Thomas O Baldwin

List of Publications by Year
in descending order

68 papers	2,803 citations	147566 31 h-index	174990 52 g-index
68 all docs	68 docs citations	68 times ranked	1508 citing authors

#	Article	IF	Citations
1	Analysis of the Bacterial Luciferase Mobile Loop by Replica-Exchange Molecular Dynamics. Biophysical Journal, 2010, 99, 4012-4019.	0.2	20
2	Two Lysine Residues in the Bacterial Luciferase Mobile Loop Stabilize Reaction Intermediates. Journal of Biological Chemistry, 2009, 284, 32827-32834.	1.6	21
3	Fre Is the Major Flavin Reductase Supporting Bioluminescence from Vibrio harveyi Luciferase in Escherichia coli. Journal of Biological Chemistry, 2009, 284, 8322-8328.	1.6	44
4	Crystal Structure of the Bacterial Luciferase/Flavin Complex Provides Insight into the Function of the Î² Subunit. Biochemistry, 2009, 48, 6085-6094.	1.2	92
5	Ph.D. in biochemistry (education)!. Biochemistry and Molecular Biology Education, 2008, 36, 251-252.	0.5	1
6	Chemiluminescence and Bioluminescence. , 2004, , 399-404.		0
7	Demonstration of Two Independently Folding Domains in the Î± Subunit of Bacterial Luciferase by Preferential Ligand Binding-Induced Stabilizationâ€. Biochemistry, 2003, 42, 3105-3112.	1.2	5
8	Mutational Analysis of the Subunit Interface ofVibrio harveyiBacterial Luciferaseâ€,â€¡. Biochemistry, 2002, 41, 3906-3915.	1.2	16
9	Functional Implications of the Unstructured Loop in the (Î²/Î±)8 Barrel Structure of the Bacterial Luciferase Î± Subunit. Biochemistry, 2001, 40, 15436-15443.	1.2	26
10	Pulsed-Alkylation Mass Spectrometry for the Study of Protein Folding and Dynamics:â€‰ Development and Application to the Study of a Folding/Unfolding Intermediate of Bacterial Luciferase. Biochemistry, 2001, 40, 15153-15163.	1.2	35
11	A rapid chromatographic method to separate the subunits of bacterial luciferase in urea-containing buffer. Methods in Enzymology, 2000, 305, 157-164.	0.4	1
12	Purification of firefly luciferase from recombinant sources. Methods in Enzymology, 2000, 305, 180-188.	0.4	3
13	Overexpression of bacterial luciferase and purification from recombinant sources. Methods in Enzymology, 2000, 305, 135-152.	0.4	8
14	Protein folding in vivo: the importance of ribosomes. Nature Cell Biology, 1999, 1, E154-E155.	4.6	9
15	Folding, Stability, and Physical Properties of the Î± Subunit of Bacterial Luciferaseâ€. Biochemistry, 1999, 38, 16136-16145.	1.2	26
16	Process of biosynthetic protein folding determines the rapid formation of native structure. Journal of Molecular Biology, 1999, 294, 579-586.	2.0	31
17	Deuterium Kinetic Isotope Effects and the Mechanism of the Bacterial Luciferase Reactionâ€. Biochemistry, 1998, 37, 2596-2606.	1.2	38
18	[1] Protein folding and assembly in a cell-free expression system. Methods in Enzymology, 1998, 290, 1-17.	0.4	29

