

Curriculum vitae: Konstantin Lukyanov



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Russia

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Education

1986–1991	Moscow, Russia	Biology Department of Moscow State University
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IBCh positions

2024–to date	Leading research fellow
2020–2024	Principal research fellow
2018–2024	Principal research fellow
2020–2024	Principal research fellow

IBCh memberships

Educational-methodical commission
Scientific council
Certifying committee

Titles

	Corresponding member of the Academy of Sciences
2016	Professor of the RAS
	Doctor of Science (Biological sciences)

Grants and projects

2019–2021	-
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Publications

1. Stepanov AI, Zhurlova PA, Shuvaeva AA, Sokolinskaya EL, Gurskaya NG, **Lukyanov KA**, Putlyaeva LV (2023). Optogenetics for sensors: On-demand fluorescent labeling of histone epigenetics. *Biochem Biophys Res Commun* 687, 149174, [10.1016/j.bbrc.2023.149174](https://doi.org/10.1016/j.bbrc.2023.149174)
2. Stepanov AI, Putlyaeva LV, Didych DA, Galiakberova AA, Gurskaya NG, **Lukyanov KA** (2023). ATOH1 factor expression induces rapid differentiation of iPSCs into neurons. *Bulletin of Russian State Medical University* 2023 (5), 4–8, [10.24075/brsmu.2023.036](https://doi.org/10.24075/brsmu.2023.036)
3. Mamontova AV, Simonyan TR, **Lukyanov KA**, Bogdanov AM (2022). Circular Permutants of BrUSLEE Protein as Fluorescent pH Indicators. *Russ. J. Bioorganic Chem.* 48 (4), 850–853, [10.1134/S106816202204015X](https://doi.org/10.1134/S106816202204015X)
4. **Lukyanov KA** (2022). Fluorescent proteins for a brighter science. *Biochem Biophys Res Commun* 633, 29–

32, [10.1016/j.bbrc.2022.08.089](https://doi.org/10.1016/j.bbrc.2022.08.089)

5. Simonyan TR, Protasova EA, Mamontova AV, Shakhov AM, **Lukyanov KA**, Maksimov EG, Bogdanov AM (2022). A Single Fluorescent Protein-Based Indicator with a Time-Resolved Fluorescence Readout for Precise pH Measurements in the Alkaline Range. *Int J Mol Sci* 23 (21), , [10.3390/ijms232112907](https://doi.org/10.3390/ijms232112907)
6. Stepanov AI, Besedovskaia ZV, Moshareva MA, **Lukyanov KA**, Putlyaeva LV (2022). Studying Chromatin Epigenetics with Fluorescence Microscopy. *Int J Mol Sci* 23 (16), , [10.3390/ijms23168988](https://doi.org/10.3390/ijms23168988)
7. Moshareva MA, **Lukyanov KA**, Putlyaeva LV (2022). Fluorescence imaging of epigenetic genome modifications. *Biochem Biophys Res Commun* 622, 86–92, [10.1016/j.bbrc.2022.07.014](https://doi.org/10.1016/j.bbrc.2022.07.014)
8. Kost LA, Iunusova VA, Ivanova VO, Nikitin ES, **Lukyanov KA**, Bogdanov AM (2022). The Electromotive Protein Prestin as a Sensitive Core of the Fluorescent Voltage Indicator. *Russ. J. Bioorganic Chem.* 48 (3), 617–620, [10.1134/S1068162022030098](https://doi.org/10.1134/S1068162022030098)
9. Mamontov V, Martynov A, Morozova N, Bukatin A, Staroverov DB, **Lukyanov KA**, Ispolatov Y, Semenova E, Severinov K (2022). Persistence of plasmids targeted by CRISPR interference in bacterial populations. *Proc Natl Acad Sci U S A* 119 (15), e2114905119, [10.1073/pnas.2114905119](https://doi.org/10.1073/pnas.2114905119)
10. Kolesov DV, Sokolinskaya EL, **Lukyanov KA**, Bogdanov AM (2021). Molecular Tools for Targeted Control of Nerve Cell Electrical Activity. Part II. *Acta Naturae* 13 (4), 17–32, [10.32607/actanaturae.11415](https://doi.org/10.32607/actanaturae.11415)
11. Bozhanova NG, Harp JM, Bender BJ, Gavrikov AS, Gorbachev DA, Baranov MS, Mercado CB, Zhang X, **Lukyanov KA**, Mishin AS, Meiler J (2021). Computational redesign of a fluorogen activating protein with Rosetta. *PLoS Comput Biol* 17 (11), e1009555, [10.1371/journal.pcbi.1009555](https://doi.org/10.1371/journal.pcbi.1009555)
12. Perfilov MM, Gavrikov AS, **Lukyanov KA**, Mishin AS (2021). Transient fluorescence labeling: Low affinity—high benefits. *Int J Mol Sci* 22 (21), , [10.3390/ijms222111799](https://doi.org/10.3390/ijms222111799)
13. Yuzhakova DV, Shirmanova MV, Klimenko VV, Lukina MM, Gavrina AI, Komarova AD, Gorbachev DA, Sapogova NV, **Lukyanov KA**, Kamensky VA (2021). PDT with genetically encoded photosensitizer miniSOG on a tumor spheroid model: A comparative study of continuous-wave and pulsed irradiation. *BIOCHIM BIOPHYS ACTA* 1865 (12), 129978, [10.1016/j.bbagen.2021.129978](https://doi.org/10.1016/j.bbagen.2021.129978)
14. Kolesov DV, Sokolinskaya EL, **Lukyanov KA**, Bogdanov AM (2021). Molecular Tools for Targeted Control of Nerve Cell Electrical Activity. Part I. *Acta Naturae* 13 (3), 52–64, [10.32607/actanaturae.11414](https://doi.org/10.32607/actanaturae.11414)
15. Kolesov DV, Ivanova VO, Sokolinskaya EL, Kost LA, Balaban PM, **Lukyanov KA**, Nikitin ES, Bogdanov AM (2021). Impacts of OrX and cAMP-insensitive Orco to the insect olfactory heteromer activity. *Mol Biol Rep* 48 (5), 4549–4561, [10.1007/s11033-021-06480-0](https://doi.org/10.1007/s11033-021-06480-0)
16. Protasova EA, Mishin AS, **Lukyanov KA**, Maksimov EG, Bogdanov AM (2021). Chromophore reduction plus reversible photobleaching: how the mKate2 photoconversion works. *Photochem Photobiol Sci* 20 (6), 791–803, [10.1007/s43630-021-00060-8](https://doi.org/10.1007/s43630-021-00060-8)
17. Pletneva NV, Maksimov EG, Protasova EA, Mamontova AV, Simonyan TR, Ziganshin RH, **Lukyanov KA**, Muslinkina L, Pletnev S, Bogdanov AM, Pletnev VZ (2021). Amino acid residue at the 165th position tunes EYFP chromophore maturation. A structure-based design. *Comput Struct Biotechnol J* 19, 2950–2959, [10.1016/j.csbj.2021.05.017](https://doi.org/10.1016/j.csbj.2021.05.017)
18. Shirmanova MV, Gorbachev DA, Sarkisyan KS, Parnes AP, Gavrina AI, Polozova AV, Kovaleva TF, Snopova LB, Dudenkova VV, Zagaynova EV, **Lukyanov KA** (2021). FUCCI-Red: a single-color cell cycle indicator for fluorescence lifetime imaging. *Cell Mol Life Sci* 78 (7), 3467–3476, [10.1007/s00018-020-03712-7](https://doi.org/10.1007/s00018-020-03712-7)
19. Mamontova AV, Shakhov AM, Grigoryev AP, **Lukyanov KA**, Bogdanov AM (2020). Increasing the Fluorescence Brightness of Superphotostable EGFP Mutant by Introducing Mutations That Block Chromophore Protonation. *Russ. J. Bioorganic Chem.* 46 (6), 1229–1241, [10.1134/S1068162020060187](https://doi.org/10.1134/S1068162020060187)
20. Mamontova AV, Shakhov AM, **Lukyanov KA**, Bogdanov AM (2020). Deciphering the Role of Positions 145 and 165 in Fluorescence Lifetime Shortening in the EGFP Variants. *Biomolecules* 10 (11), 1–10, [10.3390/biom10111547](https://doi.org/10.3390/biom10111547)
21. Gorbachev DA, Staroverov DB, **Lukyanov KA**, Sarkisyan KS (2020). Genetically encoded red photosensitizers with enhanced phototoxicity. *Int J Mol Sci* 21 (22), 1–12, [10.3390/ijms21228800](https://doi.org/10.3390/ijms21228800)
22. Sokolinskaya EL, Kolesov DV, **Lukyanov KA**, Bogdanov AM (2020). Molecular Principles of Insect Chemoreception. *Acta Naturae* 12 (3), 81–91, [10.32607/actanaturae.11038](https://doi.org/10.32607/actanaturae.11038)
23. Gorbachev DA, Petrusevich EF, Kabylda AM, Maksimov EG, **Lukyanov KA**, Bogdanov AM, Baranov MS, Bochenkova AV, Mishin AS (2020). A General Mechanism of Green-to-Red Photoconversions of GFP. *Front*

