 130-142.	12.7	16
48	TiO 2 /graphene-like photocatalysts for selective oxidation of 3-pyridine-methanol to vitamin B3 under UV/solar simulated radiation in aqueous solution at room conditions: The effect of morphology on catalyst performances. Applied Catalysis A: General, 2014, 487, 91-99.	4.3	39
49	Simulated solar photocatalytic processes for the simultaneous removal of EDDS, Cu(II), Fe(III) and Zn(II) in synthetic and real contaminated soil washing solutions. Journal of Environmental Chemical Engineering, 2014, 2, 1969-1979.	6.7	31
50	Copper modified-TiO2 catalysts for hydrogen generation through photoreforming of organics. A short review. International Journal of Hydrogen Energy, 2014, 39, 16812-16831.	7.1	115
51	Removal of EDDS and copper from waters by TiO2 photocatalysis under simulated UVâ€“solar conditions. Chemical Engineering Journal, 2014, 251, 257-268.	12.7	39
52	Nitric acid decomposition kinetics in mixed acid and their use in the modeling of aromatic nitration. Chemical Engineering Journal, 2013, 228, 366-373.	12.7	14
53	Fe(iii)-photocatalytic partial oxidation of benzyl alcohol to benzaldehyde under UV-solar simulated radiation. Photochemical and Photobiological Sciences, 2013, 12, 1991.	2.9	15
54	Photodegradation of naproxen and its photoproducts in aqueous solution at 254Ânm: A kinetic investigation. Water Research, 2013, 47, 373-383.	11.3	69

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55	Effects of photobioreactors design and operating conditions on Stichococcus bacillaris biomass and biodiesel production. Biochemical Engineering Journal, 2013, 74, 8-14.	3.6	31
56	Hydrogen production by photoreforming of formic acid in aqueous copper/TiO2 suspensions under UV-simulated solar radiation at room temperature. International Journal of Hydrogen Energy, 2013, 38, 9644-9654.	7.1	29
57	TiO2/Cu(II) photocatalytic production of benzaldehyde from benzyl alcohol in solar pilot plant reactor. Applied Catalysis B: Environmental, 2013, 136-137, 56-63.	20.2	67
58	Detailed thermal and kinetic modeling of cumene hydroperoxide decomposition in cumene. Chemical Engineering Research and Design, 2013, 91, 262-268.	5.6	14
59	An evaluation of the application of a TiO₂/ Cu(II)/solar simulated radiation system for selective oxidation of benzyl alcohol derivatives. Journal of Chemical Technology and Biotechnology, 2013, 88, 864-872.	3.2	11
60	Kinetic and Safety Characterization of the Nitration Process of Methyl Benzoate in Mixed Acid. Organic Process Research and Development, 2012, 16, 2001-2007.	2.7	11
61	Kinetic modeling of benzyl alcohol and/or benzaldehyde selective oxidation in water by means of TiO2/CuII/hÎ½ process. Chemical Engineering Journal, 2012, 209, 69-78.	12.7	20
62	Dicumyl Peroxide Thermal Decomposition in Cumene: Development of a Kinetic Model. Industrial & Engineering Chemistry Research, 2012, 51, 7493-7499.	3.7	20
63	Oxidation of 2,4-dichlorophenol and 3,4-dichlorophenol by means of Fe(III)-homogeneous photocatalysis and algal toxicity assessment of the treated solutions. Water Research, 2011, 45, 2038-2048.	11.3	46
64	Selective oxidation of benzyl alcohol to benzaldehyde in water by TiO2/Cu(II)/UV solar system. Chemical Engineering Journal, 2011, 172, 243-249.	12.7	64
65	Kinetic and chemical characterization of thermal decomposition of dicumylperoxide in cumene. Journal of Hazardous Materials, 2011, 187, 157-163.	12.4	29
66	Production of 5-hydroxy-4-keto-2-pentenoic acid by photo-oxidation of 5-hydroxymethylfurfural with singlet oxygen: A kinetic investigation. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 210, 69-76.	3.9	15
67	A Kinetic Investigation on the Ozonation of Glycerol and its Oxygenated Derivatives. Ozone: Science and Engineering, 2009, 31, 445-453.	2.5	1
68	Energy recovery in wastewater decontamination: Simultaneous photocatalytic oxidation of an organic substrate and electricity generation. Water Research, 2009, 43, 2710-2716.	11.3	35
69	Use of an amorphous iron oxide hydrated as catalyst for hydrogen peroxide oxidation of ferulic acid in water. Journal of Hazardous Materials, 2008, 152, 870-875.	12.4	17
70	Photochemical behaviour of musk tibetene. Environmental Science and Pollution Research, 2008, 15, 182-187.	5.3	12
71	Effect of combined physico-chemical processes on the phytotoxicity of olive mill wastewaters. Water Research, 2008, 42, 1684-1692.	11.3	51
72	Kinetic investigation of Cu(II) ions photoreduction in presence of titanium dioxide and formic acid. Water Research, 2008, 42, 4498-4506.	11.3	48

