Vadim R Viviani

List of Publications by Year
in descending order

98	2,604	186265	214800
papers	citations	28 h-index	47 g-index

100	100	100	1283
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The origin, diversity, and structure function relationships of insect luciferases. Cellular and Molecular Life Sciences, 2002, 59, 1833-1850.	5.4	262
2	Cloning, Sequence Analysis, and Expression of ActivePhrixothrixRailroad-Worms Luciferases:Â Relationship between Bioluminescence Spectra and Primary Structuresâ€,â€¡. Biochemistry, 1999, 38, 8271-8279.	2.5	163
3	Cloning and Molecular Characterization of the cDNA for the Brazilian Larval Click-beetle Pyrearinus termitilluminans Luciferase. Photochemistry and Photobiology, 1999, 70, 254-260.	2.5	107
4	Enhanced Beetle Luciferase for High-Resolution Bioluminescence Imaging. PLoS ONE, 2010, 5, e10011.	2.5	100
5	The structural origin and biological function of pH-sensitivity in firefly luciferases. Photochemical and Photobiological Sciences, 2008, 7, 159-169.	2.9	88
6	Quantum Yields and Kinetics of the Firefly Bioluminescence Reaction of Beetle Luciferases. Photochemistry and Photobiology, 2010, 86, 1046-1049.	2.5	83
7	BIOLUMINESCENCE OF BRAZILIAN FIREFLIES (COLEOPTERA: LAMPYRIDAE): SPECTRAL DISTRIBUTION and pH EFFECT ON LUCIFERASEâ€ŁICITED COLORS. COMPARISON WITH ELATERID and PHENGODID LUCIFERASES. Photochemistry and Photobiology, 1995, 62, 490-495.	2.5	76
8	Bioluminescence and Biological Aspects of Brazilian Railroad-Worms (Coleoptera: Phengodidae). Annals of the Entomological Society of America, 1997, 90, 389-398.	2.5	67
9	Circadian Control Sheds Light on Fungal Bioluminescence. Current Biology, 2015, 25, 964-968.	3.9	65
10	Thr226 Is a Key Residue for Bioluminescence Spectra Determination in Beetle Luciferases. Biochemical and Biophysical Research Communications, 2001, 280, 1286-1291.	2.1	60
11	Cloning and characterization of the cDNA for the Brazilian Cratomorphus distinctus larval firefly luciferase: similarities with European Lampyris noctiluca and Asiatic Pyrocoelia luciferases. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2004, 139, 151-156.	1.6	54
12	A New Firefly Luciferase with Bimodal Spectrum: Identification of Structural Determinants of Spectral pH-Sensitivity in Firefly LuciferasesÂ¶. Photochemistry and Photobiology, 2005, 81, 843.	2.5	52
13	The Influence of Ala243 (Gly247), Arg215 and Thr226 (Asn230) on the Bioluminescence Spectra and pH-Sensitivity of Railroad Worm, Click Beetle and Firefly LuciferasesÂ¶. Photochemistry and Photobiology, 2002, 76, 538.	2.5	48
14	Two Bioluminescent Diptera: The North American Orfelia fultoni and the Australian Arachnocampa flava. Similar Niche, Different Bioluminescence SystemsÂ¶. Photochemistry and Photobiology, 2002, 75, 22.	2.5	47
15	A new blue-shifted luciferase from the Brazilian Amydetes fanestratus (Coleoptera: Lampyridae) firefly: molecular evolution and structural/functional properties. Photochemical and Photobiological Sciences, 2011, 10, 1879-1886.	2.9	47
16	Nanobiosensors Based on Chemically Modified AFM Probes: A Useful Tool for Metsulfuron-Methyl Detection. Sensors, 2013, 13, 1477-1489.	3.8	47
17	Fireflies (Coleoptera: Lampyridae) from Southeastern Brazil: Habitats, Life History, and Bioluminescence. Annals of the Entomological Society of America, 2001, 94, 129-145.	2.5	46
18	Mitochondrial genome sequence of the Brazilian luminescent click beetle Pyrophorus divergens (Coleoptera: Elateridae): Mitochondrial genes utility to investigate the evolutionary history of Coleoptera and its bioluminescence. Gene, 2007, 405, 1-9.	2.2	45

#	Article	IF	Citations
19	Bioluminescence Color Determinants of Phrixothrix Railroad-worm Luciferases: Chimeric Luciferases, Site-directed Mutagenesis of Arg 215 and Guanidine effectÂ¶. Photochemistry and Photobiology, 2000, 72, 267.	2.5	44