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19	Cotranslational Protein Folding. Journal of Biological Chemistry, 1997, 272, 32715-32718.	1.6	202
20	Kinetic Mechanism of Luciferase Subunit Folding and Assemblyâ€. Biochemistry, 1997, 36, 1891-1899.	1.2	40
21	GroE modulates kinetic partitioning of folding intermediates between alternative states to maximize the yield of biologically active protein. Journal of Molecular Biology, 1997, 268, 712-723.	2.0	33
22	Structure of the Î²₂ homodimer of bacterial luciferase from vibrio harveyi: Xâ€ray analysis of a kinetic protein folding trap. Protein Science, 1997, 6, 13-23.	3.1	29
23	Carbon Monoxide Dehydrogenase fromClostridium thermoaceticum:Â Quaternary Structure, Stoichiometry of Its SDS-Induced Dissociation, and Characterization of the Faster-Migrating Formâ€. Biochemistry, 1996, 35, 1965-1971.	1.2	37
24	Implications of N and C-Terminal Proximity for Protein Folding. Journal of Molecular Biology, 1996, 257, 175-187.	2.0	35
25	Firefly luciferase: the structure is known, but the mystery remains. Structure, 1996, 4, 223-228.	1.6	87
26	The 1.5-Ã... Resolution Crystal Structure of Bacterial Luciferase in Low Salt Conditions. Journal of Biological Chemistry, 1996, 271, 21956-21968.	1.6	122
27	Interaction of Bacterial Luciferase with 8-Substituted Flavin Mononucleotide Derivatives. Journal of Biological Chemistry, 1996, 271, 104-110.	1.6	21
28	Transcriptional regulation of bioluminesence genes from Vibrio fischeri. Molecular Microbiology, 1995, 17, 801-812.	1.2	145
29	Structure of bacterial luciferase. Current Opinion in Structural Biology, 1995, 5, 798-809.	2.6	68
30	Three-dimensional structure of bacterial luciferase from Vibrio harveyi at 2.4 .ANG. resolution. Biochemistry, 1995, 34, 6581-6586.	1.2	109
31	Kinetic partitioning during protein folding yields multiple native states. Nature Structural and Molecular Biology, 1994, 1, 320-326.	3.6	68
32	Luciferase from the East European firefly Luciola mingrelica: Cloning and nucleotide sequence of the cDNA, overexpression in Escherichia coli and purification of the enzyme. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1993, 1173, 121-132.	2.4	97
33	Purified native subunits of bacterial luciferase are active in the bioluminescence reaction but fail to assemble into the .alpha..beta. structure. Biochemistry, 1993, 32, 5036-5044.	1.2	48
34	Stopped-flow kinetic analysis of the bacterial luciferase reaction. Biochemistry, 1992, 31, 3807-3813.	1.2	40
35	Use of bacterial and firefly luciferases as reporter genes in DEAE-dextran-mediated transfection of mammalian cells. Analytical Biochemistry, 1992, 204, 315-323.	1.1	80
36	Individual Î± and Î² subunits of bacterial luciferase exhibit bioluminescence activity. Biochemical and Biophysical Research Communications, 1991, 178, 1188-1193.	1.0	21

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37	Cloning and expression of the luxY gene from Vibrio fischeri strain Y-1 in Escherichia coli and complete amino acid sequence of the yellow fluorescent protein. Biochemistry, 1990, 29, 5509-5515.	1.2	27
38	A Study of Subunit Folding and Dimer Assembly In Vivo. , 1990, , 77-86.		0
39	A plasmid vector and quantitative techniques for the study of transcription termination in Escherichia coli using bacterial luciferase. Gene, 1989, 75, 289-296.	1.0	25
40	Random and site-directed mutagenesis of bacterial luciferase: investigation of the aldehyde binding site. Biochemistry, 1989, 28, 2684-2689.	1.2	27
41	Interaction between luciferases from various species of bioluminescent bacteria and the Yellow Fluorescent Protein of Vibrio fischeri strain Y-1. Biochemical and Biophysical Research Communications, 1989, 161, 1191-1198.	1.0	12
42	Proposed mechanism for the bacterial bioluminescence reaction involving a dioxirane intermediate. Biochemical and Biophysical Research Communications, 1989, 164, 1137-1142.	1.0	37
43	Nucleotide sequence of the luxR and luxI genes and structure of the primary regulatory region of the lux regulon of Vibrio fischeri ATCC 7744. Biochemistry, 1988, 27, 837-842.	1.2	94
44	Effects of 3' end deletions from the Vibrio harveyi luxB gene on luciferase subunit folding and enzyme assembly: generation of temperature-sensitive polypeptide folding mutants. Biochemistry, 1988, 27, 2872-2880.	1.2	45
45	Polypeptide folding and dimerization in bacterial luciferase occur by a concerted mechanism in vivo. Biochemistry, 1987, 26, 4917-4921.	1.2	54
46	[9] Purification of bacterial luciferase by affinity methods. Methods in Enzymology, 1986, 133, 98-108.	0.4	9
47	[22] Active center-based immunoassay approach using bacterial luciferase. Methods in Enzymology, 1986, 133, 248-264.	0.4	9
48	Bacterial luciferase: demonstration of a catalytically competent altered conformational state following a single turnover. Biochemistry, 1985, 24, 3942-3947.	1.2	31
49	Recent progress in bioluminescence: cloning of the structural genes encoding bacterial luciferase, analysis of the encoded sequences, and crystallization of the enzyme. , 1984, , 345-358.		2
50	Reaction of bacterial luciferase from Vibrio harveyi with 8-substituted flavins. , 1984, , 785-788.		2
51	Cloning of the luciferase structural genes from Vibrio harveyi and expression of bioluminescence in Escherichia coli. Biochemistry, 1984, 23, 3663-3667.	1.2	159
52	Reversible inhibition of the bacterial luciferase catalyzed bioluminescence reaction by aldehyde substrate: kinetic mechanism and ligand effects. Biochemistry, 1983, 22, 2838-2846.	1.2	33
53	Isolation of bacterial luciferases by affinity chromatography on 2,2-diphenylpropylamine-Sepharose: phosphate-mediated binding to an immobilized substrate analog. Biochemistry, 1982, 21, 6194-6201.	1.2	32
54	Digitization of sedimentation equilibrium and velocity data for analysis by minicomputer. Analytical Biochemistry, 1982, 119, 62-72.	1.1	4

