Andrés H Thomas

List of Publications by Year in descending order

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89 papers 2,623 citations

236925 25 h-index 214800 47 g-index

90 all docs 90 docs citations

90 times ranked 2007 citing authors

#	Article	IF	CITATIONS
1	Type I and Type II Photosensitized Oxidation Reactions: Guidelines and Mechanistic Pathways. Photochemistry and Photobiology, 2017, 93, 912-919.	2.5	552
2	Photophysics and Photochemistry of Pterins in Aqueous Solution. Accounts of Chemical Research, 2006, 39, 395-402.	15.6	133
3	Fluorescence of pterin, 6-formylpterin, 6-carboxypterin and folic acid in aqueous solution: pH effects. Photochemical and Photobiological Sciences, 2002, 1, 421-426.	2.9	128
4	Singlet oxygen $(1\hat{l}"g)$ production by pterin derivatives in aqueous solutions. Photochemical and Photobiological Sciences, 2003, 2, 245-250.	2.9	88
5	Study of the photolysis of folic acid and 6-formylpterin in acid aqueous solutions. Journal of Photochemistry and Photobiology A: Chemistry, 2000, 135, 147-154.	3.9	85
6	Oxidation of 2â€~-Deoxyguanosine 5â€~-Monophosphate Photoinduced by Pterin:  Type I versus Type II Mechanism. Journal of the American Chemical Society, 2008, 130, 3001-3011.	13.7	82
7	Photosensitization Reactions of Biomolecules: Definition, Targets and Mechanisms. Photochemistry and Photobiology, 2021, 97, 1456-1483.	2.5	76
8	Tryptophan oxidation photosensitized by pterin. Free Radical Biology and Medicine, 2013, 63, 467-475.	2.9	57
9	Mechanism of photooxidation of folic acid sensitized by unconjugated pterins. Photochemical and Photobiological Sciences, 2010, 9, 1604-1612.	2.9	55
10	Photosensitization of $2\hat{a} \in \mathbb{R}^2$ -deoxyadenosine- $5\hat{a} \in \mathbb{R}^2$ -monophosphate by pterin. Organic and Biomolecular Chemistry, 2007, 5, 2792.	2.8	50
11	Soybean phosphatidylcholine liposomes as model membranes to study lipid peroxidation photoinduced by pterin. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 139-145.	2.6	42
12	Photooxidation of Tryptophan and Tyrosine Residues in Human Serum Albumin Sensitized by Pterin: A Model for Globular Protein Photodamage in Skin. Biochemistry, 2016, 55, 4777-4786.	2.5	41
13	Production and quenching of reactive oxygen species by pterin derivatives, an intriguing class of biomolecules. Pure and Applied Chemistry, 2010, 83, 801-811.	1.9	40
14	Photosensitizing properties of biopterin and its photoproducts using $2\hat{a}\in^2$ -deoxyguanosine $5\hat{a}\in^2$ -monophosphate as an oxidizable target. Physical Chemistry Chemical Physics, 2012, 14, 11657.	2.8	39
15	Substituent Effects on the Photophysical Properties of Pterin Derivatives in Acidic and Alkaline Aqueous Solutions. Photochemistry and Photobiology, 2005, 81, 1234.	2.5	37
16	Oxidation of Tyrosine Photoinduced by Pterin in Aqueous Solution. Photochemistry and Photobiology, 2013, 89, 1448-1455.	2.5	35
17	Unraveling the Degradation Mechanism of Purine Nucleotides Photosensitized by Pterins: The Role of Chargeâ€Transfer Steps. ChemPhysChem, 2015, 16, 2244-2252.	2.1	35
18	Quenching of the fluorescence of pterin derivatives by anions. Photochemical and Photobiological Sciences, 2004, 3, 167.	2.9	34

