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## Гранты и проекты

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2023 [патологических состояниях, вызывающих гибель нейронов](#)

2020– [Новые биологически-активные вещества из ядов морских анемонов, избирательно](#)  
2022 [взаимодействующие с никотиновыми ацетилхолиновыми рецепторами](#)

2016– [Природные вещества с противовоспалительными, анальгетическими и антимикробными](#)  
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## Публикации

1. Kvetkina AN, Oreshkov SD, Mironov PA, Zaigraev MM, Klimovich AA, Deriavko YV, Menshov AS, Kulbatskii DS, Logashina YA, **Andreev YA**, Chugunov AO, Kirpichnikov MP, Lyukmanova EN, Leychenko EV, Shenkarev ZO (2024). Sea Anemone Kunitz Peptide HCIQ2c1: Structure, Modulation of TRPA1 Channel, and Suppression of Nociceptive Reaction In Vivo. *Mar Drugs* 22 (12), 542, [10.3390/md22120542](#)
2. Khasanov TA, Maleeva EE, Koshelev SG, Palikov VA, Palikova YA, Dyachenko IA, Kozlov SA, **Andreev YA**, Osmakov DI (2024). Mutagenesis of the Peptide Inhibitor of ASIC3 Channel Introduces Binding to Thumb Domain of ASIC1a but Reduces Analgesic Activity. *Mar Drugs* 22 (9), 382, [10.3390/md22090382](#)
3. Pavlov VM, Fedotova AY, **Andreev YA**, Palikov VA, Dyachenko IA (2024). The Study of TRPV1 Channels of the Central Nervous System and Their Effect on Anxiety in ICR Mice. *Dokl Biochem Biophys* , , [10.1134/S1607672924600325](#)
4. Kalinovskii AP, Logashina YA, Palikova YA, Palikov VA, Osmakov DI, Mineev KS, Belozeroва OA,

- Shmygarev VI, Kozlov SA, Dyachenko IA, Korolkova YV, **Andreev YA** (2024). A Diterpenoid of the Medicinal Plant *Andrographis paniculata* Targets Cutaneous TRPV3 Channel and Relieves Itch. *J. Nat. Prod.* 87 (7), 1852–1859, [10.1021/acs.jnatprod.4c00626](https://doi.org/10.1021/acs.jnatprod.4c00626)
5. Osmakov DI, Onoprienko LV, Kalinovskii AP, Koshelev SG, Stepanenko VN, **Andreev YA**, Kozlov SA (2024). Opioid Analgesic as a Positive Allosteric Modulator of Acid-Sensing Ion Channels. *Int J Mol Sci* 25 (3), 1413, [10.3390/ijms25031413](https://doi.org/10.3390/ijms25031413)
  6. Kolesova YS, Stroylova YY, Maleeva EE, Moysenovich AM, Pozdyshev DV, Muronetz VI, **Andreev YA** (2024). Modulation of TRPV1 and TRPA1 Channels Function by Sea Anemones' Peptides Enhances the Viability of SH-SY5Y Cell Model of Parkinson's Disease. *Int J Mol Sci* 25 (1), , [10.3390/ijms25010368](https://doi.org/10.3390/ijms25010368)
  7. Osmakov DI, Tarasova NV, Nedorubov AA, Palikov VA, Palikova YA, Dyachenko IA, **Andreev YA**, Kozlov SA (2023). Nocistatin and Products of Its Proteolysis Are Dual Modulators of Type 3 Acid-Sensing Ion Channels (ASIC3) with Algesic and Analgesic Properties. *Biochemistry (Mosc)* 88 (12-13), 2137–2145, [10.1134/S0006297923120155](https://doi.org/10.1134/S0006297923120155)
  8. Maleeva EE, Palikova YA, Palikov VA, Kazakov VA, Simonova MA, Logashina YA, Tarasova NV, Dyachenko IA, **Andreev YA** (2023). Potentiating TRPA1 by Sea Anemone Peptide Ms 9a-1 Reduces Pain and Inflammation in a Model of Osteoarthritis. *Mar Drugs* 21 (12), 617, [10.3390/md21120617](https://doi.org/10.3390/md21120617)
  9. Korolkova Y, Mikov A, Lobas A, Solovyeva E, Surin A, **Andreev Y**, Gorshkov M, Kozlov S (2023). Venom-gland transcriptomics and venom proteomics of the *Tibellus oblongus* spider. *Sci Data* 10 (1), 820, [10.1038/s41597-023-02703-0](https://doi.org/10.1038/s41597-023-02703-0)
  10. Kalinovskii AP, Pushkarev AP, Mikhailenko AD, Kudryavtsev DS, Belozerova OA, Shmygarev VI, Yatskin ON, Korolkova YV, Kozlov SA, Osmakov DI, Popov A, **Andreev YA** (2023). Dual Modulator of ASIC Channels and GABAA Receptors from Thyme Alters Fear-Related Hippocampal Activity. *Int J Mol Sci* 24 (17), , [10.3390/ijms241713148](https://doi.org/10.3390/ijms241713148)
