

# Jaime Gimenez

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/3455442/jaime-gimenez-publications-by-citations.pdf>

**Version:** 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Degradation of chlorophenols by means of advanced oxidation processes: a general review. <i>Applied Catalysis B: Environmental</i> , <b>2004</b> , 47, 219-256	21.8	1635
83	Comparison of different advanced oxidation processes for phenol degradation. <i>Water Research</i> , <b>2002</b> , 36, 1034-42	12.5	789
82	Degradation of 32 emergent contaminants by UV and neutral photo-fenton in domestic wastewater effluent previously treated by activated sludge. <i>Water Research</i> , <b>2012</b> , 46, 1947-57	12.5	346
81	Photocatalytic degradation of non-steroidal anti-inflammatory drugs with TiO <sub>2</sub> and simulated solar irradiation. <i>Water Research</i> , <b>2008</b> , 42, 585-94	12.5	262
80	Ultrasonic treatment of water contaminated with ibuprofen. <i>Water Research</i> , <b>2008</b> , 42, 4243-8	12.5	218
79	Degradation of the emerging contaminant ibuprofen in water by photo-Fenton. <i>Water Research</i> , <b>2010</b> , 44, 589-95	12.5	207
78	Photocatalytic degradation of sulfamethoxazole in aqueous suspension of TiO <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , <b>2007</b> , 74, 233-241	21.8	204
77	Photocatalytic degradation of antibiotics: The case of sulfamethoxazole and trimethoprim. <i>Catalysis Today</i> , <b>2009</b> , 144, 131-136	5.3	125
76	Photocatalytic degradation of 2,4-dichlorophenol by TiO <sub>2</sub> /UV: Kinetics, actinometries and models. <i>Catalysis Today</i> , <b>2005</b> , 101, 227-236	5.3	102
75	Mineralization enhancement of a recalcitrant pharmaceutical pollutant in water by advanced oxidation hybrid processes. <i>Water Research</i> , <b>2009</b> , 43, 3984-91	12.5	95
74	Photocatalytic treatment of phenol and 2,4-dichlorophenol in a solar plant in the way to scaling-up. <i>Catalysis Today</i> , <b>1999</b> , 54, 229-243	5.3	94
73	Photolysis and TiO <sub>2</sub> photocatalysis of the pharmaceutical propranolol: Solar and artificial light. <i>Applied Catalysis B: Environmental</i> , <b>2013</b> , 130-131, 249-256	21.8	88
72	Low-concentrating CPC collectors for photocatalytic water detoxification: comparison with a medium concentrating solar collector. <i>Water Science and Technology</i> , <b>1997</b> , 35, 157-164	2.2	83
71	Transformation products and reaction kinetics in simulated solar light photocatalytic degradation of propranolol using Ce-doped TiO <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , <b>2013</b> , 129, 13-29	21.8	75
70	Comparison of TiO <sub>2</sub> powder suspensions and TiO <sub>2</sub> ceramic membranes supported on glass as photocatalytic systems in the reduction of chromium(VI). <i>Journal of Molecular Catalysis</i> , <b>1992</b> , 71, 57-68		74
69	Photocatalytic reduction of chromium(VI) with titania powders in a flow system. Kinetics and catalyst activity. <i>Journal of Molecular Catalysis A</i> , <b>1996</b> , 105, 67-78		73
68	Enhancement of Fenton and photo-Fenton processes at initial circumneutral pH for the degradation of the $\beta$ -blocker metoprolol. <i>Water Research</i> , <b>2016</b> , 88, 449-457	12.5	72