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19	Study of the photolysis of 6-carboxypterin in acid and alkaline aqueous solutions. Journal of Photochemistry and Photobiology A: Chemistry, 2000, 132, 53-57.	3.9	33
20	Emission properties of dihydropterins in aqueous solutions. Physical Chemistry Chemical Physics, 2011, 13, 7419.	2.8	33
21	Electron-transfer processes induced by the triplet state of pterins in aqueous solutions. Free Radical Biology and Medicine, 2010, 49, 1014-1022.	2.9	32
22	Histidine oxidation photosensitized by pterin: pH dependent mechanism. Journal of Photochemistry and Photobiology B: Biology, 2015, 153, 483-489.	3.8	30
23	Reactivity of Conjugated and Unconjugated Pterins with Singlet Oxygen (O2(1î"g)): Physical Quenching and Chemical Reactionâ€. Photochemistry and Photobiology, 2007, 83, 526-534.	2.5	28
24	Quenching of the Fluorescence of Aromatic Pterins by Deoxynucleotides. Journal of Physical Chemistry A, 2009, 113, 1794-1799.	2.5	27
25	Kinetics and equilibrium study of nickel(II) complexation by pterin. International Journal of Chemical Kinetics, 2000, 32, 231-237.	1.6	25
26	Photochemical and photophysical properties of lumazine in aqueous solutions. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 200, 282-286.	3.9	25
27	Photochemistry of dihydrobiopterin in aqueous solution. Organic and Biomolecular Chemistry, 2010, 8, 800-810.	2.8	25
28	Photosensitization of peptides and proteins by pterin derivatives. Pteridines, 2017, 28, 105-114.	0.5	24
29	Photooxidation of Pterin in Aqueous Solutions: Biological and Biomedical Implications. Chemistry and Biodiversity, 2004, 1, 1800-1811.	2.1	23
30	Photosensitization of bovine serum albumin by pterin: A mechanistic study. Journal of Photochemistry and Photobiology B: Biology, 2013, 120, 52-58.	3.8	23
31	Photodynamic inactivation induced by carboxypterin: a novel non-toxic bactericidal strategy against planktonic cells and biofilms of <i> Staphylococcus aureus < /i > . Biofouling, 2015, 31, 459-468.</i>	2.2	23
32	Lipophilic Decyl Chain–Pterin Conjugates with Sensitizer Properties. Molecular Pharmaceutics, 2018, 15, 798-807.	4.6	23
33	Photo-Oxidation of Unilamellar Vesicles by a Lipophilic Pterin: Deciphering Biomembrane Photodamage. Langmuir, 2018, 34, 15578-15586.	3.5	23
34	Electron Transfer Initiated Reactions Photoinduced by Pterins. Pteridines, 2011, 22, 111-119.	0.5	22
35	New Results on the Photochemistry of Biopterin and Neopterin in Aqueous Solution. Photochemistry and Photobiology, 2009, 85, 365-373.	2.5	21
36	Resveratrol enhancement staphylococcus aureus survival under levofloxacin and photodynamic treatments. International Journal of Antimicrobial Agents, 2018, 51, 255-259.	2.5	21

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37	Photodynamic Effects of Pterin on HeLa Cells. Photochemistry and Photobiology, 2011, 87, 862-866.	2.5	20
38	Degradation of tyrosine and tryptophan residues of peptides by type I photosensitized oxidation. Journal of Photochemistry and Photobiology B: Biology, 2016, 164, 226-235.	3.8	20
39	Thymidine radical formation via one-electron transfer oxidation photoinduced by pterin: Mechanism and products characterization. Free Radical Biology and Medicine, 2016, 96, 418-431.	2.9	20
40	Synergistic effect of carboxypterin and methylene blue applied to antimicrobial photodynamic therapy against mature biofilm of Klebsiella pneumoniae. Heliyon, 2020, 6, e03522.	3.2	20
41	Predictive modeling of the total deactivation rate constant of singlet oxygen by heterocyclic compounds. Journal of Molecular Graphics and Modelling, 2009, 28, 12-19.	2.4	19
42	Singlet Oxygen (O2(1î"g)) Quenching by Dihydropterins. Journal of Physical Chemistry A, 2007, 111, 4280-4288.	2.5	18
43	Inactivation of tyrosinase photoinduced by pterin. Biochemical and Biophysical Research Communications, 2012, 424, 568-572.	2.1	18
44	A novel synthetic approach to tyrosine dimers based on pterin photosensitization. Dyes and Pigments, 2017, 147, 67-74.	3.7	18
45	Photochemistry of tyrosine dimer: when an oxidative lesion of proteins is able to photoinduce further damage. Photochemical and Photobiological Sciences, 2019, 18, 1732-1741.	2.9	18
46	Selective quenching of triplet excited states of pteridines. Photochemical and Photobiological Sciences, 2014, 13, 1058-1065.	2.9	17
47	Photosensitized oxidation of $2\hat{a} \in \mathbb{R}^2$ -deoxyguanosine $5\hat{a} \in \mathbb{R}^2$ -monophosphate: mechanism of the competitive reactions and product characterization. New Journal of Chemistry, 2017, 41, 7273-7282.	2.8	17
48	Photochemical Behavior of 6-Methylpterin in Aqueous Solutions: Generation of Reactive Oxygen Species¶. Photochemistry and Photobiology, 2005, 81, 793.	2.5	17
49	Chemical changes in bovine serum albumin photoinduced by pterin. Journal of Photochemistry and Photobiology B: Biology, 2014, 141, 262-268.	3.8	15
50	Degradation of $\hat{l}\pm$ -melanocyte-stimulating hormone photosensitized by pterin. Organic and Biomolecular Chemistry, 2014, 12, 3877.	2.8	15
51	Quenching of the Singlet and Triplet Excited States of Pterin by Amino Acids. Photochemistry and Photobiology, 2019, 95, 220-226.	2.5	15
52	Photoinactivation of tyrosinase sensitized by folic acid photoproducts. Journal of Photochemistry and Photobiology B: Biology, 2015, 149, 172-179.	3.8	14
53	A model to understand type I oxidations of biomolecules photosensitized by pterins. Journal of Photochemistry and Photobiology, 2021, 7, 100045.	2.5	14
54	Photoinduced Generation of H2O2 and O2•- by 6-formylpterin in Aqueous Solutions. Pteridines, 2006, 17, 82-89.	0.5	13