24. Serebrovskaya EO, Podvalnaya NM, Dudenkova VV, Efremova AS, Gurskaya NG, Gorbachev DA, Luzhin AV, Kantidze OL, Zagaynova EV, Shram SI, **Lukyanov KA** (2020). Genetically Encoded Fluorescent Sensor for Poly-ADP-Ribose. *Int J Mol Sci* 21 (14), 1–11, [10.3390/ijms21145004](https://doi.org/10.3390/ijms21145004)
25. Perfilov MM, Gurskaya NG, Serebrovskaya EO, Melnikov PA, Kharitonov SL, Lewis TR, Arshavsky VY, Baklaushev VP, Mishin AS, **Lukyanov KA** (2020). Highly photostable fluorescent labeling of proteins in live cells using exchangeable coiled coils heterodimerization. *Cell Mol Life Sci* 77 (21), 4429–4440, [10.1007/s00018-019-03426-5](https://doi.org/10.1007/s00018-019-03426-5)
26. Sen T, Mamontova AV, Titelmayer AV, Shakhov AM, Astafiev AA, Acharya A, **Lukyanov KA**, Krylov AI, Bogdanov AM (2019). Influence of the First Chromophore-Forming Residue on Photobleaching and Oxidative Photoconversion of EGFP and EYFP. *Int J Mol Sci* 20 (20), , [10.3390/ijms20205229](https://doi.org/10.3390/ijms20205229)
27. Kost LA, Ivanova VO, Balaban PM, **Lukyanov KA**, Nikitin ES, Bogdanov AM (2019). Red Fluorescent Genetically Encoded Voltage Indicators with Millisecond Responsiveness. *Sensors (Basel)* 19 (13), , [10.3390/s19132982](https://doi.org/10.3390/s19132982)
28. **(book)** Shimomura O, **Lukyanov KA** (2019). The jellyfish aequorea and other luminous coelenterates. , 95–175.
29. Bogdanov AM, Mamontova AV, Titelmayer AV, **Lukyanov KA**, Mishin AS (2019). Artificial Electron-transport Chains Based on Green Fluorescent Protein. *Opt Spectrosc* 126 (1), 102–105, [10.1134/S0030400X19010041](https://doi.org/10.1134/S0030400X19010041)
30. **(conference)** Shirmanova MV, Lukina MM, Yuzhakova DV, Druzhkova IN, Gavrina AI, **Lukyanov KA**, Belousov VV, Zagaynova EV (2019). Functional imaging and treatment of tumors with new fluorescent proteins. *Optical Molecular Probes, Imaging and Drug Delivery - Proceedings Biophotonics Congress: Optics in the Life Sciences Congress 2019* , .
31. **(conference)** Shirmanova MV, Lukina MM, Yuzhakova DV, Druzhkova IN, Gavrina AI, **Lukyanov KA**, Belousov VV, Zagaynova EV (2019). Functional imaging and treatment of tumors with new fluorescent proteins. *Optical Molecular Probes, Imaging and Drug Delivery, OMP 2019* , .
32. Богданов АМ, Мамонтова АВ, Тительмаер АВ, **Лукьянов КА**, Мишин АС (2019). Искусственные электрон-транспортные цепи на основе зеленого флуоресцентного белка. *OPT SPEKTROSK+* 126 (1), 97–100, [10.21883/OS.2019.01.47062.265-18](https://doi.org/10.21883/OS.2019.01.47062.265-18)
33. Mishin AS, **Lukyanov KA** (2019). Live-Cell Super-resolution Fluorescence Microscopy. *Biochemistry (Mosc)* 84 (Suppl 1), 19–31, [10.1134/S0006297919140025](https://doi.org/10.1134/S0006297919140025)
34. **(conference)** Shirmanova MV, Lukina MM, Yuzhakova DV, Druzhkova IN, Gavrina AI, **Lukyanov KA**, Belousov VV, Zagaynova EV (2019). Functional imaging and treatment of tumors with new fluorescent proteins. *Optics InfoBase Conference Papers Part F163-OMP 2019* , , [10.1364/OMP.2019.OT1D.2](https://doi.org/10.1364/OMP.2019.OT1D.2)
35. Mamontova AV, Solovyev ID, Savitsky AP, Shakhov A, **Lukyanov KA**, Bogdanov AM (2018). Bright GFP with subnanosecond fluorescence lifetime. *Sci Rep* 8 (1), 13224, [10.1038/s41598-018-31687-w](https://doi.org/10.1038/s41598-018-31687-w)
36. Povarova NV, Barinov NA, Baranov MS, Markina NM, Varizhuk AM, Pozmogova GE, Klinov DV, Kozhemyako VB, **Lukyanov KA** (2018). Efficient silica synthesis from tetra(glycerol)orthosilicate with cathepsin- and silicatein-like proteins. *Sci Rep* 8 (1), 16759, [10.1038/s41598-018-34965-9](https://doi.org/10.1038/s41598-018-34965-9)
37. Zlobovskaya OA, Shirmanova MV, Kovaleva TF, Sarkisyan KS, Zagaynova EV, **Lukyanov KA** (2018). Sensors for Caspase Activities. *Russ. J. Bioorganic Chem.* 44 (6), 645–652, [10.1134/S1068162018060109](https://doi.org/10.1134/S1068162018060109)
38. Klementieva NV, **Lukyanov KA**, Gorbachev DA, Chudakov DM, Zagaynova EV, Mishin AS (2018). A surprising photoactivity of blue fluorescent protein TagBFP allows for super-resolution microscopy. *Sovrem Tekhnologii Med* 10 (1), 35–38, [10.17691/stm2018.10.1.04](https://doi.org/10.17691/stm2018.10.1.04)
39. **(conference)** Mishin A, Perfilov M, Gavrikov A, Mamontova A, Bogdanov A, **Lukyanov K** (2018). Live-cell nanoscopy enabled with transient labeling and the control of fluorophore blinking. *EPJ Web of Conference* 190, , [10.1051/epjconf/201819003008](https://doi.org/10.1051/epjconf/201819003008)
40. Pennacchietti F, Serebrovskaya EO, Faro AR, Shemyakina II, Bozhanova NG, Kotlobay AA, Gurskaya NG, Bodén A, Dreier J, Chudakov DM, **Lukyanov KA**, Verkhusha VV, Mishin AS, Testa I (2018). Fast reversibly photoswitching red fluorescent proteins for live-cell RESOLFT nanoscopy. *Nat Methods* 15 (8), 601–604, [10.1038/s41592-018-0052-9](https://doi.org/10.1038/s41592-018-0052-9)
41. Shcheslavskiy VI, Shirmanova MV, Dudenkova VV, **Lukyanov KA**, Gavrina AI, Shumilova AV, Zagaynova E, Becker W (2018). Fluorescence time-resolved macroimaging. *Opt Lett* 43 (13), 3152–3155,

42. **(conference)** Zagaynova EV, Furman OE, Perfilov MM, Klementieva NV, **Lukyanov KA**, Bozhanova NG, Mishin AS (2018). Dendra2-tagged Lifeact and MAP4 as exchangeable probes for single-molecule fluorescence imaging of cytoskeleton in live cells. *Proc SPIE Int Soc Opt Eng* 10685, , [10.1117/12.2306834](#)
43. Lidsky PV, **Lukyanov KA**, Misra T, Handke B, Mishin AS, Lehner CF (2018). A genetically encoded fluorescent probe for imaging of oxygenation gradients in living drosophila. *Development* 145 (4), , [10.1242/dev.156257](#)
44. **(conference)** Shirmanova MV, Sergeeva TF, Gavrina AI, Dudenkova VV, **Lukyanov KA**, Zagaynova EV (2018). Multiparametric analysis of cisplatin-induced changes in cancer cells using FLIM. *Progress in Biomedical Optics and Imaging - Proceedings of SPIE* 10498, , [10.1117/12.2293996](#)
45. **(book)** Markina NM, Pereverzev AP, Staroverov DB, **Lukyanov KA**, Gurskaya NG (2018). Generation of cell lines stably expressing a fluorescent reporter of nonsense-mediated mRNA decay activity. *Methods Mol Biol* 1720, 187–204, [10.1007/978-1-4939-7540-214](#)
46. Povarova NV, Markina NM, Baranov MS, Barinov NA, Klinov DV, Kozhemyako VB, **Lukyanov KA** (2017). A water-soluble precursor for efficient silica polymerization by silicateins. *Biochem Biophys Res Commun* 495 (2), 2066–2070, [10.1016/j.bbrc.2017.12.075](#)
47. Pakhomov AA, Martynov VI, Orsa AN, Bondarenko AA, Chertkova RV, **Lukyanov KA**, Petrenko AG, Deyev IE (2017). Fluorescent protein Dendra2 as a ratiometric genetically encoded pH-sensor. *Biochem Biophys Res Commun* 493 (4), 1518–1521, [10.1016/j.bbrc.2017.09.170](#)
48. Mamontova AV, Grigoryev AP, Tsarkova AS, **Lukyanov KA**, Bogdanov AM (2017). Struggle for photostability: Bleaching mechanisms of fluorescent proteins. *Russ. J. Bioorganic Chem.* 43 (6), 625–633, [10.1134/S1068162017060085](#)
49. Bozhanova NG, Baranov MS, Klementieva NV, Sarkisyan KS, Gavrikov AS, Yampolsky IV, Zagaynova EV, Lukyanov SA, **Lukyanov KA**, Mishin AS (2017). Protein labeling for live cell fluorescence microscopy with a highly photostable renewable signal. *Chem Sci* 8 (10), 7138–7142, [10.1039/c7sc01628j](#)
50. Kost LA, Nikitin ES, Ivanova VO, Sung U, Putintseva EV, Chudakov DM, Balaban PM, **Lukyanov KA**, Bogdanov AM (2017). Insertion of the voltage-sensitive domain into circularly permuted red fluorescent protein as a design for genetically encoded voltage sensor. *PLoS One* 12 (9), e0184225, [10.1371/journal.pone.0184225](#)
51. Bozhanova NG, Baranov MS, Sarkisyan KS, Gritcenko R, Mineev KS, Golodukhina SV, Baleeva NS, **Lukyanov KA**, Mishin AS (2017). Yellow and Orange Fluorescent Proteins with Tryptophan-based Chromophores. *ACS Chem Biol* 12 (7), 1867–1873, [10.1021/acscchembio.7b00337](#)
52. Povarova NV, Petri ND, Blokhina AE, Bogdanov AM, Gurskaya NG, **Lukyanov KA** (2017). Functioning of fluorescent proteins in aggregates in anthozoa species and in recombinant artificial models. *Int J Mol Sci* 18 (7), , [10.3390/ijms18071503](#)
53. Klementieva NV, Bozhanova NG, Zagaynova EV, **Lukyanov KA**, Mishin AS (2017). Fluorophores for single-molecule localization microscopy. *Russ. J. Bioorganic Chem.* 43 (3), 227–234, [10.1134/S1068162017030074](#)
54. Sergeeva TF, Shirmanova MV, Zlobovskaya OA, Gavrina AI, Dudenkova VV, Lukina MM, **Lukyanov KA**, Zagaynova EV (2017). Relationship between intracellular pH, metabolic co-factors and caspase-3 activation in cancer cells during apoptosis. *BIOCHIM BIOPHYS ACTA* 1864 (3), 604–611, [10.1016/j.bbamcr.2016.12.022](#)
55. Gorbachev DA, Sarkisyan KS, Mishin AS, **Lukyanov KA** (2017). Green fluorescent protein with tryptophan-based chromophore stable at low pH. *Russ. J. Bioorganic Chem.* 43 (2), 220–222, [10.1134/S1068162017010034](#)
56. Acharya A, Bogdanov AM, Grigorenko BL, Bravaya KB, Nemukhin AV, **Lukyanov KA**, Krylov AI (2017). Photoinduced chemistry in fluorescent proteins: Curse or blessing? *Chem Rev* 117 (2), 758–795, [10.1021/acs.chemrev.6b00238](#)
57. Мамонтова АВ, Григорьев АП, Царькова АС, **Лукьянов КА**, Богданов АМ (2017). БОРЬБА ЗА ФОТОСТАБИЛЬНОСТЬ: МЕХАНИЗМЫ ОБЕСЦВЕЧИВАНИЯ ФЛУОРЕСЦЕНТНЫХ БЕЛКОВ. 43 (6), 598–607, [10.7868/S0132342317060021](#)
58. **(conference)** Zagaynova EV, Shirmanova MV, Sergeeva TF, Klementieva NV, Mishin AS, Gavrina AI, Zlobovskaya OA, Furman OE, Dudenkova VV, Perelman GS, Lukina MM, **Lukyanov KA** (2017). Genetically

