

Vadim R Viviani

List of Publications by Year in descending order

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98
papers

2,604
citations

186265

28
h-index

214800

47
g-index

100
all docs

100
docs citations

100
times ranked

1283
citing authors

#	ARTICLE	IF	CITATIONS
1	Cloning and molecular properties of a novel luciferase from the Brazilian <i>Bicellonycha lividipennis</i> (Lampyridae: Photurinae) firefly: comparison with other firefly luciferases. <i>Photochemical and Photobiological Sciences</i> , 2022, , .	2.9	1
2	Bioluminescence Color-Tuning Firefly Luciferases: Engineering and Prospects for Real-Time Intracellular pH Imaging and Heavy Metal Biosensing. <i>Biosensors</i> , 2022, 12, 400.	4.7	9
3	Selective inhibition of <i>Zophobas morio</i> (Coleoptera: Tenebrionidae) luciferase-like enzyme luminescence by diclofenac and potential suitability for light-off biosensing. <i>Luminescence</i> , 2021, 36, 367-376.	2.9	1
4	Influence of the C-terminal domain on the bioluminescence activity and color determination in green and red emitting beetle luciferases and luciferase-like enzyme. <i>Photochemical and Photobiological Sciences</i> , 2021, 20, 113-122.	2.9	1
5	RNA-Seq analysis of the blue light-emitting <i>Orfelia fultoni</i> (Diptera: Keroplatidae) suggest photoecological adaptations at the molecular level. <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2021, 39, 100840.	1.0	0
6	A Very Bright Far-Red Bioluminescence Emitting Combination Based on Engineered Railroad Worm Luciferase and 6- ² -Amino-Analogs for Bioimaging Purposes. <i>International Journal of Molecular Sciences</i> , 2021, 22, 303.	4.1	10
7	Synthesis of bioluminescent gold nanoparticle-luciferase hybrid systems for technological applications. <i>Photochemical and Photobiological Sciences</i> , 2021, 20, 1439-1453.	2.9	6
8	A Novel Brighter Bioluminescent Fusion Protein Based on ZZ Domain and <i>Amydetes vivianii</i> Firefly Luciferase for Immunoassays. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 755045.	4.1	4
9	Luciferase isozymes from the Brazilian <i>Aspisoma lineatum</i> (Lampyridae) firefly: origin of efficient pH-sensitive lantern luciferases from fat body pH-insensitive ancestors. <i>Photochemical and Photobiological Sciences</i> , 2020, 19, 1750-1764.	2.9	11
10	Role of E270 in pH- and metal-sensitivities of firefly luciferases. <i>Photochemical and Photobiological Sciences</i> , 2020, 19, 1548-1558.	2.9	3
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19	Comparison of the Malpighian tubules and fat body transcriptional profiles of <i>Zophobas morio</i> larvae (Coleoptera: Tenebrionidae). <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2019, 29, 95-105.	1.0	6
20	RNA-Seq analysis of the bioluminescent and non-bioluminescent species of Elateridae (Coleoptera): Comparison to others photogenic and non-photogenic tissues of Elateroidea species. <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2019, 29, 154-165.	1.0	4
21	Comparison of the thermostability of recombinant luciferases from Brazilian bioluminescent beetles: Relationship with kinetics and bioluminescence colours. <i>Luminescence</i> , 2018, 33, 282-288.	2.9	9
22	The proton and metal binding sites responsible for the pH-dependent green-red bioluminescence color tuning in firefly luciferases. <i>Scientific Reports</i> , 2018, 8, 17594.	3.3	13
23	Orfelia-type luciferin and its associated storage protein in the non-luminescent cave worm <i>Neoditomyia</i> sp. (Diptera: Keroplatidae) from the Atlantic rainforest: biological and evolutionary implications. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 1282-1288.	2.9	3
24	Revisiting Coleoptera T-rich region: structural conservation, phylogenetic and phylogeographic approaches in mitochondrial control region of bioluminescent Elateridae species (Coleoptera). <i>Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis</i> , 2017, 28, 671-680.	0.7	6
25	Transcriptional comparison of the photogenic and non-photogenic tissues of <i>Phrixothrix hirtus</i> (Coleoptera: Phengodidae) and non-luminescent <i>Chaulioognathus flavipes</i> (Coleoptera: Cantharidae) give insights on the origin of lanterns in railroad worms. <i>Gene Reports</i> , 2017, 7, 78-86.	0.8	16
26	Transcriptomes from the photogenic and non-photogenetic tissues and life stages of the <i>Aspisma lineatum</i> firefly (Coleoptera: Lampyridae): Implications for the evolutionary origins of bioluminescence and its associated light organs. <i>Gene Reports</i> , 2017, 8, 150-159.	0.8	14
27	Spectroscopic Properties of Amine-substituted Analogues of Firefly Luciferin and Oxyluciferin. <i>Photochemistry and Photobiology</i> , 2017, 93, 486-494.	2.5	19
28	Use of a special Brazilian red-light emitting railroad worm Luciferase in bioassays of NEK7 protein Kinase and Creatine Kinase. <i>BMC Biochemistry</i> , 2017, 18, 12.	4.4	0
29	Survey of Bioluminescent Coleoptera in the Atlantic Rain Forest of Serra da Paranapiacaba in São Paulo State (Brazil). <i>Biota Neotropica</i> , 2016, 16, .	1.0	6
30	Glu311 and Arg337 Stabilize a Closed Active-site Conformation and Provide a Critical Catalytic Base and Counteraction for Green Bioluminescence in Beetle Luciferases. <i>Biochemistry</i> , 2016, 55, 4764-4776.	2.5	26
31	The dark and bright sides of an enzyme: a three dimensional structure of the N-terminal domain of <i>Zophobas morio</i> luciferase-like enzyme, inferences on the biological function and origin of oxygenase/luciferase activity. <i>Photochemical and Photobiological Sciences</i> , 2016, 15, 654-665.	2.9	4
32	Organization and comparative analysis of the mitochondrial genomes of bioluminescent Elateroidea (Coleoptera: Polyphaga). <i>Gene</i> , 2016, 586, 254-262.	2.2	37
33	A new orange emitting luciferase from the Southern-Amazon <i>Pyrophorus angustus</i> (Coleoptera: Tenebrionidae): ecological considerations. <i>Photochemical and Photobiological Sciences</i> , 2016, 15, 1148-1154.	2.9	12
34	Preparation and Assay of Simple Light off Biosensor Based on Immobilized Bioluminescent Bacteria for General Toxicity Assays. <i>Methods in Molecular Biology</i> , 2016, 1461, 217-223.	0.9	0
35	Engineering the metal sensitive sites in <i>Macrolampis</i> sp2 firefly luciferase and use as a novel bioluminescent ratiometric biosensor for heavy metals. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 8881-8893.	3.7	8
36	First Report of <i>Pyrearinus</i> Larvae (Coleoptera: Elateridae) in Clayish Canga Caves and Luminous Termite Mounds in the Amazon Forest With a Preliminary Molecular-Based Phylogenetic Analysis of the <i>P. pumilus</i> Group. <i>Annals of the Entomological Society of America</i> , 2016, 109, 534-541.	2.5	4

