PROF. ALEXANDR ALEXEYEVICH SPASOV	M. SC. MEDICINE (VOLGOGRAD STATE MEDICAL INSITUTE, VOLGOGRAD, RUSSIA), PH.D. IN PHARMACOLOGY (VOLGOGRAD STATE MEDICAL INSTITUTE, VOLGOGRAD, RUSSIA), DR. SCI. MED. IN PHARMACOLOGY (VOLGOGRAD STATE MEDICAL INSTITUTE, VOLGOGRAD, RUSSIA)

1. CURRICULUM VITAE

NAME: ALEXANDER ALEXEEVICH SPASOV

BORN: SEPTEMBER 23, 1945, BAKU, REPUBLIC OF AZERBAIJAN

CITIZENSHIP / NATIONALITY: RUSSIAN FEDERATION / RUSSIAN

PLACE OF WORK:

STATE-FUNDED EDUCATIONAL ESTABLISHMENT OF HIGER PROFESSIONAL EDUCATION UNDER THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION, VOLGOGRAD STATE MEDICAL UNIVERSITY, 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIA

CURRENT POSITIONS:

ACADEMICIAN OF THE RUSSIAN ACADEMY OF SCIENCES, RECTOR'S ADVISOR OF THE VOLGOGRAD STATE MEDICAL UNIVERSITY, HEAD OF PHARMACOLOGY DEPARTMENT, DOCTOR OF MEDICAL SCIENCES, PROFESSOR

WEB LINKS:
Russian Science Citation Index Author ID: 79154
Scopus Author ID: 7005209788
ORCID: 0000-0002-7185-4826
E-MAIL: ASPASOV@MAIL.RU

HOME ADDRESS:

6, Kommunisticheskaya St., Volgograd, 400130, Russia

Tel: +79023612930 (H/P in Russia)

EDUCATION		**ADDRESS AND CURRENT NAME OF THE UNIVERSITY**
6/1970	**Degree in Medicine**, Faculty of General Medicine, General Physician, Volgograd Medical Institute, (Russia), Volgograd (Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*)	Volgograd State Medical Institute 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION
1975	Postgraduate Study (PhD), **Ph.D. degree in Medicine** (*candidate of medical sciences* – name of the academic degree as used in Russia), «Biochemical aspects of selected vasoactive substances» (Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*)	Volgograd State Medical Institute 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION
1984	Dr.Sci. Med. Degree in Pharmacology (*doctor of medical sciences* – name of the academic degree as used in Russia) «Imidazo(1,2-α) benzimidazoles, a new class of cardiotropic medications» (Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*)	Volgograd State Medical Institute 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION
12/2011	Full member of the Russian Academy of Medical Sciences	
2013	Academician of the Russian Academy of Sciences	

PROFESSIONAL BACKGROUND	**ADDRESS**

12/1980	Senior Research Fellow (Biochemistry), Volgograd Medical Institute, (Russia), Volgograd (Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*)	Volgograd State Medical Institute 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION
07/1985	Associate professor, Department of Pharmacology, Volgograd Medical Institute, (Russia), Volgograd (Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*)	Volgograd State Medical Institute 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION
05/87	Professor, Department of Pharmacology, Volgograd Medical Institute, (Russia), Volgograd (Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*)	Volgograd State Medical Institute 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION

RESEARCH INTERESTS

Neuropsychopharmacology (*neurobiological basis of medicine that affects the psychological/mental/cognitive/neurological behavior of the brain*)

Drug toxicology

Magnesium research (*pathological conditions associated with magnesium deficiency*)

Stereopharmacology (*the importance of chirality in drug action*)

Experimental pharmacology *(the study of condensed benzimidazole derivatives as useful molecules for new drugs; the direct search and study of the pharmacological effects of novel biologically active natural substances and their synthetical derivatives (purines, pyrimidines, benzimidazoles, neuroactive amino acids, magnesium salts, etc.)*

Preclinical studies of kappa-opioid receptor agonist activity on the imidazo benzimidazole derivative

The direct search, design and study of the pharmacological effects of substances that are considered a potential treatment for metabolic disorders which can occur in a wide variety of general medical conditions

The direct search and study of novel antiplatelet agents for the thrombosis prevention

The direct search and study of novel glucokinase activators for the treatment of streptozotocin+nicotinamide induced diabetes mellitus

The direct search and study of novel inhibitors and breakers of Advanced Glycation Endproducts (AGEs) for the prevention of long-term complications in diabetes mellitus

AWARDS

02/2011	**The Russian Federation Government Prize 2010** for Achievements in Science and Technology for "The Research and Industrial Development of Know-How Biocatalysis Technology of L-Aspartic Acid and Innovative Medical Products on the Basis of its Salts", The Government of Russian Federation, Moscow, Executive order No. 285-r of February 25, 2011, "On Awarding Government Prizes for Achievements in Science and Technology in 2010".	**The Government of Russian Federation**, Moscow, Russian Federation
9/10/2012	**The Volgograd Region Government Prize 2012** for Achievements in Science and Technology in nomination "The development and application of new teaching methods in education, publication of high-quality books and	**Administration of the Volgograd Region**, Volgograd, Russian Federation

	implementation of new teaching aids": 1st Prize for Monograph "PHARMACOLOGY OF DRUG STEREOISOMERS" (Eds.: A.A. Spasov, A.A. Ozerov, I.N. Iezhitsa and P.M. Vasiliev). Executive order of the Head of Administration of the Volgograd region № 1091 of November 9, 2012.	
14/08/2013	**The Russian Federation Presidential Certificate of Honour** for many years of dedicated service and significant contributions to supporting social activities	**The Government of the Russian Federation**, Moscow, Russian Federation

MEMBERSHIPS

Russian Pharmacology Society	Board Member
Dissertation Committee of the Volgograd State Medical University	Deputy chairman
RUSSIAN ACADEMY OF SCIENCES	(full membership from 2013 till present)
ACADEMIC JOURNALS:	Member of the Editorial Board
«Clinical and Experimental Pharmacology»	
«Bulletin of the Volgograd State Medical University »	
«Volgograd Science and Medicine Journal»	
«Bioethics»	

RESEARCH PROJECTS (COMPLETED AND ON-GOING) OVER THE PERIOD OF THE LAST 5 YEARS

TITLE	SOURCE	TOTAL FUNDS	ROLE (PRINCIPLE/CO-RESEARCHER)	YEARS, DURATION
RUSSIAN FEDERATION				
1. The study of reproductive function in male rats with experimentally-induced Mg deficiency	Government Contract of the Russian Federation	*300 000.00 Russian Roubles*	Project leader	2014 – completed
2. The study of the pharmacological effects of novel biphenyl derivatives	Government Contract of the Russian Federation	*900 000.00 Russian Roubles*	Project leader	2014 – completed
3. The study of Mg deficiency in pathogenesis of cardiovascular disease and methods of its correction	The Russian Federation President's PhD Scholarship	*900 000.00 Russian Roubles*	Project leader	2014 – completed
4. Developing a system of target-oriented discovery of biologically active compounds that affect the pathogenetically important links of carbohydrate metabolism disorder in type 2 diabetes mellitus, using the technology of in silico modeling and medicinal chemistry	Russian Science Foundation	*52 805 000.00 Russian Roubles*	Project leader	2014-2017 completed

	(Volgograd State Medical University, Russian Federation).				
5.	Preclinical studies of an antithrombotic drug with a combined mechanism of action-the P2Y12 receptor antagonist and the thromboxane A2 synthesis inhibitor, based on the 9-dihydro-phenacyl-dihydroimidazobenzimidazole derivative	Government Contract of the Russian Federation	*44 000 000.00 Russian Roubles*	Project leader	2017 – 2019 completed
6.	Preclinical studies of an anti-migraine drug that improves cerebral blood flow with a 5-HT2 antagonistic effect, a derivative of 2-methoxyphenyl-imidazobenzimidazole	Government Contract of the Russian Federation	*44 000 000.00 Russian Roubles*	Project leader	2017 – 2019 completed
7.	Preclinical studies of a drug acting on collagen glycation end products (AGE) and their receptors (RAGE) for the prevention and treatment of diabetes mellutis complications	Government Contract of the Russian Federation	*21200000 Russian Roubles*	Project leader	2017-2018 completed
8.	Development of systemic multifunctional multi-target glycation end-product receptor inhibitors for the treatment of pathia in diabetes mellitus and Alzheimer's disease	Government Contract of the Russian Federation -RFFI	*2100000 Russian Roubles*		2018-2020-on going
9.	Search and study of the pharmacological activity of new modified natural biologically active substances and their synthetic derivatives (purines, pyrimidines, benzimidazoles, neuroactive amino acids, magnesium salts, etc.)	Government Contract of the Russian Federation № government registration AAAA-A18-118100690002-6	Initiative	Project leader	2018-2028 – on going
10.	Medical chemistry in the creation of new generation drugs for the treatment of socially significant diseases	Government Contract of the Russian Federation -RFFI	*30 000 000 Russian Roubles*	Project leader	2020-2022 - on going
11.	Search for agents that break the crosslinks of glycated proteins, antiglycating and deglycating agents, RAGE blockers as potential agents for reducing extracellular matrix rigidity and associated pathological effects	Company of “Liga dolgozhiteli»	*10 900 000 Russian Roubles*	Project leader	2021-2023 on going

POSTGRADUATE SUPERVISION (INCLUDES CO-SUPERVISION)

STUDENT (NAME AND MATRIC NO.)	TITLE	LEVEL OF STUDY, COURSE CODE	SUPERVISORY STATUS (MAIN/CO-SUPERVISOR)	PROJECT STATUS (*COMPLETED, *ON-GOING)
1. Poroshin A.V.	Hypomagnesemia in pathogenesis of pain and psychovegetative disorders in patients with primary fibromyalgia	PhD dissertation	Scientific advisor	
2. Dudchenko G.P.	«The direct search and study of compounds showing anti-diabetic activity among new benzimidazole derivatives»	PhD dissertation	Scientific advisor	Leningrad – 1989, completed
3. Leschankina N.Yu.	The study of antiarrhythmic effects of ritmidazole	PhD dissertation	Scientific advisor	Kazan – 1996 completed
4. Chobanu N.T.	Pharmaceutical technology and biopharmaceutical study of mucoadhesive fenibut tablets	PhD dissertation	Scientific advisor	Kishinev – 1995 completed
5. Galenko-Yaroshevsky A.P.	«Imidazo [1,2-*a*] benzimidazole derivatives: a new class of local anaesthetics»	Doctoral dissertation	Scientific advisor	Krasnodar – 2009, completed
6. Khropova T.N.	The effects of imidazo benzimidazole derivatives with anioxidant and hemorheological activity on skin regeneration in reduced blood supply	PhD dissertation	Scientific advisor	Krasnodar – 2004 completed
7. Tegai A.V.	Skin protective properties of 2,3-dehydro imidazo[1,2-α] benzimidazole derivatives with hypoglycemic activity in reduced blood flow	PhD dissertation	Scientific advisor	Krasnodar – 2004 completed
8. Prikhodko A.K.	Local anaesthetic effects of 1- and 9- diethylaminoethyl -2-aril imidazo [1,2-α]benzimidazoles	PhD dissertation	Scientific advisor	Krasnodar – 2005 completed
9. Kuleshova S.A.	The effects of verapamil, foridon and ritmidazole on blood supply and parameters of ischemic brain metabolism	PhD dissertation	Scientific advisor	Pyatigorsk – 1993 completed
10. Solovieva N.V.	Comparison of pharmacological and toxicological activity of K, Mg aspartate stereoisomers	PhD dissertation	Scientific advisor	Pyatigorsk – 2004 completed
11. Speranskaya A.S.	Pharmacodynamic and pharmacokinetic properties of the N9- imidazo [1,2-α]benzimidazole derivative that exhibits antiulcer activity	PhD dissertation	Scientific advisor	Pyatigorsk – 2004 completed
12. Motov A.A.	An experimental study of pharmacological properties of hydrophilic bischofite-based ointments	PhD dissertation	Scientific advisor	Pyatigorsk – 2006 completed
13. Stukovina A. Yu.	The direct search and study of purine receptor antagonists for inhibition of platelet aggregation among condensed benzimidazole derivatives	PhD dissertation	Scientific advisor	Pyatigorsk – 2006 completed
14. Orlova A.A.	The study of pharmacological	PhD	Scientific advisor	Pyatigorsk – 2007

