James R Bolton

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8510008/publications.pdf

Version: 2024-02-01

200	14,105	22153	21540
papers	citations	59 h-index	114 g-index

208	208	208	9778
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultraviolet actinometry â€“ Determination of the incident photon flux and quantum yields for photochemical systems using low-pressure and ultraviolet light-emitting diode light sources. Journal of Environmental Chemical Engineering, 2022, 10, 107947.	6.7	5
2	Practical Chemical Actinometryâ€”A Review. Photochemistry and Photobiology, 2021, 97, 873-902.	2.5	28
3	Revealing photon transmission in an ultraviolet reactor: Advanced approaches for measuring fluence rate distribution in water for model validation. Journal of Environmental Sciences, 2021, 110, 169-177.	6.1	2
4	A Master Equation for Photochemical Rates. Photochemistry and Photobiology, 2020, 96, 1355-1357.	2.5	6
5	Disinfection by-product formation during UV/Chlorine treatment of pesticides in a novel UV-LED reactor at 285Ânm and the mitigation impact of GAC treatment. Science of the Total Environment, 2020, 712, 136413.	8.0	29
6	Impacts of biofilm on monochloramine decay in storm sewer systems: Direct reactions or AOB cometabolism. Biochemical Engineering Journal, 2019, 149, 107246.	3.6	0
7	Micropollutant Degradation by the UV/H₂O₂ Process: Kinetic Comparison among Various Radiation Sources. Environmental Science & Technology, 2019, 53, 5241-5248.	10.0	27
8	Organic Pollutant Degradation in Water by the Vacuum-Ultraviolet/Ultraviolet/H₂O₂ Process: Inhibition and Enhancement Roles of H₂O₂. Environmental Science & Technology, 2019, 53, 912-918.	10.0	42
9	Field data analysis of active chlorine-containing stormwater samples. Journal of Environmental Management, 2018, 206, 51-59.	7.8	15
10	Monochloramine loss mechanisms and dissolved organic matter characterization in stormwater. Science of the Total Environment, 2018, 631-632, 745-754.	8.0	13
11	A Green Method to Determine VUV (185Ânm) Fluence Rate Based on Hydrogen Peroxide Production in Aqueous Solution. Photochemistry and Photobiology, 2018, 94, 821-824.	2.5	32
12	The importance of a photon-based approach to quantum yield determinations. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 357, 81-84.	3.9	0
13	Monochloramine dissipation in storm sewer systems: field testing and model development. Water Science and Technology, 2018, 78, 2279-2287.	2.5	3
14	Trace Organic Pollutant Removal by VUV/UV/chlorine Process: Feasibility Investigation for Drinking Water Treatment on a Mini-Fluidic VUV/UV Photoreaction System and a Pilot Photoreactor. Environmental Science & Technology, 2018, 52, 7426-7433.	10.0	35
15	Standard reporting of Electrical Energy per Order (E _{EO}) for UV/H₂O₂ reactors (IUPAC Technical Report). Pure and Applied Chemistry, 2018, 90, 1487-1499.	1.9	34
16	Experimental Assessment of Photon Fluence Rate Distributions in a Medium-Pressure UV Photoreactor. Environmental Science & Technology, 2017, 51, 3453-3460.	10.0	8
17	Impact of environmental conditions on bacterial photoreactivation in wastewater effluents. Environmental Sciences: Processes and Impacts, 2017, 19, 31-37.	3.5	13
18	Impact of inner-wall reflection on UV reactor performance as evaluated by using computational fluid dynamics: The role of diffuse reflection. Water Research, 2017, 109, 382-388.	11.3	28

