

J Arturo Santaballa

List of Publications by Year in descending order

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89
papers

2,713
citations

257450

24
h-index

182427

51
g-index

98
all docs

98
docs citations

98
times ranked

3037
citing authors

#	ARTICLE	IF	CITATIONS
1	Reaction pathways and mechanisms of photodegradation of pesticides. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2002, 67, 71-108.	3.8	529
2	Kinetics and mechanism of aqueous degradation of carbamazepine by heterogeneous photocatalysis using nanocrystalline TiO ₂ , ZnO and multi-walled carbon nanotubes anatase composites. <i>Applied Catalysis B: Environmental</i> , 2011, 102, 563-571.	20.2	217
3	Aqueous degradation of diclofenac by heterogeneous photocatalysis using nanostructured materials. <i>Applied Catalysis B: Environmental</i> , 2011, 107, 110-118.	20.2	207
4	Aqueous chemistry of N-halo-compounds. <i>Chemical Society Reviews</i> , 1998, 27, 453.	38.1	122
5	On the mechanism of TiO ₂ -photocatalyzed degradation of aniline derivatives. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2005, 175, 192-200.	3.9	122
6	Oxidation of aliphatic amines by aqueous chlorine. <i>Tetrahedron</i> , 1998, 54, 521-530.	1.9	115
7	First Steps in the Oxidation of Sulfur-Containing Amino Acids by Hypohalogenation: Very Fast Generation of Intermediate Sulfenyl Halides and Halosulfonium Cations. <i>Tetrahedron</i> , 2000, 56, 1103-1109.	1.9	109
8	Mechanisms of Direct and TiO ₂ -Photocatalysed UV Degradation of Phenylurea Herbicides. <i>ChemPhysChem</i> , 2005, 6, 2064-2074.	2.1	76
9	Mechanism of degradation of ketoprofen by heterogeneous photocatalysis in aqueous solution. <i>Applied Catalysis B: Environmental</i> , 2013, 142-143, 633-646.	20.2	76
10	α-amino acids chlorination in aqueous media. <i>Tetrahedron</i> , 1993, 49, 275-284.	1.9	70
11	Ketonization of acetophenone enol in aqueous buffer solutions. Rate-equilibrium relations and mechanism of the uncatalyzed reaction. <i>Journal of the American Chemical Society</i> , 1988, 110, 5506-5510.	13.7	66
12	Degradation of aqueous ketoprofen by heterogeneous photocatalysis using Bi ₂ S ₃ /TiO ₂ Montmorillonite nanocomposites under simulated solar irradiation. <i>Applied Clay Science</i> , 2018, 166, 27-37.	5.2	64
13	Photocatalytic activity of mont-La (6%)-Cu _{0.6} Cd _{0.4} S catalyst for phenol degradation under near UV visible light irradiation. <i>Applied Catalysis B: Environmental</i> , 2017, 211, 114-125.	20.2	47
14	Photocatalyzed degradation/abatement of endocrine disruptors. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2017, 6, 101-138.	5.9	36
15	Concerted Grob Fragmentation in N-Halo-α-amino Acid Decomposition. <i>Journal of Organic Chemistry</i> , 1994, 59, 4659-4664.	3.2	33
16	On the Low-Lying Excited States of sym-Triazine-Based Herbicides. <i>ChemPhysChem</i> , 2005, 6, 306-314.	2.1	31
17	Kinetic and mechanistic aspects of the direct photodegradation of atrazine, atraton, ametryn and 2-hydroxyatrazine by 254 nm light in aqueous solution. <i>Journal of Physical Organic Chemistry</i> , 2003, 16, 498-503.	1.9	30
18	On the kinetics and energetics of one-electron oxidation of 1,3,5-triazines. <i>Chemical Communications</i> , 2003, , 112-113.	4.1	29

