Chun-Hua Huang

List of Publications by Year
in descending order

45 papers	974 citations	567281 15 h-index	454955 30 g-index
46 all docs	46 docs citations	46 times ranked	817 citing authors

#	Article	IF	Citations
1	Reactive Nitrogen Species Are Also Involved in the Transformation of Micropollutants by the UV/Monochloramine Process. Environmental Science & Technology, 2019, 53, 11142-11152.	10.0	127
2	First Direct and Unequivocal Electron Spin Resonance Spin-Trapping Evidence for pH-Dependent Production of Hydroxyl Radicals from Sulfate Radicals. Environmental Science & Technology, 2020, 54, 14046-14056.	10.0	110
3	Unprecedented hydroxyl radical-dependent two-step chemiluminescence production by polyhalogenated quinoid carcinogens and H ₂ O ₂. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16046-16051.	7.1	89
4	Metal-independent decomposition of hydroperoxides by halogenated quinones: Detection and identification of a quinone ketoxy radical. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11466-11471.	7.1	80
5	Delivering the cell-impermeable DNA â€˜light-switchingâ€™ Ru(<scp>ii</scp>) complexes preferentially into live-cell nucleus via an unprecedented ion-pairing method. Chemical Science, 2016, 7, 4016-4023.	7.4	50
6	Molecular Mechanism of Metal-Independent Decomposition of Organic Hydroperoxides by Halogenated Quinoid Carcinogens and the Potential Biological Implications. Chemical Research in Toxicology, 2015, 28, 831-837.	3.3	44
7	Potent methyl oxidation of 5-methyl-2â€²-deoxycytidine by halogenated quinoid carcinogens and hydrogen peroxide via a metal-independent mechanism. Free Radical Biology and Medicine, 2013, 60, 177-182.	2.9	40
8	Mechanism of synergistic DNA damage induced by the hydroquinone metabolite of brominated phenolic environmental pollutants and Cu(II): Formation of DNA-Cu complex and site-specific production of hydroxyl radicals. Free Radical Biology and Medicine, 2017, 104, 54-63.	2.9	40
9	The first purification and unequivocal characterization of the radical form of the carbon-centered quinone ketoxy radical adduct. Chemical Communications, 2013, 49, 6436.	4.1	29
10	Intrinsic Chemiluminescence Generation during Advanced Oxidation of Persistent Halogenated Aromatic Carcinogens. Environmental Science & Technology, 2015, 49, 7940-7947.	10.0	29
11	Mechanism of Intrinsic Chemiluminescence Production from the Degradation of Persistent Chlorinated Phenols by the Fenton System: A Structureâ€“Activity Relationship Study and the Critical Role of Quinoid and Semiquinone Radical Intermediates. Environmental Science & Technology, 2017, 51, 2934-2943.	10.0	27
12	A Combined Experimental and Computational Investigation on the Unusual Molecular Mechanism of the Lossen Rearrangement Reaction Activated by Carcinogenic Halogenated Quinones. Journal of Organic Chemistry, 2015, 80, 180-189.	3.2	24
13	Molecular mechanism of metal-independent decomposition of lipid hydroperoxide 13-HPODE by halogenated quinoid carcinogens. Free Radical Biology and Medicine, 2013, 63, 459-466.	2.9	20
14	Targeted live-cell nuclear delivery of the DNA â€˜light-switchingâ€™ Ru(II) complex via ion-pairing with chlorophenolate counter-anions: the critical role of binding stability and lipophilicity of the ion-pairing complexes. Nucleic Acids Research, 2019, 47, 10520-10528.	14.5	18
15	Why Does 2,3,5,6-Tetrachlorophenol Generate the Strongest Intrinsic Chemiluminescence among All Nineteen Chlorophenolic Persistent Organic Pollutants during Environmentally-friendly Advanced Oxidation Process?. Scientific Reports, 2016, 6, 33159.	3.3	15
16	An unexpected antioxidant and redox activity for the classic copper-chelating drug penicillamine. Free Radical Biology and Medicine, 2020, 147, 150-158.	2.9	14
17	Sulfur-centered hemi-bond radicals as active intermediates in S-DNA phosphorothioate oxidation. Nucleic Acids Research, 2019, 47, 11514-11526.	14.5	12
18	An unusual double radical homolysis mechanism for the unexpected activation of the aldoxime nerve-agent antidotes by polyhalogenated quinoid carcinogens under normal physiological conditions. Free Radical Biology and Medicine, 2019, 130, 1-7.	2.9	12