67	Photocatalytic mechanism of metoprolol oxidation by photocatalysts TiO <sub>2</sub> and TiO <sub>2</sub> doped with 5% B: Primary active species and intermediates. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 194, 111-122	21.8	72
66	Optimizing the solar photo-Fenton process in the treatment of contaminated water. Determination of intrinsic kinetic constants for scale-up. <i>Solar Energy</i> , <b>2005</b> , 79, 360-368	6.8	70
65	Photocatalytic treatment of metoprolol and propranolol. <i>Catalysis Today</i> , <b>2011</b> , 161, 115-120	5.3	64
64	Effects of radiation absorption and catalyst concentration on the photocatalytic degradation of pollutants. <i>Catalysis Today</i> , <b>2002</b> , 76, 177-188	5.3	63
63	The influence of different irradiation sources on the treatment of nitrobenzene. <i>Catalysis Today</i> , <b>2002</b> , 76, 291-300	5.3	57
62	Photocatalytic degradation of phenol: Comparison between pilot-plant-scale and laboratory results. <i>Solar Energy</i> , <b>1996</b> , 56, 387-400	6.8	57
61	Reactor modelling in the photocatalytic oxidation of wastewater. <i>Water Science and Technology</i> , <b>1997</b> , 35, 207-213	2.2	54
60	Photooxidation of the antidepressant drug Fluoxetine (Prozac <sup>®</sup> ) in aqueous media by hybrid catalytic/ozonation processes. <i>Water Research</i> , <b>2011</b> , 45, 2782-94	12.5	52
59	Vapor-phase esterification of acetic acid with ethanol catalyzed by a macroporous sulfonated styrene-divinylbenzene (20%) resin. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1987</b> , 26, 198-202	3.9	51
58	Photocatalytic treatment of metoprolol with B-doped TiO <sub>2</sub> : Effect of water matrix, toxicological evaluation and identification of intermediates. <i>Applied Catalysis B: Environmental</i> , <b>2015</b> , 176-177, 173-182	21.8	50
57	Abatement of ibuprofen by solar photocatalysis process: Enhancement and scale up. <i>Catalysis Today</i> , <b>2009</b> , 144, 112-116	5.3	50
56	A comparative study of semiconductor photocatalysts for hydrogen production by visible light using different sacrificial substrates in aqueous media. <i>International Journal of Hydrogen Energy</i> , <b>1990</b> , 15, 115-124	6.7	50
55	Advanced Oxidation Processes at Laboratory Scale: Environmental and Economic Impacts. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 3188-3196	8.3	49
54	Evaluation of two types of TiO <sub>2</sub> -based catalysts by photodegradation of DMSO in aqueous suspension. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2009</b> , 202, 164-171	4.7	49
53	Low-concentrating CPC collectors for photocatalytic water detoxification: Comparison with a medium concentrating solar collector. <i>Water Science and Technology</i> , <b>1997</b> , 35, 157	2.2	48
52	Synthesis and characterization of B-doped TiO <sub>2</sub> and their performance for the degradation of metoprolol. <i>Catalysis Today</i> , <b>2015</b> , 252, 27-34	5.3	47
51	Iron(III) photooxidation of organic compounds in aqueous solutions. <i>Applied Catalysis B: Environmental</i> , <b>2002</b> , 37, 131-137	21.8	44
50	o-Nitrobenzaldehyde actinometry in the presence of suspended TiO <sub>2</sub> for photocatalytic reactors. <i>Catalysis Today</i> , <b>2013</b> , 209, 209-214	5.3	40