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19	Myeloperoxidase-catalyzed taurine chlorination: Initial versus equilibrium rate. Archives of Biochemistry and Biophysics, 2007, 466, 221-233.	3.0	29
20	Ammonia oxide makes up some 20% of an aqueous solution of hydroxylamine. Chemical Communications, 2010, 46, 1302.	4.1	29
21	First stages of photodegradation of the urea herbicides Fenuron, Monuron and Diuron. Journal of Molecular Structure, 2001, 565-566, 133-139.	3.6	27
22	Myeloperoxidase-catalyzed chlorination: The quest for the active species. Journal of Inorganic Biochemistry, 2008, 102, 1300-1311.	3.5	27
23	An operational approach to N-Cl- α -amino acids decomposition. International Journal of Chemical Kinetics, 1993, 25, 331-339.	1.6	26
24	Photo- and Radiation-Chemical Generation and Thermodynamic Properties of the Aminium and Aminyl Radicals Derived from N-Phenylglycine and (N-Chloro,N-phenyl)glycine in Aqueous Solution: Evidence for a New Photoionization Mechanism for Aromatic Amines. Chemistry - A European Journal, 1999, 5, 1192-1201.	3.3	25
25	Diclofenac degradation using mont-La (6%)-Cu _{0.6} Cd _{0.4} S as photocatalyst under NUV α Vis irradiation. Operational parameters, kinetics and mechanism. Journal of Environmental Chemical Engineering, 2017, 5, 5636-5644.	6.7	25
26	A calculator program for the optimization of physico-chemical parameters by unidimensional search. Computers & Chemistry, 1983, 7, 209-213.	1.2	24
27	A B3LYP/6-31G** study on the chlorination of ammonia by hypochlorous acid. Chemical Physics Letters, 2001, 342, 405-410.	2.6	24
28	N Reactivity vs. O reactivity in aqueous chlorination. International Journal of Chemical Kinetics, 1994, 26, 1135-1141.	1.6	21
29	Concerted base-promoted elimination in the decomposition of N-halo amino acids. Journal of Physical Organic Chemistry, 1996, 9, 552-560.	1.9	21
30	Developments in the mechanism of photodegradation of triazine-based pesticides. Journal of Physical Organic Chemistry, 2005, 18, 148-155.	1.9	19
31	A DFT study on the microscopic ionization of cysteine in water. Chemical Physics Letters, 2006, 417, 28-33.	2.6	19
32	The use of XPS spectra for the study of reaction mechanisms: the atom inventory method. Journal of Physical Organic Chemistry, 2008, 21, 1035-1042.	1.9	19
33	Reactivity of the Thermally Stable Intermediates of the Reduction of SO ₂ on Carbons and Mechanisms of Insertion of Organic Moieties in the Carbon Matrix. Journal of Physical Chemistry C, 2008, 112, 581-589.	3.1	18
34	Selective Insertion of Sulfur Dioxide Reduction Intermediates on Graphene Oxide. Langmuir, 2014, 30, 4301-4309.	3.5	18
35	A theoretical analysis of the acid-base equilibria of hydroxylamine in aqueous solution. Chemical Physics Letters, 2010, 490, 159-164.	2.6	17
36	Photochemistry for pollution abatement. Pure and Applied Chemistry, 2013, 85, 1437-1449.	1.9	17

