Aurora Santos

List of Publications by Year
in descending order

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130 papers	5,576 citations	76326 40 h-index	91884 69 g-index
130 all docs	130 docs citations	130 times ranked	5231 citing authors

#	Article	IF	Citations
1	Toxicity and biodegradability of imidazolium ionic liquids. Journal of Hazardous Materials, 2008, 151, 268-273.	12.4	585
2	Oxidation of Orange G by persulfate activated by Fe(II), Fe(III) and zero valent iron (ZVI). Chemosphere, 2014, 101, 86-92.	8.2	269
3	Route of the catalytic oxidation of phenol in aqueous phase. Applied Catalysis B: Environmental, 2002, 39, 97-113.	20.2	253
4	Diuron abatement using activated persulphate: Effect of pH, Fe(II) and oxidant dosage. Chemical Engineering Journal, 2010, 162, 257-265.	12.7	199
5	Evolution of Toxicity upon Wet Catalytic Oxidation of Phenol. Environmental Science & Technology, 2004, 38, 133-138.	10.0	148
6	Kinetic study of diuron oxidation and mineralization by persulphate: Effects of temperature, oxidant concentration and iron dosage method. Chemical Engineering Journal, 2011, 170, 127-135.	12.7	140
7	Study of the copper leaching in the wet oxidation of phenol with CuO-based catalysts: Causes and effects. Applied Catalysis B: Environmental, 2005, 61, 323-333.	20.2	139
8	Remediation of aged diesel contaminated soil by alkaline activated persulfate. Science of the Total Environment, 2018, 622-623, 41-48.	8.0	119
9	Lindane degradation by electrooxidation process: Effect of electrode materials on oxidation and mineralization kinetics. Water Research, 2018, 135, 220-230.	11.3	111
10	Kinetic Modeling of Lactose Hydrolysis by a Î²-Galactosidase from Kluyveromices Fragilis. Enzyme and Microbial Technology, 1998, 22, 558-567.	3.2	101
11	Use of different kinds of persulfate activation with iron for the remediation of a PAH-contaminated soil. Science of the Total Environment, 2016, 563-564, 649-656.	8.0	93
12	Improvement soil remediation by using stabilizers and chelating agents in a Fenton-like process. Chemical Engineering Journal, 2011, 172, 689-697.	12.7	91
13	Abatement of chlorinated compounds in groundwater contaminated by HCH wastes using ISCO with alkali activated persulfate. Science of the Total Environment, 2018, 615, 1070-1077.	8.0	89
14	Kinetic modeling of lactose hydrolysis with an immobilized Î²-galactosidase from Kluyveromyces fragilis. Enzyme and Microbial Technology, 2000, 27, 583-592.	3.2	83
15	Removal of lindane wastes by advanced electrochemical oxidation. Chemosphere, 2018, 202, 400-409.	8.2	80
16	Wet oxidation of phenol, cresols and nitrophenols catalyzed by activated carbon in acid and basic media. Applied Catalysis B: Environmental, 2006, 65, 269-281.	20.2	75
17	Soil remediation using soil washing followed by Fenton oxidation. Chemical Engineering Journal, 2013, 220, 125-132.	12.7	73
18	Soil remediation by Fenton-like process: Phenol removal and soil organic matter modification. Chemical Engineering Journal, 2011, 170, 36-43.	12.7	71

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19	Oxidation of priority and emerging pollutants with persulfate activated by iron: Effect of iron valence and particle size. Chemical Engineering Journal, 2017, 318, 197-205.	12.7	65
20	Studies on the activity and the stability of Î²-galactosidases from Thermus sp strain T2 and from Kluyveromyces fragilis. Enzyme and Microbial Technology, 2002, 30, 392-405.	3.2	61
21	Chlorinated organic compounds in liquid wastes (DNAPL) from lindane production dumped in landfills in SabiÃ±anigo (Spain). Environmental Pollution, 2018, 242, 1616-1624.	7.5	60
22	Use of Fenton reagent combined with humic acids for the removal of PFOA from contaminated water. Science of the Total Environment, 2016, 563-564, 657-663.	8.0	57