#	Article	IF	Citations
19	Sulfamethazine degradation in water by the VUV/UV process: Kinetics, mechanism and antibacterial activity determination based on a mini-fluidic VUV/UV photoreaction system. Water Research, 2017, 108, 348-355.	11.3	98
20	Monochloramine Loss Mechanisms in Tap Water. Water Environment Research, 2017, 89, 1999-2005.	2.7	11
21	Pilot-scale UV/H2O2 advanced oxidation process for municipal reuse water: Assessing micropollutant degradation and estrogenic impacts on goldfish (Carassius auratus L.). Water Research, 2016, 101, 157-166.	11.3	36
22	VUV/UV/Chlorine as an Enhanced Advanced Oxidation Process for Organic Pollutant Removal from Water: Assessment with a Novel Mini-Fluidic VUV/UV Photoreaction System (MVPS). Environmental Science & Technology, 2016, 50, 5849-5856.	10.0	76
23	Application of UV Lightâ€“Emitting Diodes to Adenovirus in Water. Journal of Environmental Engineering, ASCE, 2016, 142, .	1.4	60
24	Application of Engineered Si Nanoparticles in Light-Induced Advanced Oxidation Remediation of a Water-Borne Model Contaminant. ACS Nano, 2016, 10, 5405-5412.	14.6	24
25	Configuration optimization of UV reactors for water disinfection with computational fluid dynamics: Feasibility of using particle minimum UV dose as a performance indicator. Chemical Engineering Journal, 2016, 306, 1-8.	12.7	34
26	Comparison of Hydrogen Peroxide to Ammonium Ions and Sulfite as a Free Chlorine Quenching Agent for Disinfection By-Product Measurement. Journal of Environmental Engineering, ASCE, 2016, 142, .	1.4	4
27	An Approach to Standardize Methods for Fluence Determination in Bench-Scale Pulsed Light Experiments. Food and Bioprocess Technology, 2016, 9, 1040-1048.	4.7	40
28	Inspection of Feasible Calibration Conditions for <scp>UV</scp> Radiometer Detectors with the <scp>KI</scp>/<scp>KIO</scp>₃ Actinometer. Photochemistry and Photobiology, 2015, 91, 68-73.	2.5	13
29	UV/chlorine control of drinking water taste and odour at pilot and full-scale. Chemosphere, 2015, 136, 239-244.	8.2	75
30	Rethinking the Concepts of Fluence (<scp>UV</scp> Dose) and Fluence Rate: The Importance of Photonâ€based Units â€“ A Systemic Review. Photochemistry and Photobiology, 2015, 91, 1252-1262.	2.5	94
31	Improved Method for Real-Time Fluence Monitoring in UV Reactors. Journal of Environmental Engineering, ASCE, 2015, 141, .	1.4	4
32	UV photolysis kinetics of sulfonamides in aqueous solution based on optimized fluence quantification. Water Research, 2015, 75, 43-50.	11.3	67
33	Formation of disinfection by-products in the ultraviolet/chlorine advanced oxidation process. Science of the Total Environment, 2015, 518-519, 49-57.	8.0	119
34	A Mini-Fluidic UV Photoreaction System for Bench-Scale Photochemical Studies. Environmental Science and Technology Letters, 2015, 2, 297-301.	8.7	8
35	UV disinfection of secondary water supply: Online monitoring with micro-fluorescent silica detectors. Chemical Engineering Journal, 2014, 255, 165-170.	12.7	14
36	Application of a Solar UV/Chlorine Advanced Oxidation Process to Oil Sands Process-Affected Water Remediation. Environmental Science & Technology, 2014, 48, 9692-9701.	10.0	98

#	Article	IF	Citations
37	Photodegradation of emerging micropollutants using the medium-pressure UV/H2O2 Advanced Oxidation Process. Water Research, 2013, 47, 2881-2889.	11.3	185
38	Development of monitored tunable biodosimetry for fluence validation in an ultraviolet disinfection reactor. Separation and Purification Technology, 2013, 117, 12-17.	7.9	9
39	In situ detailed fluence rate distributions in a UV reactor with multiple low-pressure lamps: Comparison of experimental and model results. Chemical Engineering Journal, 2013, 214, 55-62.	12.7	13
40	Estimating the fluence delivery in UV disinfection reactors using a â€˜detector-modelâ€™ combination method. Chemical Engineering Journal, 2013, 233, 39-46.	12.7	10
41	Development of a tri-parameter online monitoring system for UV disinfection reactors. Chemical Engineering Journal, 2013, 222, 101-107.	12.7	16
42	Medium pressure UV combined with chlorine advanced oxidation for trichloroethylene destruction in a model water. Water Research, 2012, 46, 4677-4686.	11.3	158
43	A solar-driven UV/Chlorine advanced oxidation process. Water Research, 2012, 46, 5672-5682.	11.3	108
44	Impact of reflection on the fluence rate distribution in a UV reactor with various inner walls as measured using a micro-fluorescent silica detector. Water Research, 2012, 46, 3595-3602.	11.3	31
45	In Situ Measurement of UV Fluence Rate Distribution by Use of a Micro Fluorescent Silica Detector. Environmental Science & Technology, 2011, 45, 3034-3039.	10.0	35
46	Assessment of the UV/Chlorine process as an advanced oxidation process. Water Research, 2011, 45, 1890-1896.	11.3	208
47	Determination of the quantum yields of the potassium ferrioxalate and potassium iodideâ€“iodate actinometers and a method for the calibration of radiometer detectors. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 222, 166-169.	3.9	216
48	A Potential New Method for Determination of the Fluence (UV Dose) Delivered in UV Reactors Involving the Photodegradation of Free Chlorine. Water Environment Research, 2010, 82, 328-334.	2.7	27
49	Comparison of the Disinfection Effects of Vacuumâ€UV (VUV) and UV Light on Bacillus subtilis Spores in Aqueous Suspensions at 172, 222 and 254â€ƒnm. Photochemistry and Photobiology, 2010, 86, 176-181.	2.5	87
50	Anatoxin-a degradation by Advanced Oxidation Processes: Vacuum-UV at 172 nm, photolysis using medium pressure UV and UV/H2O2. Water Research, 2010, 44, 278-286.	11.3	67
51	Development of a Protocol for the Determination of the Ultraviolet Sensitivity of Microorganisms Suspended in Air. Aerosol Science and Technology, 2009, 43, 284-289.	3.1	11
52	Comparison of low- and medium-pressure ultraviolet lamps: Photoreactivation of Escherichia coli and total coliforms in secondary effluents of municipal wastewater treatment plants. Water Research, 2009, 43, 815-821.	11.3	87
53	Comparison of the action spectra and relative DNA absorbance spectra of microorganisms: Information important for the determination of germicidal fluence (UVÂdose) in an ultraviolet disinfection of water. Water Research, 2009, 43, 5087-5096.	11.3	97
54	Sensor factor correction for collimated beam experiments using a medium pressure ultraviolet lamp. Journal of Environmental Engineering and Science, 2008, 7, 677-679.	0.8	2