  11. Kalashnikova I, Patrikeeva S, Nanovskaya TN, **Andreev YA**, Ahmed MS, Rytting E (2023). Folate-mediated transport of nanoparticles across the placenta. *Pharm Nanotechnol* 12 (2), 171–183, [10.2174/2211738511666230717122429](https://doi.org/10.2174/2211738511666230717122429)
  12. Lyukmanova EN, Mironov PA, Kulbatskii DS, Shulepko MA, Paramonov AS, Chernaya EM, Logashina YA, **Andreev YA**, Kirpichnikov MP, Shenkarev ZO (2023). Recombinant Production, NMR Solution Structure, and Membrane Interaction of the Ph $\alpha$ 1 $\beta$  Toxin, a TRPA1 Modulator from the Brazilian Armed Spider *Phoneutria nigriventer*. *Toxins (Basel)* 15 (6), 378, [10.3390/toxins15060378](https://doi.org/10.3390/toxins15060378)
  13. Gladkikh IN, Klimovich AA, Kalina RS, Kozhevnikova YV, Khasanov TA, Osmakov DI, Koshelev SG, Monastyrnaya MM, **Andreev YA**, Leychenko EV, Kozlov SA (2023). Anxiolytic, Analgesic and Anti-Inflammatory Effects of Peptides Hmg 1b-2 and Hmg 1b-4 from the Sea Anemone *Heteractis magnifica*. *Toxins (Basel)* 15 (5), 341, [10.3390/toxins15050341](https://doi.org/10.3390/toxins15050341)
  14. Kalinovskii AP, Utkina LL, Korolkova YV, **Andreev YA** (2023). TRPV3 Ion Channel: From Gene to Pharmacology. *Int J Mol Sci* 24 (10), 8601, [10.3390/ijms24108601](https://doi.org/10.3390/ijms24108601)
  15. Pislyagin EA, Menchinskaya ES, Gladkikh IN, Kvetkina AN, Sintsova OV, Popkova DV, Kozlovskiy SA, Gorpenchenko TY, Likhatskaya GN, Kaluzhskiy LA, Ivanov AS, **Andreev YA**, Kozlov SA, Dmitrenok PS, Aminin DL, Leychenko EV (2023). Recombinant Analogs of Sea Anemone Kunitz-Type Peptides Influence P2X7 Receptor Activity in Neuro-2a Cells. *Mar Drugs* 21 (3), , [10.3390/md21030192](https://doi.org/10.3390/md21030192)
  16. Kasheverov IE, Logashina YA, Kornilov FD, Lushpa VA, Maleeva EE, Korolkova YV, Yu J, Zhu X, Zhangsun D, Luo S, Stensvåg K, Kudryavtsev DS, Mineev KS, **Andreev YA** (2023). Peptides from the Sea Anemone *Metridium senile* with Modified Inhibitor Cystine Knot (ICK) Fold Inhibit Nicotinic Acetylcholine Receptors. *Toxins (Basel)* 15 (1), 28, [10.3390/toxins15010028](https://doi.org/10.3390/toxins15010028)
  17. Logashina YA, Lubova KI, Maleeva EE, Palikov VA, Palikova YA, Dyachenko IA, **Andreev YA** (2022). Analysis of Structural Determinants of Peptide MS 9a-1 Essential for Potentiating of TRPA1 Channel. *Mar Drugs* 20 (7), , [10.3390/md20070465](https://doi.org/10.3390/md20070465)
  18. Osmakov DI, Kalinovskii AP, Belozerova OA, **Andreev YA**, Kozlov SA (2022). Lignans as Pharmacological Agents in Disorders Related to Oxidative Stress and Inflammation: Chemical Synthesis Approaches and Biological Activities. *Int J Mol Sci* 23 (11), , [10.3390/ijms23116031](https://doi.org/10.3390/ijms23116031)
  19. Kalinovskii AP, Osmakov DI, Koshelev SG, Lubova KI, Korolkova YV, Kozlov SA, **Andreev YA** (2022). Retinoic Acid-Differentiated Neuroblastoma SH-SY5Y Is an Accessible In Vitro Model to Study Native Human

- Acid-Sensing Ion Channels 1a (ASIC1a). *Biology (Basel)* 11 (2), , [10.3390/biology11020167](https://doi.org/10.3390/biology11020167)
20. Osmakov DI, Korolkova YV, Lubova KI, Maleeva EE, **Andreev YA**, Kozlov SA (2021). The Role of the C-terminal Intracellular Domain in Acid-Sensing Ion Channel 3 Functioning. *J Evol Biochem Physiol* 57, 413–423, [10.1134/S0022093021020204](https://doi.org/10.1134/S0022093021020204)
  21. Sintsova O, Gladkikh I, Monastyrnaya M, Tabakmakher V, Yurchenko E, Menchinskaya E, Pislyagin E, **Andreev Y**, Kozlov S, Peigneur S, Tytgat J, Aminin D, Kozlovskaya E, Leychenko E (2021). Sea Anemone Kunitz-Type Peptides Demonstrate Neuroprotective Activity in the 6-Hydroxydopamine Induced Neurotoxicity Model. *Biomedicines* 9 (3), 283, [10.3390/biomedicines9030283](https://doi.org/10.3390/biomedicines9030283)