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37	Aula prática de Fotossíntese: Demonstração da reação de Hill em cloroplastos com dissipação de energia por fluorescência mediante desacoplamento ou inibição dos fotossistemas pelo herbicida Diuron. <i>Journal of Biochemistry Education</i> , 2016, 14, 73.	0.0	0
38	First transcriptional survey of the Malpighian tubules of giant mealworm, <i>Zophobas morio</i> (Coleoptera: Tenebrionidae). <i>Genetics and Molecular Research</i> , 2015, 14, 464-473.	0.2	5
39	A transcriptional and proteomic survey of <i>Arachnocampa luminosa</i> (Diptera: Keroplatidae) lanterns gives insights into the origin of bioluminescence from the Malpighian tubules in Diptera. <i>Luminescence</i> , 2015, 30, 996-1003.	2.9	30
40	Circadian Control Sheds Light on Fungal Bioluminescence. <i>Current Biology</i> , 2015, 25, 964-968.	3.9	65
41	Artificial Night Lighting Reduces Firefly (Coleoptera: Lampyridae) Occurrence in Sorocaba, Brazil. <i>Advances in Entomology</i> (Irvine, Calif), 2015, 03, 24-32.	0.4	33
42	Living Light in the Darkness: Facts and Stories. <i>Revista Virtual De Quimica</i> , 2015, 7, .	0.4	0
43	Nanobiosensors Exploiting Specific Interactions Between an Enzyme and Herbicides in Atomic Force Spectroscopy. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 6678-6684.	0.9	16
44	Suitability of <i>Macrolampis</i> firefly and <i>Pyrearinus</i> click beetle luciferases for bacterial light off toxicity biosensor. <i>Analytical Biochemistry</i> , 2014, 445, 73-79.	2.4	7
45	Molecular phylogeny of Neotropical bioluminescent beetles (Coleoptera: Elateroidea) in southern and central Brazil. <i>Luminescence</i> , 2014, 29, 412-422.	2.9	15
46	Novel application of pH-sensitive firefly luciferases as dual reporter genes for simultaneous ratiometric analysis of intracellular pH and gene expression/location. <i>Photochemical and Photobiological Sciences</i> , 2014, 13, 1661-1670.	2.9	24
47	Bioluminescence of Beetle Luciferases with 6- ² -Amino-d-luciferin Analogues Reveals Excited Keto-oxyluciferin as the Emitter and Phenolate/Luciferin Binding Site Interactions Modulate Bioluminescence Colors. <i>Biochemistry</i> , 2014, 53, 5208-5220.	2.5	32
48	The Luciferin Binding Site Residues C/T311 (S314) Influence the Bioluminescence Color of Beetle Luciferases through Main-Chain Interaction with Oxyluciferin Phenolate. <i>Biochemistry</i> , 2013, 52, 19-27.	2.5	24
49	A transcriptional survey of the cDNA library of <i>Macrolampis</i> sp2 firefly lanterns (Coleoptera: Tj ETQq1 1 0.784314 \log_{10} / Overlock 10	1.0	10
50	Nanobiosensors Based on Chemically Modified AFM Probes: A Useful Tool for Methylsulfonyl-Methyl Detection. <i>Sensors</i> , 2013, 13, 1477-1489.	3.8	47
51	A Route from Darkness to Light: Emergence and Evolution of Luciferase Activity in AMP-CoA-Ligases Inferred from a Mealworm Luciferase-like Enzyme. <i>Biochemistry</i> , 2013, 52, 3963-3973.	2.5	12
52	Bioluminescent Coleoptera of Biological Station of Boracéia (Sorocaba, SP, Brazil): diversity, bioluminescence and habitat distribution. <i>Biota Neotropica</i> , 2012, 12, 21-34.	1.0	8
53	Luciferase from <i>Fulgeochlizus bruchi</i> (Coleoptera: Elateridae), a Brazilian click-beetle with a single abdominal lantern: molecular evolution, biological function and comparison with other click-beetle luciferases. <i>Photochemical and Photobiological Sciences</i> , 2012, 11, 1259.	2.9	23
54	Spectroscopic studies of the color modulation mechanism of firefly (beetle) bioluminescence with amino-analogs of luciferin and oxyluciferin. <i>Photochemical and Photobiological Sciences</i> , 2012, 11, 1281-1284.	2.9	22