- encoded sensors and fluorescence microscopy for anticancer research. *Progress in Biomedical Optics and Imaging - Proceedings of SPIE* 10069, , [10.1117/12.2252151](https://doi.org/10.1117/12.2252151)
59. Klementieva NV, Pavlikov AI, Moiseev AA, Bozhanova NG, Mishina NM, Lukyanov SA, Zagaynova EV, **Lukyanov KA**, Mishin AS (2017). Intrinsic blinking of red fluorescent proteins for super-resolution microscopy. *Chem Commun (Camb)* 53 (5), 949–951, [10.1039/c6cc09200d](https://doi.org/10.1039/c6cc09200d)
60. (conference) Mamontova AV, Bogdanov AM, Mishin AS, Klementieva NV, **Lukyanov KA** (2016). Turning Off Photoinduced Electron Transfer In Green Fluorescent Proteins For Super-Resolution Microscopy. *EMC2016* , 977–978, [10.1002/9783527808465.EMC2016.6038](https://doi.org/10.1002/9783527808465.EMC2016.6038)
61. Плетнёв ВЗ, Плетнева НВ, Ефремов РГ, Горячева ЕА, Артемьев ИВ, Архипова СФ, Саркисян КС, Мишин АС, **Лукьянов КА**, Плетнев СВ (2016). Пространственная структура рН-зависимого зеленого флуоресцентного белка WASCFP с депротонированным хромофором на основе триптофана. 42 (6), 675–682.
62. Kost LA, Putintseva EV, Pereverzeva AR, Chudakov DM, **Lukyanov KA**, Bogdanov AM (2016). Bimolecular fluorescence complementation based on the red fluorescent protein FusionRed. *Russ. J. Bioorganic Chem.* 42 (6), 619–623, [10.1134/S1068162016060054](https://doi.org/10.1134/S1068162016060054)
63. Pletnev VZ, Pletneva NV, Efremov RG, Goryacheva EA, Artemyev IV, Arkhipova SF, Sarkisyan KS, Mishin AS, **Lukyanov KA**, Pletnev SV (2016). Three-dimensional structure of a pH-dependent fluorescent protein WasCFP with a tryptophan based deprotonated chromophore. *Russ. J. Bioorganic Chem.* 42 (6), 612–618, [10.1134/S1068162016050149](https://doi.org/10.1134/S1068162016050149)
64. Klementieva NV, Snopova LB, Prodanets NN, Furman OE, Dudenkova VV, Zagaynova EV, **Lukyanov KA**, Mishin AS (2016). Fluorescence imaging of actin fine structure in tumor tissues using sir-actin staining. *Anticancer Res* 36 (10), 5287–5294, [10.21873/anticancer.11100](https://doi.org/10.21873/anticancer.11100)
65. Ryumina AP, Serebrovskaya EO, Staroverov DB, Zlobovskaya OA, Shcheglov AS, Lukyanov SA, **Lukyanov KA** (2016). Lysosome-associated minisog as a photosensitizer for Mammalian cells. *Biotechniques* 61 (2), 92–94, [10.2144/000114445](https://doi.org/10.2144/000114445)
66. Sarkisyan KS, Bolotin DA, Meer MV, Usmanova DR, Mishin AS, Sharonov GV, Ivankov DN, Bozhanova NG, Baranov MS, Soylemez O, Bogatyreva NS, Vlasov PK, Egorov ES, Logacheva MD, Kondrashov AS, Chudakov DM, Putintseva EV, Mamedov IZ, Tawfik DS, **Lukyanov KA**, Kondrashov FA (2016). Local fitness landscape of the green fluorescent protein. *Nature* 533 (7603), 397–401, [10.1038/nature17995](https://doi.org/10.1038/nature17995)
67. Bogdanov AM, Acharya A, Titelmayer AV, Mamontova AV, Bravaya KB, Kolomeisky AB, **Lukyanov KA**, Krylov AI (2016). Turning on and off Photoinduced Electron Transfer in Fluorescent Proteins by π -Stacking, Halide Binding, and Tyr145 Mutations. *J Am Chem Soc* 138 (14), 4807–4817, [10.1021/jacs.6b00092](https://doi.org/10.1021/jacs.6b00092)
68. Povarova NV, Bozhanova NG, Sarkisyan KS, Gritcenko R, Baranov MS, Yampolsky IV, **Lukyanov KA**, Mishin AS (2016). Docking-guided identification of protein hosts for GFP chromophore-like ligands. *J Mater Chem C Mater Opt Electron Devices* 4 (14), 3036–3040, [10.1039/c5tc03931b](https://doi.org/10.1039/c5tc03931b)
69. Eroshkin FM, Nesterenko AM, Borodulin AV, Martynova NY, Ermakova GV, Gyoeva FK, Orlov EE, Belogurov AA, **Lukyanov KA**, Bayramov AV, Zarausky AG (2016). Noggin4 is a long-range inhibitor of Wnt8 signalling that regulates head development in *Xenopus laevis*. *Sci Rep* 6, 23049, [10.1038/srep23049](https://doi.org/10.1038/srep23049)
70. Prudkovsky AA, Ivanenko VN, Nikitin MA, **Lukyanov KA**, Belousova A, Reimer JD, Berumen ML (2016). Green fluorescence of Cytaeis hydroids living in association with Nassarius gastropods in the red sea. *PLoS One* 11 (2), e0146861, [10.1371/journal.pone.0146861](https://doi.org/10.1371/journal.pone.0146861)
71. Zlobovskaya OA, Sergeeva TF, Shirmanova MV, Dudenkova VV, Sharonov GV, Zagaynova EV, **Lukyanov KA** (2016). Genetically encoded far-red fluorescent sensors for caspase-3 activity. *Biotechniques* 60 (2), 62–68, [10.2144/000114377](https://doi.org/10.2144/000114377)
72. Gurskaya NG, Pereverzev AP, Staroverov DB, Markina NM, **Lukyanov KA** (2016). Analysis of Nonsense-Mediated mRNA Decay at the Single-Cell Level Using Two Fluorescent Proteins. *Methods Enzymol* 572, 291–314, [10.1016/bs.mie.2016.02.008](https://doi.org/10.1016/bs.mie.2016.02.008)
73. Yuzhakova DV, Shirmanova MV, Sergeeva TF, Zagaynova EV, **Lukyanov KA** (2016). Immunotherapy of cancer (Review). *Sovrem Tekhnologii Med* 8 (1), 173–181, [10.17691/stm2016.8.1.23](https://doi.org/10.17691/stm2016.8.1.23)
74. Klementieva NV, Zagaynova EV, **Lukyanov KA**, Mishin AS (2016). The principles of super-resolution fluorescence microscopy (review). *Sovrem Tekhnologii Med* 8 (2), 130–138, [10.17691/stm2016.8.2.17](https://doi.org/10.17691/stm2016.8.2.17)
75. Gurskaya NG, Staroverov DB, **Lukyanov KA** (2016). Fluorescent Protein-Based Quantification of Alternative

Splicing of a Target Cassette Exon in Mammalian Cells. *Methods Enzymol* 572, 255–268, [10.1016/bs.mie.2016.02.007](https://doi.org/10.1016/bs.mie.2016.02.007)

