# Ilia V Yampolsky

## List of Publications by Citations



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|---|---|---|---|
| 60 papers | 1,823 citations | 24 h-index | 41 g-index |
| 80 ext. papers | 2,158 ext. citations | 6.8 avg, IF | 4.6 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 60 | 1001 lights: luciferins, luciferases, their mechanisms of action and applications in chemical analysis, biology and medicine. *Chemical Society Reviews*, **2016**, 45, 6048-6077 | 58.5 | 172 |
| 59 | Green fluorescent proteins are light-induced electron donors. *Nature Chemical Biology*, **2009**, 5, 459-61 | 11.7 | 156 |
| 58 | Conformationally locked chromophores as models of excited-state proton transfer in fluorescent proteins. *Journal of the American Chemical Society*, **2012**, 134, 6025-32 | 16.4 | 136 |
| 57 | Fluorescence imaging using synthetic GFP chromophores. *Current Opinion in Chemical Biology*, **2015**, 27, 64-74 | 9.7 | 96 |
| 56 | Structural basis for the fast maturation of Arthropoda green fluorescent protein. *EMBO Reports*, **2006**, 7, 1006-12 | 6.5 | 84 |
| 55 | Genetically encodable bioluminescent system from fungi. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12728-12732 | 11.5 | 77 |
| 54 | The Chemical Basis of Fungal Bioluminescence. *Angewandte Chemie - International Edition*, **2015**, 54, 8124-8 | 16.4 | 66 |
| 53 | Synthesis and properties of the chromophore of the asFP595 chromoprotein from Anemonia sulcata. *Biochemistry*, **2005**, 44, 5788-93 | 3.2 | 63 |
| 52 | Fucoxanthin production by heterokont microalgae. *Algal Research*, **2017**, 24, 387-393 | 5 | 60 |
| 51 | The first mutant of the Aequorea victoria green fluorescent protein that forms a red chromophore. *Biochemistry*, **2008**, 47, 4666-73 | 3.2 | 58 |
| 50 | Mechanism and color modulation of fungal bioluminescence. *Science Advances*, **2017**, 3, e1602847 | 14.3 | 56 |
| 49 | Red-shifted fluorescent aminated derivatives of a conformationally locked GFP chromophore. *Chemistry - A European Journal*, **2014**, 20, 13234-41 | 4.8 | 56 |
| 48 | Protein labeling for live cell fluorescence microscopy with a highly photostable renewable signal. *Chemical Science*, **2017**, 8, 7138-7142 | 9.4 | 50 |
| 47 | Plants with genetically encoded autoluminescence. *Nature Biotechnology*, **2020**, 38, 944-946 | 44.5 | 41 |
| 46 | Synthesis and properties of the red chromophore of the green-to-red photoconvertible fluorescent protein Kaede and its analogs. *Bioorganic Chemistry*, **2008**, 36, 96-104 | 5.1 | 40 |
| 45 | Unveiling Structural Motions of a Highly Fluorescent Superphotoacid by Locking and Fluorinating the GFP Chromophore in Solution. *Journal of Physical Chemistry Letters*, **2017**, 8, 5921-5928 | 6.4 | 34 |
| 44 | A novel type of luciferin from the Siberian luminous earthworm Fridericia heliota: structure elucidation by spectral studies and total synthesis. *Angewandte Chemie - International Edition*, **2014**, 53, 5566-8 | 16.4 | 33 |