23	Catalytic wet oxidation of phenol on active carbon: stability, phenol conversion and mineralization. Catalysis Today, 2005, 102-103, 213-218.	4.4	55
24	Reaction network and kinetic modeling of wet oxidation of phenol catalyzed by activated carbon. Chemical Engineering Science, 2006, 61, 2457-2467.	3.8	55
25	Methanol-enhanced degradation of carbon tetrachloride by alkaline activation of persulfate: Kinetic model. Science of the Total Environment, 2019, 666, 631-640.	8.0	55
26	Fate of iron and polycyclic aromatic hydrocarbons during the remediation of a contaminated soil using iron-activated persulfate: A column study. Science of the Total Environment, 2016, 566-567, 480-488.	8.0	53
27	In situ oxidation remediation technologies: Kinetic of hydrogen peroxide decomposition on soil organic matter. Journal of Hazardous Materials, 2009, 170, 627-632.	12.4	52
28	Selective removal of chlorinated organic compounds from lindane wastes by combination of nonionic surfactant soil flushing and Fenton oxidation. Chemical Engineering Journal, 2019, 376, 120009.	12.7	52
29	Thermal and pH inactivation of an immobilized thermostable Î²-galactosidase from Thermus sp. strain T2: Comparison to the free enzyme. Biochemical Engineering Journal, 2006, 31, 14-24.	3.6	50
30	Remediation of soil contaminated by lindane wastes using alkaline activated persulfate: Kinetic model. Chemical Engineering Journal, 2020, 393, 124646.	12.7	50
31	Kinetic of oxidation and mineralization of priority and emerging pollutants by activated persulfate. Chemical Engineering Journal, 2012, 213, 225-234.	12.7	49
32	Remediation of a biodiesel blend-contaminated soil by using a modified Fenton process. Environmental Science and Pollution Research, 2014, 21, 12198-12207.	5.3	49
33	Chemical oxidation of 2,4-dimethylphenol in soil by heterogeneous Fenton process. Journal of Hazardous Materials, 2009, 162, 785-790.	12.4	47
34	Abatement of phenolic mixtures by catalytic wet oxidation enhanced by Fenton's pretreatment: Effect of H2O2 dosage and temperature. Journal of Hazardous Materials, 2007, 146, 595-601.	12.4	45
35	Etherification of Glycerol by tert-Butyl Alcohol: Kinetic Model. Industrial & Engineering Chemistry Research, 2012, 51, 9500-9509.	3.7	45
36	Comparative dehydrogenation of cyclohexanol to cyclohexanone with commercial copper catalysts: Catalytic activity and impurities formed. Applied Catalysis A: General, 2011, 392, 19-27.	4.3	44

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37	Thermally activated persulfate for the chemical oxidation of chlorinated organic compounds in groundwater. Journal of Environmental Management, 2020, 261, 110240.	7.8	44
38	Activity over lactose and ONPG of a genetically engineered Î²-galactosidase from Escherichia coli in solution and immobilized: kinetic modelling. Enzyme and Microbial Technology, 2001, 29, 181-193.	3.2	42
39	Remediation of soil contaminated by PAHs and TPH using alkaline activated persulfate enhanced by surfactant addition at flow conditions. Journal of Chemical Technology and Biotechnology, 2018, 93, 1270-1278.	3.2	42
40	Abatement of dichloromethane using persulfate activated by alkali: A kinetic study. Separation and Purification Technology, 2020, 241, 116679.	7.9	42
41	Hydrolysis of lactose by free and immobilized ?-galactosidase from Thermus sp. strain T2. Biotechnology and Bioengineering, 2003, 81, 241-252.	3.3	41
42	Kinetic Modeling of Kraft Delignification ofEucalyptus globulus. Industrial & Engineering Chemistry Research, 1997, 36, 4114-4125.	3.7	40
43	Kinetic modelling of the thermal inactivation of an industrial Î²-galactosidase from Kluyveromyces fragilis. Enzyme and Microbial Technology, 2006, 38, 1-9.	3.2	40