#	Article	IF	Citations
55	Photolysis of aqueous free chlorine species (HOCl and OClÂ–) with 254 nm ultraviolet light. Journal of Environmental Engineering and Science, 2007, 6, 277-284.	0.8	306
56	Quantum Yield of the Iodide-Iodate Chemical Actinometer: Dependence on Wavelength and ConcentrationÂ¶. Photochemistry and Photobiology, 2007, 78, 146-152.	2.5	18
57	The Iodide/Iodate Actinometer in UV Disinfection: Determination of the Fluence Rate Distribution in UV Reactors. Photochemistry and Photobiology, 2006, 82, 611.	2.5	78
58	Discussion of â€œStandardized Collimated Beam Testing Protocol for Waterâˆ•Wastewater Ultraviolet Disinfectionâ€•by Jeff Kuo, Ching-lin Chen, and Margaret Nellor. Journal of Environmental Engineering, ASCE, 2005, 131, 827-827.	1.4	2
59	Fundamental approach to the fluence-based kinetic and electrical energy efficiency parameters in photochemical degradation reactions: polychromatic light. Journal of Environmental Engineering and Science, 2005, 4, S13-S18.	0.8	26
60	Using a mathematical fluence rate model to estimate the sensor readings in a multi-lamp ultraviolet reactor. Journal of Environmental Engineering and Science, 2005, 4, S27-S31.	0.8	2
61	Standardization of Methods for Fluence (UV Dose) Determination in Bench-Scale UV Experiments. Journal of Environmental Engineering, ASCE, 2003, 129, 209-215.	1.4	962
62	Optimal methods for quenching H2O2 residuals prior to UFC testing. Water Research, 2003, 37, 3697-3703.	11.3	112
63	Quantum Yield of the Iodideâ€“Iodate Chemical Actinometer: Dependence on Wavelength and ConcentrationÂ¶. Photochemistry and Photobiology, 2003, 78, 146.	2.5	210
64	Fundamental photochemical approach to the concepts of fluence (UV dose) and electrical energy efficiency in photochemical degradation reactions. Research on Chemical Intermediates, 2002, 28, 857-870.	2.7	182
65	Inactivation of cryptosporidium parvum oocysts using medium- and low-pressure ultraviolet radiation. Water Research, 2001, 35, 1387-1398.	11.3	198
66	Figures-of-merit for the technical development and application of advanced oxidation technologies for both electric- and solar-driven systems (IUPAC Technical Report). Pure and Applied Chemistry, 2001, 73, 627-637.	1.9	874
67	Using UV to inactivate Cryptosporidium. Journal - American Water Works Association, 2000, 92, 97-104.	0.3	142
68	TERMS AND DEFINITIONS IN ULTRAVIOLET DISINFECTION. Proceedings of the Water Environment Federation, 2000, 2000, 25-40.	0.0	9
69	Inactivation of Giardia muris cysts using medium-pressure ultraviolet radiation in filtered drinking water. Water Research, 2000, 34, 4325-4332.	11.3	86
70	Degradation Pathways during the Treatment of Methyl tert-Butyl Ether by the UV/H2O2 Process. Environmental Science & Technology, 2000, 34, 650-658.	10.0	168
71	UV/H2O2 Treatment of Methyl tert-Butyl Ether in Contaminated Waters. Environmental Science & Technology, 2000, 34, 659-662.	10.0	221
72	Mediumâ€pressure UV for oocyst inactivation. Journal - American Water Works Association, 1999, 91, 86-94.	0.3	132