76. Klementieva NV, **Lukyanov KA**, Markina NM, Lukyanov SA, Zagaynova EV, Mishin AS (2016). Green-to-red primed conversion of Dendra2 using blue and red lasers. *Chem Commun (Camb)* 52 (89), 13144–13146, [10.1039/c6cc05599k](https://doi.org/10.1039/c6cc05599k)
77. Shirmanova M, Yuzhakova D, Snopova L, Perelman G, Serebrovskaya E, **Lukyanov K**, Turchin I, Subochev P, Lukyanov S, Kamensky V, Zagaynova E (2015). Towards PDT with genetically encoded photosensitizer killerred: A comparison of continuous and pulsed laser regimens in an animal tumor model. *PLoS One* 10 (12), e0144617, [10.1371/journal.pone.0144617](https://doi.org/10.1371/journal.pone.0144617)
78. Sarkisyan KS, Zlobovskaya OA, Gorbachev DA, Bozhanova NG, Sharonov GV, Staroverov DB, Egorov ES, Ryabova AV, Solntsev KM, Mishin AS, **Lukyanov KA** (2015). KillerOrange, a genetically encoded photosensitizer activated by blue and green light. *PLoS One* 10 (12), e0145287, [10.1371/journal.pone.0145287](https://doi.org/10.1371/journal.pone.0145287)
79. Pletneva NV, Pletnev VZ, Sarkisyan KS, Gorbachev DA, Egorov ES, Mishin AS, **Lukyanov KA**, Dauter Z, Pletnev S (2015). Crystal structure of phototoxic orange fluorescent proteins with a tryptophan-based chromophore. *PLoS One* 10 (12), e0145740, [10.1371/journal.pone.0145740](https://doi.org/10.1371/journal.pone.0145740)
80. Pereverzev AP, Matlashov ME, Staroverov DB, **Lukyanov KA**, Gurskaya NG (2015). Differences in nonsense-mediated mRNA decay activity in mammalian cell lines revealed by a fluorescence reporter. *Russ. J. Bioorganic Chem.* 41 (5), 525–528, [10.1134/S1068162015050118](https://doi.org/10.1134/S1068162015050118)
81. Pereverzev AP, Matlashov ME, Staroverov DB, **Lukyanov KA**, Gurskaya NG (2015). Differences of Nonsense-Mediated mRNA Degradation Activity in Mammalian Cell Lines Revealed by a Fluorescence Reporter. *Bioorg Khim* 41 (5), 587–591, [10.7868/s0132342315050115](https://doi.org/10.7868/s0132342315050115)
82. Mishin AS, Belousov VV, Solntsev KM, **Lukyanov KA** (2015). Novel uses of fluorescent proteins. *Curr Opin Chem Biol* 27, 1–9, [10.1016/j.cbpa.2015.05.002](https://doi.org/10.1016/j.cbpa.2015.05.002)
83. Walker CL, **Lukyanov KA**, Yampolsky IV, Mishin AS, Bommarius AS, Duraj-Thatte AM, Azizi B, Tolbert LM, Solntsev KM (2015). Fluorescence imaging using synthetic GFP chromophores. *Curr Opin Chem Biol* 27, 64–74, [10.1016/j.cbpa.2015.06.002](https://doi.org/10.1016/j.cbpa.2015.06.002)
84. Yuzhakova DV, Shirmanova MV, Serebrovskaya EO, **Lukyanov KA**, Druzhkova IN, Shakhov BE, Lukyanov SA, Zagaynova EV (2015). CT26 murine colon carcinoma expressing the red fluorescent protein KillerRed as a highly immunogenic tumor model. *J Biomed Opt* 20 (8), 88002, [10.1117/1.JBO.20.8.088002](https://doi.org/10.1117/1.JBO.20.8.088002)
85. Sarkisyan KS, Goryashchenko AS, Lidsky PV, Gorbachev DA, Bozhanova NG, Gorokhovatsky AY, Pereverzeva AR, Ryumina AP, Zherdeva VV, Savitsky AP, Solntsev KM, Bommarius AS, Sharonov GV, Lindquist JR, Drobizhev M, Hughes TE, Rebane A, **Lukyanov KA**, Mishin AS (2015). Green Fluorescent Protein with Anionic Tryptophan-Based Chromophore and Long Fluorescence Lifetime. *Biophys J* 109 (2), 380–389, [10.1016/j.bpj.2015.06.018](https://doi.org/10.1016/j.bpj.2015.06.018)
86. Yampolsky IV, **Lukyanov KA**, Baranov MS (2015). Boron-containing 5-arylidene-3,5-dihydro-4H-imidazol-4-ones. 9 (133), 220.
87. Luker KE, Pata P, Shemiakina II, Pereverzeva A, Stacer AC, Shcherbo DS, Pletnev VZ, Skolnaja M, **Lukyanov KA**, Luker GD, Pata I, Chudakov DM (2015). Comparative study reveals better far-red fluorescent protein for whole body imaging. *Sci Rep* 5, 10332, [10.1038/srep10332](https://doi.org/10.1038/srep10332)
88. Zlobovskaya OA, Sarkisyan KS, **Lukyanov KA** (2015). Infrared fluorescent protein iRFP as an acceptor for resonance excitation energy transfer. *Russ. J. Bioorganic Chem.* 41 (3), 266–270, [10.1134/S1068162015030139](https://doi.org/10.1134/S1068162015030139)
89. Povarova NV, Baranov MS, Kovalchuk SN, Semiletova IV, **Lukyanov KA**, Kozhemyako VB (2015). A novel water-soluble substrate for silicateins. *Russ. J. Bioorganic Chem.* 41 (3), 338–339, [10.1134/S1068162015030073](https://doi.org/10.1134/S1068162015030073)
90. Zlobovskaya OA, Sarkisyan KS, **Lukyanov KA** (2015). Infrared Fluorescent Protein iRFP as an Acceptor for Förster Resonance Energy Transfer. *Bioorg Khim* 41 (3), 299–304, [10.7868/s0132342315030136](https://doi.org/10.7868/s0132342315030136)
91. Povarova NV, Baranov MS, Kovalchuk SN, Semiletova IV, **Lukyanov KA**, Kozhemyak VB (2015). Novel Water-Soluble Substrate for Silicateins. *Bioorg Khim* 41 (3), 380–382, [10.7868/s0132342315030070](https://doi.org/10.7868/s0132342315030070)
92. Pereverzev AP, Gurskaya NG, Ermakova GV, Kudryavtseva EI, Markina NM, Kotlobay AA, Lukyanov SA, Zaraisky AG, **Lukyanov KA** (2015). Method for quantitative analysis of nonsense-mediated mRNA decay at

