James M Tanko

List of Publications by Year
in descending order

77	1,733	331538	302012
papers	citations	21 h-index	39 g-index

115	115	115	1652
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Chemistry of thet-Butoxyl Radical:Â Evidence that Most Hydrogen Abstractions from Carbon are Entropy-Controlled. Journal of the American Chemical Society, 2004, 126, 7578-7584.	6.6	150
2	How Solvent Modulates Hydroxyl Radical Reactivity in Hydrogen Atom Abstractions. Journal of the American Chemical Society, 2010, 132, 2907-2913.	6.6	140
3	Separation and characterisation of proanthocyanidins in Virginia type peanut skins by LCâ€“MSn. Food Chemistry, 2012, 131, 927-939.	4.2	103
4	Free-Radical Side-Chain Bromination of Alkylaromatics in Supercritical Carbon Dioxide. Science, 1994, 263, 203-205.	6.0	94
5	Simultaneous degradation of disinfection byproducts and earthy-musty odorants by the UV/H2O2 advanced oxidation process. Water Research, 2011, 45, 2507-2516.	5.3	93
6	Radical ion probes. 2. Evidence for the reversible ring opening of arylcyclopropylketyl anions. Implications for mechanistic studies. Journal of the American Chemical Society, 1992, 114, 1844-1854.	6.6	70
7	Rearrangements of Radical Ions:Â What It Means To Be Both a Radicalandan Ion. Journal of the American Chemical Society, 1999, 121, 6078-6079.	6.6	68
8	Cyclopropylcarbinyl-Type Ring Openings. Reconciling the Chemistry of Neutral Radicals and Radical Anions. Journal of the American Chemical Society, 2002, 124, 4271-4281.	6.6	65
9	The chemistry of 1,8-naphthalenedicarboximidyl and phthalimidyl radicals. Journal of Organic Chemistry, 1986, 51, 4959-4963.	1.7	49
10	Radical ion probes. I. Cyclopropyl-carbinyl rearrangements of aryl cyclopropyl ketyl anions. Journal of the American Chemical Society, 1990, 112, 5362-5363.	6.6	45
11	tert-Butoxyl as a Model for Radicals in Biological Systems:Â Caveat Emptor. Journal of the American Chemical Society, 2001, 123, 5808-5809.	6.6	40
12	Chlorine atom/benzene system. 1. The role of 6-chlorocyclohexadienyl radical. Journal of the American Chemical Society, 1986, 108, 6300-6311.	6.6	37
13	Comparison of Two Extraction Techniques, Solidâ€Phase Microextraction Versus Continuous Liquidâ€“Liquid Extraction/Solventâ€Assisted Flavor Evaporation, for the Analysis of Flavor Compounds in Gueuze Lambic Beer. Journal of Food Science, 2015, 80, C571-6.	1.5	37
14	Functionalization of Hydrocarbons by a New Free Radical Based Condensation Reaction. Angewandte Chemie - International Edition, 1999, 38, 159-161.	7.2	35
15	Cyclopropyl Conjugation and Ketyl Anions:Â When Do Things Begin to Fall Apart?. Journal of the American Chemical Society, 2007, 129, 4181-4192.	6.6	34
16	Interplay between conjugative and steric effects in cyclopropylarenes. Journal of Organic Chemistry, 1990, 55, 4098-4102.	1.7	33
17	Free Radical Chlorination of Alkanes in Supercritical Carbon Dioxide:Â The Chlorine Atom Cage Effect as a Probe for Enhanced Cage Effects in Supercritical Fluid Solvents. Journal of the American Chemical Society, 1998, 120, 11839-11844.	6.6	32
18	Radical Ion Probes. 3. The Importance of Resonance vs. Strain Energy in the Design of SET Probes Based upon the Cyclopropylcarbinyl-to-Homoallyl Radical Rearrangement. Journal of the American Chemical Society, 1994, 116, 1785-1791.	6.6	26