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37	Reactive Site Model of the Reduction of SO ₂ on Graphite. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14649-14657.	3.1	17
38	Nitrenium ions in N-chloro- α -amino acids decomposition?. <i>International Journal of Chemical Kinetics</i> , 1993, 25, 1-8.	1.6	16
39	Decomposition of N-chloro- α -amino acids in alkaline medium. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1993, , 181-185.	0.9	15
40	(Re)Greening photochemistry: using light for degrading persistent organic pollutants. <i>Reviews in Environmental Science and Biotechnology</i> , 2012, 11, 213-221.	8.1	15
41	A note on the meaning of the electroneutrality condition for solutions. <i>Journal of Chemical Education</i> , 1989, 66, 403.	2.3	14
42	Unimolecular Decomposition of the Anionic Form of N-Chloro- α -glycine. A Theoretical Study. <i>The Journal of Physical Chemistry</i> , 1996, 100, 3561-3568.	2.9	14
43	Intracellular oxidation of dipeptides. Very fast halogenation of the amino-terminal residue. <i>Perkin Transactions II RSC</i> , 2001, , 608-612.	1.1	14
44	Extended planarity and π delocalization in triazine-based derivatives. <i>Chemical Physics Letters</i> , 2006, 426, 290-295.	2.6	14
45	Face-Fusion of Icosahedral Boron Hydride Increases Affinity to β -Cyclodextrin: closo, closo $\{B_{21}H_{18}\}^-$ as an Anion with Very Low Free Energy of Dehydration. <i>ChemPhysChem</i> , 2020, 21, 971-976.	2.1	14
46	Simulated sunlight photodegradation of 2-mercaptobenzothiazole by heterogeneous photo-Fenton using a natural clay powder. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 1783-1793.	6.7	12
47	Combined Theoretical and Experimental Study of the Photophysics of Asulam. <i>Journal of Physical Chemistry A</i> , 2013, 117, 2125-2137.	2.5	11
48	Acidities of closo-1,7-C ₂ B ₁₀ H ₁₁ and Amino Acids Based on Icosahedral Carbaboranes. <i>Journal of Physical Chemistry A</i> , 2014, 118, 2788-2793.	2.5	11
49	An efficient green photo-Fenton system for the degradation of organic pollutants. Kinetics of propranolol removal from different water matrices. <i>Journal of Water Process Engineering</i> , 2022, 46, 102514.	5.6	10
50	Acid-base equilibria and decomposition of secondary (N-Cl)- α -amino acids.. <i>Tetrahedron</i> , 1994, 50, 10509-10520.	1.9	9
51	Theoretical study of substituent effects in the unimolecular decomposition of N-chloro- α -amino acid anions. Analysis of transition structure and molecular reaction mechanism. <i>Journal of Physical Organic Chemistry</i> , 1996, 9, 371-380.	1.9	9
52	Evidence for an intramolecular elimination mechanism in the aqueous decomposition of (N-Cl)-alcoholamines. <i>Tetrahedron</i> , 1997, 53, 2565-2572.	1.9	8
53	Evidence of non-photo-Fenton degradation of ibuprofen upon UVA irradiation in the presence of Fe(III)/malonate. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 382, 111976.	3.9	8
54	General base catalysis in the decomposition of N-Cl-Valine in aqueous solution. <i>International Journal of Chemical Kinetics</i> , 1994, 26, 1041-1053.	1.6	6

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55	Evidence for the intermediacy of N-(2-imino, 1-oxo-propyl)-glycine in the base-catalyzed decomposition of N-halo-dipeptides. <i>Tetrahedron</i> , 1997, 53, 12615-12620.	1.9	6
56	A joint theoretical and kinetic investigation on the fragmentation of (N-halo)-2-amino cycloalkanecarboxylates. <i>Chemical Physics</i> , 2002, 280, 1-14.	1.9	6
57	A theoretical study on the mechanism of the base-promoted decomposition of N-chloro,N-methylethanolamine. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 1807.	2.8	6
58	Energy landscapes in diexo and exo/endo isomers derived from Li2B12H12. <i>Chemical Physics Letters</i> , 2010, 497, 172-177.	2.6	6
59	Isotope Effects in the Solvolysis of Sterically Hindered Arenesulfonyl Chlorides. <i>International Journal of Chemical Kinetics</i> , 2015, 47, 744-750.	1.6	6
60	Photolysis of Phenylalanine in the Presence of Oxidized Carbon Nanotubes. <i>Langmuir</i> , 2015, 31, 164-170.	3.5	6
61	Photolytic insertion of albumin on activated carbon modified with ozone. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 174, 261-268.	3.8	6
62	Isotope effect of solvent on the equilibrium of formation of the nitrosonium/nitrous acidium ion. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1988, , 1963.	0.9	5
63	Alkoxide-promoted decomposition of N-halo- α -amino acids in aqueous medium.. <i>Tetrahedron</i> , 1994, 50, 2265-2276.	1.9	5
64	Solvent isotope effects in the oxidation of dipeptides by aqueous chlorine. <i>Canadian Journal of Chemistry</i> , 1999, 77, 997-1004.	1.1	5
65	Interconversion and selective reactivity of sulfur dioxide reduction intermediates inserted on graphene oxide. <i>Journal of Physical Organic Chemistry</i> , 2016, 29, 773-780.	1.9	5
66	Solvent network at the transition state in the solvolysis of hindered sulfonyl compounds. <i>Journal of Physical Organic Chemistry</i> , 2017, 30, e3588.	1.9	5
67	Consel, a least-squares program for estimating stability constants from polarographic data. <i>Talanta</i> , 1985, 32, 931-935.	5.5	4
68	Understanding the mechanism of base-assisted decomposition of (N-halo),N-alkylalcoholamines. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 4323-4328.	2.8	4
69	Density functional study of the Hoffmann elimination of (N-Cl),N-methylethanolamine in gas phase and in aqueous solution. <i>Chemical Physics Letters</i> , 2006, 429, 425-429.	2.6	4
70	Intracellular Oxidation of Dipeptides. Base-Promoted Elimination from N-Halodipeptides to 2-[N-Alkyl-N-(2-N-alkylimino-2-alkylethanoyl)amino]-2,2-dialkylethanoic Acids. <i>Journal of Organic Chemistry</i> , 2001, 66, 5692-5700.	3.2	3
71	Unravelling the mechanism of intracellular oxidation of thiols by (Nâ€¦Cl)â€¦Taurine. <i>Journal of Physical Organic Chemistry</i> , 2013, 26, 1098-1104.	1.9	3
72	Predicted Gasâ€¦Phase and Liquidâ€¦Phase Acidities of Carborane Carboxylic and Dicarboxylic Acids. <i>ChemistrySelect</i> , 2018, 3, 4344-4353.	1.5	3