  22. Logashina YA, Palikova YA, Palikov VA, Kazakov VA, Smolskaya SV, Dyachenko IA, Tarasova NV, **Andreev YA** (2021). Anti-Inflammatory and Analgesic Effects of TRPV1 Polypeptide Modulator APHC3 in Models of Osteo- and Rheumatoid Arthritis. *Mar Drugs* 19 (1), , [10.3390/md19010039](https://doi.org/10.3390/md19010039)
  23. Korolkova Y, Maleeva E, Mikov A, Lobas A, Solovyeva E, Gorshkov M, **Andreev Y**, Peigneur S, Tytgat J, Kornilov F, Lushpa V, Mineev K, Kozlov S (2021). New Insectotoxin from Tibellus Oblongus Spider Venom Presents Novel Adaptation of ICK Fold. *Toxins (Basel)* 13 (1), , [10.3390/toxins13010029](https://doi.org/10.3390/toxins13010029)
  24. Sintsova OV, Palikov VA, Palikova YA, Klimovich AA, Gladkikh IN, **Andreev YA**, Monastyrnaya MM, Kozlovskaya EP, Dyachenko IA, Kozlov SA, Leychenko EV (2020). Peptide Blocker of Ion Channel TRPV1 Exhibits a Long Analgesic Effect in the Heat Stimulation Model. *Dokl Biochem Biophys* 493 (1), 215–217, [10.1134/S1607672920030096](https://doi.org/10.1134/S1607672920030096)
  25. Belozerova OA, Osmakov DI, Vladimirov A, Koshelev SG, Chugunov AO, **Andreev YA**, Palikov VA, Palikova YA, Shaykhutdinova ER, Gvozd AN, Dyachenko IA, Efremov RG, Kublitski VS, Kozlov SA (2020). Sevanol and Its Analogues: Chemical Synthesis, Biological Effects and Molecular Docking. *Pharmaceuticals (Basel)* 13 (8), 1–21, [10.3390/ph13080163](https://doi.org/10.3390/ph13080163)
  26. Bychkov M, Shulepko M, Osmakov D, **Andreev Y**, Sudarikova A, Vasileva V, Pavlyukov MS, Latyshev YA, Potapov AA, Kirpichnikov M, Shenkarev ZO, Lyukmanova E (2020). Mambalgin-2 Induces Cell Cycle Arrest and Apoptosis in Glioma Cells via Interaction with ASIC1a. *Cancers (Basel)* 12 (7), 1–20, [10.3390/cancers12071837](https://doi.org/10.3390/cancers12071837)
  27. Osmakov DI, Khasanov TA, **Andreev YA**, Lyukmanova EN, Kozlov SA (2020). Animal, Herb, and Microbial Toxins for Structural and Pharmacological Study of Acid-Sensing Ion Channels. *Front Pharmacol* 11, 991, [10.3389/fphar.2020.00991](https://doi.org/10.3389/fphar.2020.00991)
  28. Lubova KI, Chugunov AO, Volynsky PE, Trofimov Y, Korolkova YV, Mosharova IV, Kozlov SA, **Andreev YA**, Efremov RG (2020). Probing temperature and capsaicin-induced activation of TRPV1 channel via computationally guided point mutations in its pore and TRP domains. *Int J Biol Macromol* 158, 1175–1183, [10.1016/j.ijbiomac.2020.04.239](https://doi.org/10.1016/j.ijbiomac.2020.04.239)
  29. (конференция) **Andreev YA**, Logashina YA (2020). Sea anemone peptide modulates TRPA1 activity, produces analgesia and enhances process of regeneration. *Toxicon* 177 Suppl 1, S21–S22, [10.1016/j.toxicon.2019.10.249](https://doi.org/10.1016/j.toxicon.2019.10.249)
  30. Logashina YA, Korolkova YV, Maleeva EE, Osmakov DI, Kozlov SA, **Andreev YA** (2020). Refolding of disulfide containing peptides in fusion with thioredoxin. *MENDELEEV COMMUN* 30 (2), 214–216, [10.1016/j.mencom.2020.03.028](https://doi.org/10.1016/j.mencom.2020.03.028)
  31. Smolskaya S, Logashina YA, **Andreev YA** (2020). Extract-Based Cell-Free Expression System as an Alternative for Difficult-to-Obtain Protein Biosynthesis. *Int J Mol Sci* 21 (3), , [10.3390/ijms21030928](https://doi.org/10.3390/ijms21030928)
  32. Osmakov DI, Koshelev SG, Palikov VA, Palikova YA, Shaykhutdinova ER, Dyachenko IA, **Andreev YA**, Kozlov SA (2019). Alkaloid Lindoldhamine Inhibits Acid-Sensing Ion Channel 1a and Reveals Anti-Inflammatory Properties. *Toxins (Basel)* 11 (9), , [10.3390/toxins11090542](https://doi.org/10.3390/toxins11090542)