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55	Reaction between 7,8-dihydropterins and hydrogen peroxide under physiological conditions. Tetrahedron, 2008, 64, 8692-8699.	1.9	13
56	The photosensitizing activity of lumazine using $2\hat{a}\in^2$ -deoxyguanosine $5\hat{a}\in^2$ -monophosphate and HeLa cells as targets. Photochemical and Photobiological Sciences, 2009, 8, 1539.	2.9	13
57	Oxidation of $2\hat{a}\in^2$ -Deoxyadenosine $5\hat{a}\in^2$ -Monophosphate Photoinduced by Lumazine. Journal of Physical Chemistry A, 2010, 114, 10944-10950.	2.5	13
58	A non-singlet oxygen mediated reaction photoinduced by phenalenone, a universal reference for singlet oxygen sensitization. RSC Advances, 2014, 4, 10718.	3.6	13
59	Effect of pterin impurities on the fluorescence and photochemistry of commercial folic acid. Journal of Photochemistry and Photobiology B: Biology, 2018, 181, 157-163.	3.8	13
60	Rate constants of quenching of the fluorescence of pterins by the iodide anion in aqueous solution. Chemical Physics Letters, 2012, 542, 62-65.	2.6	11
61	Photochemical formation of a fluorescent thymidine-pterin adduct in DNA. Dyes and Pigments, 2019, 160, 624-632.	3.7	11
62	Chemical Modifications of Globular Proteins Phototriggered by an Endogenous Photosensitizer. Chemical Research in Toxicology, 2019, 32, 2250-2259.	3.3	11
63	Type I Photosensitized Oxidation of Methionine ^{â€} . Photochemistry and Photobiology, 2021, 97, 91-98.	2.5	11
64	Solar radiation exposure of dihydrobiopterin and biopterin in aqueous solution. Solar Energy, 2014, 109, 45-53.	6.1	10
65	Alkane Chainâ€extended Pterin Through a Pendent Carboxylic Acid Acts as Triple Functioning Fluorophore, ¹ O ₂ Sensitizer and Membrane Binder. Photochemistry and Photobiology, 2019, 95, 1160-1168.	2.5	10
66	Mechanism of electron transfer processes photoinduced by lumazine. Photochemical and Photobiological Sciences, 2012, 11, 409-417.	2.9	9
67	Type I Photosensitization of 2′â€deoxyadenosine 5′â€monophosphate (5′â€∢scp>dAMP) by Biopt its Photoproduct Formylpterin. Photochemistry and Photobiology, 2013, 89, 1456-1462.	erin and 2.5	9
68	Alkylation of a hydrophilic photosensitizer enhances the contact-dependent photo-induced oxidation of phospholipid membranes. Dyes and Pigments, 2021, 187, 109131.	3.7	9
69	Evidence of the effectiveness of Resveratrol in the prevention of guanine one-electron oxidation: possible benefits in cancer prevention. Physical Chemistry Chemical Physics, 2019, 21, 16190-16197.	2.8	8
70	Visible-light photochemistry of 6-formyl-7,8-dihydropterin in aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 209, 104-110.	3.9	7
71	1H NMR characterization of the intermediate formed upon UV-A excitation of biopterin, neopterin and 6-hydroxymethylpterin in O2-free aqueous solutions. Chemical Physics Letters, 2010, 484, 330-332.	2.6	7
72	Clearing up the photochemistry of resveratrol: Effect of the solvent. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 367, 327-331.	3.9	7