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73	Intramolecular Amino-thiolysis Cyclization of Graphene Oxide Modified with Sulfur Dioxide: XPS and Solid-State NMR Studies. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1729-1741.	3.1	3
74	Acidity of Effluent from Inert Gas Systems Using Seawater Scrubbing. <i>Environmental Technology (United Kingdom)</i> , 1996, 17, 331-335.	2.2	2
75	Prediction of the Acidity of Effluent from Fluegas Scrubbers using Seawater. <i>Environmental Technology (United Kingdom)</i> , 1997, 18, 545-550.	2.2	2
76	Diethyl 1-(4-fluorophenyl)-3-(2-furyl)-5-oxopyrrolidine-2,2-dicarboxylate and diethyl 1-(3,4-dichlorophenyl)-3-(2-furyl)-5-oxopyrrolidine-2,2-dicarboxylate. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2004, 60, o163-o165.	0.4	2
77	1-(3-Chloro-4-fluorophenyl)-5-(2-diazoacetyl)-4-phenylpyrrolidin-2-one. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010, 66, o2103-o2103.	0.2	2
78	Mechanisms of Solid-Gas Reactions: Reduction of Air Pollutants on Carbons. <i>Topics in Catalysis</i> , 2020, 63, 817-832.	2.8	2
79	Propanolysis of arenesulfonyl chlorides: Nucleophilic substitution at sulfonyl sulfur. <i>Journal of Physical Organic Chemistry</i> , 2018, 31, e3753.	1.9	2
80	On sampling range and heteroscedasticity in the log-plot analysis of polarograms. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1988, 257, 293-297.	0.1	1
81	14-n-Butyldibenz[a,h]acridine. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2003, 59, o514-o516.	0.2	1
82	3,3-Bis(2-furylmethyl)-2-methyl-4-oxocyclohex-1-ene-1-carboxylic acid. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2003, 59, o1141-o1142.	0.2	1
83	Effect of mass of pristine carbon nanotubes on the photolysis of phenylalanine. <i>Journal of Physical Organic Chemistry</i> , 2019, 32, e3849.	1.9	1
84	Photo-immobilization of proteins on carbons. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2020, 202, 111675.	3.8	1
85	Diethyl 1-(4-methylphenyl)-3-phenyl-5-oxopyrrolidine-2,2-dicarboxylate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010, 66, o2104-o2105.	0.2	1
86	2-(2-Furylmethyl)-1-methyl-3-oxocyclohexanecarboxylic acid. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2003, 59, o1050-o1052.	0.2	0
87	Differential features of short-lived intermediates: Structure, properties and reactivity. <i>Advances in Physical Organic Chemistry</i> , 2020, , 99-118.	0.5	0
88	Effect of ionizing radiation on human myeloperoxidase: Reaction with hydrated electrons. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2022, 226, 112369.	3.8	0
89	Solvent isotope effects in the oxidation of dipeptides by aqueous chlorine. <i>Canadian Journal of Chemistry</i> , 1999, 77, 997-1004.	1.1	0