#	Article	IF	Citations
73	Photochemistry of nitrite and nitrate in aqueous solution: a review. Journal of Photochemistry and Photobiology A: Chemistry, 1999, 128, 1-13.	3.9	872
74	Reinvestigation of the Acetone Degradation Mechanism in Dilute Aqueous Solution by the UV/H2O2Process. Environmental Science & Technology, 1999, 33, 870-873.	10.0	108
75	The Photochemical Generation of Hydroxyl Radicals in the UVâˆ’vis/Ferrioxalate/H2O2System. Environmental Science & Technology, 1999, 33, 3119-3126.	10.0	172
76	Effects of Molecular Organization on Photophysical Behavior. 2. Photoelectrochemical and Photocurrent Quantum Yield Studies of the Langmuirâˆ’Blodgett Monolayers of Some Surfactant Porphyrins. Langmuir, 1998, 14, 6199-6206.	3.5	33
77	Toxicity changes during the UV treatment of pentachlorophenol in dilute aqueous solution. Water Research, 1998, 32, 489-497.	11.3	50
78	Mechanism of the Degradation of 1,4-Dioxane in Dilute Aqueous Solution Using the UV/Hydrogen Peroxide Process. Environmental Science & Technology, 1998, 32, 1588-1595.	10.0	231
79	Effects of Molecular Organization on Photophysical Behavior. 1. Steady-State Fluorescence and Fluorescence Quantum Yield Studies of Langmuirâˆ’Blodgett Monolayers of Some Surfactant Porphyrins. Langmuir, 1998, 14, 6192-6198.	3.5	58
80	Figures-of-Merit for Advanced Oxidation Technologies: A Comparison of Homogeneous UV/H2O2, Heterogeneous UV/TiO2 and Electron Beam Processes. Journal of Advanced Oxidation Technologies, 1998, 3, .	0.5	9
81	UV/H2O2 Degradation and Toxicity Reduction of Textile Azo Dyes: Remazol Black-B, a Case Study. Journal of Advanced Oxidation Technologies, 1997, 2, .	0.5	20
82	Ferrioxalate-mediated photodegradation of organic pollutants in contaminated water. Water Research, 1997, 31, 787-798.	11.3	264
83	Determination of the Quantum Yield for the Photochemical Generation of Hydroxyl Radicals in TiO2Suspensions. The Journal of Physical Chemistry, 1996, 100, 4127-4134.	2.9	397
84	Kinetics and Mechanism of the Degradation and Mineralization of Acetone in Dilute Aqueous Solution Sensitized by the UV Photolysis of Hydrogen Peroxide. Environmental Science & Technology, 1996, 30, 2382-2390.	10.0	228
85	Quantum Yields for the Photodegradation of Pollutants in Dilute Aqueous Solution: Phenol, 4-Chlorophenol and N-Nitrosodimethylamine. Journal of Advanced Oxidation Technologies, 1996, 1, .	0.5	2
86	Figures-of-Merit for the Technical Development and Application of Advanced Oxidation Processes. Journal of Advanced Oxidation Technologies, 1996, 1, .	0.5	45
87	Generation Efficiency of the Hydroxyl Radical Adduct of the DMPO Spin Trap in Homogeneous and Heterogeneous Media. Journal of Advanced Oxidation Technologies, 1996, 1, .	0.5	0
88	Solar photoproduction of hydrogen: A review. Solar Energy, 1996, 57, 37-50.	6.1	322
89	A review of analytic solutions for a model p-n junction cell under low-injection conditions. Solar Energy Materials and Solar Cells, 1996, 40, 133-176.	6.2	4
90	Ferrioxalate-mediated solar degradation of organic contaminants in water. Solar Energy, 1996, 56, 439-443.	6.1	109

#	Article	IF	Citations
91	Solar detoxification. Solar Energy, 1996, 56, 375.	6.1	11
92	Microstructural Characterization of a Fumed Titanium Dioxide Photocatalyst. Journal of Solid State Chemistry, 1995, 115, 236-239.	2.9	142
93	The photochemical conversion and storage of solar energy: An historical perspective. Solar Energy Materials and Solar Cells, 1995, 38, 543-554.	6.2	28
94	Photocatalytic Efficiency Variability in TiO2 Particles. The Journal of Physical Chemistry, 1995, 99, 4215-4224.	2.9	220
95	Intramolecular Photochemical Electron Transfer. 8. Decay of the Triplet State in a Porphyrin-Quinone Molecule.. The Journal of Physical Chemistry, 1994, 98, 1626-1633.	2.9	28
96	Thermalization of photoexcited molecules in solution. Research on Chemical Intermediates, 1994, 20, 909-926.	2.7	2
97	Intramolecular photochemical electron transfer. 7. Temperature dependence of electron-transfer rates in covalently linked porphyrin-amide-quinone molecules. The Journal of Physical Chemistry, 1992, 96, 1718-1725.	2.9	50
98	Mechanism of photodegradation of aqueous organic pollutants. 2. Measurement of the primary rate constants for reaction of hydroxyl radicals with benzene and some halobenzenes using an EPR spin-trapping method following the photolysis of hydrogen peroxide. Environmental Science & Technology, 1992, 26, 262-265.	10.0	141
99	Flash photolysis/high-performance liquid chromatography method for studying the sequence of photochemical reactions: direct photolysis of phenol. Environmental Science & Technology, 1992, 26, 2524-2527.	10.0	14
100	Flash photolysis/HPLC applications. 2. Direct photolysis vs. hydrogen peroxide mediated photodegradation of 4-chlorophenol as studied by a flash photolysis/HPLC technique. Environmental Science & Technology, 1992, 26, 259-262.	10.0	66
101	Solvent, Temperature, and Bridge Dependence of Photoinduced Intramolecular Electron Transfer. Advances in Chemistry Series, 1991, , 117-131.	0.6	10
102	Calculation of natural radiative lifetimes from the absorption and fluorescence properties of semiconductors and molecules. The Journal of Physical Chemistry, 1991, 95, 8453-8461.	2.9	15
103	Introduction to Electron Transfer in Inorganic, Organic, and Biological Systems. Advances in Chemistry Series, 1991, , 1-6.	0.6	9
104	Mechanism of photodegradation of aqueous organic pollutants. 1. EPR spin-trapping technique for the determination of hydroxyl radical rate constants in the photooxidation of chlorophenols following the photolysis of hydrogen peroxide. The Journal of Physical Chemistry, 1991, 95, 5116-5120.	2.9	90
105	Intramolecular photochemical electron transfer. 6. Bridge and solvent dependence of electron transfer in covalently linked porphyrin-peptide-quinone compounds. The Journal of Physical Chemistry, 1991, 95, 6924-6927.	2.9	36
106	Electron paramagnetic resonance spin trapping detection of short-lived radical intermediates in the direct photolysis of 4-chlorophenol in aerated aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 1991, 62, 229-240.	3.9	33
107	Flash photolysis/HPLC method for studying the sequence of photochemical reactions: applications to 4-chlorophenol in aerated aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 1991, 58, 315-322.	3.9	53
108	Basic Electron-Transfer Theory. Advances in Chemistry Series, 1991, , 7-23.	0.6	71

