

# Ludmila A Frank

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9317907/publications.pdf>

Version: 2024-02-01

52  
papers

1,137  
citations

361296

20  
h-index

414303

32  
g-index

61  
all docs

61  
docs citations

61  
times ranked

662  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cloning and Expression of cDNA for a Luciferase from the Marine Copepod <i>Metridia longa</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 3212-3217.	1.6	131
2	Recombinant obelin: Cloning and expression of cDNA, purification, and characterization as a calcium indicator. <i>Methods in Enzymology</i> , 2000, 305, 223-249.	0.4	85
3	Interchange of aequorin and obelin bioluminescence color is determined by substitution of one active site residue of each photoprotein. <i>FEBS Letters</i> , 2005, 579, 1008-1014.	1.3	67
4	Violet Bioluminescence and Fast Kinetics from W92F Obelin: Structure-Based Proposals for the Bioluminescence Triggering and the Identification of the Emitting Species. <i>Biochemistry</i> , 2003, 42, 6013-6024.	1.2	57
5	Calcium-regulated photoproteins of marine coelenterates. <i>Molecular Biology</i> , 2006, 40, 355-367.	0.4	57
6	Highly-sensitive graphene field effect transistor biosensor using PNA and DNA probes for RNA detection. <i>Applied Surface Science</i> , 2020, 527, 146839.	3.1	45
7	The light-sensitive photoprotein berovin from the bioluminescent ctenophore <i>Beroë abyssicola</i> : a novel type of Ca <sup>2+</sup> -regulated photoprotein. <i>FEBS Journal</i> , 2012, 279, 856-870.	2.2	43
8	Bioluminescent immunoassay of thyrotropin and thyroxine using obelin as a label. <i>Analytical Biochemistry</i> , 2004, 325, 240-246.	1.1	42
9	Coelenterazine-binding protein of <i>Renilla muelleri</i> : cDNA cloning, overexpression, and characterization as a substrate of luciferase. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 189-196.	1.6	41
10	Green-fluorescent protein from the bioluminescent jellyfish <i>Clytia gregaria</i> : cDNA cloning, expression, and characterization of novel recombinant protein. <i>Photochemical and Photobiological Sciences</i> , 2010, 9, 757-765.	1.6	39
11	Spectral tuning of obelin bioluminescence by mutations of Trp92. <i>FEBS Letters</i> , 2003, 554, 184-188.	1.3	36
12	Crystal structure of coelenterazine-binding protein from <i>Renilla muelleri</i> at 1.7 Å...: Why it is not a calcium-regulated photoprotein. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 442.	1.6	31
13	Ca <sup>2+</sup> -Regulated Photoproteins: Effective Immunoassay Reporters. <i>Sensors</i> , 2010, 10, 11287-11300.	2.1	30
14	Bioluminescent and spectroscopic properties of His-Trp-Tyr triad mutants of obelin and aequorin. <i>Photochemical and Photobiological Sciences</i> , 2013, 12, 1016-1024.	1.6	30
15	Analysis of interactions between proteins and small-molecule drugs by a biosensor based on a graphene field-effect transistor. <i>Sensors and Actuators B: Chemical</i> , 2021, 326, 128991.	4.0	30
16	Violet and greenish photoprotein obelin mutants for reporter applications in dual-color assay. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 391, 2891-2896.	1.9	29
17	Use of proZZ-obelin Fusion Protein in Bioluminescent Immunoassay. <i>Biochemical and Biophysical Research Communications</i> , 1996, 219, 475-479.	1.0	28
18	RNA Aptamer against Autoantibodies Associated with Multiple Sclerosis and Bioluminescent Detection Probe on Its Basis. <i>Analytical Chemistry</i> , 2014, 86, 2590-2594.	3.2	25