44	Dye Oxidation in Aqueous Phase by Using Zero-Valent Iron as Persulfate Activator: Kinetic Model and Effect of Particle Size. Industrial & Engineering Chemistry Research, 2014, 53, 12288-12294.	3.7	40
45	Effectiveness of AOP's on abatement of emerging pollutants and their oxidation intermediates: Nicotine removal with Fenton's Reagent. Desalination, 2011, 280, 108-113.	8.2	39
46	Influence of pH on the wet oxidation of phenol with copper catalyst. Topics in Catalysis, 2005, 33, 181-192.	2.8	38
47	Activated carbon as catalyst in wet oxidation of phenol: Effect of the oxidation reaction on the catalyst properties and stability. Applied Catalysis B: Environmental, 2008, 81, 122-131.	20.2	38
48	Organosolv Delignification of Eucalyptus globulus:â€‰ Kinetic Study of Autocatalyzed Ethanol Pulping. Industrial & Engineering Chemistry Research, 2000, 39, 34-39.	3.7	37
49	Lower toxicity route in catalytic wet oxidation of phenol at basic pH by using bicarbonate media. Applied Catalysis B: Environmental, 2004, 53, 181-194.	20.2	37
50	Decolorization of Textile Dyes by Wet Oxidation Using Activated Carbon as Catalyst. Industrial & Engineering Chemistry Research, 2007, 46, 2423-2427.	3.7	37
51	Remediation of soil polluted with herbicides by Fenton-like reaction: Kinetic model of diuron degradation. Applied Catalysis B: Environmental, 2014, 144, 252-260.	20.2	37
52	Degradation of HCHs by thermally activated persulfate in soil system: Effect of temperature and oxidant concentration. Journal of Environmental Chemical Engineering, 2021, 9, 105668.	6.7	37
53	Catalytic Wet Oxidation of Phenol:Â Kinetics of the Mineralization Rate. Industrial & Engineering Chemistry Research, 2001, 40, 2773-2781.	3.7	36
54	Overall rate of aqueous-phase catalytic oxidation of phenol: pH and catalyst loading influences. Catalysis Today, 1999, 48, 109-117.	4.4	34

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55	Partitioning of chlorinated organic compounds from dense non-aqueous phase liquids and contaminated soils from lindane production wastes to the aqueous phase. Chemosphere, 2020, 239, 124798.	8.2	34
56	Catalytic Wet Oxidation of Phenol:Â Kinetics of Phenol Uptake. Environmental Science & Technology, 2001, 35, 2828-2835.	10.0	32
57	Diffusion and chemical reaction rates with nonuniform enzyme distribution: An experimental approach. Biotechnology and Bioengineering, 2001, 72, 458-467.	3.3	32
58	Kinetics of Lindane Dechlorination by Zerovalent Iron Microparticles: Effect of Different Salts and Stability Study. Industrial & Engineering Chemistry Research, 2016, 55, 12776-12785.	3.7	32
59	Remediation of HCHs-contaminated sediments by chemical oxidation treatments. Science of the Total Environment, 2021, 751, 141754.	8.0	32
60	Diuron abatement in contaminated soil using Fenton-like process. Chemical Engineering Journal, 2012, 183, 357-364.	12.7	31
61	Study of the deactivation of copper-based catalysts for dehydrogenation of cyclohexanol to cyclohexanone. Catalysis Today, 2012, 187, 150-158.	4.4	30
62	Degradation of Hexachlorocyclohexanes (HCHs) by Stable Zero Valent Iron (ZVI) Microparticles. Water, Air, and Soil Pollution, 2016, 227, 1.	2.4	30
63	Compatibility of nonionic and anionic surfactants with persulfate activated by alkali in the abatement of chlorinated organic compounds in aqueous phase. Science of the Total Environment, 2021, 751, 141782.	8.0	30
64	Oxidation of phenol in aqueous solution with copper catalysts. Catalysis Today, 2001, 66, 511-517.	4.4	28
65	Application of Chelating Agents to Enhance Fenton Process in Soil Remediation: A Review. Catalysts, 2021, 11, 722.	3.5	28
