Jaime Gimenez

List of Publications by Year in Descending Order

84 papers	6,223 citations	38 h-index	78 g-index
93 ext. papers	6,706 ext. citations	9 avg, IF	5.56 L-index

#	Paper	IF	Citations
84	Role of sunlight and oxygen on the performance of photo-Fenton process at near neutral pH using organic fertilizers as iron chelates. *Science of the Total Environment*, **2022**, 803, 149873	10.2	1
83	Evaluation of the main active species involved in the TiO2 photocatalytic degradation of ametryn herbicide and its by-products. *Journal of Environmental Chemical Engineering*, **2021**, 9, 105109	6.8	3
82	Coagulation-flocculation followed by catalytic ozonation processes for enhanced primary treatment during wet weather conditions. *Journal of Environmental Management*, **2021**, 283, 111975	7.9	3
81	Improvement of the photo-Fenton process at natural condition of pH using organic fertilizers mixtures: Potential application to agricultural reuse of wastewater. *Applied Catalysis B: Environmental*, **2021**, 290, 120066	21.8	6
80	Mixtures of chelating agents to enhance photo-Fenton process at natural pH: Influence of wastewater matrix on micropollutant removal and bacterial inactivation. *Science of the Total Environment*, **2021**, 786, 147416	10.2	4
79	The self-sustaining decomposition of ammonium nitrate fertiliser: Case study, Escombreras valley, Spain. *Journal of Hazardous Materials*, **2020**, 387, 121674	12.8	3
78	Organic fertilizer as a chelating agent in photo-Fenton at neutral pH with LEDs for agricultural wastewater reuse: Micropollutant abatement and bacterial inactivation. *Chemical Engineering Journal*, **2020**, 388, 124246	14.7	17
77	Removal and Degradation of Pharmaceutically Active Compounds (PhACs) in Wastewaters by Solar Advanced Oxidation Processes. *Handbook of Environmental Chemistry*, **2020**, 299-326	0.8	
76	Micropollutant removal in real WW by photo-Fenton (circumneutral and acid pH) with BLB and LED lamps. *Chemical Engineering Journal*, **2020**, 379, 122416	14.7	17
75	Economic Assessment and Possible Industrial Application of a (Photo)catalytic Process **2019**, 235-267		1
74	Synergies, radiation and kinetics in photo-Fenton process with UVA-LEDs. *Journal of Hazardous Materials*, **2019**, 380, 120882	12.8	18
73	Performance and kinetic modelling of photolytic and photocatalytic ozonation for enhanced micropollutants removal in municipal wastewaters. *Applied Catalysis B: Environmental*, **2019**, 249, 211-217	21.8	37
72	Photocatalytic diphenhydramine degradation under different radiation sources: Kinetic studies and energetic comparison. *Applied Catalysis B: Environmental*, **2018**, 220, 497-505	21.8	11
71	Photo-Fenton treatment of valproate under UVC, UVA and simulated solar radiation. *Journal of Hazardous Materials*, **2017**, 323, 537-549	12.8	22
70	Synthesis, Characterization, and Photocatalytic Activity of Pure and N-, B-, or Ag- Doped TiO2. *Journal of the Brazilian Chemical Society*, **2017**,	1.5	4
69	Photocatalytic treatment of valproic acid sodium salt with TiO 2 in different experimental devices: An economic and energetic comparison. *Chemical Engineering Journal*, **2017**, 327, 656-665	14.7	9
68	Treatment of Diphenhydramine with different AOPs including photo-Fenton at circumneutral pH. *Chemical Engineering Journal*, **2017**, 318, 112-120	14.7	25