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55	<i>Aspisma lineatum</i> (Gyllenhal) (Coleoptera: Lampyridae) Firefly: Description of the Immatures, Biological, and Ecological Aspects. <i>Neotropical Entomology</i> , 2012, 41, 89-94.	1.2	13
56	Structural evolution of luciferase activity in <i>Zophobas</i> mealworm AMP/CoA-ligase (protoluciferase) through site-directed mutagenesis of the luciferin binding site. <i>Photochemical and Photobiological Sciences</i> , 2011, 10, 1226-1232.	2.9	7
57	Bioluminescent Fat Body of Larval <i>Aspisma lineatum</i> (Coleoptera: Lampyridae) Firefly: Ontogenic Precursor of Lantern's Photogenic Tissue. <i>Annals of the Entomological Society of America</i> , 2011, 104, 761-767.	2.5	15
58	A new blue-shifted luciferase from the Brazilian <i>Amydetes fanestratus</i> (Coleoptera: Lampyridae) firefly: molecular evolution and structural/functional properties. <i>Photochemical and Photobiological Sciences</i> , 2011, 10, 1879-1886.	2.9	47
59	Enhanced red-emitting railroad worm luciferase for bioassays and bioimaging. <i>Protein Science</i> , 2010, 19, 26-33.	7.6	32
60	The origin of luciferase activity in <i>Zophobas</i> mealworm AMP/CoA-ligase (protoluciferase): luciferin stereoselectivity as a switch for the oxygenase activity. <i>Photochemical and Photobiological Sciences</i> , 2010, 9, 1111-1119.	2.9	9
61	Vision in click beetles (Coleoptera: Elateridae): pigments and spectral correspondence between visual sensitivity and species bioluminescence emission. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2010, 196, 629-638.	1.6	23
62	Quantum Yields and Kinetics of the Firefly Bioluminescence Reaction of Beetle Luciferases. <i>Photochemistry and Photobiology</i> , 2010, 86, 1046-1049.	2.5	83
63	Enhanced Beetle Luciferase for High-Resolution Bioluminescence Imaging. <i>PLoS ONE</i> , 2010, 5, e10011.	2.5	100
64	Fauna de besouros bioluminescentes (Coleoptera: Elateroidea: Lampyridae; Phengodidae, Elateridae) nos municípios de Campinas, Sorocaba-Votorantim e Rio Claro-Limeira (SP, Brasil): biodiversidade e influência da urbanização. <i>Biota Neotropica</i> , 2010, 10, 103-116.	1.0	28
65	Molecular insights on the evolution of the lateral and head lantern luciferases and bioluminescence colors in <i>Mastinocerini</i> railroad-worms (Coleoptera: Phengodidae). <i>Photochemical and Photobiological Sciences</i> , 2010, 9, 87-92.	2.9	26
66	<i>Pyrearinus termitilluminans</i> larval click beetle luciferase: active site properties, structure and function relationships and comparison with other beetle luciferases. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 1748-1754.	2.9	27
67	An ancestral luciferase in the Malpighi tubules of a non-bioluminescent beetle!. <i>Photochemical and Photobiological Sciences</i> , 2009, 8, 57-61.	2.9	24
68	CCD imaging of basal bioluminescence in larval fireflies: clues on the anatomic origin and evolution of bioluminescence. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 448-452.	2.9	18
69	Introduction to the themed issue on bioluminescence. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 145.	2.9	1
70	The structural origin and biological function of pH-sensitivity in firefly luciferases. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 159-169.	2.9	88
71	Mitochondrial genome sequence of the Brazilian luminescent click beetle <i>Pyrophorus divergens</i> (Coleoptera: Elateridae): Mitochondrial genes utility to investigate the evolutionary history of Coleoptera and its bioluminescence. <i>Gene</i> , 2007, 405, 1-9.	2.2	45
72	Few substitutions affect the bioluminescence spectra of <i>Phrixotrix</i> (Coleoptera: Phengodidae) luciferases: a site-directed mutagenesis survey. <i>Luminescence</i> , 2007, 22, 362-369.	2.9	26