66	Kinetic model of wet oxidation of phenol at basic pH using a copper catalyst. Chemical Engineering Science, 2005, 60, 4866-4878.	3.8	27
67	Remediation of a Biodiesel Blend-Contaminated Soil with Activated Persulfate by Different Sources of Iron. Water, Air, and Soil Pollution, 2015, 226, 1.	2.4	27
68	Remediation of real soil polluted with hexachlorocyclohexanes (Î±-HCH and Î²-HCH) using combined thermal and alkaline activation of persulfate: Optimization of the operating conditions. Separation and Purification Technology, 2021, 270, 118795.	7.9	27
69	Kinetics ofEucalyptus globulusDelignification in a Methanolâ^'Water Medium. Industrial & Engineering Chemistry Research, 1999, 38, 3324-3332.	3.7	26
70	Kinetic modelling of the thermal and pH inactivation of a thermostable Î²-galactosidase from Thermus sp. strain T2. Enzyme and Microbial Technology, 2005, 37, 505-513.	3.2	26
71	In situ chemical reduction of chlorinated organic compounds from lindane production wastes by zero valent iron microparticles. Journal of Water Process Engineering, 2018, 26, 146-155.	5.6	26
72	Enhanced remediation of a real HCH-polluted soil by the synergetic alkaline and ultrasonic activation of persulfate. Chemical Engineering Journal, 2022, 440, 135901.	12.7	26

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73	Oxidation and mineralisation of substituted phenols by Fenton's reagent and catalytic wet oxidation. Water Science and Technology, 2007, 55, 37-45.	2.5	25
74	Comparison of real wastewater oxidation with Fenton/Fenton-like and persulfate activated by NaOH and Fe(II). Journal of Environmental Management, 2020, 255, 109926.	7.8	25
75	Enhancing p-cresol extraction from soil. Chemosphere, 2011, 84, 260-264.	8.2	24
76	Generalized Kinetic Model for the Catalytic Wet Oxidation of Phenol Using Activated Carbon as the Catalyst. Industrial & Engineering Chemistry Research, 2005, 44, 3869-3878.	3.7	23
77	Etherification of Glycerol with Benzyl Alcohol. Industrial & Engineering Chemistry Research, 2013, 52, 14545-14555.	3.7	23
78	Kinetic of Alkali Catalyzed Self-Condensation of Cyclohexanone. Industrial & Engineering Chemistry Research, 2013, 52, 2257-2265.	3.7	23
79	Remediation of soil contaminated by <scp>NAPLs</scp> using modified Fenton reagent: application to gasoline type compounds. Journal of Chemical Technology and Biotechnology, 2015, 90, 754-764.	3.2	23
80	Phenol abatement using persulfate activated by nZVI, H₂O₂ and NaOH and development of a kinetic model for alkaline activation. Environmental Technology (United Kingdom), 2018, 39, 35-43.	2.2	23
81	Effective diffusivity under inert and reaction conditions. Chemical Engineering Science, 1994, 49, 3091-3102.	3.8	22
82	Coke formation in copper catalyst during cyclohexanol dehydrogenation: Kinetic deactivation model and catalyst characterization. Chemical Engineering Journal, 2013, 214, 119-128.	12.7	22
83	Soil-Washing Effluent Treatment by Selective Adsorption of Toxic Organic Contaminants on Activated Carbon. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	21
84	Glycerol etherification with benzyl alcohol over sulfated zirconia catalysts. Applied Catalysis A: General, 2015, 505, 36-43.	4.3	21
85	Improved Etherification of Glycerol with Tert-Butyl Alcohol by the Addition of Dibutyl Ether as Solvent. Catalysts, 2019, 9, 378.	3.5	21
86	Partition of a mixture of chlorinated organic compounds in real contaminated soils between soil and aqueous phase using surfactants: Influence of pH and surfactant type. Journal of Environmental Chemical Engineering, 2021, 9, 105908.	6.7	19
87	Surfactant-Enhanced Solubilization of Chlorinated Organic Compounds Contained in DNAPL from Lindane Waste: Effect of Surfactant Type and pH. International Journal of Environmental Research and Public Health, 2020, 17, 4494.	2.6	18