	activity of antioxidants and antiradicals, such as hindered phenols, a class of benzimidazole derivatives	dissertation		completed
15. Agarkov D.Yu.	The study of anti-diabetic activity of a multicomponent dietary supplement that includes Gymnema sylvestre extract	PhD dissertation	Scientific advisor	Pyatigorsk – 2008 completed
16. Goryagin I.I.	The search and study of compounds with anti-serotonin 5-HT2 activity among condensed imidazole derivatives	PhD dissertation	Scientific advisor	Pyatigorsk – 2008 completed
17. Kravchenko M.S.	Pharmacological activity of Mg salts of organic acids	PhD dissertation	Scientific advisor	Pyatigorsk – 2008 completed
18. Gretskaya I.B.	The direct search and study of novel antiarrhythmic compounds among nitrogen-containing heterocyclic derivatives	PhD dissertation	Scientific advisor	Rostov – 1987, completed
19. Panchenko T.I.	Antiarrhythmic effects of novel condensed benzimidazole derivatives exhibiting antioxidant activity	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 1990 completed
20. Ponomarev V.V.	Local anaesthetic effects of imidazo[1,2-*a*]benzimidazole derivatives	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 1998 completed
21. Avakimyan A.A.	Local anaesthetic effects of b - amino - g –hydroxybutanoic acid derivatives	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 1999 completed
22. Dmitrenko G.D.	Local anaesthetic effects of 2-tert-butyl imidazole benzimidazole salts	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 1999 completed
23. Rybakov B.V.	Local anaesthetic effects of condensed tricyclic benzimidazole systems	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 1999 completed
24. Erokhina L.V.	Local anaesthetic effects of 1,2-disubstituted imidazo [1,2-a] benzimidazole	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 2000 completed
25. Vasilieva S.V.	Local anaesthetic effects of N-amino methyl substituted 2-aril imidazo[1,2- a] benzimidazole	PhD dissertation	Scientific advisor	Rostov-on-the-Don – 2000 completed
26. Semakova S.A.	Pharmaceutical technology and biopharmaceutical study of efcobut and mefebut tablets	PhD dissertation	Scientific advisor	St. Petersburg – 1992 completed
27. Martynova L.A.	The use of polycatan in comprehensive treatment of acute and chronic nasal mucosa and paranasal sinus diseases	PhD dissertation	Scientific advisor	St. Petersburg – 1998 completed
28. Lobzov M.S.	The effectivenss of the combined use of electrostimulation and policatan in comprehensive treatment of sensorineural hearing loss	PhD dissertation	Scientific advisor	St. Petersburg – 1998 completed
29. Timofeeva A.S.	Pharmacological properties of cyclic guanidine derivatives of Na^+/H^+ exchange inhibitors	PhD dissertation	Scientific advisor	Volgograd – 2015 completed
30. Chernov A.V.	Antiarrhythmic effects of novel pyrazolo-(1,5-a)-benzimidazoles	PhD dissertation	Scientific advisor	Volgograd – 1990 completed
31. Bakumov P.A.	The direct search and study of antiulcer compounds among novel condensed benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 1991 completed

32. Tsybanev A.V.	The search for compounds boosting recovery and performance after exercising among imidazo (1,2- a) benzimidazoles exhibiting anti-oxidant activity	PhD dissertation	Scientific advisor	Volgograd – 1991 completed
33. Pankov N.B.	Comparative study of toxicity of vasoactive substances, a new class of GABA derivatives, in intact and hypertensive rats	PhD dissertation	Scientific advisor	Volgograd – 1992 completed
34. Likhodeeva V.A.	The effects of novel GABA analogues on recovery and performance	PhD dissertation	Scientific advisor	Volgograd – 1993 completed
35. Seredintseva N.V.	The search and study of novel hypotensive drugs among azacrown ether derivatives	PhD dissertation	Scientific advisor	Volgograd – 1993 completed
36. Shipov A.A.	Hepatoprotective properties of new condensed derivatives of benzimidazoles exhibiting anti-oxidant activity	PhD dissertation	Scientific advisor	Volgograd – 1994 completed
37. Kosolapov V.A.	Protective properties of anti-oxidant substances during and after hypoxia	PhD dissertation	Scientific advisor	Volgograd – 1995 completed
38. Sibiryakova T.B.	Pharmacological properties of novel calmodulin inhibitors, a new class of benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 1995 completed
39. Smirnova L.A.	Pharmacodynamic and pharmacokinetic properties of bischofite mineral	PhD dissertation	Scientific advisor	Volgograd – 1995 completed
40. Turchaeva A.F.	The search and study ofantiplatelet compounds among novel condensed benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 1995 completed
41. Kirillov O.V.	Comparison of clinical and electrophysiological effects of ritmidazole, nocainamide, cordarone and verapamil for the treatment of supraventricular tachyarrhythmia	PhD dissertation	Scientific advisor	Volgograd – 1996 completed
42. Gavrilova E.S.	Pharmacotoxicity of diabenol, a novel hypoglycemic drug	PhD dissertation	Scientific advisor	Volgograd – 1997 completed
43. Ivakhnenko I.V.	The direct search and study of anti-platelet agents among novel heterocyclic compounds exhibiting anti-oxidant activity	PhD dissertation	Scientific advisor	Volgograd – 1997 completed
44. Shabasheva I.G.	Antiarrhythmic effects and pharmacokintetics of ritmidazole	PhD dissertation	Scientific advisor	Volgograd – 1997 completed
45. Kuame Konan	Intravenous blood irradiation therapy of chronic diffuse liver disease	PhD dissertation	Scientific advisor	Volgograd – 1998 completed
46. Gurova N.A.	Pharmacological effects of midazbenzimidazole derivative, a new antiarrhythmic compound	PhD dissertation	Scientific advisor	Volgograd – 1998 completed
47. Iezhitsa I.N.	Psycho- and neurotoxic effects of single-dose versus multiple-dose actoprotectors	PhD dissertation	Scientific advisor	Volgograd – 1998 completed
48. Mozgovoy P.V.	Improvement of reconstruction outcomes for chronically occluded arteries of the lower limbs	PhD dissertation	Scientific advisor	Volgograd – 1998 completed
49. Khamidova T.V.	The effects of novel nootropic agents and actoprotectors on the	PhD dissertation	Scientific advisor	Volgograd – 1999 completed

	reproductive function (an experimental study)			
50. Bogus S.K.	Local anaesthetic effects of 1- and 9-substituted 2-tert –butyl imidazo [1,2- a]benzimidazole	PhD dissertation	Scientific advisor	Volgograd – 2000 completed
51. Chernikov M.V.	The direct search and study of compounds with potent antihistamine activity among condensed benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 2000 completed
52. Frolov D.V.	Prognosis of early reocclusion in patients with obliterating arterial disease of the lower limbs	PhD dissertation	Scientific advisor	Volgograd – 2000 completed
53. Mironova I.A.	Assessment, prognosis and correction of foreign students' learning and institutional outcomes in Russia	PhD dissertation	Scientific advisor	Volgograd – 2000 completed
54. Tregubova I.A.	The effects of antioxidant compounds on maternal and fetal hypoxia (an experimental study)	PhD dissertation	Scientific advisor	Volgograd – 2000 completed
55. Degtyarev A.N.	Mechanism of action and anti-platelet effects of new benzimidazole derivatives on the rheology of blood	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
56. Guba T.I.	Professionalization of bilingual medical students	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
57. Kuzubova E.A.	Gonadotropic effects of new actoprotectors	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
58. Salaznikova O.A.	The effects of hypoglycemic agents on hemostasis and the rheology of blood	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
59. Schava S.N.	Clinical and experimental rationale for the use of bischofite mineral in comprehensive treatment of skin inflammation	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
60. Sidorov D.N.	Laser blood irradiation in the prevention of early reocclusion following terminal aortic and lower extremity arterial reconstruction	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
61. Stepanov A.V.	Pharmacokinetic characteristics of imidazo benzimidazole derivatives exhibiting antiarrhythmic activity	PhD dissertation	Scientific advisor	Volgograd – 2001 completed
62. Kiabia S.T.	The direct search and study of 3 subtype serotonin receptor antagonists among condensed benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 2003 completed
63. Samokhina M.P.	Hemorheological properties of condensed imidazo benzimidazole derivatives exhibiting antioxidant effects	PhD dissertation	Scientific advisor	Volgograd – 2003 completed
64. Arkova N.V.	The direct search and study of compounds that affect rheological properties of blood among new benzimidazole	PhD dissertation	Scientific advisor	Volgograd – 2004 completed
65. Denisova T.D.	The effects of actoprotectors on the development of offspring postnatally	PhD dissertation	Scientific advisor	Volgograd – 2004 completed
66. Lebedeva S.A.	Pharmacological study of Mg-containing bischofite mineral supplemented with iron, zinc and copper salts	PhD dissertation	Scientific advisor	Volgograd – 2004 completed