67	Enhancement of Fenton and photo-Fenton processes at initial circumneutral pH for the degradation of the β-blocker metoprolol. *Water Research*, **2016**, 88, 449-457	12.5	72
66	Degradation of Metoprolol by photo-Fenton: Comparison of different photoreactors performance. *Chemical Engineering Journal*, **2016**, 283, 639-648	14.7	30
65	Photocatalytic mechanism of metoprolol oxidation by photocatalysts TiO 2 and TiO 2 doped with 5% B: Primary active species and intermediates. *Applied Catalysis B: Environmental*, **2016**, 194, 111-122	21.8	72
64	Competency Training of Students of the Faculty of Chemistry of the University of Barcelona by Conducting Internal Audits. *Procedia, Social and Behavioral Sciences*, **2015**, 196, 59-62		
63	Photocatalytic treatment of metoprolol with B-doped TiO2: Effect of water matrix, toxicological evaluation and identification of intermediates. *Applied Catalysis B: Environmental*, **2015**, 176-177, 173-182	21.8	50
62	Advanced Oxidation Processes at Laboratory Scale: Environmental and Economic Impacts. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 3188-3196	8.3	49
61	Synthesis and characterization of B-doped TiO2 and their performance for the degradation of metoprolol. *Catalysis Today*, **2015**, 252, 27-34	5.3	47
60	Performance of different advanced oxidation technologies for the abatement of the beta-blocker metoprolol. *Catalysis Today*, **2015**, 240, 86-92	5.3	24
59	Comparing the photocatalytic oxidation of Metoprolol in a solarbox and a solar pilot plant reactor. *Chemical Engineering Journal*, **2014**, 254, 17-29	14.7	16
58	A comparison of the environmental impact of different AOPs: risk indexes. *Molecules*, **2014**, 20, 503-18	4.8	2
57	2,4-Dichlorophenol degradation by means of heterogeneous photocatalysis. Comparison between laboratory and pilot plant performance. *Chemical Engineering Journal*, **2013**, 232, 405-417	14.7	8
56	o-Nitrobenzaldehyde actinometry in the presence of suspended TiO2 for photocatalytic reactors. *Catalysis Today*, **2013**, 209, 209-214	5.3	40
55	Photolysis and TiO2 photocatalysis of the pharmaceutical propranolol: Solar and artificial light. *Applied Catalysis B: Environmental*, **2013**, 130-131, 249-256	21.8	88
54	Transformation products and reaction kinetics in simulated solar light photocatalytic degradation of propranolol using Ce-doped TiO2. *Applied Catalysis B: Environmental*, **2013**, 129, 13-29	21.8	75
53	Adsorption and Photocatalytic Decomposition of the β-Blocker Metoprolol in Aqueous Titanium Dioxide Suspensions: Kinetics, Intermediates, and Degradation Pathways. *International Journal of Photoenergy*, **2013**, 2013, 1-10	2.1	18
52	Influence of Physical and Optical Parameters on 2,4-Dichlorophenol Degradation. *International Journal of Chemical Reactor Engineering*, **2013**, 11, 765-772	1.2	1
51	Degradation of 32 emergent contaminants by UV and neutral photo-fenton in domestic wastewater effluent previously treated by activated sludge. *Water Research*, **2012**, 46, 1947-57	12.5	346
50	Direct evaluation of the absorbed photon flow in a photocatalytic reactor by an actinometric method. *Chemical Engineering Journal*, **2012**, 200-202, 158-167	14.7	3