- the single cell level. *Sci Rep* 5, 7729, [10.1038/srep07729](https://doi.org/10.1038/srep07729)
93. Mamontova AV, Bogdanov AM, **Lukyanov KA** (2015). Influence of cell growth conditions and medium composition on egfp photostability in live cells. *Biotechniques* 58 (5), 258–261, [10.2144/000114289](https://doi.org/10.2144/000114289)
 94. Pletnev VZ, Pletneva NV, Sarkisyan KS, Mishin AS, **Lukyanov KA**, Goryacheva EA, Ziganshin RH, Dauter Z, Pletnev S (2015). Structure of the green fluorescent protein NowGFP with an anionic tryptophan-based chromophore. *Acta Crystallogr D Biol Crystallogr* 71 (Pt 8), 1699–1707, [10.1107/S1399004715010159](https://doi.org/10.1107/S1399004715010159)
 95. Sergeeva TF, Shirmanova MV, Zagaynova EV, **Lukyanov KA** (2015). Modern research techniques of apoptotic cell death (Review). *Sovrem Tekhnologii Med* 7 (3), 172–181, [10.17691/stm2015.7.3.21](https://doi.org/10.17691/stm2015.7.3.21)
 96. Klementieva NV, Bozhanova NG, Mishina NM, Zagaynova EV, **Lukyanov KA**, Mishin AS (2015). Common fluorescent proteins for single-molecule localization microscopy. *Progress in Biomedical Optics and Imaging - Proceedings of SPIE* 9536, , [10.1117/12.2184924](https://doi.org/10.1117/12.2184924)
 97. Baranov MS, Solntsev KM, Baleeva NS, Mishin AS, Lukyanov SA, **Lukyanov KA**, Yampolsky IV (2014). Red-Shifted Fluorescent Aminated Derivatives of a Conformationally Locked GFP Chromophore. *Chemistry* 20 (41), 13234–13241, [10.1002/chem.201403678](https://doi.org/10.1002/chem.201403678)
 98. Serebrovskaya EO, Ryumina AP, Boulina ME, Shirmanova MV, Zagaynova EV, Bogdanova EA, Lukyanov SA, **Lukyanov KA** (2014). Phototoxic effects of lysosome-associated genetically encoded photosensitizer killer red. *J Biomed Opt* 19 (7), 071403, [10.1117/1.JBO.19.7.071403](https://doi.org/10.1117/1.JBO.19.7.071403)
 99. Makarov NS, Cirloganu C, Perry JW, **Lukyanov KA**, Solntsev KM (2014). Steady-state and time-resolved spectroscopic studies of green-to-red photoconversion of fluorescent protein Dendra2. *J Photochem Photobiol A Chem* 280, 5–13, [10.1016/j.jphotochem.2014.02.001](https://doi.org/10.1016/j.jphotochem.2014.02.001)
 100. **Lukyanov KA**, Belousov VV (2014). Genetically encoded fluorescent redox sensors. *BIOCHIM BIOPHYS ACTA* 1840 (2), 745–756, [10.1016/j.bbagen.2013.05.030](https://doi.org/10.1016/j.bbagen.2013.05.030)
 101. Pereverzev AP, Markina NM, Yanushevich YG, Gorodnicheva TV, Minasyan BE, **Lukyanov KA**, Gurskaya NG (2014). Intron 2 of human beta-globin in 3'-untranslated region enhances expression of chimeric genes. *Russ. J. Bioorganic Chem.* 40 (3), 269–271, [10.1134/S106816201403011X](https://doi.org/10.1134/S106816201403011X)
 102. Переверзев АП, Маркина НМ, Янушевич ЮГ, Городничева ТВ, Минасян БЭ, **Лукьянов КА**, Гурская НГ (2013). УСИЛЕНИЕ ЭКСПРЕССИИ ХИМЕРНЫХ ГЕНОВ ВКЛЮЧЕНИЕМ В ИХ 3'-НЕТРАНСЛИРУЕМУЮ ОБЛАСТЬ ИНТРОНА 2 ГЕНА БЕТА-ГЛОБИНА ЧЕЛОВЕКА. 40 (3), 293–296.
 103. Shirmanova MV, Serebrovskaya EO, Snopova LB, Kuznetsova MM, Ryumina AP, Turchind IV, Sergeeva EA, Ignatova NI, Klementieva NV, **Lukyanov KA**, Lukyanov SA, Zagaynova EV (2013). KillerRed and miniSOG as genetically encoded photosensitizers for photodynamic therapy of cancer. *Progress in Biomedical Optics and Imaging - Proceedings of SPIE* 8803, , [10.1117/12.2032552](https://doi.org/10.1117/12.2032552)
 104. Baranov MS, **Lukyanov KA**, Ivashkin PE, Yampolsky IV (2013). Efficient synthetic approach to fluorescent oxazole-4-carboxylate derivatives. *Synth Commun* 43 (17), 2337–2342, [10.1080/00397911.2012.706350](https://doi.org/10.1080/00397911.2012.706350)
 105. Pletnev VZ, Pletneva NV, **Lukyanov KA**, Souslova EA, Fradkov AF, Chudakov DM, Chepurnykh T, Yampolsky IV, Wlodawer A, Dauter Z, Pletnev S (2013). Structure of the red fluorescent protein from a lancelet (*Branchiostoma lanceolatum*): A novel GYG chromophore covalently bound to a nearby tyrosine. *Acta Crystallogr D Biol Crystallogr* 69 (9), 1850–1860, [10.1107/S0907444913015424](https://doi.org/10.1107/S0907444913015424)
 106. Ryumina AP, Serebrovskaya EO, Shirmanova MV, Snopova LB, Kuznetsova MM, Turchin IV, Ignatova NI, Klementieva NV, Fradkov AF, Shakhov BE, Zagaynova EV, **Lukyanov KA**, Lukyanov SA (2013). Flavoprotein miniSOG as a genetically encoded photosensitizer for cancer cells. *BIOCHIM BIOPHYS ACTA* 1830 (11), 5059–5067, [10.1016/j.bbagen.2013.07.015](https://doi.org/10.1016/j.bbagen.2013.07.015)
 107. Baranov MS, Solntsev KM, **Lukyanov KA**, Yampolsky IV (2013). A synthetic approach to GFP chromophore analogs from 3-azidocinnamates. Role of methyl rotors in chromophore photophysics. *Chem Commun (Camb)* 49 (51), 5778–5780, [10.1039/c3cc41948g](https://doi.org/10.1039/c3cc41948g)
 108. Baranov MS, **Lukyanov KA**, Yampolsky IV (2013). Synthesis of the chromophores of fluorescent proteins and their analogs. *Russ. J. Bioorganic Chem.* 39 (3), 223–244, [10.1134/S1068162013030047](https://doi.org/10.1134/S1068162013030047)
 109. Shirmanova MV, Snopova LB, Prodanets NN, Serebrovskaya EO, Ignatova NI, Sergeeva EA, Kamensky VA, Klementyeva NV, **Lukyanov KA**, Lukyanov SA, Zagaynova EV (2013). Pathomorphological study of phototoxicity of genetically-encoded photosensitizer KillerRed on animal tumors. *Sovrem Tekhnologii Med* 2013 (1), 6–13.
 110. Shirmanova MV, Serebrovskaya EO, **Lukyanov KA**, Snopova LB, Sirotkina MA, Prodanetz NN, Bugrova ML,

- Minakova EA, Turchin IV, Kamensky VA, Lukyanov SA, Zagaynova EV (2013). Phototoxic effects of fluorescent protein KillerRed on tumor cells in mice. *J Biophotonics* 6 (3), 283–290, [10.1002/jbio.201200056](https://doi.org/10.1002/jbio.201200056)
111. Shirmanova MV, Serebrovskaya EO, Snopova LB, Kuznetsova MM, Ryumina AP, Turchin IV, Sergeeva EA, Ignatova NI, Klementieva NV, **Lukyanov KA**, Lukyanov SA, Zagaynova EV (2013). KillerRed and miniSOG as genetically encoded photosensitizers for photodynamic therapy of cancer. *Optics InfoBase Conference Papers*, .
 112. Bogdanov AM, Kudryavtseva EI, **Lukyanov KA** (2012). Anti-Fading Media for Live Cell GFP Imaging. *PLoS One* 7 (12), e53004, [10.1371/journal.pone.0053004](https://doi.org/10.1371/journal.pone.0053004)
 113. **Lukyanov KA**, Belousov VV (2012). Biophotonics: The slow fade of cell fluorescence. *Nat Photonics* 6 (10), 641–643, [10.1038/nphoton.2012.240](https://doi.org/10.1038/nphoton.2012.240)
 114. Sarkisyan KS, Yampolsky IV, Solntsev KM, Lukyanov SA, **Lukyanov KA**, Mishin AS (2012). Tryptophan-based chromophore in fluorescent proteins can be anionic. *Sci Rep* 2, 608, [10.1038/srep00608](https://doi.org/10.1038/srep00608)
 115. Baranov MS, **Lukyanov KA**, Borissova AO, Shamir J, Kosenkov D, Slipchenko LV, Tolbert LM, Yampolsky IV, Solntsev KM (2012). Conformationally locked chromophores as models of excited-state proton transfer in fluorescent proteins. *J Am Chem Soc* 134 (13), 6025–6032, [10.1021/ja3010144](https://doi.org/10.1021/ja3010144)
 116. Gurskaya NG, Staroverov DB, Zhang L, Fradkov AF, Markina NM, Pereverzev AP, **Lukyanov KA** (2012). Analysis of alternative splicing of cassette exons at single-cell level using two fluorescent proteins. *Nucleic Acids Res* 40 (8), e57, [10.1093/nar/gkr1314](https://doi.org/10.1093/nar/gkr1314)
 117. **Lukyanov KA** (2011). Green-red flashers to accelerate biology. *Cell Chem Biol* 18 (10), 1202–1204, [10.1016/j.chembiol.2011.10.003](https://doi.org/10.1016/j.chembiol.2011.10.003)
 118. Ivashkin PE, **Lukyanov KA**, Yampolsky IV (2011). Synthesis of biosynthetic precursors of chromophores of red fluorescent proteins. *Russ. J. Bioorganic Chem.* 37 (4), 411–420, [10.1134/S1068162011040066](https://doi.org/10.1134/S1068162011040066)
 119. Gurskaya NG, Staroverov DB, Fradkov AF, **Lukyanov KA** (2011). The coding region of far-red fluorescent protein Katushka contains a strong donor splice site. *Russ. J. Bioorganic Chem.* 37 (3), 380–382, [10.1134/S1068162011030071](https://doi.org/10.1134/S1068162011030071)
 120. Ivashkin PE, **Lukyanov KA**, Lukyanov S, Yampolsky IV (2011). A synthetic GFP-like chromophore undergoes base-catalyzed autoxidation into acylimine red form. *J Org Chem* 76 (8), 2782–2791, [10.1021/jo200150b](https://doi.org/10.1021/jo200150b)
 121. Serebrovskaya EO, Gorodnicheva TV, Ermakova GV, Solovieva EA, Sharonov GV, Zagaynova EV, Chudakov DM, Lukyanov S, Zaisky AG, **Lukyanov KA** (2011). Light-induced blockage of cell division with a chromatin-targeted phototoxic fluorescent protein. *Biochem J* 435 (1), 65–71, [10.1042/BJ20101217](https://doi.org/10.1042/BJ20101217)
 122. Serebrovskaya EO, Stremovsky OA, Chudakov DM, **Lukyanov KA**, Deyev SM (2011). Genetically encoded immunophotosensitizer. *Russ. J. Bioorganic Chem.* 37 (1), 123–129, [10.1134/S1068162011010134](https://doi.org/10.1134/S1068162011010134)
 123. **Lukyanov KA**, Serebrovskaya EO, Lukyanov S, Chudakov DM (2010). Fluorescent proteins as light-inducible photochemical partners. *Photochem Photobiol Sci* 9 (10), 1301–1306, [10.1039/c0pp00114g](https://doi.org/10.1039/c0pp00114g)
 124. Shcherbo D, Shemiakina II, Ryabova AV, Luker KE, Schmidt BT, Souslova EA, Gorodnicheva TV, Strukova L, Shidlovskiy KM, Britanova OV, Zaisky AG, **Lukyanov KA**, Loschenov VB, Luker GD, Chudakov DM (2010). Near-infrared fluorescent proteins. *Nat Methods* 7 (10), 827–829, [10.1038/nmeth.1501](https://doi.org/10.1038/nmeth.1501)
 125. Subach FV, Zhang L, Gadella TWJ, Gurskaya NG, **Lukyanov KA**, Verkhusha VV (2010). Red fluorescent protein with reversibly photoswitchable absorbance for photochromic FRET. *Cell Chem Biol* 17 (7), 745–755, [10.1016/j.chembiol.2010.05.022](https://doi.org/10.1016/j.chembiol.2010.05.022)
 126. Chudakov DM, Matz MV, Lukyanov S, **Lukyanov KA** (2010). Fluorescent proteins and their applications in imaging living cells and tissues. *Physiol Rev* 90 (3), 1103–1163, [10.1152/physrev.00038.2009](https://doi.org/10.1152/physrev.00038.2009)
 127. Pletneva NV, Pletnev VZ, **Lukyanov KA**, Gurskaya NG, Goryacheva EA, Martynov VI, Wlodawer A, Dauter Z, Pletnev S (2010). Structural evidence for a dehydrated intermediate in green fluorescent protein chromophore biosynthesis. *J Biol Chem* 285 (21), 15978–15984, [10.1074/jbc.M109.092320](https://doi.org/10.1074/jbc.M109.092320)
 128. Zhang L, Gurskaya NG, Kopantseva YE, Mudrik NN, Vagner LL, **Lukyanov KA**, Chudakov DM (2010). Identification of the amino acid residues responsible for the reversible photoconversion of the monomeric red fluorescent protein TagRFP. *Russ. J. Bioorganic Chem.* 36 (2), 179–184, [10.1134/S1068162010020068](https://doi.org/10.1134/S1068162010020068)
 129. Bogdanov AM, Bogdanova EA, Chudakov DM, Gorodnicheva TV, Lukyanov S, **Lukyanov KA** (2009). Cell culture medium affects GFP photostability: A solution. *Nat Methods* 6 (12), 859–860, [10.1038/nmeth1209-859](https://doi.org/10.1038/nmeth1209-859)
 130. Pletnev S, Gurskaya NG, Pletneva NV, **Lukyanov KA**, Chudakov DM, Martynov VI, Popov VO, Kovalchuk