67. Naumenko L.V.	The search and study of xanthine derivatives exhibiting hemorheological effects	PhD dissertation	Scientific advisor	Volgograd – 2006 completed
68. Frolov M.V.	Prevention of late reocclusion in patients with obliterating atherosclerotic vascular disease of the lower extremities	PhD dissertation	Scientific advisor	Volgograd – 2007 completed
69. Yakovlev D.S.	The search and study of 5-HT3-serotonin receptor antagonists among condensed and non-condensed benzimidazole and benzimidazoline derivatives	PhD dissertation	Scientific advisor	Volgograd – 2007 completed
70. Kharitonova M.V.	Pharmacological activity of inorganic Mg salts	PhD dissertation	Scientific advisor	Volgograd – 2008 completed
71. Sorokina E.V.	Anti-diabetic activity of Gymnema sylvestre dry extract	PhD dissertation	Scientific advisor	Volgograd – 2008 completed
72. Iezhitsa I.N.	The design of magnesium – containing drugs based on bischofite mineral	Doctoral dissertation	Scientific advisor	Volgograd – 2008, completed
73. Abakumov T.A.	The effectiveness of policatan in the treatment of periodontal disease	PhD dissertation	Scientific advisor	Volgograd – 2009 completed
74. Vasiliev P.M.	A computer-based approach to identify highly potent chemical compounds	Doctoral dissertation	Scientific advisor	Volgograd – 2009, completed
75. Voronkova M.P.	Anti-diabetic effects of gymnemic acids	Doctoral dissertation	Scientific advisor	Volgograd – 2009, completed
76. Eliseeva N.V.	The search and study of new kappa-opioid receptor agonists among benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 2010 completed
77. Kuznetsova V.A.	The search and study of compounds with hemorheological activity among new methylxanthine derivatives	PhD dissertation	Scientific advisor	Volgograd – 2010 completed
78. Tibirkova E.V.	The direct search and study of antioxidants among noncondensed benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 2010 completed
79. Likhodeeva V.A.	The use of drugs boosting performance in maladaptive athletes in response to exercise	Doctoral dissertation	Scientific advisor	Volgograd – 2011, completed
80. Cheplyaeva N.I.	Pharmacological properties of the combined use of diabenol, a hypoglycemic agent, and alpha lipoic acid	PhD dissertation	Scientific advisor	Volgograd – 2012 completed
81. Chepurnova M.V.	The study of the pharmacological properties of combined hypoglycemic compounds using diabenol	PhD dissertation	Scientific advisor	Volgograd – 2012 completed
82. Kolobrodova N.A.	The direct search and study of new 5-HT3 receptor blockers among indole derivatives and benzimidazole	PhD dissertation	Scientific advisor	Volgograd – 2012 completed
83. Zheltova A.A.	Pharmacological treatment of endothelial dysfunction and myocardial ischemia in experimentally-induced Mg deficiency	PhD dissertation	Scientific advisor	Volgograd – 2012 completed
84. Kucheryavenko A.F.	Condensed benzimidazole derivatives: a new class of antiplatelet agents	Doctoral dissertation	Scientific advisor	Volgograd – 2012, completed

85. Bukatin M.V.	The effects of benzimidazole derivatives on the reproductive system of male rats	PhD dissertation	Scientific advisor	Volgograd – 2013 completed
86. Bukatina T.M.	The search and study of purine receptor antagonists among condensed indole derivatives	PhD dissertation	Scientific advisor	Volgograd – 2014 completed
87. Maltsev D.V.	The study of 5-HT2A – antagonists, a class of benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd – 2014 completed
88. Raschenko A.I.	Pharmacokinetic characteristics of a novel analgesic, a benzimidazole derivative	PhD dissertation	Scientific advisor	Volgograd – 2014 completed
89. Shtareva D.M.	Analgesic effects of a condensed benzimidazole derivative	PhD dissertation	Scientific advisor	Volgograd – 2014 completed
90. Ostrovsky O.V.	Pharmacological correction of stress and neurochemical aspects of anti-stress effects	PhD dissertation	Scientific advisor	Volgograd –1987, completed
91. Ostrovsky O.V.	Pharmacological study of condensed benzimidazole derivatives for antioxidant activity	Doctoral dissertation	Scientific advisor	Volgograd – 1996, completed
92. Bugaeva L.I.	Toxicity of novel psychotropic actoprotectors and nootropics	Doctoral dissertation	Scientific advisor	Volgograd – 2001, completed
93. Dudchenko G.P.	Anti-diabetic activity of benzimidazole derivatives	Doctoral dissertation	Scientific advisor	Volgograd – 2001, completed
94. Ponomarev V.V.	The direct search and study of novel benzimidazole and imidazo [1,2-*a*] benzimidazole derivatives showing potent local anaesthetic activity	Doctoral dissertation	Scientific advisor	Volgograd – 2001, completed
95. Smirnova L.A.	Pharmacokinetics of benzimidazole derivatives: a basis for design and development of novel drugs and optimal drug therapy strategies	Doctoral dissertation	Scientific advisor	Volgograd – 2004, completed
96. Kosolapov V.A.	Antioxidants: selection strategy and potential use	Doctoral dissertation	Scientific advisor	Volgograd – 2005, completed
97. Chernikov M.V.	Benzimidazole derivatives are biologically active substance receptor modulators	Doctoral dissertation	Scientific advisor	Volgograd – 2008, completed
98. Grechko O.Yu.	Condensed benzimidazoles: a new class of kappa-opioid receptor agonist	Doctoral dissertation	Scientific advisor	Volgograd – 2012, completed
99. Naumenko L.V.	Pharmacological correctors of hemorheological and microcirculatory disorders: ways of improving the search and study of the mechanism of action	Doctoral dissertation	Scientific advisor	Volgograd – 2012, completed
100. Gurova N.A.	Benzimidazole derivatives: a new class of cardioprotective drugs	Doctoral dissertation	Scientific advisor	Volgograd – 2015, completed
101. Litvinov R.A.	Pharmacotoxicological properties of a new kappa-opioid agonist - a benzimidazole derivative	PhD dissertation	Scientific advisor	Volgograd – 2016, completed
102. Muravyova V.Yu.	Cerebroprotective properties of new derivatives of cyclic guanidines of Na^+/H^+ inhibitors	PhD dissertation	Scientific advisor	Volgograd – 2016, completed
103. Yakovlev D.S.	Condensed azoles - a new class of ligands of serotonin receptors	Doctoral dissertation	Scientific advisor	Volgograd – 2016, completed

104.Ziganshin B.A.	Comparative pharmacological characteristics of P2-receptor-mediated responses of human blood vessels	PhD dissertation	Scientific advisor	Volgograd – 2016, completed
105.Lenskaya K.V.	Cyclic guanidines - a new class of hypoglycemic agents	Doctoral dissertation	Scientific advisor	Volgograd–2018, completed
106.Brigadirova A.A.	Pharmacological properties of novel biphenyl derivatives	PhD dissertation	Scientific advisor	Volgograd–2018, completed
107.Taran A.S.	Neuropsychotropic effects of novel diazepino[1,2-a]benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd–2018, completed
108.Sirotenko V.S.	Antihtromogenic properties of new tricyclic diazepino(1,2-a) benzimidazole derivatives	PhD dissertation	Scientific advisor	Volgograd–2018, completed
109.Kalitin K.Yu	Antiepieptic activity of new deivatives of parahalogen of benzimidazoles	PhD dissertation	Scientific advisor	Volgograd–2019, completed
110.Agatsarskaya I.V.	Pharmacological properties of 9-dimetil-2-(4-methoxyphenyl imidazo-(1,2-a)benzimidazole preclinical study of specific	PhD dissertation	Scientific advisor	Volgograd–2019, completed
111.Miroshnikov M.V.	Anxiolytic activity of new derivatives of diazepino-[1,2-α]-benzimidazole	PhD dissertation	Scientific advisor	Volgograd–2020, completed
112.Zakharyashcheva O. Y	Pharmacological properties of glucokinase activators - some derivatives of nitrogen-containing heterocyclic compounds	PhD dissertation	Scientific advisor	Volgograd–2020, completed
113.Gaidukova K. A.	Antithrombogenic activity of new benzimidazole derivatives having a shielded phenol substituent in the structure	PhD dissertation	Scientific advisor	Volgograd–2020, completed
114.Sultanova K.T.	Pharmacological and toxicological properties of a new migraine treatment	PhD dissertation	Scientific advisor	Volgograd–2021, completed
115.KlochkovVG	Pharmacological properties of new derivatives of 2-oxindole	PhD dissertation	Scientific advisor	Volgograd–2022, completed

2. LIST OF PUBLICATIONS

FULL-TEXT ARTICLES IN REVIEWED JOURNALS (MEDLINE, SCOPUS, ISI WEB OF KNOWLEDGE)

SCOPUS *h*-index: 28

1. Iezhitsa I.N., **Spasov A.A.,** Kharitonova M.V., Kravchenko M.S. The effects of magnesium chloride on psychomotor activity, emotional status, and acute behavioural responses to clonidine, d-amphetamine, arecoline, nicotine, apomorphine, and L-5-hydroxytryptophan. *Nutritional Neuroscience* 2011 Jan;14(1):10-24.

2. **Spasov A.A**., Kuzubova E.A., Bugaeva L.I., Rebrova D.N. The effects of benzimidazole derivative with hypoglycemic activity on the reproduction in females rats. Eksp Klin Farmakol. 2010 Oct;73(10):31-3. [In Russian].

3. **Spasov A.A.,** Iezhitsa I.N., Kharitonova M.V., Kravchenko M.S. The effects of magnesium salts on the course of experimental calcium-oxalate urolithiasis. *Urologiia* 2011 Mar-Apr;(2):23-29.

4. **Spasov A.A**., Grechko O.Yu., Anisimova V.A. Model of platelet activation as experimental test system for screening kappa-opioid receptor ligands. [Eksp Klin Farmakol]. 2011;74(8):45-7. Russian.

5. **Spasov A.A.,** Ozerov A.A., Iezhitsa I.N., Kharitonova M.V., Kravchenko M.S., Zheltova A.A. Correction of furosemide-induced magnesium deficiency with different stereoisomers of organic magnesium salts: a comparative study. *Bulletin of experimental biology and medicine* 2011 Jul;151(3):333-335. [A translation of *Biulleten' eksperimental'noĭ biologii i meditsiny* 2011 Jul;151(3):308-310]

6. **Spasov A.A**., Kosolapov V.A., Chepliaeva N.I. Comparative characteristics of antioxidant properties of hypoglycemic agents, such as diabenol and gliclazide. [Eksp Klin Farmakol.] 2011;74(11):14-6. [In Russian].

7. Anisimova V.A., Tolpygin I.E., **Spasov A.A**., Serdiuk T.S., Sukhov A.G. The study of imidazo[1,2-a]benzimidazole derivatives. XXX. Synthesis and properties of (imidazo[1,2-a]benzimidazolyl-2)acetic acid derivatives]. Bioorg Khim. 2011 Nov-Dec;37(6):836-43. [In Russian].

8. Agarwal R., Iezhitsa I., Agarwal P., **Spasov A.** Magnesium deficiency: Does it have a role in cataractogenesis? *Experimental Eye Research* 2012 Aug;101:82-89. doi: 10.1016/j.exer.2012.05.008. Epub 2012 Jun 2.

9. Tregubova I.A., Kosolapov V.A., **Spasov A.A.** Antioxidants: current situation and perspectives. Usp Fiziol Nauk. 2012 Jan-Mar;43(1):75-94. Review. [In Russian].

10. **Spasov A.A.,** Kharitonova M.V., Iezhitsa I.N., Zheltova A.A., Tyurenkov I.N., Gurova N.A. Functional reserves of the heart in alimentary magnesium deficiency. *Kardiologiia. 2012;52(10):39-44*. Bull Exp Biol Med. 2012 May;153(1):54-6.

11. Bugaeva L.I., Denisova T.D., **Spasov A.A.** The effects of ladasten on antenatal and postnatal development. Eksp Klin Farmakol. 2012;75(4):23-5. [In Russian].

12. Zinoveva V.N., **Spasov A.A.** Mechanism of action of plant polyphenols exhibiting anti-cancer effects. I. Blockade of carcinogenesis initiation]. Biomed Khim. 2012 Mar-Apr;58(2):160-75. Review. [In Russian].