  33. Osmakov DI, Koshelev SG, Ivanov IA, **Andreev YA**, Kozlov SA (2019). Endogenous Neuropeptide Nocistatin Is a Direct Agonist of Acid-Sensing Ion Channels (ASIC1, ASIC2 and ASIC3). *Biomolecules* 9 (9), , [10.3390/biom9090401](https://doi.org/10.3390/biom9090401)
  34. Osmakov DI, Koshelev SG, Lyukmanova EN, Shulepko MA, **Andreev YA**, Illes P, Kozlov SA (2019). Multiple Modulation of Acid-Sensing Ion Channel 1a by the Alkaloid Daurisoline. *Biomolecules* 9 (8), , [10.3390/biom9080336](https://doi.org/10.3390/biom9080336)
  35. Smolskaya S, **Andreev YA** (2019). Site-Specific Incorporation of Unnatural Amino Acids into Escherichia coli Recombinant Protein: Methodology Development and Recent Achievement. *Biomolecules* 9 (7), ,

36. Logashina YA, Korolkova YV, Kozlov SA, **Andreev YA** (2019). TRPA1 Channel as a Regulator of Neurogenic Inflammation and Pain: Structure, Function, Role in Pathophysiology, and Therapeutic Potential of Ligands. *Biochemistry (Mosc)* 84 (2), 101–118, [10.1134/S0006297919020020](https://doi.org/10.1134/S0006297919020020)
37. **Andreev YA**, Osmakov DI, Koshelev SG, Maleeva EE, Logashina YA, Palikov VA, Palikova YA, Dyachenko IA, Kozlov SA (2018). Analgesic Activity of Acid-Sensing Ion Channel 3 (ASIC3) Inhibitors: Sea Anemones Peptides Ugr9-1 and APETx2 versus Low Molecular Weight Compounds. *Mar Drugs* 16 (12), , [10.3390/md16120500](https://doi.org/10.3390/md16120500)
38. Palikova YA, Skobtsova LA, Zharmukhamedova TY, Palikov VA, Rudenko VB, Khokhlova ON, Lobanov AV, Rzhetskii DI, Slashcheva GA, Dyachenko EV, Belous GI, **Andreev YA**, Logashina YA, Kozlov SA, Yavorskii AN, Elyakova EG, Dyachenko IA (2018). Influence of New Promising Analgesic Compounds on Locomotor Activity of Mice. *PHARM CHEM J* 52 (8), 700–703, [10.1007/s11094-018-1884-4](https://doi.org/10.1007/s11094-018-1884-4)
39. Palikova YA, Skobtsova LA, Palikov VA, Belous GI, Khokhlova ON, Lobanov AV, Slashcheva GA, Rzhetskii DI, Rudenko VB, Kalabina EA, Osipova GA, **Andreev YA**, Logashina YA, Kozlov SA, Yavorskii AN, Elyakova EG, Dyachenko IA (2018). Effects of Novel Potential Analgesic Compounds on the Cardiovascular and Respiratory Systems. *PHARM CHEM J* 52 (7), 593–595, [10.1007/s11094-018-1865-7](https://doi.org/10.1007/s11094-018-1865-7)
40. Rogozhin EA, Sadykova VS, Baranova AA, Vasilchenko AS, Lushpa VA, Mineev KS, Georgieva ML, Kulko AB, Krashenninnikov ME, Lyundup AV, Vasilchenko AV, **Andreev YA** (2018). A Novel Lipopeptaibol Emericellipsin A with Antimicrobial and Antitumor Activity Produced by the Extremophilic Fungus. *Molecules* 23 (11), , [10.3390/molecules23112785](https://doi.org/10.3390/molecules23112785)
41. Nicosia A, Mikov A, Cammarata M, Colombo P, **Andreev Y**, Kozlov S, Cuttitta A (2018). The Anemonia viridis Venom: Coupling Biochemical Purification and RNA-Seq for Translational Research. *Mar Drugs* 16 (11), , [10.3390/md16110407](https://doi.org/10.3390/md16110407)
42. Kalinina EV, **Andreev YA**, Petrova AS, Lubova KI, Shtil AA, Chernov NN, Novichkova MD, Nurmuradov NK (2018). Redox-Dependent Expression of Genes Encoding NADPH Oxidase 5 and the Key Antioxidant Enzymes during Formation of Drug Resistance of Tumor Cells to Cisplatin. *Bull Exp Biol Med* 165 (5), 678–681, [10.1007/s10517-018-4240-5](https://doi.org/10.1007/s10517-018-4240-5)
43. Dyachenko IA, Belous GI, Skobtsova LA, Zharmukhamedova TY, Palikov VA, Palikova YA, Dyachenko EV, Kalabina EA, Rudenko VB, **Andreev YA**, Logashina YA, Kozlov SA, Yavorskii AN, Murashev AN (2018). Analgesic Activity of a Polypeptide Modulator of TRPV1 Receptors. *PHARM CHEM J* 52 (3), 213–215, [10.1007/s11094-018-1793-6](https://doi.org/10.1007/s11094-018-1793-6)
44. Esipov RS, Makarov DA, Stepanenko VN, Kostromina MA, Muravyova TI, **Andreev YA**, Dyachenko IA, Kozlov SA, Grishin EV (2018). Pilot production of the recombinant peptide toxin of Heteractis crispa as a potential analgesic by intein-mediated technology. *Protein Expr Purif* 145, 71–76, [10.1016/j.pep.2017.12.011](https://doi.org/10.1016/j.pep.2017.12.011)