88	Abatement of chlorobenzenes in aqueous phase by persulfate activated by alkali enhanced by surfactant addition. Journal of Environmental Management, 2022, 306, 114475.	7.8	18
89	Dehydrogenation of Cyclohexanol to Cyclohexanone:Â Influence of Methylcyclopentanols on the Impurities Obtained in Îµ-Caprolactam. Industrial & Engineering Chemistry Research, 2003, 42, 3654-3661.	3.7	17
90	Fenton Pretreatment in the Catalytic Wet Oxidation of Phenol. Industrial & Engineering Chemistry Research, 2010, 49, 5583-5587.	3.7	17

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91	Glycerol etherification over acid ion exchange resins: effect of catalyst concentration and reusability. Journal of Chemical Technology and Biotechnology, 2013, 88, 2027-2038.	3.2	17
92	Optimization of the application of the Fenton chemistry for the remediation of a contaminated soil with polycyclic aromatic hydrocarbons. Journal of Chemical Technology and Biotechnology, 2016, 91, 1763-1772.	3.2	17
93	Humic acids extracted from compost as amendments for Fenton treatment of diesel-contaminated soil. Environmental Science and Pollution Research, 2020, 27, 22225-22234.	5.3	17
94	Measurement of the effective diffusivity for a vanadia-tungsta-titania/sepiolite catalyst for SCR of NOx. Applied Catalysis B: Environmental, 1996, 8, 299-314.	20.2	16
95	Abatement of 1,2,4-Trichlorobencene by Wet Peroxide Oxidation Catalysed by Goethite and Enhanced by Visible LED Light at Neutral pH. Catalysts, 2021, 11, 139.	3.5	16
96	Isomerization of 1-butene on silica-alumina: Kinetic modeling and catalyst deactivation. AICHE Journal, 1995, 41, 286-300.	3.6	15
97	Mineralization lumping kinetic model for abatement of organic pollutants using Fenton's reagent. Catalysis Today, 2010, 151, 89-93.	4.4	15
98	Wet Peroxide Oxidation of Chlorobenzenes Catalyzed by Goethite and Promoted by Hydroxylamine. Catalysts, 2019, 9, 553.	3.5	15
99	Effect of Methyl-Î´-valerolactams on the Quality of Îµ-Caprolactam. Industrial & Engineering Chemistry Research, 2004, 43, 1557-1560.	3.7	14
100	Kinetic Model of Catalytic Self-Condensation of Cyclohexanone over Amberlyst 15. Industrial & Engineering Chemistry Research, 2014, 53, 19117-19127.	3.7	13
101	Soil flushing pilot test in a landfill polluted with liquid organic wastes from lindane production. Heliyon, 2019, 5, e02875.	3.2	13
102	Kinetics of Alkali-Catalyzed Condensation of Impurities in the Cyclohexanone Purification Process. Industrial & Engineering Chemistry Research, 2013, 52, 15780-15788.	3.7	11
103	Deactivation of a silica-alumina catalyst by coke deposition. Industrial & Engineering Chemistry Research, 1993, 32, 2626-2632.	3.7	10
104	Kraft Pulping ofEucalyptusglobulus:Â Kinetics of Residual Delignification. Industrial & Engineering Chemistry Research, 2002, 41, 1955-1959.	3.7	10
105	Hindered diffusion of proteins and polymethacrylates in controlled-pore glass: An experimental approach. Chemical Engineering Science, 2007, 62, 666-678.	3.8	10
106	Simultaneous addition of surfactant and oxidant to remediate a polluted soil with chlorinated organic compounds: Slurry and column experiments. Journal of Environmental Chemical Engineering, 2022, 10, 107625.	6.7	10
107	Coke effect in mass transport and morphology of Pt-Al2O3 and Ni-Mo-Al2O3 catalysts. AICHE Journal, 1996, 42, 524-531.	3.6	8
108	Kinetic model of 2-cyclohexenone formation from cyclohexanol and 2-cyclohexenol dehydrogenation. Chemical Engineering Journal, 2012, 192, 129-137.	12.7	8

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109	Mass transfer influences on the design of selective catalytic reduction (SCR) monolithic reactors. Chemical Engineering and Processing: Process Intensification, 1998, 37, 117-124.	3.6	7