#	Article	IF	Citations
109	THE MAXIMUM EFFICIENCY OF PHOTOSYNTHESIS *. Photochemistry and Photobiology, 1991, 53, 545-548.	2.5	117
110	Requirements for ideal performance of photochemical and photovoltaic solar energy converters. The Journal of Physical Chemistry, 1990, 94, 8028-8036.	2.9	84
111	Flash photolysisâ€“HPLC method applied to the study of photodegradation reactions. Journal of the Chemical Society Chemical Communications, 1990, , 1596-1597.	2.0	15
112	Intramolecular photochemical electron transfer. Part 5.â€”Solvent dependence of electron transfer in a porphyrinâ€“amideâ€“quinone molecule. Journal of the Chemical Society Faraday Transactions I, 1989, 85, 1027.	1.0	45
113	Fluorescence lifetime of 5-(4-carboxyphenyl)-10,15,20-tritolylporphyrin in a mixed Langmuir-Blodgett film with dioleoylphosphatidylcholine. A proposed standard. Langmuir, 1988, 4, 133-136.	3.5	26
114	Intramolecular photochemical electron transfer. 4. Singlet and triplet mechanisms of electron transfer in a covalently linked porphyrin-amide-quinone molecule. Journal of the American Chemical Society, 1988, 110, 1733-1740.	13.7	90
115	Solvent dependence of photochemical electron-transfer rates in a covalently linked porphyrinâ€“quinone molecule. Journal of the Chemical Society, Faraday Transactions 2, 1986, 82, 2305-2313.	1.1	24
116	The utilization of time-resolved dielectric loss to probe the role of the surface in heterogeneous photochemistry. Journal of the Chemical Society Faraday Transactions I, 1986, 82, 3625.	1.0	5
117	CHEMICAL CONVERSION AND STORAGE OF SOLAR ENERGY - AN OVERVIEW. , 1986, , 1843-1859.		2
118	ESR and optical evidence for two distinct porphyrin triplet states in linked porphyrin-quinone molecules. The Journal of Physical Chemistry, 1986, 90, 5640-5646.	2.9	8
119	Mechanism of Hyperfine Splittings in Conjugated Systems. , 1986, , 112-130.		1
120	Mechanism of the photochemistry of p-benzoquinone in aqueous solutions. 2. Optical flash photolysis studies. The Journal of Physical Chemistry, 1986, 90, 6270-6274.	2.9	67
121	Mechanism of the photochemistry of p-benzoquinone in aqueous solutions. 1. Spin trapping and flash photolysis electron paramagnetic resonance studies. The Journal of Physical Chemistry, 1986, 90, 6266-6270.	2.9	97
122	Spectroscopic and Electrochemical Studies of Photochemical Electron Transfer in Linked Donor-Acceptor Molecules. , 1986, , 175-188.		1
123	Time-dependent Phenomena. , 1986, , 192-222.		1
124	Analysis of Electron Spin Resonance Spectra of Systems in the Liquid Phase. , 1986, , 49-86.		0
125	Time resolution enhancement technique applied to a study of the absolute rate of reaction of ketyl radicals with a spin trap using flash photolysis electron paramagnetic resonance. The Journal of Physical Chemistry, 1985, 89, 3343-3347.	2.9	10
126	Synthesis of a model compound for the photosynthetic electron transfer. Tetrahedron Letters, 1985, 26, 5207-5210.	1.4	31