49	A comparative study of CdS-based semiconductor photocatalysts for solar hydrogen production from sulphide + sulphite substrates. <i>Solar Energy Materials and Solar Cells</i> , <b>1992</b> , 25, 25-39	6.4	40
48	CONTINUOUS PHOTOCATALYTIC TREATMENT OF Cr(VI) EFFLUENTS WITH SEMICONDUCTOR POWDERS. <i>Chemical Engineering Communications</i> , <b>1991</b> , 104, 71-85	2.2	40
47	Photocatalytic production of hydrogen from sulfide and sulfite waste streams: a kinetic model for reactions occurring in illuminating suspensions of CdS. <i>Chemical Engineering Science</i> , <b>1990</b> , 45, 3089-3096	4.4	39
46	Performance and kinetic modelling of photolytic and photocatalytic ozonation for enhanced micropollutants removal in municipal wastewaters. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 249, 211-217	1.8	37
45	Photocatalysis and radiation absorption in a solar plant. <i>Solar Energy Materials and Solar Cells</i> , <b>1996</b> , 44, 199-217	6.4	35
44	Optical Properties of TiO <sub>2</sub> Suspensions: Influence of pH and Powder Concentration on Mean Particle Size. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 7620-7626	3.9	33
43	Degradation of Metoprolol by photo-Fenton: Comparison of different photoreactors performance. <i>Chemical Engineering Journal</i> , <b>2016</b> , 283, 639-648	14.7	30
42	Coupled photochemical-biological system to treat biorecalcitrant wastewater. <i>Water Science and Technology</i> , <b>2007</b> , 55, 95-100	2.2	29
41	Study of the wavelength effect in the photolysis and heterogeneous photocatalysis. <i>Catalysis Today</i> , <b>2007</b> , 129, 231-239	5.3	28
40	Continuous photocatalytic treatment of mercury(II) on titania powders. Kinetics and catalyst activity. <i>Chemical Engineering Science</i> , <b>1995</b> , 50, 1561-1569	4.4	28
39	Treatment of Diphenhydramine with different AOPs including photo-Fenton at circumneutral pH. <i>Chemical Engineering Journal</i> , <b>2017</b> , 318, 112-120	14.7	25
38	Performance of different advanced oxidation technologies for the abatement of the beta-blocker metoprolol. <i>Catalysis Today</i> , <b>2015</b> , 240, 86-92	5.3	24
37	Photo-Fenton treatment of valproate under UVC, UVA and simulated solar radiation. <i>Journal of Hazardous Materials</i> , <b>2017</b> , 323, 537-549	12.8	22
36	Rate-controlling steps in a three-phase (solid-liquid-gas) photoreactor: a phenomenological approach applied to hydrogen photoproduction using Pt/TiO <sub>2</sub> aqueous suspensions. <i>Chemical Engineering Science</i> , <b>1989</b> , 44, 583-593	4.4	22
35	Reactor modelling in the photocatalytic oxidation of wastewater. <i>Water Science and Technology</i> , <b>1997</b> , 35, 207	2.2	19
34	Synergies, radiation and kinetics in photo-Fenton process with UVA-LEDs. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 380, 120882	12.8	18
33	Adsorption and Photocatalytic Decomposition of the Blocker Metoprolol in Aqueous Titanium Dioxide Suspensions: Kinetics, Intermediates, and Degradation Pathways. <i>International Journal of Photoenergy</i> , <b>2013</b> , 2013, 1-10	2.1	18
32	Solar hydrogen photoproduction from sulphide/sulphite substrate. <i>International Journal of Hydrogen Energy</i> , <b>1992</b> , 17, 683-688	6.7	18

31	Higher intrinsic photocatalytic efficiency of 2,4,6-triphenylpyrylium-based photocatalysts compared to TiO <sub>2</sub> P-25 for the degradation of 2,4-dichlorophenol using solar simulated light. <i>Chemosphere</i> , <b>2008</b> , 72, 67-74	8.4	17
30	Organic fertilizer as a chelating agent in photo-Fenton at neutral pH with LEDs for agricultural wastewater reuse: Micropollutant abatement and bacterial inactivation. <i>Chemical Engineering Journal</i> , <b>2020</b> , 388, 124246	14.7	17
29	Micropollutant removal in real WW by photo-Fenton (circumneutral and acid pH) with BLB and LED lamps. <i>Chemical Engineering Journal</i> , <b>2020</b> , 379, 122416	14.7	17
28	Comparing the photocatalytic oxidation of Metoprolol in a solarbox and a solar pilot plant reactor. <i>Chemical Engineering Journal</i> , <b>2014</b> , 254, 17-29	14.7	16
27	Preparation and characterization of Pt(RuO <sub>2</sub> )/TiO <sub>2</sub> catalysts: Test in a continuous water photolysis system. <i>Journal of Catalysis</i> , <b>1990</b> , 123, 319-332	7.3	16
26	Physical characteristics of photocatalysts affecting the performance of a process in a continuous photoreactor. <i>Solar Energy Materials and Solar Cells</i> , <b>1988</b> , 17, 151-163		14
25	Photocatalytic diphenhydramine degradation under different radiation sources: Kinetic studies and energetic comparison. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 220, 497-505	21.8	11
24	Photolysis and TiO <sub>2</sub> Photocatalytic Treatment of Naproxen: Degradation, Mineralization, Intermediates and Toxicity. <i>Journal of Advanced Oxidation Technologies</i> , <b>2008</b> , 11,		10
23	Photocatalytic treatment of valproic acid sodium salt with TiO <sub>2</sub> in different experimental devices: An economic and energetic comparison. <i>Chemical Engineering Journal</i> , <b>2017</b> , 327, 656-665	14.7	9
22	Photodecomposition of phenol in a flow reactor: Adsorption and kinetics. <i>Monatshefte Für Chemie</i> , <b>1997</b> , 128, 1109-1118	1.4	9
21	A new continuous device to perform S-L-G photocatalytic studies. <i>Solar Energy</i> , <b>1992</b> , 49, 47-52	6.8	9
20	2,4-Dichlorophenol degradation by means of heterogeneous photocatalysis. Comparison between laboratory and pilot plant performance. <i>Chemical Engineering Journal</i> , <b>2013</b> , 232, 405-417	14.7	8
19	Comparative Study of 2,4-Dichlorophenol Degradation With Different Advanced Oxidation Processes. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>2007</b> , 129, 60-67	2.3	8
18	Catalysis by ion-exchange sulfonated resins: Comparative study of gel and macroporous types and influence of divinylbenzene concentration. <i>Applied Catalysis</i> , <b>1987</b> , 31, 221-234		8
17	Improvement of the photo-Fenton process at natural condition of pH using organic fertilizers mixtures: Potential application to agricultural reuse of wastewater. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 290, 120066	21.8	6
16	Synthesis, Characterization, and Photocatalytic Activity of Pure and N-, B-, or Ag- Doped TiO <sub>2</sub> . <i>Journal of the Brazilian Chemical Society</i> , <b>2017</b> ,	1.5	4
15	Mixtures of chelating agents to enhance photo-Fenton process at natural pH: Influence of wastewater matrix on micropollutant removal and bacterial inactivation. <i>Science of the Total Environment</i> , <b>2021</b> , 786, 147416	10.2	4
14	Direct evaluation of the absorbed photon flow in a photocatalytic reactor by an actinometric method. <i>Chemical Engineering Journal</i> , <b>2012</b> , 200-202, 158-167	14.7	3