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| 43 | Tryptophan-based chromophore in fluorescent proteins can be anionic. *Scientific Reports*, **2012**, 2, 608 | 4.9 | 29 |
| 42 | Designing redder and brighter fluorophores by synergistic tuning of ground and excited states. *Chemical Communications*, **2019**, 55, 2537-2540 | 5.8 | 27 |
| 41 | Bioinspired Fluorescent Dyes Based on a Conformationally Locked Chromophore of the Fluorescent Protein Kaede. *European Journal of Organic Chemistry*, **2015**, 2015, 5716-5721 | 3.2 | 27 |
| 40 | Docking-guided identification of protein hosts for GFP chromophore-like ligands. *Journal of Materials Chemistry C*, **2016**, 4, 3036-3040 | 7.1 | 26 |
| 39 | Chemical introduction of the green fluorescence: imaging of cysteine cathepsins by an irreversibly locked GFP fluorophore. *Organic and Biomolecular Chemistry*, **2013**, 11, 5913-21 | 3.9 | 26 |
| 38 | A synthetic approach to GFP chromophore analogs from 3-azidocinnamates. Role of methyl rotors in chromophore photophysics. *Chemical Communications*, **2013**, 49, 5778-80 | 5.8 | 24 |
| 37 | Photoinduced Proton Transfer of GFP-Inspired Fluorescent Superphotoacids: Principles and Design. *Journal of Physical Chemistry B*, **2019**, 123, 3804-3821 | 3.4 | 22 |
| 36 | A Tale Of Two Luciferins: Fungal and Earthworm New Bioluminescent Systems. *Accounts of Chemical Research*, **2016**, 49, 2372-2380 | 24.3 | 22 |
| 35 | Novel mechanism of bioluminescence: oxidative decarboxylation of a moiety adjacent to the light emitter of Fridericia luciferin. *Angewandte Chemie - International Edition*, **2015**, 54, 7065-7 | 16.4 | 21 |
| 34 | Selected Least Studied but not Forgotten Bioluminescent Systems. *Photochemistry and Photobiology*, **2017**, 93, 405-415 | 3.6 | 20 |
| 33 | Synthesis and spectral and chemical properties of the yellow fluorescent protein zFP538 chromophore. *Biochemistry*, **2009**, 48, 8077-82 | 3.2 | 20 |
| 32 | Bioluminescence chemistry of fireworm. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 18911-18916 | 11.5 | 18 |
| 31 | A synthetic GFP-like chromophore undergoes base-catalyzed autoxidation into acylimine red form. *Journal of Organic Chemistry*, **2011**, 76, 2782-91 | 4.2 | 18 |
| 30 | Luciferase of the Japanese syllid polychaete Odontosyllis undecimdonta. *Biochemical and Biophysical Research Communications*, **2018**, 502, 318-323 | 3.4 | 17 |
| 29 | Identification of hispidin as a bioluminescent active compound and its recycling biosynthesis in the luminous fungal fruiting body. *Photochemical and Photobiological Sciences*, **2017**, 16, 1435-1440 | 4.2 | 15 |
| 28 | Structure of the red fluorescent protein from a lancelet (Branchiostoma lanceolatum): a novel GYG chromophore covalently bound to a nearby tyrosine. *Acta Crystallographica Section D: Biological Crystallography*, **2013**, 69, 1850-60 | | 13 |
| 27 | New class of blue animal pigments based on Frizzled and Kringle protein domains. *Journal of Biological Chemistry*, **2004**, 279, 43367-70 | 5.4 | 13 |
| 26 | Prolonged bioluminescence imaging in living cells and mice using novel pro-substrates for Renilla luciferase. *Organic and Biomolecular Chemistry*, **2017**, 15, 10238-10244 | 3.9 | 12 |