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19	Free Radical Chlorinations in Halogenated Solvents:Â Are ThereAnySolvents Which Are Truly Noncomplexing?â€. Journal of Organic Chemistry, 1998, 63, 8860-8864.	1.7	26
20	Photochemistry in supercritical carbon dioxide. The benzophenone-mediated addition of aldehydes to Î±,Î²-unsaturated carbonyl compounds. Tetrahedron Letters, 2001, 42, 1415-1418.	0.7	25
21	Radical additions to allyl bromides. A synthetically useful, â€˜Tin-Freeâ€™ method for carbonâ€“carbon bond formation. Tetrahedron Letters, 2009, 50, 2119-2120.	0.7	25
22	Radical Ion Probes. 6. Origin of the High Intrinsic Barrier to Nucleophile-Induced Ring Opening of Arylcyclopropane Radical Cations. Journal of the American Chemical Society, 1997, 119, 8201-8208.	6.6	22
23	Synthesis of Succinimido[3,4-b]indane and 1,2,3,4,5,6-Hexahydro-1,5-methano-3-benzazocine-2,4-dione by Sequential Alkylation and Intramolecular Arylation of Enolates Derived fromN,N,Nâ€˜Nâ€˜-Tetramethylbutanediamides andN,N,Nâ€˜Nâ€˜-Tetramethylpentanediamides. Journal of Organic Chemistry, 1999, 64, 1543-1553.	1.7	22
24	Activation/Driving Force Relationships for Cyclopropylcarbinyl â†' Homoallyl-Type Rearrangements of Radical Anions. Journal of Physical Chemistry A, 2005, 109, 3372-3382.	1.1	22
25	Radical Ion Probes. 8. Direct and Indirect Electrochemistry of 5,7-Di-tert-butylspiro[2.5]octa-4,7-dien-6-one and Derivatives. Journal of the American Chemical Society, 1998, 120, 195-202.	6.6	21
26	The first calibration of an aminiumyl radical ion clock: why N-cyclopropylanilines may be poor mechanistic probes for single electron transfer. Chemical Communications, 2007, , 2648.	2.2	21
27	Stereoelectronic effects on chemoselectivity in the free radical bromination of arylcyclopropanes. Journal of the American Chemical Society, 1990, 112, 5557-5562.	6.6	20
28	Inverted regioselectivities in the reactions of chlorine atoms with heteroarylmethanes. Journal of the American Chemical Society, 1992, 114, 6003-6006.	6.6	20
29	High barrier biosourced polyester from dimethyl [2,2â€²-bifuran]-5,5â€²-dicarboxylate. Polymer, 2020, 191, 122258.	1.8	20
30	Viscosity-Dependent Behavior of Geminate Caged-Pairs in Supercritical Fluid Solvent. Journal of the American Chemical Society, 1996, 118, 11958-11959.	6.6	19
31	Competitive cage kinetics. Relative rates of complexation of chlorine atom by various arenes. Journal of the American Chemical Society, 1988, 110, 3525-3530.	6.6	18
32	Cyclopropylcarbinyl â†' Homoallyl-Type Ring Opening of Ketyl Radical Anions. Structure/Reactivity Relationships and the Contribution of Solvent/Counterion Reorganization to the Intrinsic Barrier. Journal of Organic Chemistry, 2005, 70, 4170-4173.	1.7	18
33	Solvent pressure effects in free-radical reactions. A selectivity inversion in free-radical brominations induced by solvent. Journal of the American Chemical Society, 1993, 115, 4520-4526.	6.6	17
34	Ground- and excited-state succinimidyl radicals in chain reactions: a reexamination. Journal of the American Chemical Society, 1986, 108, 121-127.	6.6	15
35	Radical ion probes. Part 10. Ceric(IV) ammonium nitrate oxidation of cyclopropylarenesâ€. Journal of the Chemical Society Perkin Transactions II, 1998, , 2705-2712.	0.9	14
36	Enhanced Cage Effects in Supercritical Fluid Solvents. The Behavior of Diffusive and Geminate Caged-Pairs in Supercritical Carbon Dioxide. Journal of the American Chemical Society, 2001, 123, 5703-5709.	6.6	14