20	Active-Site Properties of Phrixotrix Railroad Worm Green and Red Bioluminescence-Eliciting Luciferases. Journal of Biochemistry, 2006, 140, 467-474.	1.7	41
21	BIOPHYSICAL AND BIOCHEMICAL ASPECTS OF PHENGODID (RAILROADâ€WORM) BIOLUMINESCENCE. Photochemistry and Photobiology, 1993, 58, 615-622.	2.5	40
22	Organization and comparative analysis of the mitochondrial genomes of bioluminescent Elateroidea (Coleoptera: Polyphaga). Gene, 2016, 586, 254-262.	2.2	37
23	Bovine serum albumin displays luciferase-like activity in presence of luciferyl adenylate: insights on the origin of protoluciferase activity and bioluminescence colours. Luminescence, 2006, 21, 262-267.	2.9	34
24	Artificial Night Lighting Reduces Firefly (Coleoptera: Lampyridae) Occurrence in Sorocaba, Brazil. Advances in Entomology (Irvine, Calif), 2015, 03, 24-32.	0.4	33
25	Enhanced redâ€emitting railroad worm luciferase for bioassays and bioimaging. Protein Science, 2010, 19, 26-33.	7.6	32
26	Bioluminescence of Beetle Luciferases with 6â€²-Amino-d-luciferin Analogues Reveals Excited Keto-oxyluciferin as the Emitter and Phenolate/Luciferin Binding Site Interactions Modulate Bioluminescence Colors. Biochemistry, 2014, 53, 5208-5220.	2.5	32
27	Cloning and Molecular Characterization of the cDNA for the Brazilian Larval Click-beetle Pyrearinus termitilluminans Luciferase. Photochemistry and Photobiology, 1999, 70, 254.	2.5	32
28	A transcriptional and proteomic survey of Arachnocampaâ€‰luminosa (Diptera: Keroplatidae) lanterns gives insights into the origin of bioluminescence from the Malpighian tubules in Diptera. Luminescence, 2015, 30, 996-1003.	2.9	30
29	Fauna de besouros bioluminescentes (Coleoptera: Elateroidea: Lampyridae; Phengodidae, Elateridae) nos municÃpios de Campinas, Sorocaba-Votorantim e Rio Claro-Limeira (SP, Brasil): biodiversidade e influÃªncia da urbanizaÃ§Ã£o. Biota Neotropica, 2010, 10, 103-116.	1.0	28
30	Pyrearinus termitilluminans larval click beetle luciferase: active site properties, structure and function relationships and comparison with other beetle luciferases. Photochemical and Photobiological Sciences, 2009, 8, 1748-1754.	2.9	27
31	Larval Tenebrio molitor (Coleoptera: Tenebrionidae) Fat Body Extracts Catalyze Firefly D-Luciferin- and ATP-Dependent Chemiluminescence: A Luciferase-like Enzyme. Photochemistry and Photobiology, 1996, 63, 713-718.	2.5	26
32	Few substitutions affect the bioluminescence spectra ofPhrixotrix (Coleoptera: Phengodidae) luciferases: a site-directed mutagenesis survey. Luminescence, 2007, 22, 362-369.	2.9	26
33	Molecular insights on the evolution of the lateral and head lantern luciferases and bioluminescence colors in Mastinocerini railroad-worms (Coleoptera: Phengodidae). Photochemical and Photobiological Sciences, 2010, 9, 87-92.	2.9	26
34	Glu311 and Arg337 Stabilize a Closed Active-site Conformation and Provide a Critical Catalytic Base and Countercation for Green Bioluminescence in Beetle Luciferases. Biochemistry, 2016, 55, 4764-4776.	2.5	26
35	The Influence of the Loop between Residues 223-235 in Beetle Luciferase Bioluminescence Spectra: A Solvent Gate for the Active Site of pH-Sensitive Luciferases. Photochemistry and Photobiology, 2007, 84, 071018085748004-???.	2.5	24
36	An ancestral luciferase in the Malpighi tubules of a non-bioluminescent beetle!. Photochemical and Photobiological Sciences, 2009, 8, 57-61.	2.9	24

#	Article	IF	Citations
37	The Luciferin Binding Site Residues C/T311 (S314) Influence the Bioluminescence Color of Beetle Luciferases through Main-Chain Interaction with Oxyluciferin Phenolate. Biochemistry, 2013, 52, 19-27.	2.5	24
38	Novel application of pH-sensitive firefly luciferases as dual reporter genes for simultaneous ratiometric analysis of intracellular pH and gene expression/location. Photochemical and Photobiological Sciences, 2014, 13, 1661-1670.	2.9	24