110	Phenol Production Kinetic Model in the Cyclohexanol Dehydrogenation Process. Industrial & Engineering Chemistry Research, 2011, 50, 8498-8504.	3.7	7
111	Detoxification Kinetic Modeling for Nonbiodegradable Wastewaters: An Ecotoxicity Lumping Approach. Industrial & Engineering Chemistry Research, 2008, 47, 8639-8644.	3.7	6
112	Kinetic Modeling of Toxicity Evolution during Phenol Oxidation. Industrial & Engineering Chemistry Research, 2009, 48, 2844-2850.	3.7	6
113	Linear Amides in Caprolactam from Linear Ketone Impurities in Cyclohexanone Obtained from Cyclohexane: Kinetics and Identification. Industrial & Engineering Chemistry Research, 2019, 58, 11878-11890.	3.7	6
114	Catalytic oxidation ofn-propanol in a multiphase upflow reactor: surface tension effects. Chemical Engineering Science, 1994, 49, 5699-5707.	3.8	5
115	Vaporâ€“Liquid Equilibria of Cyclohexanone + 2-Cyclohexen-1-one and Cyclohexanol + 2-Cyclohexen-1-one, Validated in a Packed Column Distillation.. Journal of Chemical & Engineering Data, 2015, 60, 2818-2826.	1.9	5
116	Regeneration of Granulated Spent Activated Carbon with 1,2,4-Trichlorobenzene Using Thermally Activated Persulfate. Industrial & Engineering Chemistry Research, 2022, 61, 9611-9620.	3.7	5
117	Influence of temperature and catalyst loading on the aqueous-phase catalytic oxidation of phenol. Studies in Surface Science and Catalysis, 2000, 130, 1769-1774.	1.5	4
118	Determination of deactivation kinetic parameters, II. Data from integral reactors. Reaction Kinetics and Catalysis Letters, 1989, 40, 163-170.	0.6	3
119	Determination of deactivation kinetic parameters, I. Data from differential reactors. Reaction Kinetics and Catalysis Letters, 1989, 40, 157-162.	0.6	2
120	Modelling of a Reactive Distillation in the production process of high purity Cyclohexanone to produce caprolactam. Computer Aided Chemical Engineering, 2016, , 176-181.	0.5	2
121	Optimization-Based Design of a Reactive Distillation Column for the Purification Process of Cyclohexanone Using Rigorous Simulation Model and Validated Using an Experimental Packed Column. Industrial & Engineering Chemistry Research, 2018, 57, 16407-16422.	3.7	2
122	Persulfate in Remediation of Soil and Groundwater Contaminated byÂOrganic Compounds. Environmental Pollution, 2021, , 221-262.	0.4	2
123	HCH-Contaminated Soils and Remediation Technologies. , 0, , .		2
124	Non-Ionic Surfactant Recovery in Surfactant Enhancement Aquifer Remediation Effluent with Chlorobenzenes by Semivolatile Chlorinated Organic Compounds Volatilization. International Journal of Environmental Research and Public Health, 2022, 19, 7547.	2.6	2
125	Transformation of Cyclic Ketones as Impurities in Cyclohexanone in the Caprolactam Production Process. Industrial & Engineering Chemistry Research, 2019, 58, 21983-21995.	3.7	1
126	Evaluation of VLEs for Binaries of Five Compounds Involved in the Production Processes of Cyclohexanone. ChemEngineering, 2022, 6, 42.	2.4	1

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127	Liquid phase catalytic oxidation of aliphatic alcohols mixtures. Catalysis Today, 1995, 24, 59-64.	4.4	0
128	Direct test of adsorption enthalpy in 1-butene isomerization over a silicaâ€”alumina catalyst. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1995, 60, 147-154.	0.1	0
129	Special Issue on â€œGreen Catalysts: Application to Waste and Groundwater Treatmentâ€• Catalysts, 2021, 11, 1043.	3.5	0
130	Abatement of Naphthalene by Persulfate Activated by Goethite and Visible LED Light at Neutral pH: Effect of Common Ions and Organic Matter. Catalysts, 2022, 12, 732.	3.5	0