13. Kheyfets I.A., **Spasov A.A**., Voronkova M.P., Dugina J.L., Epstein O.I. The study of hypoglycemic activity of Subetta and rosiglitazone on the model of streptozotocin-induced diabetes mellitus in rats.

14. Naumenko L.V., Kuznetsov V.A., **Spasov A.A**., Muravyev A.V., Tikhomirova I.A., Khaliullin F.A., Anisimova V.A. Changes in electrokinetic properties of erythrocytes under the influence of pentoxifylline and new hemorheologically active substances. Bull Exp Biol Med. 2012 Jun;153(2):209-11. English, Russian.

15. Zinov'eva V.N., **Spasov A.A**. Mechanisms of anti-cancer effects of plant polyphenols. II. Suppression on tumor growth]. Biomed Khim. 2012 May-Jun;58(3):257-71. Review. [In Russian].

16. Grechko O.Yu, **Spasov A.A**., Vislobokov A.I., Ignatov Yu.D., Anisimova V.A. Elucidation of the mechanisms of membranotropic effects of RU-1203 on ionic channels of Lymnaea stagnalis neurons. Bull Exp Biol Med. 2012 Jul;153(3):301-4.

17. Grechko O.Yu., **Spasov A.A**., Vislobokov A.I., Ignatov Yu.D., Anisimova V.A. The effects of metabotropic receptor agonists on ionic current of snail neurons. Bull Exp Biol Med. 2012 Aug;153(4):483-6. English, Russian.

18. Kharitonova M.V., Zheltova A.A., **Spasov A.A.,** Smirnov A.V., Panshin N.G., Iezhitsa I.N. Correction of isoproterenol-induced myocardial injury with magnesium salts in magnesium-deficient rats. *Voprosy pitaniia* 2013;82(5):29-35.

19. Agarwal R., Iezhitsa I**.**, Awaludin N.A., Ahmad Fisol N.F., Bakar N.S., Agarwal P., Abdul Rahman T.H., **Spasov A**., Ozerov A., Mohamed Ahmed Salama M.S., Mohd Ismail N. The effects of magnesium taurate on the onset and progression of galactose-induced experimental cataract: in vivo and in vitro studies. *Experimental Eye Research*. 2013 May;110:35-43. doi: 10.1016/j.exer.2013.02.011. Epub 2013 Feb 18.

20. **Spasov A.A.,** Iezhitsa I.N**.**, Kharitonova M.V., Kravchenko M.S., Snigur G.L., Pisarev V.B. The effectiveness of certain magnesium salts in nephrolithiasis caused by the use of sodium oxalate and celecoxib. *Urologiia*. 2013 Jan-Feb;(1):29-34.

21. **Spasov A.A**., Zheltova A.A., Kharitonov M.V. Magnesium and oxidative stress. Ross Fiziol Zh Im I M Sechenova. 2012 Jul;98(7):915-23. Review. [In Russian].

22. **Spasov A.A**., Gurova N.A., Kharitonova M.V. Structure and physiological role of NHE1 and pharmacological regulation of its activity. Eksp Klin Farmakol. 2013;76(1):43-8. Review. [In Russian].

23. Agarwal R., Iezhitsa I.N., Agarwal P., **Spasov A.A.** Mechanisms of cataractogenesis in magnesium deficiency. *Magnesium research*. 2013 Jan-Feb;26(1):2-8. doi: 10.1684/mrh.2013.0336.

24. **Spasov A.A.,** Iezhitsa I.N., Kharitonova M.V., Kravchenko M.S., Snigur G.L., Pisarev V.B. Experimental evidence of the use of magnesium salts for the treatment of calcium oxalate nephrolithiasis in an animal model based on sodium oxalate and cyclooxygenase 2selective inhibitor. *Patologicheskaia fiziologiia i èksperimental'naia terapiia.* 2013 Apr-Jun;(2):50-55.

25. **Spasov A.A**., Iezhitsa I.N., Kharitonova M.V., Kravchenko M.S., Snigur G.L., Pisarev V.B. Experimental evidence of the use of magnesium salts for the treatment of calcium oxalate nephrolithiasis in an animal model based on sodium oxalate and cyclooxygenase 2selective inhibitor. Patol Fiziol Eksp Ter. 2013 Apr-Jun;(2):50-5. [In Russian].

26. **Spasov A.A**., Petrov V.I., Cheplyaeva N.I., Lenskaya K.V. Vestn Ross Akad Med Nauk. 2013;(2):43-9. Review. [In Russian].

27. **Spasov A.A**., Kucheryavenko A.F., Tian' M, Anisimova V.A. Antithrombotic activity of RU-891 antiaggregant agent. Eksp Klin Farmakol. 2013;76(6):25-6. [In Russian].

28. Gurova N.A., **Spasov A.A**., Timofeeva A.S., Zheltova A.A., Fedorchuk V.Yu. Cardioprotective properties of zoniporide in experimental ischemia-reperfusion rat myocardium. Eksp Klin Farmakol. 2013;76(8):17-9. [In Russian].

29. **Spasov A.A**., Kucheryavenko A.F., Kosolapov V.A., Anisimova V.A. Antithrombogenic activity of antioxidants. Bull Exp Biol Med. 2013 Oct;155(6):775-7.

30. **Spasov A.A**., Grechko O.Yu., Shtareva D.M., Anisimova V.A. Analgesic properties of RU-1205 morpholinoethylimidazobenzimidazole derivative. Eksp Klin Farmakol. 2013;76(9):15-8. [In Russian].

31. Kharitonova M.V., Iezhitsa I.N., Zheltova A.A., Ozerov A.A., **Spasov A**.**A**., Skalny A. Comparative angioprotective effects of Mg-containing compounds. *Journal of Trace Elements in Medicine and Biology.* 2015 Jan;29:227-34. doi: 10.1016/j.jtemb.2014.06.026. Epub 2014 Jul 8.

32. **Spasov A.A**., Smirnova L.A., Rashchenko A.I., Kuznetsov K.A., Anisimova V.A. Absolute bioavailability of RU-1205 benzimidazole derivative in rats. Eksp Klin Farmakol. 2014;77(1):17-9. [In Russian].

33. **Spasov A.A.**, Kucheryavenko A.F., Anisimova V.A. Calcium-dependent mechanism of antiplatelet activity of RU-891 benzimidazole derivative. Eksp Klin Farmakol. 2014;77(3):16-9. [In Russian].

34. Smirnov A.V., **Spasov A.A**., Shmidt M.V., Snigur G.L., Evsyukov O.Yu., Zheltova A.A. Patterns of TRPM7 expression in hypothalamic and hippocampal neurons in the model of nutritional magnesium deficiency. Bull Exp Biol Med. 2014 Apr;156(6):736-9. doi: 10.1007/s10517-014-2436-x. Epub 2014 May 3.

35. Tregubova I.A., Kosolapov V.A., **Spasov A.A**., Anisimova V.A. Experimental study of the effects of a new antioxidant agent on learning and memory. Bull Exp Biol Med. 2014 Apr;156(6):793-5. doi: 10.1007/s10517-014-2452-x. Epub 2014 May 3.

36. Kucheryavenko A.F., **Spasov A.A**., Petrov V.I., Anisimova V.A. Antiaggregant activity of a new benzimidazole derivative. Bull Exp Biol Med. 2014 Apr;156(6):796-8. doi: 10.1007/s10517-014-2453-9. Epub 2014 May 3.

37. Yakovlev D.S., **Spasov A.A**., Maltsev D.V., Anisimova V.A. The effects of 5-HT(2A) receptor antagonists on blood flow in the carotid vessels upon elevation of serotonin level. Bull Exp Biol Med. 2014 Jul;157(3):350-2. doi: 10.1007/s10517-014-2563-4. Epub 2014 Jul 30.

38. **Spasov A.A**., Gurova N.A., Timofeeva AS, Sorokin SM. Experimental study of the antiarrhythmic properties of zoniporide. Eksp Klin Farmakol. 2014;77(6):13-7. [In Russian].

39. Smirnov A.V., Kucheryavenko A.F., **Spasov A.A**. Antithrombotic activity of a new benzimidazole derivative in mouse model venous thrombosis. Bull Exp Biol Med. 2014 Sep;157(5):580-2. doi: 10.1007/s10517-014-2620-z. Epub 2014 Sep 27.

40. **Spasov A.A**., Smirnova L.A., Grechko O.Yu., Rashchenko A.I., Shtareva D.M., Anisimova V.A. Pharmacokinetic and analgesic properties of the tablets of RU-1205, a new imidazobenzimidazole derivative with kappa agonist activity. Eksp Klin Farmakol. 2014;77(7):27-30. [In Russian].

41. Yakovlev D.S., **Spasov A.A**., Bukatina T.M., Smirnov A.V., Suzdalev K.F. Antithrombotic effects of Sbt-119, a new P2Y1 receptor antagonist, on experimentally-induced thrombosis in rats. Bull Exp Biol Med. 2014 Nov;158(1):53-6. doi: 10.1007/s10517-014-2690-y. Epub 2014 Nov 19.

42. **Spasov A.A**., Yakovlev D.S., Bukatina T.M., Brigadirova A.A. In vitro method of studying the angiotensin activity of chemical compounds. Bull Exp Biol Med. 2014 Nov;158(1):115-7. doi: 10.1007/s10517-014-2705-8. Epub 2014 Nov 19.

43. **Spasov A.A.**, Grechko O.Yu., Shtareva D.M. Kappa-opioid receptors: molecular structure and function. Eksp Klin Farmakol. 2014;77(11):27-35. Review. [In Russian].

44. Kucheryavenko A.F., **Spasov A.A**., Smirnov A.V. Antithrombotic effects of limiglidole, a new hypoglycemic compound, on mouse model of cell thrombosis. Bull Exp Biol Med. 2015 May;159(1):41-3. doi: 10.1007/s10517-015-2885-x. Epub 2015 Jun 2.

45. Kosolapov V.A., Sorotskii D.V., **Spasov A.A**., Anisimova V.A. The effects of RU-792, a pyrrolobenzimidazole

derivative, on experimentally-induced brain ischemia. Bull Exp Biol Med. 2015 Jul;159(3):372-5. doi: 10.1007/s10517-015-2966-x. Epub 2015 Jul 28.

46. **Spasov A.A**., Cheplyaeva N.I. Potential of pharmacological modulation of level and activity of ncretins on diabetes mellitus type 2. Biomed Khim. 2015 Jul-Aug;61(4):488-96. doi: 10.18097/PBMC20156104488. Review. [In Russian].

47. **Spasov** A.A., Smirnova L.A., Grechko O.Yu., Raschenko A.I., Shtareva D.M., Anisimova V.A. Pharmacokinetic and analgesic properties of the injectable RU-1205, a new imidazobenzimidazole derivative with kappa agonist activity. Biomed Khim. 2015 Sep-Oct;61(5):636-9. doi: 10.18097/PBMC20156105636. [In Russian].

48. Kharitonova M., Iezhitsa I., Zheltova A., Ozerov A., **Spasov A.**, Skalny A. Comparative angioprotective effects of magnesium compounds. J Trace Elem Med Biol [Internet]. 2015;29:227–34. doi: 10.1016/2Fj.jtemb.2014.06.026.