39	Vision in click beetles (Coleoptera: Elateridae): pigments and spectral correspondence between visual sensitivity and species bioluminescence emission. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2010, 196, 629-638.	1.6	23
40	Luciferase from Fulgeochlizus bruchi (Coleoptera:Elateridae), a Brazilian click-beetle with a single abdominal lantern: molecular evolution, biological function and comparison with other click-beetle luciferases. Photochemical and Photobiological Sciences, 2012, 11, 1259.	2.9	23
41	Spectral correspondence between visual spectral sensitivity and bioluminescence emission spectra in the click beetle Pyrophorus punctatissimus (Coleoptera: Elateridae). Journal of Insect Physiology, 2000, 46, 1137-1141.	2.0	22
42	The influence of the region between residues 220 and 344 and beyond in Phrixotrix railroad worm luciferases green and red bioluminescence. Protein Engineering, Design and Selection, 2004, 17, 113-117.	2.1	22
43	Spectroscopic studies of the color modulation mechanism of firefly (beetle) bioluminescence with amino-analogs of luciferin and oxyluciferin. Photochemical and Photobiological Sciences, 2012, 11, 1281-1284.	2.9	22
44	Beetle Luciferases: Colorful Lights on Biological Processes and Diseases. , 2006, , 49-63.		20
45	Spectroscopic Properties of Amineâ€substituted Analogues of Firefly Luciferin and Oxyluciferin. Photochemistry and Photobiology, 2017, 93, 486-494.	2.5	19
46	CCD imaging of basal bioluminescence in larval fireflies: clues on the anatomic origin and evolution of bioluminescence. Photochemical and Photobiological Sciences, 2008, 7, 448-452.	2.9	18
47	Phrixotrix luciferase and 6â€²-aminoluciferins reveal a larger luciferin phenolate binding site and provide novel far-red combinations for bioimaging purposes. Scientific Reports, 2019, 9, 8998.	3.3	18
48	A new brilliantly blue-emitting luciferin-luciferase system from Orfelia fultoni and Keroplatinae (Diptera). Scientific Reports, 2020, 10, 9608.	3.3	17
49	Nanobiosensors Exploiting Specific Interactions Between an Enzyme and Herbicides in Atomic Force Spectroscopy. Journal of Nanoscience and Nanotechnology, 2014, 14, 6678-6684.	0.9	16
50	Transcriptional comparison of the photogenic and non-photogenic tissues of Phrixothrix hirtus (Coleoptera: Phengodidae) and non-luminescent Chauliognathus flavipes (Coleoptera: Cantharidae) give insights on the origin of lanterns in railroad worms. Gene Reports, 2017, 7, 78-86.	0.8	16
51	Bioluminescent Fat Body of Larval Aspisoma lineatum (Coleoptera: Lampyridae) Firefly: Ontogenic Precursor of Lantern's Photogenic Tissue. Annals of the Entomological Society of America, 2011, 104, 761-767.	2.5	15
52	Molecular phylogeny of Neotropical bioluminescent beetles (Coleoptera: Elateroidea) in southern and central Brazil. Luminescence, 2014, 29, 412-422.	2.9	15
53	Transcriptomes from the photogenic and non-photogenetic tissues and life stages of the Aspisoma lineatum firefly (Coleoptera: Lampyridae): Implications for the evolutionary origins of bioluminescence and its associated light organs. Gene Reports, 2017, 8, 150-159.	0.8	14
54	Aspisoma lineatum (Gyllenhal) (Coleoptera: Lampyridae) Firefly: Description of the Immatures, Biological, and Ecological Aspects. Neotropical Entomology, 2012, 41, 89-94.	1.2	13

#	Article	IF	Citations
55	The proton and metal binding sites responsible for the pH-dependent green-red bioluminescence color tuning in firefly luciferases. Scientific Reports, 2018, 8, 17594.	3.3	13
56	A Route from Darkness to Light: Emergence and Evolution of Luciferase Activity in AMP-CoA-Ligases Inferred from a Mealworm Luciferase-like Enzyme. Biochemistry, 2013, 52, 3963-3973.	2.5	12
57	A new orange emitting luciferase from the Southern-Amazon Pyrophorus angustus (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 1 ecological considerations. Photochemical and Photobiological Sciences, 2016, 15, 1148-1154.	2.9	12