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19	Chiral Os(II) Polypyridyl Complexes as Enantioselective Nuclear DNA Imaging Agents Especially Suitable for Correlative High-Resolution Light and Electron Microscopy Studies. ACS Applied Materials & Interfaces, 2020, 12, 3465-3473.	8.0	12
20	Potent Oxidation of DNA by Haloquinoid Disinfection Byproducts to the More Mutagenic Imidazolone dIz via an Unprecedented Haloquinone-Enoxy Radical-Mediated Mechanism. Environmental Science & Technology, 2020, 54, 6244-6253.	10.0	12
21	An Exceptionally Facile Two-Step Structural Isomerization and Detoxication via a Water-Assisted Double Lossen Rearrangement. Scientific Reports, 2016, 6, 39207.	3.3	11
22	First unequivocal identification of the critical acyl radicals from the anti-tuberculosis drug isoniazid and its hydrazide analogs by complementary applications of ESR spin-trapping and HPLC/MS methods. Free Radical Biology and Medicine, 2020, 154, 1-8.	2.9	11
23	Molecular mechanism for the activation of the anti-tuberculosis drug isoniazid by Mn(III): First detection and unequivocal identification of the critical N-centered isoniazidyl radical and its exact location. Free Radical Biology and Medicine, 2019, 143, 232-239.	2.9	10
24	What Are the Major Physicochemical Factors in Determining the Preferential Nuclear Uptake of the DNA â€œLight-Switchingâ€•Ru(II)-Polypyridyl Complex in Live Cells via Ion-Pairing with Chlorophenolate Counter-Anions?. Journal of Physical Chemistry Letters, 2019, 10, 4123-4128.	4.6	10
25	Unexpected activation of N-alkyl hydroxamic acids to produce reactive N-centered free radicals and DNA damage by carcinogenic chlorinated quinones under normal physiological conditions. Free Radical Biology and Medicine, 2020, 146, 70-78.	2.9	10
26	Mechanism of synergistic DNA damage induced by caffeic acid phenethyl ester (CAPE) and Cu(II): Competitive binding between CAPE and DNA with Cu(II)/Cu(I). Free Radical Biology and Medicine, 2020, 159, 107-118.	2.9	10
27	Unprecedented strong intrinsic chemiluminescence generation from degradation of halogenated hydroxy-quinoid pollutants by Co(II)-mediated advanced oxidation processes: The critical role of site-specific production of hydroxyl radicals. Chemical Engineering Journal, 2020, 394, 125023.	12.7	10
28	Caffeic Acid Phenyl Ester (CAPE) Protects against Iron-Mediated Cellular DNA Damage through Its Strong Iron-Binding Ability and High Lipophilicity. Antioxidants, 2021, 10, 798.	5.1	10
29	Unusual Double Beckmann Fragmentation Reaction under Physiological Conditions. Journal of Organic Chemistry, 2017, 82, 13084-13092.	3.2	9
30	Ultrafast excited state dynamics and light-switching of [Ru(phen)2(dppz)]2+ in G-quadruplex DNA. Communications Chemistry, 2021, 4, .	4.5	9
31	The cell-impermeable Ru(II) polypyridyl complex as a potent intracellular photosensitizer under visible light irradiation via ion-pairing with suitable lipophilic counter-anions. Free Radical Biology and Medicine, 2021, 171, 69-79.	2.9	9
32	Enantioselective and Differential Fluorescence Lifetime Imaging of Nucleus and Nucleolus by the Two Enantiomers of Chiral Os(II) Polypyridyl Complex. Journal of Physical Chemistry Letters, 2019, 10, 5909-5916.	4.6	8
33	An unexpected new pathway for nitroxide radical production via more reactve nitrogen-centered amidyl radical intermediate during detoxification of the carcinogenic halogenated quinones by N-alkyl hydroxamic acids. Free Radical Biology and Medicine, 2020, 146, 150-159.	2.9	8
34	Potent oxidation of DNA by Ru(<scp>ii</scp>) tri(polypyridyl) complexes under visible light irradiation via a singlet oxygen-mediated mechanism. Inorganic Chemistry Frontiers, 2021, 8, 3421-3432.	6.0	7
35	Mechanism of unprecedented hydroxyl radical production and site-specific oxidative DNA damage by photoactivation of the classic arylhydroxamic acid carcinogens. Carcinogenesis, 2019, , .	2.8	6
36	Detoxifying Polyhalogenated Catechols through a Copperâ€Chelating Agent by Forming Stable and Redoxâ€Inactive Hydrogenâ€Bonded Complexes with an Unusual Perpendicular Structure. Chemistry - A European Journal, 2014, 20, 13028-13033.	3.3	5

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37	Unexpected reversible and controllable nuclear uptake and efflux of the DNA â€œlight-switchingâ€• Ru(ii)-polypyridyl complex in living cellsviaion-pairing with chlorophenolate counter-anions. Journal of Materials Chemistry B, 2020, 8, 10327-10336.	5.8	5
38	Mechanistic Study on Oxidative DNA Damage and Modifications by Haloquinoid Carcinogenic Intermediates and Disinfection Byproducts. Chemical Research in Toxicology, 2021, 34, 1701-1712.	3.3	5
39	Unusual Two-Step Claisen-type Rearrangement Reaction under Physiological Conditions. Journal of Organic Chemistry, 2020, 85, 14945-14953.	3.2	4
40	The critical role of superoxide anion radicals on delaying tetrachlorohydroquinone autooxidation by penicillamine. Free Radical Biology and Medicine, 2021, 163, 369-378.	2.9	4
41	Detecting and Quantifying Polyhaloaromatic Environmental Pollutants by Chemiluminescence-Based Analytical Method. Molecules, 2021, 26, 3365.	3.8	4
42	Molecular mechanisms and potential applications of the intrinsic chemiluminescence produced from the degradation of haloaromatic pollutants during environmentally-friendly advanced oxidation processes. Environmental Science: Water Research and Technology, 2020, 6, 2259-2274.	2.4	3
43	Free-Radical-Mediated Photoinduced Electron Transfer between 6-Thioguanine and Tryptophan Leading to DNAâ€“Protein-Like Cross-Link. Journal of Physical Chemistry B, 2022, 126, 14-22.	2.6	2
44	Structureâ€“Activity Relationship Investigation on Reaction Mechanism between Chlorinated Quinoid Carcinogens and Clinically-Used Aldoxime Nerve-Agent Antidote under Physiological Condition. Chemical Research in Toxicology, 2021, 34, 1091-1100.	3.3	0
45	The critical role of unique azido-substituted chloro-O-semiquinone radical intermediates in the synergistic toxicity between sodium azide and chlorocatecholic carcinogens. Free Radical Biology and Medicine, 2021, 177, 260-269.	2.9	0