49. Morkovnik A.S., **Spasov A.A.**, Kuz'menko T.A., Kucheryavenko A.F., Divaeva L.N., Koshchienko Y.V. et al. Prototropic equilibrium in 1(11)*H*-2,3,4,5-tetrahydro[1,3]diazepino[1,2-*a*]benzimidazole, synthesis and pharmacological properties of its *N*-substituted derivatives. Russ Chem Bull [Internet]. 2015 Nov 27;64(11):2622–31. doi: 10.1007/s11172-015-1200-3.

50. Kucheryavenko A.F., **Spasov A.A.**, Smirnov A.V. Antithrombotic Activity of a New Hypoglycemic Compound Limiglidole in Mouse Model of Cell Thrombosis. Bull Exp Biol Med [Internet]. 2015 May 2;159(1):41–3. doi: 10.1007/s10517-015-2885-x.

51. **Spasov A.A.**, Lenskaya K.V., Vasil'ev P.M. Hypoglycemic Potential of Benzimidazole Derivatives. Pharm Chem J [Internet]. 2015 Nov 14;49(8):495–500. doi: 10.1007/s11094-015-1313-x.

52. Zheltova A.A., Kharitonova M.V., Iezhitsa I.N., **Spasov A.A.** Magnesium deficiency and oxidative stress: An update. Biomed [Internet]. 2016;6(4):8–14. doi: 10.7603/2Fs40681-016-0020-6.

53. Iezhitsa I., Agarwal R., Saad S.D.B., Zakaria F.K.B., Agarwal P., Krasilnikova A. et al. Mechanism of the anticataract effect of liposomal MgT in galactose-fed rats. Mol Vis [Internet]. 2016;22:734–47. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84978472321&partnerID=40&md5=58bec16a021d55962e12374e80886b06.

54. **Spasov A.A.**, Yakovlev D.S., Maltsev D.V., Zhukovskaya O.N., Anisimova V.A., Kovalev G.I. et al. The derivatives of imidazo[1,2-a]benzimidazole as 5-HT_{2A} receptor antagonists. Russ J Bioorganic Chem [Internet]. 2016;42(4):397–403. doi: 10.1134/2FS1068162016040178.

55. Arfuzir N.N.N., Lambuk L., Jafri A.J.A., Agarwal R., Iezhitsa I., Sidek S. et al. Protective effect of magnesium acetyltaurate against endothelin-induced retinal and optic nerve injury. Neuroscience [Internet]. 2016;325:153–64. doi: 10.1016/2Fj.neuroscience.2016.03.041.

56. Kucheryavenko A.F., **Spasov A.A.**, Anisimova V.A. Effect of a New Antioxidant Enoxifol on Platelet Aggregation and Blood Rheological Properties in Rats with Experimental Diabetes Mellitus. Bull Exp Biol Med [Internet]. 2016;160(6):759–62. doi: 10.1007/2Fs10517-016-3303-8.

57. Grechko O.Y., **Spasov A.A.**, Shtareva D.M. Opioid κ Receptors as a Molecular Target for the Creation of a New Generation of Analgesic Drugs. Pharm Chem J [Internet]. 2016;50(1). doi: 10.1007/2Fs11094-016-1388-z.

58. **Spasov A.A.**, Kalitin K.Y., Grechko O.Y., Anisimova V.A. Antiepileptic Activity of a New Derivative of Benzimidazole RU-1205. Bull Exp Biol Med [Internet]. 2016;160(3):336–9. doi: 10.1007/2Fs10517-016-3164-1.

59. Grechko O.Y., **Spasov A.A.**, Kalitin K.Y., Zhukovskaya O.N., Anisimova V.A. Comparative study of the influence of benzimidazole derivative RU-1205, diazepam, and sodium valproate on the seizure threshold, anticonvulsant tolerance, and rebound effects. Eksp i Klin Farmakol [Internet]. 2016;79(12):3–6. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85015973436&partnerID=40&md5=c4db8d249023115572f183245710df34.

60. Grechko O.Y., Shtareva D.M., **Spasov A.A.**, Litvinov R.A., Rashchenko A.I. Studying the physical dependence on and tolerance to the antinociceptive effect of RU-1205 substance. Eksp i Klin Farmakol [Internet]. 2016;79(4):8–11. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84984691487&partnerID=40&md5=9d0034dfbd44f5a2f16e27b6b5be4401.

61. **Spasov A.A.**, Bugaeva L.I., Korzhova T.M., Lebedeva S.A., Getmanenko A.Y., Voronin S.P. Effect of magnesium L-aspartate and vitamin B_6 combination upon organogenesis registered during antenatal and postnatal periods. Eksp i Klin Farmakol [Internet]. 2016;79(8):18–22. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85010931217&partnerID=40&md5=72535dbf2aae159af9732991f2b6ad22

62. **Spasov A.**, Murav'eva V.U., Gurova N.A., Cheplyaeva N.I., Reznikov E.V., Anisimova V.A. Neuroprotective properties of a new inhibitor of Na^+/H^+ exchanger (compound RU-1355) on the model of focal ischemia in rats.

Eksp i Klin Farmakol [Internet]. 2016;79(4):3–7. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84984705725&partnerID=40&md5=43fe165d540952a51e9ec932e944249a.

63. Kucheryavenko A.F., Anisimova V.A., Gaidukova K.A., Divaeva L.N., Kuz'menko T.A., Morkovnik A.S. et al. Antiaggregant activity of a new tricyclic benzimidazole derivative. Eksp i Klin Farmakol [Internet]. 2016;79(5):29–32. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84984686679&partnerID=40&md5=cb63130a27714771766262453 0a3de0d.

64. Zhukovskaya O.N., Anisimova V.A., **Spasov A.A.**, Vasil'ev P.M., Kosolapov V.A., Kucheryavenko A.F. et al. 1-Substituted 2-Benzylaminobenzimidazoles with Phenyl Methoxyls: Synthesis, Computer Prediction, and Pharmacological Activity. Pharm Chem J [Internet]. 2016 Feb 16;49(11):735–42. doi: 10.1007/s11094-016-1362-9.

65. Anisimova V.A., Zhukovskaya O.N., **Spasov A.A.**, Kuznetsova V.A., Kosolapov V.A., Yakovlev D.S. et al. Synthesis and Pharmacological Activity of 2,9-Disubstituted Imidazo[1,2-a]Benzimidazole Phenyl- and Alkylthiocarbamides. Pharm Chem J [Internet]. 2016 Jan 3;49(10):653–6. doi: 10.1007/s11094-016-1346-9.

66. **Spasov A.A.**, Chepljaeva N.I., Vorob'ev E.S. Glycogen phosphorylase inhibitors in the regulation of carbohydrate metabolism in type 2 diabetes. Russ J Bioorganic Chem [Internet]. 2016 Mar 7;42(2):133–42. doi: 10.1134/S1068162016020138.

67. **Spasov A.A.**, Vassiliev P.M., Lenskaya K.V., Anisimova V.A., Kuzmenko T.A., Morkovnik A.S. et al. Hypoglycemic potential of cyclic guanidine derivatives Directed search, pharmacology, clinics. Pure Appl Chem [Internet]. 2017;89(8):1007–16. doi: 10.1515/2Fpac-2016-1024.

68. **Spasov A.A.**, Vasil'ev P.M., Babkov D.A., Prokhorova T.Y., Sturova E.A., Klimochkin Y.N. et al. New dipeptidyl peptidase 4 inhibitors among adamantane derivatives. Russ J Bioorganic Chem [Internet]. 2017;43(4):449–55. doi: 10.1134/2FS1068162017040124.

69. Zhukovskaya O.N., Anisimova V.A., **Spasov A.A.**, Yakovlev D.S., Gurova N.A., Kucheryavenko A.F. et al. The Search for Pharmacologically Active Compounds Among the 2-Dialkylaminobenzimidazoles [Internet]. Pharmaceutical Chemistry Journal. 2017. p. 1–5. Doi: 10.1007/2Fs11094-017-1578-3.

70. Kucheryavenko A.F., **Spasov A.A.**, Tian M., Suzdalev K.F. Effect of Compound SBT-828, a New Indole Derivative Exhibiting Antiaggregant Activity, on the Prostacyclin-Thromboxane A_2 Balance [Internet]. Bulletin of Experimental Biology and Medicine. 2017. p. 1–4. Doi: 10.1007/2Fs10517-017-3706-1.

71. **Spasov A.A.**, Yakovlev D.S., Brigadirova A.A. Angiotensin AT_1 Receptors and Their Ligands (Review). Pharm Chem J [Internet]. 2017;51(1). Doi: 10.1007/2Fs11094-017-1546-y.

72. Grechko O.Y., Litvinov R.A., **Spasov A.A.**, Rashchenko A.I., Shtareva D.M., Anisimova V.A. et al. Study of μ- and δ-Opioid Activities in Agents with Various κ-Receptor Selectivity. Bull Exp Biol Med [Internet]. 2017;162(5):632–5. Doi: 10.1007/2Fs10517-017-3674-5.

73. Vasil'ev P.M., Kalitin K.Y., **Spasov A.A.**, Grechko O.Y., Poroikov V.V., Filimonov D.A. et al. Prediction and Study of Anticonvulsant Properties of Benzimidazole Derivatives. Pharm Chem J [Internet]. 2017;50(12):775–80. Doi: 10.1007/2Fs11094-017-1530-6.

74. **Spasov A.A.**, Kucheryavenko A.F., Sirotenko V.S., Gaidukova K.A., Morkovnik A.S., Anisimova V.A. et al. Antithrombotic Activity of DAB-15, a Novel Diazepinobenzimidazole Compound. Bull Exp Biol Med [Internet]. 2017;162(5):636–9. Doi: 10.1007/2Fs10517-017-3675-4.

75. **Spasov A.A.**, Popov Y.V., Lobasenko V.S., Korchagina T.K., Vassiliev P.M., Kuznetsova V.A. et al. Synthesis and pharmacological activity of 3-phenoxybenzoic acid derivatives. Russ J Bioorganic Chem [Internet]. 2017;43(2):163–9. Doi: 10.1134/2FS1068162017020145.

76. Zheltova A.A., Kharitonova M.V., Iezhitsa I.N., Serebryansky E.P., Evsyukov O.Y., **Spasov A.A.** et al. Low magnesium diet alters distribution of macroelements and trace elements in tissues and organs of female rats. J Trace Elem Med Biol [Internet]. 2017;39:36–42. Doi: 10.1016/2Fj.jtemb.2016.07.002.

77. **Spasov A.A.**, Babkov D.A., Prokhorova T.Y., Sturova E.A., Muleeva D.R., Demidov M.R., et al. Synthesis and biological evaluation of 2-acylbenzofuranes as novel α-glucosidase inhibitors with hypoglycemic activity [Internet]. Chemical Biology and Drug Design. 2017. Doi: 10.1111/2Fcbdd.13038.

78. Ziganshin B.A., Giniyatova L.R., Slavin D.A., Kamaliev R.R., Ziganshina A.P., **Spasov A.A.** et al. The role of P2 receptor-mediated component in neurogenic tone control of human great saphenous vein. Sovrem Tehnol v Med [Internet]. 2017;9(1):85–91. Doi: 10.17691/2Fstm2017.9.1.10.