13	Radiation-induced corrosion of wet CdS powders monitored by transmission electron microscopy. <i>Journal of Colloid and Interface Science</i> , <b>1990</b> , 140, 35-40	9.3	3
12	The self-sustaining decomposition of ammonium nitrate fertiliser: Case study, Escombreras valley, Spain. <i>Journal of Hazardous Materials</i> , <b>2020</b> , 387, 121674	12.8	3
11	Evaluation of the main active species involved in the TiO <sub>2</sub> photocatalytic degradation of ametryn herbicide and its by-products. <i>Journal of Environmental Chemical Engineering</i> , <b>2021</b> , 9, 105109	6.8	3
10	Coagulation-flocculation followed by catalytic ozonation processes for enhanced primary treatment during wet weather conditions. <i>Journal of Environmental Management</i> , <b>2021</b> , 283, 111975	7.9	3
9	A comparison of the environmental impact of different AOPs: risk indexes. <i>Molecules</i> , <b>2014</b> , 20, 503-18	4.8	2
8	Catalytic Activity of Sulphonated Styrene-Divinylbenzene Resins. <i>Applied Catalysis</i> , <b>1989</b> , 48, 307-325		2
7	Economic Assessment and Possible Industrial Application of a (Photo)catalytic Process <b>2019</b> , 235-267		1
6	Influence of Physical and Optical Parameters on 2,4-Dichlorophenol Degradation. <i>International Journal of Chemical Reactor Engineering</i> , <b>2013</b> , 11, 765-772	1.2	1
5	Approach to TiO <sub>2</sub> -light interaction in heterogeneous photocatalysis. <i>Water Science and Technology</i> , <b>2007</b> , 55, 147-151	2.2	1
4	Role of sunlight and oxygen on the performance of photo-Fenton process at near neutral pH using organic fertilizers as iron chelates. <i>Science of the Total Environment</i> , <b>2022</b> , 803, 149873	10.2	1
3	Lessons learned from the Barracas accident: Ammonium nitrate explosion during road transport. <i>Process Safety Progress</i> ,	1	1
2	Competency Training of Students of the Faculty of Chemistry of the University of Barcelona by Conducting Internal Audits. <i>Procedia, Social and Behavioral Sciences</i> , <b>2015</b> , 196, 59-62		
1	Removal and Degradation of Pharmaceutically Active Compounds (PhACs) in Wastewaters by Solar Advanced Oxidation Processes. <i>Handbook of Environmental Chemistry</i> , <b>2020</b> , 299-326	0.8	