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| 25 | CompX, a luciferin-related tyrosine derivative from the bioluminescent earthworm Fridericia heliota. Structure elucidation and total synthesis. *Tetrahedron Letters*, **2014**, 55, 460-462 | 2 | 11 |
| 24 | AsLn2, a luciferin-related modified tripeptide from the bioluminescent earthworm Fridericia heliota. *Tetrahedron Letters*, **2014**, 55, 463-465 | 2 | 10 |
| 23 | New bioluminescent coelenterazine derivatives with various C-6 substitutions. *Organic and Biomolecular Chemistry*, **2017**, 15, 7008-7018 | 3.9 | 10 |
| 22 | Bioluminescence **2019**, | | 10 |
| 21 | Allylic boron and zinc derivatives in synthesis and transformations of nitrogen heterocycles. *Pure and Applied Chemistry*, **2000**, 72, 1641-1644 | 2.1 | 9 |
| 20 | Novel condensations of nitroacetic esters with aromatic aldehydes leading to 5-hydroxy-1,2-oxazin-6-ones. *Tetrahedron Letters*, **2013**, 54, 628-629 | 2 | 8 |
| 19 | Allylboration of functionalized isoquinolines. *Journal of Organometallic Chemistry*, **2002**, 657, 123-128 | 2.3 | 8 |
| 18 | Efficient Synthetic Approach to Fluorescent Oxazole-4-carboxylate Derivatives. *Synthetic Communications*, **2013**, 43, 2337-2342 | 1.7 | 7 |
| 17 | The Chemical Basis of Fungal Bioluminescence. *Angewandte Chemie*, **2015**, 127, 8242-8246 | 3.6 | 7 |
| 16 | Novel peptide chemistry in terrestrial animals: natural luciferin analogues from the bioluminescent earthworm Fridericia heliota. *Chemistry - A European Journal*, **2015**, 21, 3942-7 | 4.8 | 7 |
| 15 | A Novel Type of Luciferin from the Siberian Luminous Earthworm Fridericia heliota: Structure Elucidation by Spectral Studies and Total Synthesis. *Angewandte Chemie*, **2014**, 126, 5672-5674 | 3.6 | 6 |
| 14 | Total synthesis of AsLn2 – a luciferin analogue from the Siberian bioluminescent earthworm Fridericia heliota. *Mendeleev Communications*, **2015**, 25, 99-100 | 1.9 | 4 |
| 13 | Ring-expanding rearrangement of 2-acyl-5-arylidene-3,5-dihydro-4H-imidazol-4-ones in synthesis of flutimide analogs. *Tetrahedron*, **2014**, 70, 3714-3719 | 2.4 | 4 |
| 12 | Nambiscalarane, a novel sesterterpenoid comprising a furan ring, and other secondary metabolites from bioluminescent fungus Neonothopanus nambi. *Mendeleev Communications*, **2016**, 26, 191-192 | 1.9 | 4 |
| 11 | Conformationally locked GFP chromophore derivatives as potential fluorescent sensors. *Russian Journal of Bioorganic Chemistry*, **2016**, 42, 453-456 | 1 | 4 |
| 10 | Plants with self-sustained luminescence | | 3 |
| 9 | Chaetopterus variopedatus Bioluminescence: A Review of Light Emission within a Species Complex. *Photochemistry and Photobiology*, **2020**, 96, 768-778 | 3.6 | 2 |
| 8 | Novel Mechanism of Bioluminescence: Oxidative Decarboxylation of a Moiety Adjacent to the Light Emitter of Fridericia Luciferin. *Angewandte Chemie*, **2015**, 127, 7171-7173 | 3.6 | 2 |

# List of Publications

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| 7 | A bioluminescent system of fungi: prospects for application in medical research. *Bulletin of Russian State Medical University*, **2018**, 74-77 | 0.4 | 1 |
| 6 | Unusual transformations of anthranilic acid imidazolides. *Chemistry of Heterocyclic Compounds*, **2012**, 48, 1108-1110 | 1.4 | 0 |
| 5 | Unexpected Coelenterazine Degradation Products of Photoprotein Photoinactivation. *Organic Letters*, **2021**, 23, 6846-6849 | 6.2 | 0 |
| 4 | Synthesis of Panal Terpenoid Core. *Synlett*, **2017**, 28, 583-588 | 2.2 | |
| 3 | Titelbild: The Chemical Basis of Fungal Bioluminescence (Angew. Chem. 28/2015). *Angewandte Chemie*, **2015**, 127, 8113-8113 | 3.6 | |
| 2 | Bioluminescent imaging: new opportunities. *Bulletin of Russian State Medical University*, **2018**, 87-90 | 0.4 | |
| 1 | Luminous Fungi **2019**, 301-348 | | |