#	ARTICLE	IF	CITATIONS
19	Coelenterazine-Dependent Luciferases as a Powerful Analytical Tool for Research and Biomedical Applications. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7465.	1.8	24
20	Recombinant <i>Metridia</i> luciferase isoforms: expression, refolding and applicability for in vitro assay. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 1025-1031.	1.6	22
21	Bioluminescent aptamer-based sandwich-type assay of anti-myelin basic protein autoantibodies associated with multiple sclerosis. <i>Analytica Chimica Acta</i> , 2019, 1064, 112-118.	2.6	18
22	Polysaccharide-coated iron oxide nanoparticles: Synthesis, properties, surface modification. <i>Materials Letters</i> , 2021, 284, 128920.	1.3	17
23	Ni <sup>2+</sup> -zeolite/ferrosphere and Ni <sup>2+</sup> -silica/ferrosphere beads for magnetic affinity separation of histidine-tagged proteins. <i>Dalton Transactions</i> , 2016, 45, 1582-1592.	1.6	16
24	Simultaneous Bioluminescent Immunoassay of Serum Total and IgG-Bound Prolactins. <i>Analytical Chemistry</i> , 2012, 84, 3119-3124.	3.2	15
25	Hydrogen-bond networks between the C-terminus and Arg from the first $\alpha$ -helix stabilize photoprotein molecules. <i>Photochemical and Photobiological Sciences</i> , 2014, 13, 541-547.	1.6	15
26	Development and characterization of novel 2'-F-RNA aptamers specific to human total and glycosylated hemoglobins. <i>Analytical Biochemistry</i> , 2019, 570, 43-50.	1.1	14
27	The Ca <sup>2+</sup> -Regulated Photoprotein Obelin as a Tool for SELEX Monitoring and DNA Aptamer Affinity Evaluation. <i>Photochemistry and Photobiology</i> , 2020, 96, 1041-1046.	1.3	13
28	Application of Enzyme Bioluminescence for Medical Diagnostics. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2014, 144, 175-197.	0.6	11
29	Bioluminescent detection probe for tick-borne encephalitis virus immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 5417-5423.	1.9	11
30	Bioluminescent signal system: bioluminescence immunoassay of pathogenic organisms. <i>Luminescence</i> , 2007, 22, 215-220.	1.5	10
31	Obelin mutants as reporters in bioluminescent dual-analyte binding assay. <i>Analytical Methods</i> , 2013, 5, 636-640.	1.3	9
32	Hybrid Minimal Core Streptavidin-Obelin as a Versatile Reporter for Bioluminescence-based Bioassay. <i>Photochemistry and Photobiology</i> , 2017, 93, 548-552.	1.3	9
33	Mutants of Ca <sup>2+</sup> -Regulated Photoprotein Obelin for Site-specific Conjugation. <i>Photochemistry and Photobiology</i> , 2017, 93, 553-557.	1.3	8
34	Bioluminescent aptamer-based solid-phase microassay to detect lung tumor cells in plasma. <i>Talanta</i> , 2019, 199, 674-678.	2.9	7
35	Ca <sup>2+</sup> -triggered coelenterazine-binding protein from <i>Renilla</i> as an enzyme-dependent label for binding assay. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 2573-2579.	1.9	6
36	A bioluminescent assay for detecting melanocortin-1 receptor (MC1R) gene polymorphisms R160W, R151C, and D294H. <i>Molecular Biology</i> , 2015, 49, 852-857.	0.4	6

#	ARTICLE	IF	CITATIONS
37	Simultaneous Genotyping of Four Single Nucleotide Polymorphisms Associated with Risk Factors of Hemostasis Disorders. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2015, 18, 930-936.	0.6	6
38	Affine magnetic sorbents supported on coal ash microspheres for recombinant protein isolation. <i>Applied Biochemistry and Microbiology</i> , 2009, 45, 215-220.	0.3	5
39	Reporter-recruiting bifunctional aptasensor for bioluminescent analytical assays. <i>RSC Advances</i> , 2020, 10, 32393-32399.	1.7	4
40	Starch-Coated Magnetic Iron Oxide Nanoparticles for Affinity Purification of Recombinant Proteins. <i>International Journal of Molecular Sciences</i> , 2022, 23, 5410.	1.8	4
41	Creation of artificial luciferases to expand their analytical potential. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2015, 18, 919-929.	0.6	3
42	Bioluminescent detection of tick-borne encephalitis virus in native ticks. <i>Analytical Methods</i> , 2017, 9, 2252-2255.	1.3	2
43	Bioluminescent SNP genotyping technique: Development and application for detection of melanocortin 1 receptor gene polymorphisms. <i>Talanta</i> , 2018, 189, 111-115.	2.9	2
44	The Ca <sup>2+</sup> -Regulated Photoprotein Obelin as a Target for the RNA Aptamer Selection. <i>Russian Journal of Bioorganic Chemistry</i> , 2018, 44, 296-301.	0.3	2
45	The Hybrid Protein ZZâ€œOL as an Analytical Tool for Biotechnology Research. <i>Russian Journal of Bioorganic Chemistry</i> , 2020, 46, 1004-1010.	0.3	2
46	THE MAIN FUNCTION OF HIS175, TRP179, AND TYR190 RESIDUES OF THE OBELIN BINDING SITE IS TO STABILIZE THE HYDROPEROXYCOELENTERAZINE INTERMEDIATE. , 2007, , .		1
47	Bioluminescent monitoring enables observation of intracellular events in real time without cell and tissue destruction. <i>Biophysics (Russian Federation)</i> , 2017, 62, 503-507.	0.2	1
48	REFOLDING OF THE RECOMBINANT LUCIFERASES OF <i>METRIDIA LONGA</i> , 2007, , .		0
49	Editorial (Thematic Issue: Recent Trends and Advancements in Bioassay Based on Bioluminescent) Tj ETQq1 1 0.784314 rgBT <sub>0</sub> Overlo 0,6		0
50	Genetically Modified Coelenterazine-Dependent Luciferases as Reporters for In Vitro Assay. <i>Journal of Siberian Federal University - Biology</i> , 2017, 10, 199-210.	0.2	0
51	A Test System for Tick-Borne Encephalitis Virus Detection Based on Bioluminescent Immunoassay. <i>Journal of Siberian Federal University - Humanities and Social Sciences</i> , 0, , 1-11.	0.2	0
52	N-extended photoprotein obelin to competitively detect small protein tumor markers. <i>Biochemical and Biophysical Research Communications</i> , 2022, 598, 69-73.	1.0	0