#	Article	IF	Citations
127	Limiting and realizable efficiencies of solar photolysis of water. Nature, 1985, 316, 495-500.	27.8	509
128	Light-induced intramolecular electron transfer from a porphyrin linked to a p-benzoquinone by a rigid spacer group. Journal of the Chemical Society Chemical Communications, 1985, , 559.	2.0	25
129	Intramolecular photochemical electron transfer. 3. Solvent dependence of fluorescence quenching and electron transfer rates in a porphyrin-amide-quinone molecule. Journal of the American Chemical Society, 1985, 107, 6112-6114.	13.7	45
130	Thermodynamic limits on conversion of solar energy to work or stored energyâ€"Effects of temperature, intensity and atmospheric conditions. Solar Energy, 1984, 32, 75-84.	6.1	10
131	MONOLAYER STUDIES OF 5â€(4â€CARBâ€•OXYPHENYL)â€10,15,20â€TRITOLYLâ€PORPHYRINâ€II. PHOTOVOLTAIC STUDY OF MULTILAYER SANDWICH CELLS*. Photochemistry and Photobiology, 1984, 40, 319-327.	2.5	19
132	MONOLAYER STUDIES OF 5-(4-CARBOXYPHENYL)-10,15,20-TRITOLYL-PORPHYRINâ€"I. OPTICAL STUDIES OF FILMS AT THE AIR-WATER INTERFACE and OF FILMS TRANSFERRED ONTO SOLID SUBSTRATES. Photochemistry and Photobiology, 1984, 39, 735-746.	2.5	30
133	Intramolecular photochemical electron transfer to acceptors in a Î²-cyclodextrin linked to a porphyrin. Journal of the Chemical Society Chemical Communications, 1984, , 1138-1140.	2.0	35
134	A study of chemically induced dynamic electron polarization (CIDEP) in Photosystem I of whole algal cells at ambient temperatures. Biochimica Et Biophysica Acta - Bioenergetics, 1984, 765, 68-73.	1.0	11
135	Flash photolysis electron paramagnetic resonance studies of charge-carrier production in sublimed films of phthalocyanine. The Journal of Physical Chemistry, 1984, 88, 3139-3142.	2.9	3
136	Solar cellsâ€"A technology assessment. Solar Energy, 1983, 31, 483-502.	6.1	8
137	Intramolecular Photochemical Electron Transfer. 1. EPR and Optical Absorption Evidence for Stabilized Charge Separation in Linked Porphyrin-Quinone Molecules. Journal of the American Chemical Society, 1983, 105, 7215-7223.	13.7	79
138	Intramolecular photochemical electron transfer. 2. Fluorescence studies of linked porphyrin-quinone compounds. Journal of the American Chemical Society, 1983, 105, 7224-7230.	13.7	104
139	Solar Electricity: Lessons Gained from Photosynthesis. ACS Symposium Series, 1983, , 3-19.	0.5	4
140	Detection of a new photoinduced electron paramagnetic resonance signal in particle dispersions of metal-free .alpha.-, .beta.- and x-phthalocyanine. The Journal of Physical Chemistry, 1983, 87, 862-867.	2.9	4
141	A flash photolysis-electron paramagnetic resonance study of light-generated paramagnetic charge carriers in metal-free .alpha.-, .beta.- and x-phthalocyanines. The Journal of Physical Chemistry, 1983, 87, 868-872.	2.9	4
142	PHOTOCHEMICAL ENERGY STORAGE: AN ANALYSIS OF LIMITS. , 1981, , 297-339.		27
143	MECHANISM OF THE PHOTOSENSITIZED REDOX REACTIONS OF ACRIDINE ORANGE IN AQUEOUS SOLUTIONS-A SYSTEM OF INTEREST IN THE PHOTOCHEMICAL STORAGE OF SOLAR ENERGY. Photochemistry and Photobiology, 1981, 34, 537-547.	2.5	13
144	The importance of geminate pairs in the mechanism of photochemically induced dynamic electron polarization. A case of acetone ketyl radicals. The Journal of Physical Chemistry, 1981, 85, 12-14.	2.9	22

#	Article	IF	Citations
145	MECHANISM OF THE PHOTOSENSITIZED REDOX REACTIONS OF ACRIDINE ORANGE IN AQUEOUS SOLUTIONS-A SYSTEM OF INTEREST IN THE PHOTOCHEMICAL STORAGE OF SOLAR ENERGY. Photochemistry and Photobiology, 1981, 34, 537-547.	2.5	30
146	PHOTOBIOLOGY AND SOLAR ENERGY. , 1981, , 261-271.		0
147	The analysis of the EPR spectrum of the 10-hydro-5-methylphenazinium cation radical. Journal of Magnetic Resonance, 1980, 37, 231-239.	0.5	0
148	Structures, reduction potentials and absorption maxima of synthetic dyes of interest in photochemical solar-energy storage studies. Solar Energy, 1980, 24, 561-574.	6.1	53
149	Intramolecular photochemical electron transfer in a linked porphyrinâ€“quinone molecule as a model for the primary step of photosynthesis. Nature, 1980, 286, 254-256.	27.8	49
150	Photochemistry of 5-methylphenazinium salts in aqueous solution. 1. Products and quantum yield of the reaction. The Journal of Physical Chemistry, 1980, 84, 1903-1908.	2.9	22
151	Photochemistry of 5-methylphenazinium salts in aqueous solution. 2. Optical flash photolysis and fluorescence results and a proposed mechanism. The Journal of Physical Chemistry, 1980, 84, 1909-1916.	2.9	26
152	Observations of chemically induced dynamic electron polarization in photosystem I of green plants and algae. The Journal of Physical Chemistry, 1979, 83, 3309-3313.	2.9	24
153	CIDEP in the photosystems of green plant photosynthesis. Reviews of Chemical Intermediates, 1979, 3, 121-129.	1.1	9
154	Photochemical electron transfer in monolayer assemblies. 2. Photoelectric behavior in chlorophyll a/acceptor systems. Journal of the American Chemical Society, 1979, 101, 6342-6348.	13.7	59
155	Photochemical electron transfer in monolayer assemblies. 1. Spectroscopic study of radicals produced in chlorophyll a/acceptor systems. Journal of the American Chemical Society, 1979, 101, 6337-6341.	13.7	41
156	Photochemical Aspects of Solar Energy Conversion and Storage. ACS Symposium Series, 1979, , 202-220.	0.5	3
157	Solar Energy Conversion in Photosynthesis â€" Features Relevant to Artificial Systems for the Photochemical Conversion of Solar Energy. , 1979, , 31-50.		6
158	Improvement of the 100-kHz instrument-limited time response for Varian E-Line EPR spectrometers. Journal of Magnetic Resonance, 1978, 32, 167.	0.5	3
159	Photochemical storage of solar energy. Solar Energy, 1978, 20, 181-183.	6.1	21
160	THE INVOLVEMENT OF THE HYDROXYL RADICAL IN THE DESTRUCTIVE PHOTOOXIDATION OF CHLOROPHYLLS IN VIVO AND IN VITRO*. Photochemistry and Photobiology, 1978, 28, 231-234.	2.5	105
161	Nuclear magnetic and electron spin resonance evidence for the strength and site of attachement of N-methylphenazonium cation radical to sodium dodecyl sulfate micelles. Journal of the American Chemical Society, 1977, 99, 4502-4504.	13.7	15
162	Electron spin resonance spectrum of species â€œXâ€•which may function as the primary electron acceptor in Photosystem I of green plant photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 1976, 430, 553-554.	1.0	29