58	A highly efficient, thermostable and cadmium selective firefly luciferase suitable for ratiometric metal and pH biosensing and for sensitive ATP assays. Photochemical and Photobiological Sciences, 2019, 18, 2061-2070.	2.9	12
59	Neoceroplatus betaryiensis nov. sp. (Diptera: Keroplatidae) is the first record of a bioluminescent fungus-gnat in South America. Scientific Reports, 2019, 9, 11291.	3.3	11
60	Luciferase isozymes from the Brazilian Aspisoma lineatum (Lampyridae) firefly: origin of efficient pH-sensitive lantern luciferases from fat body pH-insensitive ancestors. Photochemical and Photobiological Sciences, 2020, 19, 1750-1764.	2.9	11
61	Phylogenomic analyses and divergence time estimation of Elateroidea (Coleoptera) based on RNA-Seq data. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2019, 30, 283-289.	1.0	10
62	A Very Bright Far-Red Bioluminescence Emitting Combination Based on Engineered Railroad Worm Luciferase and 6â€²-Amino-Analogs for Bioimaging Purposes. International Journal of Molecular Sciences, 2021, 22, 303.	4.1	10
63	The origin of luciferase activity in Zophobas mealworm AMP/CoA-ligase (protoluciferase): luciferin stereoselectivity as a switch for the oxygenase activity. Photochemical and Photobiological Sciences, 2010, 9, 1111-1119.	2.9	9
64	Comparison of the thermostability of recombinant luciferases from Brazilian bioluminescent beetles: Relationship with kinetics and bioluminescence colours. Luminescence, 2018, 33, 282-288.	2.9	9
65	Temperature effect on the bioluminescence spectra of firefly luciferases: potential applicability for ratiometric biosensing of temperature and pH. Photochemical and Photobiological Sciences, 2019, 18, 2682-2687.	2.9	9
66	Novel application of Macrolampis sp2 firefly luciferase for intracellular pH-biosensing in mammalian cells. Photochemical and Photobiological Sciences, 2019, 18, 1212-1217.	2.9	9
67	Bioluminescence Color-Tuning Firefly Luciferases: Engineering and Prospects for Real-Time Intracellular pH Imaging and Heavy Metal Biosensing. Biosensors, 2022, 12, 400.	4.7	9
68	Bioluminescent Coleoptera of Biological Station of BoracÃ©ia (SalesÃ³polis, SP, Brazil): diversity, bioluminescence and habitat distribution. Biota Neotropica, 2012, 12, 21-34.	1.0	8
69	Engineering the metal sensitive sites in Macrolampis sp2 firefly luciferase and use as a novel bioluminescent ratiometric biosensor for heavy metals. Analytical and Bioanalytical Chemistry, 2016, 408, 8881-8893.	3.7	8
70	Structural evolution of luciferase activity in Zophobas mealworm AMP/CoA-ligase (protoluciferase) through site-directed mutagenesis of the luciferin binding site. Photochemical and Photobiological Sciences, 2011, 10, 1226-1232.	2.9	7
71	A transcriptional survey of the cDNA library of Macrolampis sp2 firefly lanterns (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.0	7
72	Suitability of Macrolampis firefly and Pyrearinus click beetle luciferases for bacterial light off toxicity biosensor. Analytical Biochemistry, 2014, 445, 73-79.	2.4	7

#	Article	IF	Citations
73	Survey of Bioluminescent Coleoptera in the Atlantic Rain Forest of Serra da Paranapiacaba in SÃ£o Paulo State (Brazil). Biota Neotropica, 2016, 16, .	1.0	6
74	Revisiting Coleoptera aâ€‰+â€‰T-rich region: structural conservation, phylogenetic and phylogeographic approaches in mitochondrial control region of bioluminescent Elateridae species (Coleoptera). Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis, 2017, 28, 671-680.	0.7	6
75	Comparison of the Malpighian tubules and fat body transcriptional profiles of Zophobas morio larvae (Coleoptera: Tenebrionidae). Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2019, 29, 95-105.	1.0	6
76	Synthesis of bioluminescent gold nanoparticleâ€“luciferase hybrid systems for technological applications. Photochemical and Photobiological Sciences, 2021, 20, 1439-1453.	2.9	6