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73	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. <i>Photochemistry and Photobiology</i> , 2007, 84, 071018085748004-???	2.5	24
74	Bioluminescence Color Determinants of Phrixothrix Railroad-worm Luciferases: Chimeric Luciferases, Site-directed Mutagenesis of Arg 215 and Guanidine effect. <i>Photochemistry and Photobiology</i> , 2007, 72, 267-271.	2.5	2
75	Two Bioluminescent Diptera: The North American <i>Orfelia fultoni</i> and the Australian <i>Arachnocampa flava</i> . Similar Niche, Different Bioluminescence Systems. <i>Photochemistry and Photobiology</i> , 2007, 75, 22-27.	2.5	4
76	The Influence of Ala243 (Gly247), Arg215 and Thr226 (Asn230) on the Bioluminescence Spectra and pH-Sensitivity of Railroad Worm, Click Beetle and Firefly Luciferases. <i>Photochemistry and Photobiology</i> , 2007, 76, 538-544.	2.5	3
77	Chemical, biological and evolutionary aspects of beetle bioluminescence. <i>Arkivoc</i> , 2007, 2007, 311-323.	0.5	3
78	Beetle Luciferases: Colorful Lights on Biological Processes and Diseases. , 2006, , 49-63.		20
79	Bovine serum albumin displays luciferase-like activity in presence of luciferyl adenylate: insights on the origin of protoluciferase activity and bioluminescence colours. <i>Luminescence</i> , 2006, 21, 262-267.	2.9	34
80	Active-Site Properties of Phrixotrix Railroad Worm Green and Red Bioluminescence-Eliciting Luciferases. <i>Journal of Biochemistry</i> , 2006, 140, 467-474.	1.7	41
81	A New Firefly Luciferase with Bimodal Spectrum: Identification of Structural Determinants of Spectral pH-Sensitivity in Firefly Luciferases. <i>Photochemistry and Photobiology</i> , 2005, 81, 843.	2.5	52
82	The influence of the region between residues 220 and 344 and beyond in Phrixotrix railroad worm luciferases green and red bioluminescence. <i>Protein Engineering, Design and Selection</i> , 2004, 17, 113-117.	2.1	22
83	Cloning and characterization of the cDNA for the Brazilian <i>Cratomorphus distinctus</i> larval firefly luciferase: similarities with European <i>Lampyris noctiluca</i> and Asiatic <i>Pyrocoelia</i> luciferases. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2004, 139, 151-156.	1.6	54
84	Two Bioluminescent Diptera: The North American <i>Orfelia fultoni</i> and the Australian <i>Arachnocampa flava</i> . Similar Niche, Different Bioluminescence Systems. <i>Photochemistry and Photobiology</i> , 2002, 75, 22.	2.5	47
85	The Influence of Ala243 (Gly247), Arg215 and Thr226 (Asn230) on the Bioluminescence Spectra and pH-Sensitivity of Railroad Worm, Click Beetle and Firefly Luciferases. <i>Photochemistry and Photobiology</i> , 2002, 76, 538.	2.5	48
86	The origin, diversity, and structure function relationships of insect luciferases. <i>Cellular and Molecular Life Sciences</i> , 2002, 59, 1833-1850.	5.4	262
87	THE STRUCTURAL DETERMINANTS OF BIOLUMINESCENCE COLORS IN RAILROAD WORM AND OTHER pH-INSENSITIVE LUCIFERASES. , 2002, , .		1
88	Fireflies (Coleoptera: Lampyridae) from Southeastern Brazil: Habitats, Life History, and Bioluminescence. <i>Annals of the Entomological Society of America</i> , 2001, 94, 129-145.	2.5	46
89	Thr226 Is a Key Residue for Bioluminescence Spectra Determination in Beetle Luciferases. <i>Biochemical and Biophysical Research Communications</i> , 2001, 280, 1286-1291.	2.1	60
90	Spectral correspondence between visual spectral sensitivity and bioluminescence emission spectra in the click beetle <i>Pyrophorus punctatissimus</i> (Coleoptera: Elateridae). <i>Journal of Insect Physiology</i> , 2000, 46, 1137-1141.	2.0	22