#	Article	IF	Citations
163	Triplet state involvement in primary photochemistry of photosynthetic photosystem II. Nature, 1976, 263, 443-445.	27.8	42
164	Combined optical and electron spin resonance kinetic spectrometer. Review of Scientific Instruments, 1976, 47, 201-204.	1.3	6
165	Flash photolysis electron spin resonance studies of the electron acceptor species at low temperatures in Photosystem I of spinach subchloroplast particles. Biochimica Et Biophysica Acta - Bioenergetics, 1975, 376, 308-314.	1.0	88
166	Superoxide formation in spinach chloroplasts: Electron spin resonance detection by spin trapping. Biochemical and Biophysical Research Communications, 1975, 64, 803-807.	2.1	181
167	THE RELATION OF THE ESR SIGNAL II TO ELECTRON TRANSPORT IN PHOTOSYSTEM II OF SPINACH CHLOROPLASTS. Photochemistry and Photobiology, 1974, 20, 245-250.	2.5	16
168	FLASH PHOTOLYSISâ€ELECTRON SPIN RESONANCE STUDIES OF THE DYNAMICS OF PHOTOSYSTEM I IN GREENâ€PLANT PHOTOSYNTHESISâ€. EFFECTS OF ACCEPTORS AND DONORS IN SUBCHLOROPLAST PARTICLES*. Photochemistry and Photobiology, 1974, 20, 251-262.	2.5	19
169	FLASH PHOTOLYSIS-ELECTRON SPIN RESONANCE STUDIES OF THE DYNAMICS OF PHOTOSYSTEM I IN GREEN-PLANT PHOTOSYNTHESISâ€"II. INTACT AND BROKEN SPINACH CHLOROPLASTS. Photochemistry and Photobiology, 1974, 20, 263-269.	2.5	19
170	Light-induced paramagnetism in photosynthetic systems. Accounts of Chemical Research, 1974, 7, 189-195.	15.6	31
171	Flash photolysis-electron spin resonance study of the effect of o-phenanthroline and temperature on the decay time of the ESR signal B1 in reaction-center preparations and chromatophores of mutant and wild strains of Rhodopseudomonas spheroides and Rhodospirillum rubrum. Biochimica Et Biophysica Acta - Bioenergetics, 1974, 347, 126-133.	1.0	62
172	Flash photolysis â€" electron spin resonance studies of the dynamics of photosystem I: III temperature dependence of the decay of signal I. Biochemical and Biophysical Research Communications, 1974, 59, 872-878.	2.1	35
173	An Electron Spin Resonance Study of the Spin Adducts of OH and HO2 Radicals with Nitrones in the Ultraviolet Photolysis of Aqueous Hydrogen Peroxide Solutions. Canadian Journal of Chemistry, 1974, 52, 3549-3553.	1.1	418
174	FLASH PHOTOLYSISâ€ELECTRON SPIN RESONANCE: A KINETIC STUDY OF ENDOGENOUS LIGHTâ€INDUCED FREE RADICALS IN REACTION CENTER PREPARATIONS FROM RHODOPSEUDOMONAS SPHEROIDES*. Photochemistry and Photobiology, 1973, 18, 417-421.	2.5	45
175	FLASH PHOTOLYSISâ€ELECTRON SPIN RESONANCE STUDIES OF THE INTERACTION OF PHENAZINE METHOSULFATE WITH REACTIONâ€CENTER PREPARATIONS FROM THE Râ€26 MUTANT OF RHODOPSEUDOMONAS SPHEROIDES*. Photochemistry and Photobiology, 1973, 18, 423-428.	2.5	6
176	Simultaneous quantitative comparison of the optical changes at 700 nm (P700) and electron spin resonance signals in system I of green plant photosynthesis. Journal of the American Chemical Society, 1973, 95, 6435-6436.	13.7	28
177	A Rapid Scan Apparatus for Flash Photolysis Electron Spin Resonance. Review of Scientific Instruments, 1973, 44, 197-199.	1.3	2
178	Reversible photooxidation of chlorophyll. Study of the chlorophyll-benzoquinone system utilizing flash photolysis and electron spin resonance spectroscopy. Journal of the American Chemical Society, 1972, 94, 3314-3320.	13.7	40
179	Simultaneous optical and electron spin resonance detection of the primary photoproduct P700 in green plant photosynthesis. Journal of the American Chemical Society, 1972, 94, 4351-4353.	13.7	44
180	FLASHâ€PHOTOLYSIS OF CHLORANIL AS STUDIED BY ELECTRON SPIN RESONANCE SPECTROSCOPY*. Photochemistry and Photobiology, 1970, 12, 239-243.	2.5	20