79. Jafri A.J.A., Arfuzir N.N.N., Lambuk L., Iezhitsa I., Agarwal R., Agarwal P. et al. Protective effect of magnesium acetyltaurate against NMDA-induced retinal damage involves restoration of minerals and trace elements homeostasis. J Trace Elem Med Biol [Internet]. 2017;39:147–54. Doi: 10.1016/2Fj.jtemb.2016.09.005.

80. Dzyurkevich MS, Babkov DA, Shtyrlin NV, Mayka OY, Iksanova AG, Vassiliev PM, Balakin KV, **Spasov**AA, Tarasov VV, Barreto G, Shtyrlin YG, Aliev G. Pyridoxine dipharmacophore derivatives as potent glucokinase activators for the treatment of type 2 diabetes mellitus. Sci Rep. [Internet] 2017 Nov 22;7(1):16072. doi: 10.1038/s41598-017-16405-2. Erratum in: Sci Rep. 2018 Apr 19;8(1):6489.
81. **Spasov** AA, Babkov DA, Sysoeva VA, Litvinov RA, Shamshina DD, Ulomsky EN, Savateev KV, Fedotov VV, Slepukhin PA, Chupakhin ON, Charushin VN, Rusinov VL. 6-Nitroazolo[1,5-a]pyrimidin-7(4H)-ones as Antidiabetic Agents. Arch Pharm (Weinheim). [Internet] 2017 Dec;350(12). doi: 10.1002/ardp.201700226. Epub 2017 Nov 20.
82. **Spasov** AA, Kosolapov VA, Babkov DA, Maika OY. Effect of GRP119 Receptor Agonist, Compound MBX-2982, on Activity of Human Glucokinase. Bull Exp Biol Med. [Internet] 2017 Sep;163(5):695-698. doi: 10.1007/s10517-017-3881-0. Epub 2017 Sep 25.
83. Lambuk L., Jafri A.J.A., Arfuzir N.N.N., Iezhitsa I., Agarwal R., Rozali K.N.B. et al. Neuroprotective Effect of Magnesium Acetyltaurate Against NMDA-Induced Excitotoxicity in Rat Retina. Neurotox Res [Internet]. 2017;31(1):31–45. Doi: 10.1007/2Fs12640-016-9658-9.
84. Rusinov V.L., Sapozhnikova I.M., Bliznik A.M., Chupakhin O.N., Charushin V.N., **Spasov A.A.** et al. Synthesis and Evaluation of Novel [1,2,4]Triazolo[5,1-*c*][1,2,4]-triazines and Pyrazolo[5,1-*c*][1,2,4]triazines as Potential Antidiabetic Agents. Arch Pharm (Weinheim) [Internet]. 2017 May;350(5):1600361. Doi: 10.1002/ardp.201600361.
85. **Spasov A.A.**, Zhukovskaya O.N., Brigadirova A.A., Abbas H.S.A., Anisimova V.A., Sysoeva V.A., Rashchenko A.I., Litvinov R.A., Mayka O.Yu., Babkov D.A., Morkovnikc A.S. Synthesis and pharmacological activity of 2(biphenyl4yl)imidazo[1,2a]benzimidazoles. Russ. Chem. Bull. [Internet]. 2017; 66(10): 1905-1912. doi: 10.1007/s11172-017-1965-7.
86. Kalitin K.Y., Grechko O.Y., **Spasov A.A.,** Sukhov A.G., Anisimova V.A., Matukhno A.E. GABAergic mechanism of anticonvulsive effect of chemical agent RU-1205. Bull Exp Biol Med. [Internet] 2018. Vol. 164, № 5. P. 629–635.
87. **Spasov A.A.,** Grechko O.Yu., Kalitin K.Yu., Anisimova V.A. Receptor-dependent mechanisms of anticonvulsant activity of benzimidazole derivative RU-1205 compared to diazepam and U-50,488H. Eksperimental'naya i Klinicheskaya Farmakologiya. [Internet] 2018. Vol. 81, № 2. P. 3–6.
88. Jafri AJA, Agarwal R, Iezhitsa I, Agarwal P, **Spasov A,** Ozerov A, Ismail NM. Protective effect of magnesium acetyltaurate and taurine against NMDA-induced retinal damage involves reduced nitrosative stress. Mol Vis. [Internet] 2018 Jul 25;24:495-508. eCollection 2018.
89. Marcus AJ, Iezhitsa I, Agarwal R, Vassiliev P, **Spasov A**, Zhukovskaya O, Anisimova V, Mohd Ismail N. Data on the effects of imidazo[1,2-a]benzimidazole and pyrimido[1,2-a]benzimidazole compounds on intraocular pressure of ocular normotensive rats. Data Brief. [Internet] 2018 Mar 8;18:523-554. doi: 10.1016/j.dib.2018.03.019. eCollection 2018 Jun.
90. Nor Arfuzir NN, Agarwal R, Iezhitsa I, Agarwal P, Sidek S, **Spasov A**, Ozerov A, Mohd Ismail N. Effect of Magnesium Acetyltaurate and Taurine on Endothelin1-Induced Retinal Nitrosative Stress in Rats. Curr Eye Res. [Internet] 2018 Aug;43(8):1032-1040. doi: 10.1080/02713683.2018.1467933. Epub 2018 May 8.
91. Marcus AJ, Iezhitsa I, Agarwal R, Vassiliev P, **Spasov A**, Zhukovskaya O, Anisimova V, Johari B, Mohd Ismail N. Intraocular pressure lowering effect and structure-activity relationship of imidazo[1,2-a]benzimidazole and pyrimido[1,2-a]benzimidazole compounds in ocular normotensive rats: Insight on possible link with hypotensive activity. Eur J Pharm Sci. [Internet] 2018 Mar 1;114:245-254. doi: 10.1016/j.ejps.2017.12.015. Epub 2017 Dec 21.
92. Milaeva E.R., Shpakovsky D.B., Maklakova I.A., Rufanov K.A., Neganova M.E., Shevtsova E.F., Churakov A.V., Babkova V.A., Babkov D.A., Kosolapov V.A., **Spasov A.A.** Novel Diphenylsulfimide Antioxidants Containing 2,6-Di-Tert-Butylphenol Moieties Russian Chemical Bulletin. 2018. Т. 67. № 11. С. 2025-2034.
93. Ishmetova R.I., Ignatenko N.K., Korotina A.V., Ganebnykh I.N., Slepukhin P.A., Rusinov G.L., Chupakhin O.N., Babkova V.A., **Spasov A.A.,** Gerasimova N.A., Evstigneeva N.P., Zilberberg N.V., Kungurov N.V. Synthesis And Biological Activity Of 3-Guanidino-6-R-Imidazo[1,2-B]- And 6-Guanidino-3-R-[1,2,4]Triazolo[4,3-B][1,2,4,5]Tetrazines Russian Chemical Bulletin 2018. Т. 67. № 11. С.2079-2087.
94. Zhukovskaya O.N., Kuzmenko T.A., Morkovnik A.S., Anisimova V.A., **Spasov A.A.**, Kucheryavenko A.F., Salaznikova O.A., Gaidukova K.A., Kuznetsova V.A., Babkov D.A., Grechko O.Y., Eliseeva N.V., Rashchenko A.I. Synthesis And Pharmacological Activity Of Trifluoromethyl-Containing Imidazo[1,2-A]Benzimidazoles Pharmaceutical Chemistry Journal. 2018. Т. 52. № 5. С. 385-391.
95. N.N., Agarwal R., Iezhitsa I., Sidek S., Mohd Ismail N., **Spasov A.**, Ozerov A., Agarwal P. Effect Of Magnesium Acetyltaurate And Taurine On Endothelin1-Induced Retinal Nitrosative Stress In Rats Nor Arfuzir Current Eye Research.2018. С.1032-1040.
96. Jafri A.J.A., Agarwal R., Iezhitsa I., Ismail N.M., **Spasov A**., Ozerov A., Agarwal P. Protective Effect Of Magnesium Acetyltaurate And Taurine Nmda Induced Retinal Damage Involves Reduced Nitrosative Stress Molecular Vision 2018. Т. 24. С. 495-508.
97. Dzyurkevich M.S., Babkov D.A., Shtyrlin N.V., Mayka O.Yu., Iksanova A.G., Vassiliev P.M., Balakin K.V., **Spasov A.A.**, Tarasov V.V., Barreto G., Shtyrlin Yu.G., Aliev G. Author Correction: Pyridoxine Dipharmacophore Derivatives As Potent Glucokinase Activators For The Treatment Of Type 2 Diabetes Mellitus Scientific Reports 2018. Т. 8. №1. С. 6489.