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37	Radical Anions and Radical Cations Derived from Compounds Containing Cï£¾C, Cï£¾O or Cï£¾N Groups. , 0, , 1281-1354.		14
38	The tert-butoxyl radical mediated hydrogen atom transfer reactions of the Parkinsonian proneurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine and selected tertiary amines. Bioorganic and Medicinal Chemistry, 2008, 16, 8557-8562.	1.4	13
39	Solvent Effects in the Reactions of Neutral Free Radicals. , 1996, , 224-293.		12
40	Characterization of a â€˜hypersensitiveâ€™ probe for single electron transfer to carbonyl compounds. Journal of the Chemical Society Perkin Transactions II, 1994, , 1407-1409.	0.9	11
41	Supercritical Carbon Dioxide as a Medium for Conducting Free-Radical Reactions. ACS Symposium Series, 1994, , 98-113.	0.5	11
42	Stereoelectronic and Resonance Effects on the Rate of Ring Opening of N-Cyclopropyl-Based Single Electron Transfer Probes. Journal of the American Chemical Society, 2020, 142, 2640-2652.	6.6	11
43	Absolute rate constants for bromine abstraction from N-bromoimides and Br2 by alkyl radicals. Journal of the American Chemical Society, 1988, 110, 3221-3225.	6.6	10
44	Câ€“H Bond Functionalization with the Formation of a Câ€“C Bond: A Free Radical Condensation Reaction Based on the Phthalimidoâ€Nâ€oxyl Radical. European Journal of Organic Chemistry, 2014, 2014, 502-505.	1.2	10
45	Kinetic vs. thermodynamic factors in .alpha.-hydrogen atom abstractions from alkylaromatics. 2. Reactivities of .alpha.-alkylnaphthalenes and several conformationally locked alkylaromatics toward bromine atom. Journal of Organic Chemistry, 1991, 56, 6395-6399.	1.7	9
46	Utilization of 1,1-dimethyl-4,6-di-tert-butylspiro[2,5]octa-3,6-dien-5-one as a â€˜hypersensitiveâ€™ probe for single electron transfer to carbonyl compounds. Journal of the Chemical Society Chemical Communications, 1994, , 1165-1166.	2.0	9
47	Solvent Pressure Effects in Free Radical Reactions. 2. Reconciliation of the Gas and Condensed Phase Chlorination of Cyclopropane. Journal of the American Chemical Society, 1994, 116, 5162-5166.	6.6	9
48	Kinetic vs. thermodynamic factors in .alpha.-hydrogen atom abstractions from alkyl aromatics. Journal of Organic Chemistry, 1990, 55, 5145-5150.	1.7	8
49	Reaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2006, 102, 247.	0.8	8
50	Solvent Effects in Free Radical Halogenations:Â The Nature of the Brâ€¢/CS2â€œComplexâ€• Journal of Organic Chemistry, 1997, 62, 4185-4188.	1.7	7
51	Radical Ion Probes. 9. The Chemistry of Radical Cations Derived from 9-Cyclopropylanthracene and 9-Bromo-10-cyclopropylanthracene. Journal of Organic Chemistry, 1998, 63, 628-635.	1.7	7
52	Radical Ion Probes. 7. Behavior of a â€œHypersensitiveâ€•Probe for Single Electron Transfer in Reactions Not Involving Electron Transfer. Journal of Organic Chemistry, 1997, 62, 5550-5556.	1.7	6
53	ORAChromatography and Total Phenolics Content of Peanut Root Extracts. Journal of Food Science, 2011, 76, C380-4.	1.5	6
54	Effect of Lewis acids and low temperature initiators on the allyl transfer reaction involving phthalimido-N-oxyl radical. Tetrahedron Letters, 2014, 55, 7029-7033.	0.7	6