#	Article	IF	Citations
181	Electron spin resonance studies of ion association between alkali metals ions and hydrocarbon radical ions. The Journal of Physical Chemistry, 1970, 74, 1965-1976.	2.9	39
182	Proton hyperfine structure from water ligands in electron spin resonance spectra of aqueous titanium(III) complexes with alcohols. Journal of the American Chemical Society, 1970, 92, 6354-6355.	13.7	4
183	AN IDENTIFICATION OF THE RADICAL GIVING RISE TO THE LIGHTâ€INDUCED ELECTRON SPIN RESONANCE SIGNAL IN PHOTOSYNTHETIC BACTERIA. Photochemistry and Photobiology, 1969, 9, 209-218.	2.5	117
184	The synthesis of dibenzo[fg,op]naphthacene from biphenylene and lithium. Challenge, 1969, , 223.	0.4	2
185	Structure of ketyl radicals. Carbon-13 splitting in electron spin resonance spectrum of hexafluoroacetone ketyl. Journal of the American Chemical Society, 1969, 91, 5411-5412.	13.7	13
186	Line-width effects in the electron spin resonance spectrum of the 2,5-dimethylhydroquinone cation radical. The Journal of Physical Chemistry, 1969, 73, 4387-4389.	2.9	3
187	An electron spin resonance study of the cation radicals of dimethylhydroquinones. Journal of the American Chemical Society, 1968, 90, 5366-5370.	13.7	37
188	A kinetic study of the production of light-induced ESR signals in Rhodospirillum rubrum chromatophores. Archives of Biochemistry and Biophysics, 1968, 126, 383-387.	3.0	14
189	Electron Spin Resonance Study of the Pairing Theorem for Alternant Hydrocarbons. II. 13C Hyperfine Splittings in the Positive and Negative Ions of Biphenylene. Journal of Chemical Physics, 1968, 48, 4703-4708.	3.0	12
190	Deuterium Isotope Effects in the Electron Spin Resonance Spectra of Naphthalene Negative Ions. Journal of Chemical Physics, 1967, 47, 2149-2165.	3.0	30
191	Comment on the `Anomalous'' ESR Spectrum Spread for Pentacene Anion and Cation Radicals. Journal of Chemical Physics, 1967, 46, 408-409.	3.0	30
192	Comment on "Theoretical calculations on ions and radicals. I. A restricted Hartree-Fock perturbation method for the calculation of spin densities". The Journal of Physical Chemistry, 1967, 71, 3099-3100.	2.9	2
193	Analysis of the excess charge effect in alternant conjugated hydrocarbon radical-ions. The Journal of Physical Chemistry, 1967, 71, 3702-3704.	2.9	28
194	Anomalous Temperature Dependence in the Electron Spin Resonance Spectrum of Bis(trifluoromethyl) Nitroxide1. Journal of the American Chemical Society, 1966, 88, 371-373.	13.7	31
195	THE ACCELERATING ACTION OF 5â€“METHYLPHENAZINIUM METHYL SULFATE ON LIGHT INDUCED ABSORBANCY AND ESR CHANGES IN RHODOSPIRILLUM CHROMATOPHORES*. Photochemistry and Photobiology, 1966, 5, 823-826.	2.5	12
196	Determination of Piâ€Electron Spin Densities in Aromatic Free Radicals by Linewidth Studies of Electron Spin Resonance Spectra: The 3,5â€Difluoronitrobenzene Anion. Journal of Chemical Physics, 1965, 42, 955-966.	3.0	52
197	Relationship between Electron Spin Resonance Hyperfine Splittings and Ï€â€Electron Spin Densities. A Firstâ€Order Excess Charge Effect. Journal of Chemical Physics, 1965, 43, 309-310.	3.0	53
198	Electron Spin Resonance Study of the Pairing Theorem for Alternant Hydrocarbons :13C Splittings in the Anthracene Positive and Negative Ions. Journal of Chemical Physics, 1964, 40, 3307-3320.	3.0	145

#	Article	IF	Citations
199	Orbital Degeneracy and the Electron Spin Resonance Spectrum of the Benzene-1-d Negative Ion. Journal of the American Chemical Society, 1964, 86, 520-521.	13.7	57
200	Assignment of Hyperfine Splittings in Electron Spin Resonance Spectra by Linewidth Analyses. Journal of Chemical Physics, 1964, 41, 944-948.	3.0	16