98. Vassiliev P., Iezhitsa I., **Spasov A.,** Agarwal R., Marcus A.J., Zhukovskaya O., Anisimova V. Relationship Between Intraocular Pressure Lowering Effect And Chemical Structure Of Imidazo[1,2-A]Benzimidazole And Pyrimido[1,2-A]Benzimidazole Derivatives Data in Brief, 2018.
99. Marcus A.J., Iezhitsa I., Agarwal R., Mohd Ismail N., Vassiliev P., **Spasov A.,** Zhukovskaya O., Anisimova V. Date On The Effects Of Imidazo(1,2-A)Benzimidazole And Pyrimido(1,2-A)Benzimidazole Compounds On Intraocular Pressure Of Ocular Normotensive Rats Data in Brief. 2018, N.18. C. 523-554
100. **Spasov A.A.,** Babkov D.A., Prilepskaya D.R., Zakharyashcheva O.Yu. Type 2 Diabetes Mellitus In Rats On High-Fat Diet With Streptozotocin Induction: Evaluation Of The Model Journal of Clinical and Health Sciences. 2018. T. 3. № 1. C. 20-26.
101. **Spasov A.A.**, Grechko O.Yu., Shtareva D.M., Rashchenko A.I., Eliseeva N.V., Anisimova V.A. Analgesic Activity Of The Kappa Opioid Receptor Agonist - Ru-1205 In Rats. Journal of Clinical and Health Sciences. 2018. T. 3. № 2. C. 13-18.
102. **Spasov A.A**., Kucheryavenko A.F., Sirotenko V.S., Anisimova V.A., Divaeva L.N., Kuz'menko T.A., Morkovnik A.S. ANTITHROMBOTIC ACTIVITY OF A NOVEL DIAZEPINO[1,2-α] BENZIMIDAZOLE DERIVATIVE ON ARTERIAL THROMBOSIS MODEL IN RATS WITHOUT CONCOMITANT PATHOLOGY AND IN RATS WITH EXPERIMENTAL MYOCARDIAL INFARCTION Bulletin of Experimental Biology and Medicine. 2019. T. 166. № 6. C. 747-750.
103. Brel A.K., **Spasov A.A.**, Lisina C.V., Popov S.S., Kucheryavenko A.F., Litvinov R.A. Salaznikova O.A. Rashchenko A.I. Racil Hydroxybenzamides As Potential Antidiabetic Prodrugs. Pharmaceutical Chemistry Journal. 2019. T. 53. № 6. C. 511-515.
104. Marcus A.J., Iezhitsa I., Agarwal R., Vassiliev P., **Spasov A.**, Zhukovskaya O., Anisimova V., Ismail N.M. Intraocular Pressure-Lowering Effects Of Imidazo[1,2-A]- And Pyrimido[1,2-A]Benzimidazole Compounds In Rats With Dexamethasone-Induced Ocular Hypertension. European Journal of Pharmacology. 2019. T. 850. C. 75-87.
105. Babkov D., Zhukowskaya O., Babkova V., Sokolova E., Brigadirova A., Litvinov R., Kolodina A., Morkovnik A., Sochnev V., Borodkin G., **Spasov A** Towards. Multi-Target Antidiabetic Agents: Discovery Of Biphenyl-Benzimidazole Conjugates As Ampk Activators. Bioorganic & Medicinal Chemistry Letters. 2019. T. 29. № 17. C. 2443-2447.
106. **Spasov A.A.**, Babkov D.A., Klochkov V.G., Prilepskaya D.R., Osipov D.V., Demidov M.R., Osyanin V.A., Klimochkin Y.N. Synthesis, In Vitro And In Vivo Evaluation Of 2-Aryl-4h-Chromene And 3-Aryl-1h-Benzo[F]Chromene Derivatives As Novel A-Glucosidase Inhibitors. Bioorganic & Medicinal Chemistry Letters. 2019. T. 29. № 1. C. 119-123.
107. Lozinskaya N.A., Babkov D.A., Zaryanova E.V., Bezsonova E.N., Efremov A.M., Tsymlyakov M.D., Anikina L.V., Zakharyascheva O.Yu., Borisov A.V., Perfilova V.N., Tyurenkov I.N., Proskurnina M.V., **Spasov A.A.** SYNTHESIS AND BIOLOGICAL EVALUATION OF 3-SUBSTITUTED 2-OXINDOLE DERIVATIVES AS NEW GLYCOGEN SYNTHASE KINASE 3β INHIBITORS Bioorganic & Medicinal Chemistry. 2019. T. 27. № 9. C. 1804-1817.
108. Trofimenko A.S., Mozgovaya E.E., Bedina S.A., **Spasov A.A.** Ambiguities in Neutrophil Extracellular Traps. Ongoing Concepts and Potential Biomarkers for Rheumatoid Arthritis: A Narrative Review. Curr. Rheumatol. Rev. 2019 doi: 10.2174/1573397115666191127141801
109. Savateev K.V., Fedotov V.V., Butorin I., Eltsov O.S., Slepukhin P.A., Ulomsky E.N., Rusinov V.L., Litvinov R.A., Babkov D.A., Khokhlacheva E.A., Radaev P., Vasilev P.M., **Spasov A.A.** Nitrothiadiazolo[3,2-A]Pyrimidines As Promising Antiglycating Agents. European Journal of Medicinal Chemistry. 2020. T. 185. C. 111808.
110. Vassiliev P.M., **Spasov A.A.,** Babkov D.A., Litvinov R.A., Kochetkov A.N. Neural network modeling search for multitarget RAGE inhibitors with different target activity spectra/ Russian Chemical Bulletin. – 2021. – Vol. 70. – Iss. 3 – P. 562-566.
111. Maltsev D.V., **Spasov A.A.,** Yakovlev D.S., Vassiliev P.M., Skripka M.O., Miroshnikov M.V., Sultanova K.T., Kochetkov A.N., Divaeva L.N., Kuzmenko T.A., Morkovnik A.S. Searching for new anxiolytic agents among derivatives of 11-dialkylaminoethyl-2,3,4,5-tetrahydrodiazepino[1,2-a]benzimidazole European Journal of Pharmaceutical Sciences. – 2021. – Vol. 161. – Art. 105792. – 10 p.
112. Vassiliev P.M., **Spasov A.A.,** Kochetkov A.N., Perfilev M.A., Koroleva A.R. Consensus ensemble neural network multitarget model of RAGE inhibitory activity of chemical compounds Biomeditsinskaya Khimiya. – 2021. – Vol. 67. – Iss. 3. – P. 268-277.
113. Maltsev D.V., **Spasov A.A.,** Vassiliev P.M., Skripka M.O., Miroshnikov M.V., Kochetkov N.A., Eliseeva N.V., Lifanova Yu.V., Kuzmenko T.A., Divaeva L.N., Morkovnik A.S. Synthesis and Pharmacological Evaluation of Novel 2,3,4,5-tetrahydro[1,3]diazepino[1,2-a]benzimidazole Derivatives as Promising Anxiolytic and Analgesic Agents Molecules. – 2021. – Vol. 29. – Iss. 19. – Art06049. – 18 p.
114. Sarapultsev A., Vassiliev P., Grinchii D., Paliokha R., Kochetkov A., Sidorova L., Sarapultsev P., Chupakhin O., Rantsev M., **Spasov A.,** Dremencov E. In silico and in vivo assessment of L-17, a thiadiazine derivative with putative serotonin reuptake properties Preprints. – 2021. – Posted 25 February 2021. – 11 p.
115. **Spasov A.A.** Smirnova L.A. Grechko O.Yu. Eliseeva N.V. Lifanova Yu.V. Rashchenko A.I. Zhukovskaya O.N. Morkovnik A.S. Anisimova V.A. Syrvacheva O.E. Distribution, excretion and metabolic pathways of a single parenteral administration of kappa-opioid receptor agonist RU-1205 Research Results in Pharmacology. 2021. T. 7. № 2. C. 59 – 65.

116. **Spasov A.A.** Grechko O.Yu. Eliseeva N.V. Lifanova Yu.V. Alexandrenkova A.N. Effect of adjuvant drugs on the analgesic activity of opioid morphine analgesics and compound RU-1205 Research Results in Pharmacology. 2021. Т. 7. № 3. С. 41 – 47.
117. **Spasov A.A.,** Gurova N.A., Popova T.A., Perfilova V.N., Vishnevskaya V.V., Kustova M.V., Ovsyankina N.V., Ozerov A.A. EFFECTS OF ZONIPORIDE AND BMA-1321 COMPOUND ON THE RATE OF OXYGEN ABSORPTION BY CARDIOMYOCYTE MITOCHONDRIA IN RATS WITH EXPERIMENTAL CHRONIC HEART FAILURE Bulletin of Experimental Biology and Medicine. 2021. Т. 170. № 3. С. 316-320
118. L.A.Smirnova, **A. A. Spasov**, F. A. Khaliullin, A. F. Kucheryavenko, A. F. Ryabukha, O. K. Abramov Biopharmaceutical Study of an Injectable Dosage Form of the New Antiaggregant Substance 3-Methyl-8-(Piperazin-1-yl)-7-(Thietan-3-yl)-1-Ethyl-1*H*-Purine-2,6(3*H*,7*H*)-Dione Hydrochloride Pharmaceutical Chemistry Journal volume 55, pages 14–16 (2021)
119. L.A.Smirnova, A. F.Ryabukha, O. K.Abramov, A. F. Kucheryavenko, **A. A. Spasov** F. A. Khaliullin Quantitative Determination of Angipur Drug Substance in Blood Plasma by HPLC with Fluorescence Detection Pharmaceutical Chemistry Journa volume 55, pages 202–205 (2021)
120. Maltsev D.V., **Spasov A.A.,** Miroshnikov M.V., Skripka M.O. Current approaches to the search of anxiolytic drugs Russian Journal of Bioorganic Chemistry. 2021. Т. 47. № 3. С. 622-652.
121. Smirnova L.A., Ryabukha A.F., Kuznetsov K.A., Velikopolskaya M.V., **Spasov A.A.,** Yakovlev D.S. Development of a quantitative determination method for a benzimidazole derivative with laboratory code ru-31 and antimigraine activity in biological samples Pharmaceutical Chemistry Journal. 55, p. 312–314 (2021)
122. **Spasov A.A.,** Smirnova L.A., Ryabukha A.F., Kuznetsov K.A., Velikopol'skaya M.V., Yakovlev D.S. Bioequivalence of ru-31 tablet dosage form Pharmaceutical Chemistry Journal. 2021. Т. 55. № 4. С. 328-330.
123. Skripka M.O., **Spasov A.A.,** Maltsev D.V., Miroshnikov M.V., Yakovlev D.S., Sultanova K.T., Kochergin M.A., Divaeva L.N. Screening of anxiolytic properties and analysis of structure-activity relationship of new derivatives of 6-(4-methoxy)-7h-[1,2,4]triazolo[3,4-a][2,3]benzodiazepine under the code rd Research Results in Pharmacology. 2021. Т. 7. № 2. С. 31-37.
124. Kosolapov V.A., **Spasov A.A.,** Vasil'ev P.M., Babkov D.A., Smirnov A.V., Borisov A.V., Miroshnikov M.V., Rusinov V.L., Rusinov G.L. The search for compounds to prevent the consequences of a cytokine storm DOI: 10.19163/MedChemRussia2021-2021-8
125. P. M. Vassiliev, **A. A. Spasov**, D. A. Babkov, R. A. Litvinov A. N. Kochetkov Neural network modeling search for multitarget RAGE inhibitors with different target activity spectra *Russian Chemical Bulletin* **volume 70**, pages562–566 (2021)
126. Maltsev D.V., **Spasov A.A.,** Yakovlev D.S., Vassiliev P.M., Skripka M.O., Miroshnikov M.V., Sultanova K.T., Kochetkov A.N., Divaeva L.N., Kuzmenko T.A., Morkovnik A.S. Searching for new anxiolytic agents among derivatives of 11-dialkylaminoethyl-2,3,4,5-tetrahydrodiazepino[1,2-a]benzimidazole European Journal of Pharmaceutical Sciences. – 2021. – Vol. 161. – Art. 105792. – 10 p.
127. Vassiliev P.M., **Spasov A.A.,** Kochetkov A.N., Perfilev M.A., Koroleva A.R. Consensus ensemble neural network multitarget model of RAGE inhibitory activity of chemical compounds Biomeditsinskaya Khimiya. – 2021. – Vol. 67. – Iss. 3. – P. 268-277.
128. Maltsev D.V., **Spasov A.A.,** Vassiliev P.M., Skripka M.O., Miroshnikov M.V., Kochetkov N.A., Eliseeva N.V., Lifanova Yu.V., Kuzmenko T.A., Divaeva L.N., Morkovnik A.S. Synthesis and Pharmacological Evaluation of Novel 2,3,4,5-tetrahydro[1,3]diazepino[1,2-a]benzimidazole Derivatives as Promising Anxiolytic and Analgesic Agents Molecules. – 2021. – Vol. 29. – Iss. 19. – Art06049. – 18 p.
129. **Spasov A.A.** Smirnova L.A. Grechko O.Yu. Eliseeva N.V. Lifanova Yu.V. Rashchenko A.I. Zhukovskaya O.N. Morkovnik A.S. Anisimova V.A. Syrvacheva O.E. Distribution, excretion and metabolic pathways of a single parenteral administration of kappa-opioid receptor agonist RU-1205 Research Results in Pharmacology. 2021. Т. 7. № 2. С. 59 – 65.
130. **Spasov A.A**. Grechko O.Yu. Eliseeva N.V. Lifanova Yu.V. Alexandrenkova A.N. Effect of adjuvant drugs on the analgesic activity of opioid morphine analgesics and compound RU-1205 Research Results in Pharmacology. 2021. Т. 7. № 3. С. 41 – 47.
131. **Spasov A.A**., Gurova N.A., Popova T.A., Perfilova V.N., Vishnevskaya V.V., Kustova M.V., Ovsyankina N.V., Ozerov A.A. Effects of zoniporide and bma-1321 compound on the rate of oxygen absorption by cardiomyocyte mitochondria in rats with experimental chronic heart failure Bulletin of Experimental Biology and Medicine. 2021. Т. 170. № 3. С. 316-32
132. L. A.Smirnova, **A. A. Spasov**, F. A. Khaliullin, A. F. Kucheryavenko, A. F. Ryabukha, O. K. Abramov Biopharmaceutical Study of an Injectable Dosage Form of the New Antiaggregant Substance 3-Methyl-8-(Piperazin-1-yl)-7-(Thietan-3-yl)-1-Ethyl-1*H*-Purine-2,6(3*H*,7*H*)-Dione Hydrochloride Pharmaceutical Chemistry Journal volume 55, pages 14–16 (2021)
133. L.A.Smirnova, A. F.Ryabukha, O. K.Abramov, A. F. Kucheryavenko, **A. A. Spasov** F. A. Khaliullin Quantitative Determination of Angipur Drug Substance in Blood Plasma by HPLC with Fluorescence Detection Pharmaceutical Chemistry Journa volume 55, pages 202–205 (2021)
134. Maltsev D.V., **Spasov A.A**., Miroshnikov M.V., Skripka M.O. Current approaches to the search of anxiolytic drugs Russian Journal of Bioorganic Chemistry. 2021. Т. 47. № 3. С. 622-652.
135. Smirnova L.A., Ryabukha A.F., Kuznetsov K.A., Velikopolskaya M.V., **Spasov A.A.,** Yakovlev D.S. Development of a quantitative determination method for a benzimidazole derivative with laboratory code ru-31 and antimigraine activity in biological samples Pharmaceutical Chemistry Journal. 55, p. 312–314 (2021)
136. Search For Compounds With Antioxidant And Antiradical Activity Among N9-Substituted 2-(Biphenyl-4-Yl)Imidazo[1,2- A]Benzimidazoles **Spasov A.A.,** Brigadirova A.A., Zhukovskaya O.N., Morkovnik A.S., Lifanova Yu.V. Research Results in Pharmacology. 2022. Т. 8. № 3. С. 41-48.