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55	Improving the Efficiency of the Mn^{2+/3+} Couple in Quantum Dot Solar Cells: The Role of Spin Crossover. Journal of Physical Chemistry C, 2018, 122, 14135-14149.	1.5	6
56	Insight into Hydrogen Abstractions by Nitrate Radical: Structural, Solvent Effects, and Evidence for a Polar Transition State. Journal of Physical Chemistry A, 2021, 125, 5471-5480.	1.1	5
57	9-Alkylanthracene radical cations. An alternate route to apparent products of deprotonation. Chemical Communications, 1997, , 2387-2388.	2.2	4
58	Encyclopedia of Electrochemistry, Volume 8:Â Organic Electrochemistry Edited by Hans J. SchÃfer (UniversitÃt MÃ¼nster). Series edited by Allen J. Bard and Martin Stratmann. Wiley-VCH Verlag GmbH & Co. KGaA:Â Weinheim, Germany. 2004. x + 654 pp. $455.00. ISBN 3-527-30400-2.. Journal of the American Chemical Society, 2005, 127, 4538-4538.	6.6	4
59	Radical additions of acyclic and cyclic ethers to alkenes via an allyl transfer reaction involving phthalimido-N-oxyl radical. Tetrahedron, 2016, 72, 7849-7858.	1.0	4
60	Evidence for a Protonâ€Coupled Electron Transfer Mechanism in a Biomimetic System for Monoamine Oxidaseâ€…B Catalysis. Chemistry - A European Journal, 2020, 26, 823-829.	1.7	4
61	10â€ƒâ€ƒReaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2003, 99, 326.	0.8	3
62	Reaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2010, 106, 260.	0.8	3
63	Radical ion probes. 11. Reaction of 1,1-dimethyl-5,7-di-t-butylspiro[2.5]octa-4,7-dien-6-one with 5-hexenyl magnesium bromide. Tetrahedron Letters, 1998, 39, 8795-8798.	0.7	2
64	11ÂÂReaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2005, 101, 235.	0.8	2
65	Reaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2008, 104, 234.	0.8	2
66	Reaction of benzophenone triplet with aliphatic amines. What a potent neurotoxin can tell us about the reaction mechanism. Bioorganic and Medicinal Chemistry, 2011, 19, 1458-1463.	1.4	2
67	Does Metal Ion Complexation Make Radical Clocks Run Fast? An Experimental Perspective. Journal of Physical Chemistry A, 2017, 121, 9682-9686.	1.1	2
68	Functionalization of Hydrocarbons by a New Free Radical Based Condensation Reaction. Angewandte Chemie - International Edition, 1999, 38, 159-161.	7.2	2
69	Green Chemistry Through the Use of Supercritical Fluids and Free Radicals. ACS Symposium Series, 2000, , 258-269.	0.5	1
70	12ÂÂReaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2004, 100, 285-310.	0.8	1
71	Reaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2007, 103, 250.	0.8	1
72	Reaction mechanisms : Part (i) Radical and radical ion reactions. Annual Reports on the Progress of Chemistry Section B, 2009, 105, 264.	0.8	1

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73	Interplay between Structure and Mechanism in Reductive Dissociative Electron Transfers to Î±,Î² â€Epoxyketones. ChemPlusChem, 2020, 85, 2387-2396.	1.3	1
74	Kinetic vs. thermodynamic factors in .alpha.-hydrogen atom abstractions from alkylaromatics. 2. Reactivities of .alpha.-alkylnaphthalenes and several conformationally locked alkylaromatics toward bromine atom. [Erratum to document cited in CA115(19):207432f]. Journal of Organic Chemistry, 1992, 57, 1318-1318.	1.7	0
75	Reaction Mechanisms. Part 1. Radical and Radical Ion Reactions. ChemInform, 2004, 35, no.	0.1	0
76	Reaction Mechanisms. Part 1. Radical and Radical Ion Reactions. ChemInform, 2005, 36, no.	0.1	0
77	Frontispiece: Evidence for a Protonâ€Coupled Electron Transfer Mechanism in a Biomimetic System for Monoamine Oxidaseâ€…B Catalysis. Chemistry - A European Journal, 2020, 26, .	1.7	0