- MV, Wlodawer A, Dauter Z, Pletnev V (2009). Structural basis for phototoxicity of the genetically encoded photosensitizer KillerRed. *J Biol Chem* 284 (46), 32028–32039, [10.1074/jbc.M109.054973](https://doi.org/10.1074/jbc.M109.054973)
131. Ivashkin PE, Yampolsky IV, **Lukyanov KA** (2009). Synthesis and properties of chromophores of fluorescent proteins. *Russ. J. Bioorganic Chem.* 35 (6), 652–669, [10.1134/S1068162009060028](https://doi.org/10.1134/S1068162009060028)
132. Yampolsky IV, Balashova TA, **Lukyanov KA** (2009). Synthesis and spectral and chemical properties of the yellow fluorescent protein zFP538 chromophore. *Biochemistry* 48 (33), 8077–8082, [10.1021/bi900719x](https://doi.org/10.1021/bi900719x)
133. Serebrovskaya EO, Edelweiss EF, Stremovskiy OA, **Lukyanov KA**, Chudakov DM, Deyev SM (2009). Targeting cancer cells by using an antireceptor antibody-photosensitizer fusion protein. *Proc Natl Acad Sci U S A* 106 (23), 9221–9225, [10.1073/pnas.0904140106](https://doi.org/10.1073/pnas.0904140106)
134. Bogdanov AM, Mishin AS, Yampolsky IV, Belousov VV, Chudakov DM, Subach FV, Verkhusha VV, Lukyanov S, **Lukyanov KA** (2009). Green fluorescent proteins are light-induced electron donors. *Nat Chem Biol* 5 (7), 459–461, [10.1038/nchembio.174](https://doi.org/10.1038/nchembio.174)
135. Kiseleva YV, Mishin AS, Bogdanov AM, Labas YA, **Lukyanov KA** (2008). The ability of green fluorescent proteins for photoconversion under oxygen-free conditions is determined by the chromophore structure rather than its amino acid environment. *Russ. J. Bioorganic Chem.* 34 (5), 638–641, [10.1134/S1068162008050142](https://doi.org/10.1134/S1068162008050142)
136. Shkrob MA, Mishin AS, Chudakov DM, Labas YA, **Lukyanov KA** (2008). Chromoproteins of the green fluorescent protein family: Properties and applications. *Russ. J. Bioorganic Chem.* 34 (5), 517–525, [10.1134/S1068162008050014](https://doi.org/10.1134/S1068162008050014)
137. Mishin AS, Subach FV, Yampolsky IV, King W, **Lukyanov KA**, Verkhusha VV (2008). The first mutant of the *Aequorea victoria* green fluorescent protein that forms a red chromophore. *Biochemistry* 47 (16), 4666–4673, [10.1021/bi702130s](https://doi.org/10.1021/bi702130s)
138. Yampolsky IV, Kislukhin AA, Amatov TT, Shcherbo D, Potapov VK, Lukyanov S, **Lukyanov KA** (2008). Synthesis and properties of the red chromophore of the green-to-red photoconvertible fluorescent protein Kaede and its analogs. *Bioorg Chem* 36 (2), 96–104, [10.1016/j.bioorg.2007.12.003](https://doi.org/10.1016/j.bioorg.2007.12.003)
139. Cox LJ, Hengst U, Gurskaya NG, **Lukyanov KA**, Jaffrey SR (2008). Intra-axonal translation and retrograde trafficking of CREB promotes neuronal survival. *Nat Cell Biol* 10 (2), 149–159, [10.1038/ncb1677](https://doi.org/10.1038/ncb1677)
140. Shcherbo D, Merzlyak EM, Chepurnykh TV, Fradkov AF, Ermakova GV, Solovieva EA, **Lukyanov KA**, Bogdanova EA, Zaraisky AG, Lukyanov S, Chudakov DM (2007). Bright far-red fluorescent protein for whole-body imaging. *Nat Methods* 4 (9), 741–746, [10.1038/nmeth1083](https://doi.org/10.1038/nmeth1083)
141. Chudakov DM, Lukyanov S, **Lukyanov KA** (2007). Tracking intracellular protein movements using photoswitchable fluorescent proteins PS-CFP2 and Dendra2. *Nat Protoc* 2 (8), 2024–2032, [10.1038/nprot.2007.291](https://doi.org/10.1038/nprot.2007.291)
142. Merzlyak EM, Goedhart J, Shcherbo D, Bulina ME, Shcheglov AS, Fradkov AF, Gaintzeva A, **Lukyanov KA**, Lukyanov S, Gadella TWJ, Chudakov DM (2007). Bright monomeric red fluorescent protein with an extended fluorescence lifetime. *Nat Methods* 4 (7), 555–557, [10.1038/nmeth1062](https://doi.org/10.1038/nmeth1062)
143. Chudakov DM, Lukyanov S, **Lukyanov KA** (2007). Using photoactivatable fluorescent protein Dendra2 to track protein movement. *Biotechniques* 42 (5), 553–565, [10.2144/000112470](https://doi.org/10.2144/000112470)
144. Zhang L, Gurskaya NG, Merzlyak EM, Staroverov DB, Mudrik NN, Samarkina ON, Vinokurov LM, Lukyanov S, **Lukyanov KA** (2007). Method for real-time monitoring of protein degradation at the single cell level. *Biotechniques* 42 (4), 446–450, [10.2144/000112453](https://doi.org/10.2144/000112453)
145. Lukyanov SA, **Lukyanov KA**, Gurskaya NG, Bogdanova EA, Buzdin AA (2007). Selective suppression of polymerase chain reaction and its most popular applications. , 29–51, [10.1007/978-1-4020-6040-32](https://doi.org/10.1007/978-1-4020-6040-32)
146. Evdokimov AG, Pokross ME, Egorov NS, Zaraisky AG, Yampolsky IV, Merzlyak EM, Shkoporov AN, Sander I, **Lukyanov KA**, Chudakov DM (2006). Structural basis for the fast maturation of Arthropoda green fluorescent protein. *EMBO Rep* 7 (10), 1006–1012, [10.1038/sj.embor.7400787](https://doi.org/10.1038/sj.embor.7400787)
147. Chudakov DM, Chepurnykh TV, Belousov VV, Lukyanov S, **Lukyanov KA** (2006). Fast and precise protein tracking using repeated reversible photoactivation. *Traffic* 7 (10), 1304–1310, [10.1111/j.1600-0854.2006.00468.x](https://doi.org/10.1111/j.1600-0854.2006.00468.x)
148. Bulina ME, **Lukyanov KA**, Britanova OV, Onichtchouk D, Lukyanov S, Chudakov DM (2006). Chromophore-assisted light inactivation (CALI) using the phototoxic fluorescent protein KillerRed. *Nat Protoc* 1 (2), 947–953, [10.1038/nprot.2006.89](https://doi.org/10.1038/nprot.2006.89)
149. Schüttrigkeit TA, Feilitzsch Tv, Kompa CK, **Lukyanov KA**, Savitsky AP, Voityuk AA, Michel-Beyerle ME