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55	Active center studies on bacterial luciferase: modification of the enzyme with 2,4-dinitrofluorobenzene. Biochemistry, 1981, 20, 512-517.	1.2	41
56	Binding of 2,2-diphenylpropylamine at the aldehyde site of bacterial luciferase increases the affinity of the reduced riboflavin 5'-phosphate site. Biochemistry, 1981, 20, 5524-5528.	1.2	17
57	Biochemistry of Bacterial Bioluminescence. Current Topics in Bioenergetics, 1981, , 65-113.	2.7	117
58	ACTIVE CENTER STUDIES ON BACTERIAL LUCIFERASE: MODIFICATION WITH METHYL METHANETHIOLSULFONATE. , 1981, , 155-160.		4
59	ACTIVE CENTER STUDIES ON BACTERIAL LUCIFERASE: EVIDENCE THAT THE REACTIVE CYSTEINYL RESIDUE IS WITHIN THE PROTEASE-LABILE REGION OF THE Î± SUBUNIT. , 1981, , 121-128.		0
60	Inactivation of luciferase from the luminous marine bacterium Beneckea harveyi by proteases: Evidence for a protease labile region and properties of the protein following inactivation. Archives of Biochemistry and Biophysics, 1980, 205, 554-563.	1.4	28
61	Modification of the reactive sulfhydryl of bacterial luciferase with spin-labeled maleimides. Archives of Biochemistry and Biophysics, 1980, 202, 499-506.	1.4	17
62	The effects of phosphate on the structure and stability of the luciferases from , , , , ,. Biochemical and Biophysical Research Communications, 1980, 94, 1199-1206.	1.0	30
63	[14] Bacterial luciferase: Assay, purification, and properties. Methods in Enzymology, 1978, , 135-152.	0.4	140
64	[22] Bacterial luciferase as a generalized substrate for the assay of proteases. Methods in Enzymology, 1978, 57, 198-201.	0.4	4
65	Bacterial luciferase activity does not require a disulfide-dithiol conversion. Archives of Biochemistry and Biophysics, 1977, 179, 342-348.	1.4	22
66	A sensitive assay for proteolytic enzymes using bacterial luciferase as a substrate. Analytical Biochemistry, 1974, 61, 280-287.	1.1	43
67	The binding and spectral alterations of oxidized flavin mononucleotide by bacterial luciferase. Biochemical and Biophysical Research Communications, 1974, 57, 1000-1005.	1.0	19
68	The Hemoglobins of the Bullfrog, Rana catesbeiana. Journal of Biological Chemistry, 1974, 249, 6110-6118.	1.6	32