45. Osmakov DI, Koshelev SG, **Andreev YA**, Dubinnyi MA, Kublitski VS, Efremov RG, Sobolevsky AI, Kozlov SA (2018). Proton-independent activation of acid-sensing ion channel 3 by an alkaloid, lindoldhamine, from *Laurus nobilis*. *Br J Pharmacol* 175 (6), 924–937, [10.1111/bph.14134](https://doi.org/10.1111/bph.14134)
46. Palikova YA, Zharmukhamedova TY, Palikov VA, Khokhlova ON, Osipova GA, **Andreev YA**, Logashina YA, Kozlov SA, Yavorskii AN, Murashev AN, DYachenko IA (2018). Analgesic activity of a natural peptide capable of specific binding to purinergic (P2x3) receptors. *Eksp i Klin Farm* 81 (3), 12–14, [10.30906/0869-2092-2018-81-3-12-14](https://doi.org/10.30906/0869-2092-2018-81-3-12-14)
47. Babenko VV, Mikov AN, Manuvera VA, Anikanov NA, Kovalchuk SI, **Andreev YA**, Logashina YA, Kornilov DA, Manolov AI, Sanamyan NP, Sanamyan KE, Kostryukova ES, Kozlov SA, Grishin EV, Govorun VM, Lazarev VN (2017). Identification of unusual peptides with new Cys frameworks in the venom of the cold-water sea anemone *Cnidopus japonicus*. *Sci Rep* 7 (1), 14534, [10.1038/s41598-017-14961-1](https://doi.org/10.1038/s41598-017-14961-1)
48. Slavokhotova AA, Shelenkov AA, **Andreev YA**, Odintsova TI (2017). Hevein-like antimicrobial peptides of plants. *Biochemistry (Mosc)* 82 (13), 1659–1674, [10.1134/S0006297917130065](https://doi.org/10.1134/S0006297917130065)
49. Baranova AA, Georgieva ML, Bilanenko EN, **Andreev YA**, Rogozhin EA, Sadykova VS (2017). Antimicrobial potential of alkalophilic micromycetes *Emericellopsis alkalina*. *APPL BIOCHEM MICRO+* 53 (6), 703–710, [10.1134/S0003683817060035](https://doi.org/10.1134/S0003683817060035)
50. Dyachenko IA, Palikov VA, Palikova YA, Belous GI, Murashev AN, **Andreev YA**, Logashina YA, Maleeva EE, Grishin EV, Kozlov SA (2017). Single mutation in peptide inhibitor of TRPV1 receptor changes its effect from



- hypothermic to hyperthermic level in animals. *Russ. J. Bioorganic Chem.* 43 (5), 509–516, [10.1134/S1068162017050053](https://doi.org/10.1134/S1068162017050053)
51. Osmakov DI, Koshelev SG, **Andreev YA**, Kozlov SA (2017). Endogenous isoquinoline alkaloids agonists of acid-sensing ion channel type 3. *Front Mol Neurosci* 10, 282, [10.3389/fnmol.2017.00282](https://doi.org/10.3389/fnmol.2017.00282)
  52. Nikolaev MV, Dorofeeva NA, Komarova MS, Korolkova YV, **Andreev YA**, Mosharova IV, Grishin EV, Tikhonov DB, Kozlov SA (2017). TRPV1 activation power can switch an action mode for its polypeptide ligands. *PLoS One* 12 (5), e0177077, [10.1371/journal.pone.0177077](https://doi.org/10.1371/journal.pone.0177077)
  53. Logashina YA, Solstad RG, Mineev KS, Korolkova YV, Mosharova IV, Dyachenko IA, Palikov VA, Palikova YA, Murashev AN, Arseniev AS, Kozlov SA, Stensvåg K, Haug T, **Andreev YA** (2017). New disulfide-stabilized fold provides sea anemone peptide to exhibit both antimicrobial and TRPA1 potentiating properties. *Toxins (Basel)* 9 (5), , [10.3390/toxins9050154](https://doi.org/10.3390/toxins9050154)
  54. Korolkova Y, Makarieva T, Tabakmakher K, Shubina L, Kudryashova E, **Andreev Y**, Mosharova I, Lee HS, Lee YJ, Kozlov S (2017). Marine cyclic guanidine alkaloids monanchomycalin B and urupocidin a act as inhibitors of TRPV1, TRPV2 and TRPV3, but not TRPA1 receptors. *Mar Drugs* 15 (4), , [10.3390/md15040087](https://doi.org/10.3390/md15040087)
  55. Logashina YA, Mosharova IV, Korolkova YV, Shelukhina IV, Dyachenko IA, Palikov VA, Palikova YA, Murashev AN, Kozlov SA, Stensvåg K, **Andreev YA** (2017). Peptide from sea anemone metridium senile affects transient receptor potential ankyrin-repeat 1 (TRPA1) function and produces analgesic effect. *J Biol Chem* 292 (7), 2992–3004, [10.1074/jbc.M116.757369](https://doi.org/10.1074/jbc.M116.757369)