- (2006). Femtosecond study of light-induced fluorescence increase of the dark chromoprotein asFP595. *Chem Phys* 323 (23), 149–160, [10.1016/j.chemphys.2005.09.039](https://doi.org/10.1016/j.chemphys.2005.09.039)
150. Gurskaya NG, Verkhusha VV, Shcheglov AS, Staroverov DB, Chepurnykh TV, Fradkov AF, Lukyanov S, **Lukyanov KA** (2006). Engineering of a monomeric green-to-red photoactivatable fluorescent protein induced by blue light. *Nat Biotechnol* 24 (4), 461–465, [10.1038/nbt1191](https://doi.org/10.1038/nbt1191)
 151. Belousov VV, Fradkov AF, **Lukyanov KA**, Staroverov DB, Shakhbazov KS, Tersikh AV, Lukyanov S (2006). Genetically encoded fluorescent indicator for intracellular hydrogen peroxide. *Nat Methods* 3 (4), 281–286, [10.1038/nmeth866](https://doi.org/10.1038/nmeth866)
 152. Bulina ME, Chudakov DM, Britanova OV, Yanushevich YG, Staroverov DB, Chepurnykh TV, Merzlyak EM, Shkrob MA, Lukyanov S, **Lukyanov KA** (2006). A genetically encoded photosensitizer. *Nat Biotechnol* 24 (1), 95–99, [10.1038/nbt1175](https://doi.org/10.1038/nbt1175)
 153. Shkrob MA, Yanushevich YG, Chudakov DM, Gurskaya NG, Labas YA, Poponov SY, Mudrik NN, Lukyanov S, **Lukyanov KA** (2005). Far-red fluorescent proteins evolved from a blue chromoprotein from *Actinia equina*. *Biochem J* 392 (3), 649–654, [10.1042/BJ20051314](https://doi.org/10.1042/BJ20051314)
 154. **Lukyanov KA**, Chudakov DM, Fradkov AF, Labas YA, Matz MV, Lukyanov S (2005). Discovery and properties of GFP-like proteins from nonbioluminescent Anthozoa. *Methods Biochem Anal* 47, 121–138, [10.1002/0471739499.ch6](https://doi.org/10.1002/0471739499.ch6)
 155. Chudakov DM, Lukyanov S, **Lukyanov KA** (2005). Fluorescent proteins as a toolkit for in vivo imaging. *Trends Biotechnol* 23 (12), 605–613, [10.1016/j.tibtech.2005.10.005](https://doi.org/10.1016/j.tibtech.2005.10.005)
 156. **Lukyanov KA**, Chudakov DM, Lukyanov S, Verkhusha VV (2005). Photoactivatable fluorescent proteins. *Nat Rev Mol Cell Biol* 6 (11), 885–891, [10.1038/nrm1741](https://doi.org/10.1038/nrm1741)
 157. Yampolsky IV, Remington SJ, Martynov VI, Potapov VK, Lukyanov S, **Lukyanov KA** (2005). Synthesis and properties of the chromophore of the asFP595 chromoprotein from *Anemonia sulcata*. *Biochemistry* 44 (15), 5788–5793, [10.1021/bi0476432](https://doi.org/10.1021/bi0476432)
 158. Remington SJ, Wachter RM, Yarbrough DK, Branchaud B, Anderson DC, Kallio K, **Lukyanov KA** (2005). zFP538, a yellow-fluorescent protein from *Zoanthus*, contains a novel three-ring chromophore. *Biochemistry* 44 (1), 202–212, [10.1021/bi048383r](https://doi.org/10.1021/bi048383r)
 159. Yanushevich YG, Shagin DA, Fradkov AF, Shakhbazov KS, Barsova EV, Gurskaya NG, Labas YA, Matz MV, **Lukyanov KA**, Lukyanov SA (2005). Spectral diversity among members of the green fluorescent protein family in hydroid jellyfish (Cnidaria, Hydrozoa). *Russ. J. Bioorganic Chem.* 31 (1), 43–47, [10.1007/s11171-005-0005-9](https://doi.org/10.1007/s11171-005-0005-9)
 160. Savitsky AP, Agranat MB, **Lukyanov KA**, Schüttrigkeit T, Von Feilitzsch T, Kompa C, Michel-Beyerle ME (2004). Fluorescence enhancement of asCP595 is due to consecutive absorbance of two photons. *Proc SPIE Int Soc Opt Eng* 5329, 73–78, [10.1117/12.533013](https://doi.org/10.1117/12.533013)
 161. Chudakov DM, Verkhusha VV, Staroverov DB, Souslova EA, Lukyanov S, **Lukyanov KA** (2004). Photoswitchable cyan fluorescent protein for protein tracking. *Nat Biotechnol* 22 (11), 1435–1439, [10.1038/nbt1025](https://doi.org/10.1038/nbt1025)
 162. Bulina ME, **Lukyanov KA**, Yampolsky IV, Chudakov DM, Staroverov DB, Shcheglov AS, Gurskaya NG, Lukyanov S (2004). New class of blue animal pigments based on Frizzled and Kringle protein domains. *J Biol Chem* 279 (42), 43367–43370, [10.1074/jbc.C400337200](https://doi.org/10.1074/jbc.C400337200)
 163. Belov GA, Lidsky PV, Mikitas OV, Egger D, **Lukyanov KA**, Bienz K, Agol VI (2004). Bidirectional increase in permeability of nuclear envelope upon poliovirus infection and accompanying alterations of nuclear pores. *J Virol* 78 (18), 10166–10177, [10.1128/JVI.78.18.10166-10177.2004](https://doi.org/10.1128/JVI.78.18.10166-10177.2004)
 164. Verkhusha VV, Chudakov DM, Gurskaya NG, Lukyanov S, **Lukyanov KA** (2004). Common pathway for the red chromophore formation in fluorescent proteins and chromoproteins. *Cell Chem Biol* 11 (6), 845–854, [10.1016/j.chembiol.2004.04.007](https://doi.org/10.1016/j.chembiol.2004.04.007)
 165. Shagin DA, Barsova EV, Yanushevich YG, Fradkov AF, **Lukyanov KA**, Labas YA, Semenova TN, Ugalde JA, Meyers A, Nunez JM, Widder EA, Lukyanov SA, Matz MV (2004). GFP-like Proteins as Ubiquitous Metazoan Superfamily: Evolution of Functional Features and Structural Complexity. *Mol Biol Evol* 21 (5), 841–850, [10.1093/molbev/msh079](https://doi.org/10.1093/molbev/msh079)
 166. Verkhusha VV, **Lukyanov KA** (2004). The molecular properties and applications of Anthozoa fluorescent proteins and chromoproteins. *Nat Biotechnol* 22 (3), 289–296, [10.1038/nbt943](https://doi.org/10.1038/nbt943)

167. Chudakov DM, **Lukyanov KA** (2003). Review: Use of green fluorescent protein (GFP) and its homologs for in vivo protein motility studies. *Biochemistry (Mosc)* 68 (9), 1166–1172.
168. Chudakov DM, **Lukyanov KA** (2003). Use of Green Fluorescent Protein (GFP) and Its Homologs for in vivo Protein Motility Studies. *Biochemistry (Mosc)* 68 (9), 952–957, [10.1023/A:1026048109654](https://doi.org/10.1023/A:1026048109654)
169. Gurskaya NG, Fradkov AF, Pounkova NI, Staroverov DB, Bulina ME, Yanushevich YG, Labas YA, Lukyanov S, **Lukyanov KA** (2003). A colourless green fluorescent protein homologue from the non-fluorescent hydromedusa *Aequorea coerulescens* and its fluorescent mutants. *Biochem J* 373 (2), 403–408, [10.1042/BJ20021966](https://doi.org/10.1042/BJ20021966)
170. Bulina ME, Verkhusha VV, Staroverov DB, Chudakov DM, **Lukyanov KA** (2003). Hetero-oligomeric tagging diminishes non-specific aggregation of target proteins fused with Anthozoa fluorescent proteins. *Biochem J* 371 (1), 109–114, [10.1042/BJ20021796](https://doi.org/10.1042/BJ20021796)
171. Chudakov DM, Feofanov AV, Mudrik NN, Lukyanov S, **Lukyanov KA** (2003). Chromophore environment provides clue to "kindling fluorescent protein" riddle. *J Biol Chem* 278 (9), 7215–7219, [10.1074/jbc.M211988200](https://doi.org/10.1074/jbc.M211988200)
172. Chudakov DM, Belousov VV, Zairisky AG, Novoselov VV, Staroverov DB, Zorov DB, Lukyanov S, **Lukyanov KA** (2003). Kindling fluorescent proteins for precise in vivo photolabeling. *Nat Biotechnol* 21 (2), 191–194, [10.1038/nbt778](https://doi.org/10.1038/nbt778)
173. Yanushevich YG, Bulina ME, Gurskaya NG, Savitskii AP, **Lukyanov KA** (2002). Key amino acid residues responsible for the color of the green and yellow fluorescent proteins from the coral polyp *Zoanthus* sp. *Bioorg Khim* 28 (4), 306–307.
174. Yanushevich YG, Bulina ME, Gurskaya NG, Savitskii AP, **Lukyanov KA** (2002). Key amino acid residues responsible for the color of green and yellow fluorescent proteins from the coral polyp *Zoanthus* sp. *Russ. J. Bioorganic Chem.* 28 (4), 274–277, [10.1023/A:1019583522608](https://doi.org/10.1023/A:1019583522608)
175. Fradkov AF, Verkhusha VV, Staroverov DB, Bulina ME, Yanushevich YG, Martynov VI, Lukyanov S, **Lukyanov KA** (2002). Far-red fluorescent tag for protein labelling. *Biochem J* 368 (1), 17–21, [10.1042/BJ20021191](https://doi.org/10.1042/BJ20021191)
176. Matz MV, **Lukyanov KA**, Lukyanov SA (2002). Family of the green fluorescent protein: Journey to the end of the rainbow. *Bioessays* 24 (10), 953–959, [10.1002/bies.10154](https://doi.org/10.1002/bies.10154)
177. Bulina ME, Chudakov DM, Mudrik NN, **Lukyanov KA** (2002). Interconversion of Anthozoa GFP-like fluorescent and non-fluorescent proteins by mutagenesis. *BMC Biochem* 3, 1–8, [10.1186/1471-2091-3-7](https://doi.org/10.1186/1471-2091-3-7)
178. Labas YA, Gurskaya NG, Yanushevich YG, Fradkov AF, **Lukyanov KA**, Lukyanov SA, Matz MV (2002). Diversity and evolution of the green fluorescent protein family. *Proc Natl Acad Sci U S A* 99 (7), 4256–4261, [10.1073/pnas.062552299](https://doi.org/10.1073/pnas.062552299)
179. Yanushevich YG, Staroverov DB, Savitsky AP, Fradkov AF, Gurskaya NG, Bulina ME, **Lukyanov KA**, Lukyanov SA (2002). A strategy for the generation of non-aggregating mutants of Anthozoa fluorescent proteins. *FEBS Lett* 511 (13), 11–14, [10.1016/S0014-5793\(01\)03263-X](https://doi.org/10.1016/S0014-5793(01)03263-X)
180. Shagin DA, Barsova EV, Bogdanova EA, Britanova OV, Gurskaya NG, **Lukyanov KA**, Matz MV, Pounkova NI, Usman NY, Kopantzev EP, Salo E, Lukyanov SA (2002). Identification and characterization of a new family of C-type lectin-like genes from planaria *Girardia tigrina*. *Glycobiology* 12 (8), 463–472, [10.1093/glycob/cwf056](https://doi.org/10.1093/glycob/cwf056)
181. Gurskaya NG, Fradkov AF, Tersikh A, Matz MV, Labas YA, Martynov VI, Yanushevich YG, **Lukyanov KA**, Lukyanov SA (2001). GFP-like chromoproteins as a source of far-red fluorescent proteins. *FEBS Lett* 507 (1), 16–20, [10.1016/S0014-5793\(01\)02930-1](https://doi.org/10.1016/S0014-5793(01)02930-1)
182. Gurskaya NG, Savitsky AP, Yanushevich YG, Lukyanov SA, **Lukyanov KA** (2001). Color transitions in coral's fluorescent proteins by site-directed mutagenesis. *BMC Biochem* 2, 1–7, [10.1186/1471-2091-2-6](https://doi.org/10.1186/1471-2091-2-6)
183. Martynov VI, Savitsky AP, Martynova NY, Savitsky PA, **Lukyanov KA**, Lukyanov SA (2001). Alternative cyclization in GFP-like proteins family. The formation and structure of the chromophore of a purple chromoprotein from *Anemonia sulcata*. *J Biol Chem* 276 (24), 21012–21016, [10.1074/jbc.M100500200](https://doi.org/10.1074/jbc.M100500200)
184. Rebrikov DV, Britanova OV, Gurskaya NG, **Lukyanov KA**, Tarabykin VS, Lukyanov SA (2000). Mirror orientation selection (MOS): a method for eliminating false positive clones from libraries generated by suppression subtractive hybridization. *Nucleic Acids Res* 28 (20), E90, [10.1093/nar/28.20.e90](https://doi.org/10.1093/nar/28.20.e90)
185. **Lukyanov KA**, Fradkov AF, Gurskaya NG, Matz MV, Labas YA, Savitsky AP, Markelov ML, Zairisky AG, Zhao X, Fang Y, Tan W, Lukyanov SA (2000). Natural animal coloration can be determined by a