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91	Bioluminescence Color Determinants of Phrixothrix Railroad-worm Luciferases: Chimeric Luciferases, Site-directed Mutagenesis of Arg 215 and Guanidine effect. Photochemistry and Photobiology, 2000, 72, 267.	2.5	44
92	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
93	Cloning, Sequence Analysis, and Expression of Active Phrixothrix Railroad-Worms Luciferases: A Relationship between Bioluminescence Spectra and Primary Structures. Biochemistry, 1999, 38, 8271-8279.	2.5	163
94	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
95	Bioluminescence and Biological Aspects of Brazilian Railroad-Worms (Coleoptera: Phengodidae). Annals of the Entomological Society of America, 1997, 90, 389-398.	2.5	67
96	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
97	BIOLUMINESCENCE OF BRAZILIAN FIREFLIES (COLEOPTERA: LAMPYRIDAE): SPECTRAL DISTRIBUTION and pH EFFECT ON LUCIFERASE-ELICITED COLORS. COMPARISON WITH ELATERID and PHENGODID LUCIFERASES. Photochemistry and Photobiology, 1995, 62, 490-495.	2.5	76
98	BIOPHYSICAL AND BIOCHEMICAL ASPECTS OF PHENGODID (RAILROAD-WORM) BIOLUMINESCENCE. Photochemistry and Photobiology, 1993, 58, 615-622.	2.5	40