  56. Tishkina AO, Martyanova EK, Logashina YA, **Andreev YA**, Khaibullina SF, Martynova EV, Rizvanov AA, Gulyaeva NV, Grishin EV (2016). Effects of intranasal administration of the peptide antagonist of type I vanilloid receptor (TRPV1) in the rodent central nervous system. *Dokl Biol Sci* 470 (1), 234–236, [10.1134/S0012496616050082](https://doi.org/10.1134/S0012496616050082)
  57. Skobtsova LA, Dyachenko IA, **Andreev YA**, Logashina YA, Murashev AN, Grishin EV (2016). Effect of polypeptides from sea anemone *Heteractis crispa* on the rodent blood pressure, heart rate, and hemostasis. *Dokl Biol Sci* 470 (1), 228–230, [10.1134/S0012496616050069](https://doi.org/10.1134/S0012496616050069)
  58. Osmakov DI, Koshelev SG, **Andreev YA**, Dyachenko IA, Bondarenko DA, Murashev AN, Grishin EV, Kozlov SA (2016). Converged mutagenesis of an inactive peptide to ASIC3 inhibitor for active sites determination. *Toxicon* 116, 11–16, [10.1016/j.toxicon.2015.11.019](https://doi.org/10.1016/j.toxicon.2015.11.019)
  59. Mikov AN, Fedorova IM, Potapieva NN, Maleeva EE, **Andreev YA**, Zaitsev AV, Kim KK, Bocharov EV, Bozin TN, Altukhov DA, Lipkin AV, Kozlov SA, Tikhonov DB, Grishin EV (2015).  $\omega$ -Tbo-IT1-New Inhibitor of Insect Calcium Channels Isolated from Spider Venom. *Sci Rep* 5, 17232, [10.1038/srep17232](https://doi.org/10.1038/srep17232)
  60. Dyachenko IA, **Andreev YA**, Logashina YA, Murashev AN, Grishin EV (2015). Biological activity of a polypeptide modulator of TRPV1 receptor. *Dokl Biol Sci* 465 (1), 279–281, [10.1134/S0012496615060034](https://doi.org/10.1134/S0012496615060034)
  61. Osmakov DI, Koshelev SG, Belozero OA, Kublitski VS, **Andreev YA**, Grishin EV, Kozlov SA (2015). Biological activity of sevanol and its analogues. *Russ. J. Bioorganic Chem.* 41 (5), 543–547, [10.1134/S1068162015050106](https://doi.org/10.1134/S1068162015050106)
  62. Ogurtsova EK, Makarieva TN, Guzii AG, Dmitrenok PS, Denisenko VA, Krasokhin VB, Korolkova YV, **Andreev YA**, Mosharova IV, Grishin EV (2015). Erratum: Inhibitory Activity on TRP Receptors of Pentacyclic Alkaloids from the Fungus *Haliclona* (Gellius) sp (Chemistry of Natural Compounds (2015) 51:1 (194-196)). *CHEM NAT COMPD* 51 (2), 404, [10.1007/s10600-015-1302-z](https://doi.org/10.1007/s10600-015-1302-z)
  63. Ogurtsova EK, Makarieva TN, Korolkova YV, **Andreev YA**, Mosharova IV, Denisenko VA, Dmitrenok PS, Lee YJ, Grishin EV, Stonik VA (2015). New derivatives of natural acyclic guanidine alkaloids with TRPV receptor-regulating properties. *Nat Prod Commun* 10 (7), 1171–1173, [10.1177/1934578x1501000708](https://doi.org/10.1177/1934578x1501000708)
  64. Ogurtsova EK, Makarieva TN, Guzii AG, Dmitrenok PS, Denisenko VA, Krasokhin VB, Korolkova YV, **Andreev YA**, Mosharova IV, Grishin EV (2015). Inhibitory activity on trp receptors of pentacyclic alkaloids from the fungus *Haliclona* (gellius) sp. *CHEM NAT COMPD* 51 (1), 194–196, [10.1007/s10600-015-1243-6](https://doi.org/10.1007/s10600-015-1243-6)
  65. Slavokhotova AA, Rogozhin EA, Musolyamov AK, **Andreev YA**, Oparin PB, Berkut AA, Vassilevski AA, Egorov TA, Grishin EV, Odintsova TI (2014). Novel antifungal  $\alpha$ -hairpinin peptide from *Stellaria media* seeds: Structure, biosynthesis, gene structure and evolution. *Plant Mol Biol* 84 (12), 189–202, [10.1007/s11103-013-0127-z](https://doi.org/10.1007/s11103-013-0127-z)
  66. Slavokhotova AA, Naumann TA, Price NPJ, Rogozhin EA, **Andreev YA**, Vassilevski AA, Odintsova TI (2014). Novel mode of action of plant defense peptides - hevein-like antimicrobial peptides from wheat inhibit fungal