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73	Bezafibrate removal by means of ozonation: Primary intermediates, kinetics, and toxicity assessment. Water Research, 2007, 41, 2525-2532.	11.3	123
74	Evaluation of biodegradation kinetic constants for aromatic compounds by means of aerobic batch experiments. Chemosphere, 2006, 62, 1431-1436.	8.2	30
75	Lincomycin solar photodegradation, algal toxicity and removal from wastewaters by means of ozonation. Water Research, 2006, 40, 630-638.	11.3	144
76	Fe(III) homogeneous photocatalysis for the removal of 1,2-dichlorobenzene in aqueous solution by means UV lamp and solar light. Water Research, 2006, 40, 3785-3792.	11.3	46
77	Removal of Organic Pollutants from Soil: The Ozonation of Clofibric Acid in Aqueous Slurries. Ozone: Science and Engineering, 2006, 28, 47-52.	2.5	1
78	Antibiotic removal from wastewaters: The ozonation of amoxicillin. Journal of Hazardous Materials, 2005, 122, 243-250.	12.4	342
79	(S)-Nitroxycarnitine nitrate production from (S)-carnitine by using acetic anhydride/nitric acid/acetic acid mixtures: safety assessment. Journal of Hazardous Materials, 2004, 113, 1-10.	12.4	5
80	Antibiotics in the Environment:Â Occurrence in Italian STPs, Fate, and Preliminary Assessment on Algal Toxicity of Amoxicillin. Environmental Science & Technology, 2004, 38, 6832-6838.	10.0	270
81	Advanced oxidation of the pharmaceutical drug diclofenac with UV/H2O2 and ozone. Water Research, 2004, 38, 414-422.	11.3	382
82	Removal of benzoic acid in aqueous solution by Fe(III) homogeneous photocatalysis. Water Research, 2004, 38, 1225-1236.	11.3	45
83	Kinetic and chemical assessment of the UV/H2O2 treatment of antiepileptic drug carbamazepine. Chemosphere, 2004, 54, 497-505.	8.2	306
84	Ozonation and H2O2/UV treatment of clofibric acid in water: a kinetic investigation. Journal of Hazardous Materials, 2003, 103, 233-246.	12.4	119
85	Pharmaceuticals in STP effluents and their solar photodegradation in aquatic environment. Chemosphere, 2003, 50, 1319-1330.	8.2	1,064
86	Paracetamol oxidation from aqueous solutions by means of ozonation and H2O2/UV system. Water Research, 2003, 37, 993-1004.	11.3	297
87	Iron(III) (hydr)oxide-mediated photooxidation of 2-aminophenol in aqueous solution: a kinetic study. Water Research, 2003, 37, 3682-3688.	11.3	36
88	Advanced Oxidation Chemistry of Paracetamol. UV/H2O2-Induced Hydroxylation/Degradation Pathways and15N-Aided Inventory of Nitrogenous Breakdown Products.. Journal of Organic Chemistry, 2002, 67, 6143-6151.	3.2	119
89	Oxidation of 3,4-dihydroxybenzoic acid by means of hydrogen peroxide in aqueous goethite slurry. Water Research, 2002, 36, 2761-2768.	11.3	62
90	Carbamazepine in water: persistence in the environment, ozonation treatment and preliminary assessment on algal toxicity. Water Research, 2002, 36, 2869-2877.	11.3	259

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91	Oxidation of aromatic substrates in water/goethite slurry by means of hydrogen peroxide. Water Research, 2002, 36, 4691-4698.	11.3	71
92	Thermal decomposition of acetic anhydrideâ€“nitric acid mixtures. Journal of Hazardous Materials, 2002, 90, 111-121.	12.4	15
93	Kinetic modeling of pyruvic acid ozonation in aqueous solutions catalyzed by Mn(II) and Mn(IV) ions. Water Research, 2001, 35, 109-120.	11.3	46
94	Oxidation of benzothiazole, 2-mercaptobenzothiazole and 2-hydroxybenzothiazole in aqueous solution by means of H2O2/UV or photoassisted Fenton systems. Journal of Chemical Technology and Biotechnology, 2001, 76, 196-202.	3.2	32
95	A kinetic model for the degradation of benzothiazole by Fe3+-photo-assisted Fenton process in a completely mixed batch reactor. Journal of Hazardous Materials, 2000, 80, 241-257.	12.4	40
96	N-methyl-p-aminophenol (metol) ozonation in aqueous solution: kinetics, mechanism and toxicological characterization of ozonized samples. Water Research, 2000, 34, 4419-4429.	11.3	28
97	Advanced oxidation processes for the treatment of mineral oil-contaminated wastewaters. Water Research, 2000, 34, 620-628.	11.3	60
98	The oxidation of metol (N-methyl-p-aminophenol) in aqueous solution by UV/H2O2 photolysis. Water Research, 2000, 34, 463-472.	11.3	55
99	Thermal decomposition of ethyl parathion. Journal of Loss Prevention in the Process Industries, 1999, 12, 315-319.	3.3	9
100	Advanced oxidation processes (AOP) for water purification and recovery. Catalysis Today, 1999, 53, 51-59.	4.4	2,004
101	The thermal decomposition of dimethoate. Journal of Hazardous Materials, 1999, 64, 283-294.	12.4	29
102	Ozonation of p-chlorophenol in aqueous solution. Journal of Hazardous Materials, 1999, 69, 303-317.	12.4	38
103	The ozonation of pyruvic acid in aqueous solutions catalyzed by suspended and dissolved manganese. Water Research, 1998, 32, 1492-1496.	11.3	76
104	Kinetics of Oxalic Acid Ozonation Promoted by Heterogeneous MnO2 Catalysis. Industrial & Engineering Chemistry Research, 1997, 36, 4774-4778.	3.7	22
105	The use of manganese dioxide as a heterogeneous catalyst for oxalic acid ozonation in aqueous solution. Applied Catalysis A: General, 1996, 138, 75-81.	4.3	168