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73	Photosensitizing properties of hollow microcapsules built by multilayer self-assembly of poly(allylamine hydrochloride) modified with rose Bengal. RSC Advances, 2019, 9, 19226-19235.	3.6	7
74	Characterization and reactivity of photodimers of dihydroneopterin and dihydrobiopterin. Photochemical and Photobiological Sciences, 2012, 11, 979.	2.9	6
75	Kinetic Control in the Regioselective Alkylation of Pterin Sensitizers: A Synthetic, Photochemical, and Theoretical Study. Photochemistry and Photobiology, 2018, 94, 834-844.	2.5	6
76	Photophysical and Photochemical Properties of 3â€methylpterin as a New and More Stable Pterinâ€type Photosensitizer. Photochemistry and Photobiology, 2018, 94, 881-889.	2.5	6
77	S,Sâ€Chiral Linker Induced U Shape with a Synâ€facial Sensitizer and Photocleavable Ethene Group. Photochemistry and Photobiology, 2019, 95, 293-305.	2.5	6
78	Deoxythymidine–Pterin Fluorescent Adduct Formation through a Photosensitized Process. ChemPhysChem, 2018, 19, 300-306.	2.1	5
79	Immobilization of alkyl-pterin photosensitizer on silicon surfaces through in situ S 2 reaction as suitable approach for photodynamic inactivation of Staphylococcus aureus. Colloids and Surfaces B: Biointerfaces, 2021, 198, 111456.	5.0	5
80	Photodimerization of 7,8â€Dihydroneopterin in Aqueous Solution Under UVâ€A Irradiation. Photochemistry and Photobiology, 2011, 87, 51-55.	2.5	4
81	Mono ―and Bis â€Alkylated Lumazine Sensitizers: Synthetic, Molecular Orbital Theory, Nucleophilic Index and Photochemical Studies. Photochemistry and Photobiology, 2021, 97, 80-90.	2.5	4
82	Shelter for Biologically Relevant Molecules: Photoprotection and Enhanced Thermal Stability of Folic Acid Loaded in a ZIF-8 MOF Porous Host. Industrial & Engineering Chemistry Research, 2020, 59, 22155-22162.	3.7	3
83	Role of Tryptophan Residues in the Toxicity and Photosensitized Inactivation of <i>Escherichia coli</i> α-Hemolysin. Biochemistry, 2020, 59, 4213-4224.	2.5	2
84	Photosensitized Dimerization of Tyrosine: The Oxygen Paradox ^{â€} . Photochemistry and Photobiology, 2022, 98, 687-695.	2.5	2
85	Pterin-lysine photoadduct: a potential candidate for photoallergy. Photochemical and Photobiological Sciences, 2022, 21, 1647-1657.	2.9	2
86	Photochemical Behavior of 6â€Methylpterin in Aqueous Solutions: Generation of Reactive Oxygen Species [¶] . Photochemistry and Photobiology, 2005, 81, 793-801.	2.5	1
87	Pterin-photosensitization of thymine under anaerobic conditions in the presence of guanine. Free Radical Biology and Medicine, 2021, 174, 321-328.	2.9	1
88	Chemical and photochemical reactivity of 6â€hydroxymethylâ€7,8â€dihydropterin in aqueous solutions. Journal of Physical Organic Chemistry, 2013, 26, 2-8.	1.9	0
89	Special Issue Devoted to the XIV ELAFOT Conference (<i>XIV Encuentro Latinoamericano de) Tj ETQq1 1 0.784</i>	314 rgBT / 2.5	Overlock 10