- metalloproteases. *FEBS J* 281 (20), 4754–4764, [10.1111/febs.13015](https://doi.org/10.1111/febs.13015)
67. Osmakov DI, **Andreev YA**, Kozlov SA (2014). Acid-sensing ion channels and their modulators. *Biochemistry (Mosc)* 79 (13), 1528–1545, [10.1134/S0006297914130069](https://doi.org/10.1134/S0006297914130069)
  68. **Andreev YA**, Kozlov SA, Korolkova YV, Dyachenko IA, Bondarenko DA, Skobtsov DI, Murashev AN, Kotova PD, Rogachevskaja OA, Kabanova NV, Kolesnikov SS, Grishin EV (2013). Polypeptide modulators of TRPV1 produce analgesia without hyperthermia. *Mar Drugs* 11 (12), 5100–5115, [10.3390/md11125100](https://doi.org/10.3390/md11125100)
  69. Astafieva AA, Rogozhin EA, **Andreev YA**, Odintsova TI, Kozlov SA, Grishin EV, Egorov TA (2013). A novel cysteine-rich antifungal peptide ToAMP4 from *Taraxacum officinale* Wigg. flowers. *Plant Physiol Biochem* 70, 93–99, [10.1016/j.plaphy.2013.05.022](https://doi.org/10.1016/j.plaphy.2013.05.022)
  70. Osmakov DI, Kozlov SA, **Andreev YA**, Koshelev SG, Sanamyan NP, Sanamyan KE, Dyachenko IA, Bondarenko DA, Murashev AN, Mineev KS, Arseniev AS, Grishin EV (2013). Sea anemone peptide with uncommon  $\beta$ -hairpin structure inhibits acid-sensing ion channel 3 (ASIC3) and reveals analgesic activity. *J Biol Chem* 288 (32), 23116–23127, [10.1074/jbc.M113.485516](https://doi.org/10.1074/jbc.M113.485516)
  71. Utkina LL, **Andreev YA**, Rogozhin EA, Korostyleva TV, Slavokhotova AA, Oparin PB, Vassilevski AA, Grishin EV, Egorov TA, Odintsova TI (2013). Genes encoding 4-Cys antimicrobial peptides in wheat *Triticum kiharae* Dorof. et Migush.: Multimodular structural organization, intraspecific variability, distribution and role in defence. *FEBS J* 280 (15), 3594–3608, [10.1111/febs.12349](https://doi.org/10.1111/febs.12349)
  72. Guzii AG, Makarieva TN, Korolkova YV, **Andreev YA**, Mosharova IV, Tabakmaher KM, Denisenko VA, Dmitrenok PS, Ogurtsova EK, Antonov AS, Lee HS, Grishin EV (2013). Pulchranin A, isolated from the Far-Eastern marine sponge, *Monanchora pulchra*: The first marine non-peptide inhibitor of TRPV-1 channels. *Tetrahedron Lett* 54 (10), 1247–1250, [10.1016/j.tetlet.2012.12.099](https://doi.org/10.1016/j.tetlet.2012.12.099)
  73. Odintsova TI, Korostyleva TV, Utkina LL, **Andreev YA**, Slavokhotova AA, Istomina EA, Pukhalski VA, Egorov TA (2013). Wheat antimicrobial peptides. *Russian Journal of Genetics: Applied Research* 3 (1), 40–46, [10.1134/S2079059713010103](https://doi.org/10.1134/S2079059713010103)
  74. Makarieva TN, Ogurtsova EK, Korolkova YV, **Andreev YA**, Mosharova IV, Tabakmakher KM, Guzii AG, Denisenko VA, Dmitrenok PS, Lee HS, Grishin EV, Stonik VA (2013). Pulchranins B and C, new acyclic guanidine alkaloids from the far-eastern marine sponge *Monanchora pulchra*. *Nat Prod Commun* 8 (9), 1229–1232, [10.1177/1934578x1300800911](https://doi.org/10.1177/1934578x1300800911)
  75. Philyppov IB, Paduraru ON, **Andreev YA**, Grishin EV, Shuba YM (2012). Modulation of TRPV1-dependent contractility of normal and diabetic bladder smooth muscle by analgesic toxins from sea anemone *Heteractis crispa*. *Life Sci* 91 (1920), 912–920, [10.1016/j.lfs.2012.09.001](https://doi.org/10.1016/j.lfs.2012.09.001)
  76. Kozlov SA, Osmakov DI, **Andreev YA**, Koshelev SG, Gladkikh IN, Monastyrnaya MM, Kozlovskaya EP, Grishin EV (2012). A sea anemone polypeptide toxin inhibiting the ASIC3 acid-sensitive channel. *Russ. J. Bioorganic Chem.* 38 (6), 578–583, [10.1134/S1068162012060064](https://doi.org/10.1134/S1068162012060064)
  77. Dubinnyi MA, Osmakov DI, Koshelev SG, Kozlov SA, **Andreev YA**, Zakaryan NA, Dyachenko IA, Bondarenko DA, Arseniev AS, Grishin EV (2012). Lignan from thyme possesses inhibitory effect on ASIC3 channel current. *J Biol Chem* 287 (39), 32993–33000, [10.1074/jbc.M112.366427](https://doi.org/10.1074/jbc.M112.366427)