77	First transcriptional survey of the Malpighian tubules of giant mealworm, Zophobas morio (Coleoptera: Tenebrionidae). Genetics and Molecular Research, 2015, 14, 464-473.	0.2	5
78	Two Bioluminescent Diptera: The North American Orfelia fultoni and the Australian Arachnocampa flava. Similar Niche, Different Bioluminescence SystemsÂ¶. Photochemistry and Photobiology, 2007, 75, 22-27.	2.5	4
79	The dark and bright sides of an enzyme: a three dimensional structure of the N-terminal domain of Zophobas morio luciferase-like enzyme, inferences on the biological function and origin of oxygenase/luciferase activity. Photochemical and Photobiological Sciences, 2016, 15, 654-665.	2.9	4
80	First Report ofPyrearinusLarvae (Coleoptera: Elateridae) in Clayish Canga Caves and Luminous Termite Mounds in the Amazon Forest With a Preliminary Molecular-Based Phylogenetic Analysis of theP. pumilusGroup. Annals of the Entomological Society of America, 2016, 109, 534-541.	2.5	4
81	RNA-Seq analysis of the bioluminescent and non-bioluminescent species of Elateridae (Coleoptera): Comparison to others photogenic and non-photogenic tissues of Elateroidea species. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2019, 29, 154-165.	1.0	4
82	A Novel Brighter Bioluminescent Fusion Protein Based on ZZ Domain and Amydetes vivianii Firefly Luciferase for Immunoassays. Frontiers in Bioengineering and Biotechnology, 2021, 9, 755045.	4.1	4
83	The Influence of Ala243 (Gly247), Arg215 and Thr226 (Asn230) on the Bioluminescence Spectra and pH-Sensitivity of Railroad Worm, Click Beetle and Firefly LuciferasesÂ¶. Photochemistry and Photobiology, 2007, 76, 538-544.	2.5	3
84	Orfelia-type luciferin and its associated storage protein in the non-luminescent cave worm Neoditomyia sp. (Diptera: Keroplatidae) from the Atlantic rainforest: biological and evolutionary implications. Photochemical and Photobiological Sciences, 2018, 17, 1282-1288.	2.9	3
85	Role of E270 in pH- and metal-sensitivities of firefly luciferases. Photochemical and Photobiological Sciences, 2020, 19, 1548-1558.	2.9	3
86	Chemical, biological and evolutionary aspects of beetle bioluminescence. Arkivoc, 2007, 2007, 311-323.	0.5	3
87	Bioluminescence Color Determinants of Phrixothrix Railroad-worm Luciferases: Chimeric Luciferases, Site-directed Mutagenesis of Arg 215 and Guanidine effectÂ¶. Photochemistry and Photobiology, 2007, 72, 267-271.	2.5	2
88			

#	Article	IF	Citations
91	Influence of the C-terminal domain on the bioluminescence activity and color determination in green and red emitting beetle luciferases and luciferase-like enzyme. Photochemical and Photobiological Sciences, 2021, 20, 113-122.	2.9	1
92	THE STRUCTURAL DETERMINANTS OF BIOLUMINESCENCE COLORS IN RAILROAD WORM AND OTHER pH-INSENSITIVE LUCIFERASES. , 2002, , .		1
93	Cloning and molecular properties of a novel luciferase from the Brazilian Bicellonycha lividipennis (Lampyridae: Photurinae) firefly: comparison with other firefly luciferases. Photochemical and Photobiological Sciences, 2022, , .	2.9	1
94	Preparation and Assay of Simple Light off Biosensor Based on Immobilized Bioluminescent Bacteria for General Toxicity Assays. Methods in Molecular Biology, 2016, 1461, 217-223.	0.9	0
95	Use of a special Brazilian red-light emitting railroad worm Luciferase in bioassays of NEK7 protein Kinase and Creatine Kinase. BMC Biochemistry, 2017, 18, 12.	4.4	0
96	RNA-Seq analysis of the blue light-emitting Orfelia fultoni (Diptera: Keroplatidae) suggest photoecological adaptations at the molecular level. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2021, 39, 100840.	1.0	0
97	Living Light in the Darkness: Facts and Stories. Revista Virtual De Quimica, 2015, 7, .	0.4	0
98	Aula prÃ¡tica de FotossÃntese: DemonstraÃ§Ã£o da reaÃ§Ã£o de Hill em cloroplastos com dissipaÃ§Ã£o de energia por fluorescÃªncia mediante desacoplamento ou inibiÃ§Ã£o dos fotossistemas pelo herbicida Diuron. Journal of Biochemistry Education, 2016, 14, 73.	0.0	0