nonfluorescent green fluorescent protein homolog. *J Biol Chem* 275 (34), 25879–25882, [10.1074/jbc.C000338200](https://doi.org/10.1074/jbc.C000338200)

186. Panchina Y, Kelmanson I, Matz M, **Lukyanov K**, Usman N, Lukyanov S (2000). A ubiquitous family of putative gap junction molecules [2]. *Curr Biol* 10 (13), R473–4, [10.1016/S0960-9822\(00\)00576-5](https://doi.org/10.1016/S0960-9822(00)00576-5)
187. **Lukyanov KA**, Gurskaya NG, Bogdanova EA, Lukyanov SA (1999). Selective suppression of polymerase chain reaction. *Bioorg Khim* 25 (3), 169–170.
188. Shagin DA, **Lukyanov KA**, Vagner LL, Matz MV (1999). Regulation of average length of complex PCR product. *Nucleic Acids Res* 27 (18), e23, [10.1093/nar/27.18.e23-i](https://doi.org/10.1093/nar/27.18.e23-i)
189. **Lukyanov KA**, Gurskaya NG, Bogdanova EA, Lukyanov SA (1999). Selective suppression of polymerase chain reaction. *Russ. J. Bioorganic Chem.* 25 (3), 141–147.
190. Fradkov AF, **Lukyanov KA**, Matz MV, Diatchenko LB, Siebert PD, Lukyanov SA (1998). Sequence-independent method for in vitro generation of nested deletions for sequencing large DNA fragments. *Anal Biochem* 258 (1), 138–141, [10.1006/abio.1997.2591](https://doi.org/10.1006/abio.1997.2591)
191. **Lukyanov KA**, Lukyanov SA (1997). In vitro Cloning of DNA Fragments Using One Polymerase Chain Reaction. *Bioorg Khim* 23 (11), 887.
192. **Lukyanov KA**, Lukyanov SA (1997). In vitro cloning of DNA fragments using one polymerase chain reaction. *Russ. J. Bioorganic Chem.* 23 (11), 785–789.
193. **Lukyanov K**, Diatchenko L, Chenchik A, Nanisetti A, Siebert P, Usman N, Matz M, Lukyanov S (1997). Construction of cDNA libraries from small amounts of total RNA using the suppression PCR effect. *Biochem Biophys Res Commun* 230 (2), 285–288, [10.1006/bbrc.1996.5948](https://doi.org/10.1006/bbrc.1996.5948)
194. Markitantova YV, **Lukyanov KA**, Kazanskaya OV, Mitashov VI, Lukyanov SA (1997). Analysis of Expression of the Genes Containing LeR-1 and VeR-1 Sequences during Embryogenesis and Regeneration and in Intact Tissues of Newts. *Ontogenez* 28 (4), 269–270.
195. **Lukyanov KA**, Gurskaya NG, Matz MV, Khaspekov GL, Dyachenko LB, Chenchik AA, Ilevich-Stuchkov SG, Lukyanov SA (1996). A Method for Obtaining Equalized cDNA Libraries Based on Polymerase Chain Reaction Suppression. *Bioorg Khim* 22 (9), .
196. **Lukyanov KA**, Gurskaya NG, Matz MV, Khaspekov GL, Dyachenko LB, Chenchik AA, Ilevich-Stuchkov SG, Lukyanov SA (1996). A method for obtaining equalized cDNA libraries based on polymerase chain reaction suppression. *Russ. J. Bioorganic Chem.* 22 (9), 587–591.
197. Gurskaya NG, Diatchenko L, Chenchik A, Siebert PD, Khaspekov GL, **Lukyanov KA**, Vagner LL, Ermolaeva OD, Lukyanov SA, Sverdlov ED (1996). Equalizing cDNA subtraction based on selective suppression of polymerase chain reaction: Cloning of Jurkat cell transcripts induced by phytohemagglutinin and phorbol 12-myristate 13-acetate. *Anal Biochem* 240 (1), 90–97, [10.1006/abio.1996.0334](https://doi.org/10.1006/abio.1996.0334)
198. Diatchenko L, Lau YFC, Campbell AP, Chenchik A, Moqadam F, Huang B, Lukyanov S, **Lukyanov K**, Gurskaya N, Sverdlov ED, Siebert PD (1996). Suppression subtractive hybridization: A method for generating differentially regulated or tissue-specific cDNA probes and libraries. *Proc Natl Acad Sci U S A* 93 (12), 6025–6030, [10.1073/pnas.93.12.6025](https://doi.org/10.1073/pnas.93.12.6025)
199. Gurskaya NG, Shagin DA, **Lukyanov KA**, Vagner LL, Shtutman MS, Musatkina EA, Moinova EV, Tatosyan AG, Lukyanov SA, Sverdlov ED (1996). Cloning of the ha-SDGF gene cDNA from a highly metastatic golden hamster cell line by subtractive hybridization. *Russ. J. Bioorganic Chem.* 22 (6), 368–373.
200. **Lukyanov KA**, Matz MV, Bogdanova EA, Gurskaya NG, Lukyanov SA (1996). Molecule by molecule PCR amplification of complex DNA mixtures for direct sequencing: An approach to in vitro cloning. *Nucleic Acids Res* 24 (11), 2194–2195, [10.1093/nar/24.11.2194](https://doi.org/10.1093/nar/24.11.2194)
201. **Lukyanov KA**, Gurskaya NG, Kopantsev EP, Lukyanov SA (1996). Selective Amplification of Evolutionarily Conserved Expressed Sequences. *Bioorg Khim* 22 (1), 53.
202. Gurskaya NG, Shagin DA, **Lukyanov KA**, Vagner LL, Shtutman MS, Musatkina EA, Moinova EV, Tatosyan AG, Lukyanov SA, Sverdlov ED (1996). Cloning of the ha-SDGF Gene cDNA from a Highly Metastatic Golden Hamster Cell Line by Subtractive Hybridization. *Bioorg Khim* 22 (6), 430–431.
203. **Lukyanov KA**, Gurskaya NG, Kopantsev EP, Lukyanov SA (1996). Selective amplification of evolutionarily conserved expressed sequences. *Russ. J. Bioorganic Chem.* 22 (1), 43–47.
204. Siebert PD, Chenchik A, Kellogg DE, **Lukyanov KA**, Lukyanov SA (1995). An improved PCR method for walking in uncloned genomic DNA. *Nucleic Acids Res* 23 (6), 1087–1088, [10.1093/nar/23.6.1087](https://doi.org/10.1093/nar/23.6.1087)

205. **Lukyanov KA**, Launer GA, Tarabykin VS, Zaisky AG, Lukyanov SA (1995). Inverted terminal repeats permit the average length of amplified dna fragments to be regulated during preparation of cdna libraries by polymerase chain reaction. *Anal Biochem* 229 (2), 198–202, [10.1006/abio.1995.1402](https://doi.org/10.1006/abio.1995.1402)
206. Launer GA, **Lukyanov KA**, Tarabykin VS, Lukyanov SA (1994). Simple method for cDNA amplification starting from small amount of total RNA. *Mol Gen Mikrobiol Virusol* (6), 38–41.