  78. Gladkikh I, Monastyrnaya M, Leychenko E, Zelepuga E, Chausova V, Isaeva M, Anastyuk S, **Andreev Y**, Peigneur S, Tytgat J, Kozlovskaya E (2012). Atypical reactive center Kunitz-type inhibitor from the sea anemone *Heteractis crispa*. *Mar Drugs* 10 (7), 1545–1565, [10.3390/md10071545](https://doi.org/10.3390/md10071545)
  79. **Andreev YA**, Korostyleva TV, Slavokhotova AA, Rogozhin EA, Utkina LL, Vassilevski AA, Grishin EV, Egorov TA, Odintsova TI (2012). Genes encoding hevein-like defense peptides in wheat: Distribution, evolution, and role in stress response. *Biochimie* 94 (4), 1009–1016, [10.1016/j.biochi.2011.12.023](https://doi.org/10.1016/j.biochi.2011.12.023)
  80. **Andreev YA**, Vassilevski AA, Kozlov SA (2012). Molecules to selectively target receptors for treatment of pain and neurogenic inflammation. *Recent Pat Inflamm Allergy Drug Discov* 6 (1), 35–45, [10.2174/187221312798889266](https://doi.org/10.2174/187221312798889266)
  81. Slavokhotova AA, Odintsova TI, Rogozhin EA, Musolyamov AK, **Andreev YA**, Grishin EV, Egorov TA (2011). Isolation, molecular cloning and antimicrobial activity of novel defensins from common chickweed (*Stellaria media* L.) seeds. *Biochimie* 93 (3), 450–456, [10.1016/j.biochi.2010.10.019](https://doi.org/10.1016/j.biochi.2010.10.019)
  82. **Andreev YA**, Kozlov SA, Vassilevski AA, Grishin EV (2010). Cyanogen bromide cleavage of proteins in salt and buffer solutions. *Anal Biochem* 407 (1), 144–146, [10.1016/j.ab.2010.07.023](https://doi.org/10.1016/j.ab.2010.07.023)
  83. Kozlov SA, **Andreev YA**, Murashev AN, Skobtsov DI, DYachenko IA, Grishin EV (2009). New polypeptide

- components from the *Heteractis crispa* sea anemone with analgesic activity. *Russ. J. Bioorganic Chem.* 35 (6), 711–719, [10.1134/S1068162009060065](https://doi.org/10.1134/S1068162009060065)
84. **Andreev YA**, Kozlov SA, Kozlovskaya EP, Grishin EV (2009). Analgesic effect of a polypeptide inhibitor of the TRPV1 receptor in noxious heat pain models. *Dokl Biochem Biophys* 424 (1), 46–48, [10.1134/S160767290901013X](https://doi.org/10.1134/S160767290901013X)
85. **Andreev YA**, Kozlov SA, Koshelev SG, Ivanova EA, Monastyrnaya MM, Kozlovskaya EP, Grishin EV (2008). Analgesic compound from sea anemone *Heteractis crispa* is the first polypeptide inhibitor of vanilloid receptor 1 (TRPV1). *J Biol Chem* 283 (35), 23914–23921, [10.1074/jbc.M800776200](https://doi.org/10.1074/jbc.M800776200)
86. Shlyapnikov YM, **Andreev YA**, Kozlov SA, Vassilevski AA, Grishin EV (2008). Bacterial production of Iatarcin 2a, a potent antimicrobial peptide from spider venom. *Protein Expr Purif* 60 (1), 89–95, [10.1016/j.pep.2008.03.011](https://doi.org/10.1016/j.pep.2008.03.011)
87. Kalinina EV, Chernov NN, Saprin AN, Kotova YN, **Andreev YA**, Solomka VS, Scherbak NP (2006). Changes in expression of genes encoding antioxidant enzymes, heme oxygenase-1, Bcl-2, and Bcl-xl and in level of reactive oxygen species in tumor cells resistant to doxorubicin. *Biochemistry (Mosc)* 71 (11), 1200–1206, [10.1134/S0006297906110058](https://doi.org/10.1134/S0006297906110058)
88. **Andreev YA**, Danilevich VN, Grishin EV (2005). Alternative splicing of pre-mRNA encoding the *Musca domestica* latrophilin-like protein: Primary structures of four spliced forms of mRNA and their protein products. *Bioorg Khim* 31 (2), 175–185.
89. **Andreev YA**, Danilevich VN, Grishin EV (2005). Alternative splicing of pre-mRNA encoding the *Musca domestica* latrophilin-like protein: Primary structures of four spliced forms of mRNA and their protein products. *Russ. J. Bioorganic Chem.* 31 (2), 160–169, [10.1007/s11171-005-0022-8](https://doi.org/10.1007/s11171-005-0022-8)