49	Photooxidation of the antidepressant drug Fluoxetine (Prozac) in aqueous media by hybrid catalytic/ozonation processes. *Water Research*, **2011**, 45, 2782-94	12.5	52
48	Photocatalytic treatment of metoprolol and propranolol. *Catalysis Today*, **2011**, 161, 115-120	5.3	64
47	Degradation of the emerging contaminant ibuprofen in water by photo-Fenton. *Water Research*, **2010**, 44, 589-95	12.5	207
46	Evaluation of two types of TiO2-based catalysts by photodegradation of DMSO in aqueous suspension. *Journal of Photochemistry and Photobiology A: Chemistry*, **2009**, 202, 164-171	4.7	49
45	Abatement of ibuprofen by solar photocatalysis process: Enhancement and scale up. *Catalysis Today*, **2009**, 144, 112-116	5.3	50
44	Photocatalytic degradation of antibiotics: The case of sulfamethoxazole and trimethoprim. *Catalysis Today*, **2009**, 144, 131-136	5.3	125
43	Mineralization enhancement of a recalcitrant pharmaceutical pollutant in water by advanced oxidation hybrid processes. *Water Research*, **2009**, 43, 3984-91	12.5	95
42	Photocatalytic degradation of non-steroidal anti-inflammatory drugs with TiO2 and simulated solar irradiation. *Water Research*, **2008**, 42, 585-94	12.5	262
41	Ultrasonic treatment of water contaminated with ibuprofen. *Water Research*, **2008**, 42, 4243-8	12.5	218
40	Higher intrinsic photocatalytic efficiency of 2,4,6-triphenylpyrylium-based photocatalysts compared to TiO2 P-25 for the degradation of 2,4-dichlorophenol using solar simulated light. *Chemosphere*, **2008**, 72, 67-74	8.4	17
39	Photolysis and TiO2 Photocatalytic Treatment of Naproxen: Degradation, Mineralization, Intermediates and Toxicity. *Journal of Advanced Oxidation Technologies*, **2008**, 11,		10
38	Optical Properties of TiO2 Suspensions: Influence of pH and Powder Concentration on Mean Particle Size. *Industrial & Engineering Chemistry Research*, **2007**, 46, 7620-7626	3.9	33
37	Study of the wavelength effect in the photolysis and heterogeneous photocatalysis. *Catalysis Today* , **2007**, 129, 231-239	5.3	28
36	Photocatalytic degradation of sulfamethoxazole in aqueous suspension of TiO2. *Applied Catalysis B: Environmental*, **2007**, 74, 233-241	21.8	204
35	Comparative Study of 2,4-Dichlorophenol Degradation With Different Advanced Oxidation Processes. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2007**, 129, 60-67	2.3	8
34	Approach to TiO2ght interaction in heterogeneous photocatalysis. *Water Science and Technology*, **2007**, 55, 147-151	2.2	1
33	Coupled photochemical-biological system to treat biorecalcitrant wastewater. *Water Science and Technology*, **2007**, 55, 95-100	2.2	29
32	Optimizing the solar photo-Fenton process in the treatment of contaminated water. Determination of intrinsic kinetic constants for scale-up. *Solar Energy*, **2005**, 79, 360-368	6.8	70

31	Photocatalytic degradation of 2,4-dichlorophenol by TiO2/UV: Kinetics, actinometries and models. *Catalysis Today*, **2005**, 101, 227-236	5.3	102
30	Degradation of chlorophenols by means of advanced oxidation processes: a general review. *Applied Catalysis B: Environmental*, **2004**, 47, 219-256	21.8	1635
29	Iron(III) photoxidation of organic compounds in aqueous solutions. *Applied Catalysis B: Environmental*, **2002**, 37, 131-137	21.8	44
28	Effects of radiation absorption and catalyst concentration on the photocatalytic degradation of pollutants. *Catalysis Today*, **2002**, 76, 177-188	5.3	63
27	The influence of different irradiation sources on the treatment of nitrobenzene. *Catalysis Today*, **2002**, 76, 291-300	5.3	57
26	Comparison of different advanced oxidation processes for phenol degradation. *Water Research*, **2002**, 36, 1034-42	12.5	789
25	Photocatalytic treatment of phenol and 2,4-dichlorophenol in a solar plant in the way to scaling-up. *Catalysis Today*, **1999**, 54, 229-243	5.3	94
24	Reactor modelling in the photocatalytic oxidation of wastewater. *Water Science and Technology*, **1997**, 35, 207-213	2.2	54
23	Low-concentrating CPC collectors for photocatalytic water detoxification: comparison with a medium concentrating solar collector. *Water Science and Technology*, **1997**, 35, 157-164	2.2	83
22	Low-concentrating CPC collectors for photocatalytic water detoxification: Comparison with a medium concentrating solar collector. *Water Science and Technology*, **1997**, 35, 157	2.2	48
21	Reactor modelling in the photocatalytic oxidation of wastewater. *Water Science and Technology*, **1997**, 35, 207	2.2	19
20	Photodecomposition of phenol in a flow reactor: Adsorption and kinetics. *Monatshefte F Chemie*, **1997**, 128, 1109-1118	1.4	9
19	Photocatalysis and radiation absorption in a solar plant. *Solar Energy Materials and Solar Cells*, **1996**, 44, 199-217	6.4	35
18	Photocatalytic reduction of chromium(VI) with titania powders in a flow system. Kinetics and catalyst activity. *Journal of Molecular Catalysis A*, **1996**, 105, 67-78		73
17	Photocatalytic degradation of phenol: Comparison between pilot-plant-scale and laboratory results. *Solar Energy*, **1996**, 56, 387-400	6.8	57
16	Continuous photocatalytic treatment of mercury(II) on titania powders. Kinetics and catalyst activity. *Chemical Engineering Science*, **1995**, 50, 1561-1569	4.4	28
15	Comparison of TiO2 powder suspensions and TiO2 ceramic membranes supported on glass as photocatalytic systems in the reduction of chromium(VI). *Journal of Molecular Catalysis*, **1992**, 71, 57-68		74
14	Solar hydrogen photoproduction from sulphide/sulphite substrate. *International Journal of Hydrogen Energy*, **1992**, 17, 683-688	6.7	18

13	A comparative study of CdS-based semiconductor photocatalysts for solar hydrogen production from sulphide + sulphite substrates. *Solar Energy Materials and Solar Cells*, **1992**, 25, 25-39	6.4	40
12	A new continuous device to perform S-L-G photocatalytic studies. *Solar Energy*, **1992**, 49, 47-52	6.8	9
11	CONTINUOUS PHOTOCATALYTIC TREATMENT OF Cr(VI) EFFLUENTS WITH SEMICONDUCTOR POWDERS. *Chemical Engineering Communications*, **1991**, 104, 71-85	2.2	40
10	Preparation and characterization of Pt(RuO2)/TiO2 catalysts: Test in a continuous water photolysis system. *Journal of Catalysis*, **1990**, 123, 319-332	7.3	16
9	Photocatalytic production of hydrogen from sulfide and sulfite waste streams: a kinetic model for reactions occurring in illuminating suspensions of CdS. *Chemical Engineering Science*, **1990**, 45, 3089-3096	4.4	39
8	A comparative study of semiconductor photocatalysts for hydrogen production by visible light using different sacrificial substrates in aqueous media. *International Journal of Hydrogen Energy*, **1990**, 15, 115-124	6.7	50
7	Radiation-induced corrosion of wet CdS powders monitored by transmission electron microscopy. *Journal of Colloid and Interface Science*, **1990**, 140, 35-40	9.3	3
6	Rate-controlling steps in a three-phase (solid□quid□as) photoreactor: a phenomenological approach applied to hydrogen photoprodution using Pt?TiO2 aqueous suspensions. *Chemical Engineering Science*, **1989**, 44, 583-593	4.4	22
5	Catalytic Activity of Sulphonated Styrene□Divinylbenzene Resins. *Applied Catalysis*, **1989**, 48, 307-325		2
4	Physical characteristics of photocatalysts affecting the performance of a process in a continuous photoreactor. *Solar Energy Materials and Solar Cells*, **1988**, 17, 151-163		14
3	Catalysis by ion-exchange sulfonated resins: Comparative study of gel and macroporous types and influence of divinylbenzene concentration. *Applied Catalysis*, **1987**, 31, 221-234		8
2	Vapor-phase esterification of acetic acid with ethanol catalyzed by a macroporous sulfonated styrene-divinylbenzene (20%) resin. *Industrial & Engineering Chemistry Research*, **1987**, 26, 198-202	3.9	51
1	Lessons learned from the Barracas accident: Ammonium nitrate explosion during road transport. *Process Safety Progress*,	1	1