137. Searching For Novel Antagonists Of Adenosine A1 Receptors Among Azolo[1,5-A]Pyrimidine Nitro Derivatives Yakovlev D.S., Vassiliev P.M., Agatsarskaya Y.V., Brigadirova A.A., Sultanova K.T., Skripka M.O., **Spasov A.A.,** Savateev K.V., Rusinov V.L., Maltsev D.V. Research Results in Pharmacology. 2022. T. 8. № 2. C. 69-76.
138. Discovery Of Nitro-Azolo[1,5-A]Pyrimidines With Anti-Inflammatory And Protective Activity Against Lps-Induced Acute Lung Injury **Spasov A.**, Kosolapov V., Babkov D., Klochkov V., Sokolova E., Miroshnikov M., Borisov A., Velikorodnaya Y., Smirnov A., Savateev K., Fedotov V., Kotovskaya S., Rusinov V. Pharmaceuticals. 2022. T. 15. № 5.
139. Anti-Inflammatory Activity Of Soluble Epoxide Hydrolase Inhibitors Based On Selenoureas Bearing An Adamantane Moiety Burmistrov V., Morisseau Ch., Babkov D.A., Golubeva T., Pitushkin D., Sokolova E.V., Vasipov V., Kuznetsov Ya., Bazhenov S.V., Novoyatlova U.S., Bondarev N.A., Manukhov I.V., Osipova V., Berberova N., **Spasov A.A.,** Butov G.M., Hammock B.D. International Journal of Molecular Sciences. 2022. T. 23. № 18. C. 10710
140. Antiplatelet Activity Of Riamilovir Under Conditions Of Lipopolysaccharide Intoxication **Spasov A.A.,** Kucheryavenko A.F., Sirotenko V.S., Gaidukova K.A., Uskov G.M. Bulletin of Experimental Biology and Medicine. 2022. T. 173. № 1. C. 41-45
141. Azolo[1,5-A]Pyrimidines And Their Condensed Analogs With Anticoagulant Activity Savateev K.V., Fedotov V.V., Rusinov V.L., Kotovskaya S.K., **Spasov A.A.,** Kucheryavenko A.F., Vasiliev P.M., Kosolapov V.A., Sirotenko V.S., Gaidukova K.A., Uskov G.M. Molecules. 2022. T. 27. № 1.
142. Synthesis Of 2-Chloropurine Ribosides With Chiral Amino Acid Amides At C6 And Their Evaluation As A1 Adenosine Receptor Agonists Berzina M.Y., Eletskaya B.Z., Kayushin A.L., Dorofeeva E.V., Lutonina O.I., Fateev I.V., Paramonov A.S., Kostromina M.A., Zayats E.A., Abramchik Y.A., Miroshnikov A.I., Esipov R.S., Konstantinova I.D., Naumenko L.V., Taran A.S., Yakovlev D.S., **Spasov A.A.,** Maltsev D.V. Bioorganic Chemistry. 2022. T. 126. C. 105878.
143. Pharmacological Targets and Mechanisms Of Action Of Antipsychotic Substances In The Context Of The Neurochemical Theory Of The Pathogenesis Of Schizophrenia Kalitin K.Y., **Spasov A.A**., Mukha O.Y., Pridvorov G.V., Lipatov V.A. Neuroscience And Behavioral Physiology. 2022. T. 52. № 1. C. 108-123.
144. Pharmacological Properties Of 2-Aminobenzimidazole Halides And Imidazo[1,2-A]Benzimidazole Derivatives **Spasov A.A.,** Gurova N.A., Naumenko L.V., Eliseeva N.V., Kucheryavenko A.F., Kosolapov V.A., Yakovlev D.S., Muravyeva V.Y., Babkova V.A., Babkov D.A., Lifanova J.V., Zhukovskaya O.N., Morkovnik A.S. Russian Journal Of Bioorganic Chemistry. 2022. T. 48. № 2. C. 281-291.
145. Antithrombotic Activity of The Antiplatelet Agent Angipur On The Model Of Arterial Thrombosis In Rats With Isoproterenol-Induced Myocardial Infarction **Spasov A.A.,** Kucheryavenko A.F., Gurova N.A., Sirotenko V.S., Gaidukova K.A., Khaliullin F.A., Samorodov A.V., Pavlov V.N. Bulletin of Experimental Biology and Medicine. 2022. T. 172. № 3. C. 314-317.
146. Towards Multi-Target Antidiabetic Agents: In Vitro And In Vivo Evaluation Of 3,5-Disubstituted Indolin-2-One Derivatives as Novel A-Glucosidase Inhibitors Klochkov V.G., Babkov D.A., **Spasov A.A**., Bezsonova E.N., Dubar M., Melekhina D.D., Temnov V.V., Zaryanova E.V., Lozinskaya N.A. Bioorganic & Medicinal Chemistry Letters. 2022. T. 55. C. 128449.

BOOKS, INVITED BOOK CHAPTERS, MANUALS AND EDUCATIONAL MATERIALS

1.	Petrov V.I., **Spasov A.A.**, Nedogoda S.V., Gurova N.A., Iezhitsa I.N., Stepanov A.V., Ivakhnenko I.V., Efremov A.P. *The Russian encyclopaedia of nutritional supplements.* Eds.: V.I. Petrov, **A.A. Spasov**, Moscow: "GEOTAR-Meditsina" publishing house, 2007, 1056 pp.	**[Russian],** ISBN 978-5-9704-0452-2
2.	**Spasov A.A.**, Iezhitsa I.N., Vasiliev P.M., Ozerov A.A. *Pharmacology of drug stereoisomers* – Monograph. Volgograd: Publisher of Volgograd State Medical University, 2011, 344 p.	**[Russian]** ISBN 978-5-9652-0153-2
3.	Spasov A.A., Voronkova M.P., Snigur G.L., Ogarkov D.Yu. *Gymnema sylvestre (botany, pharmacognosy, pharmacology, clinical efficiency)* / Eds.: A.A. Spasov. Volgograd: Volgograd State Medical University Publishing, 2012. -200p.	**[Russian]**
4.	Yakovlev D.S., Bukatina T.M., Vasiliev P.M., Chernikov M.V., Suzdalev K.F., Anisimova V.A. *P2Y1-receptors. Molecular, biological, chemical and pharmacological aspects – Monograph*. Eds.: **A.A. Spasov** – Saarbrücken, Germany. – LAP Lambert Academic Publishing. - 25.07.2013 – 164p.	**[English]** ISBN-13 978-3-659-42561-5
5.	**Spasov A.A.**, Smirnov A.V., et al. Pathological morphology of the brain in alimentary Mg deficiency. – Volgograd : VolgSMU Publishing. 2015. – 140p.	**[Russian]** ISBN 978-5-9652-03-25-3
6.	**Spasov A.A.**, Babaeva A.R., Temkin E.S., Shakhova E.G., Rodin A.Yu., Orobinskaya T.A. Application of bishofit in local therapy: monography edited by RAS Academician **A.A. Spasov** – Volgograd : VolgSMU Publishing. 2003. - 158 p.	**[Russian]** ISBN 5-88462-065-9
7.	Diagnosis of the functional condition of athletes in laboratory and natural conditions: monograph edited by V.A. Likhodeev, V.B. Mandrikov, **A.A. Spasov**, I.B. Isupov. – Volgograd : VolgSMU Publishing. 2012. – 132 p.	**[Russian]** ISBN 978-5-9652-0185-3
8.	Diagnosis of morphological changes in the brain during experimental modeling of alimentary deficiency of magnesium: Methodical recommendations by **A.A. Spasov**, A.V. Smirnov, G.L. Snigur et al. – Volgograd : VolgSMU Publishing. 2014. - 28 p.	**[Russian]** ISBN 978-5-9652-03-25-3

9. Vassiliev P.M., **Spasov A.A.**, Kosolapov V.A., Kucheryavenko A.F., Gurova N.A., Anisimova V.A. Consensus Drug Design Using IT Microcosm: In Application of Computational Techniques in Pharmacy and Medicine edited by L. Gorb, V. Kuzmin, E. Muratov. / Challenges and Advances in Computational Chemistry and Physics – Dordrecht, Netherlands. – 2014. – p. 369-431. **[English]** ISBN 978-94-017-9256-1
10. Pathologic morphology of the brain in alimentary magnesium deficiency: monograph by A.V. Smirnov, **A.A. Spasov**, G.L. Snigur et al. – Volgograd : VolgSMU Publishing. 2015. - 140 p. **[Russian]** ISBN 978-5-9652-0373-4
11. Antidiabetogenic Potential of Benzimidazoles: Chemistry, Pharmacology, Clinics: monograph edited by RAS Academician **A.A. Spasov**, RAS Academician V.I. Petrov, RAS Academician V.I. Minkin. – Volgograd : VolgSMU Publishing. 2016. - 548 p. **[Russian]** ISBN 978-5-9652-0452-6
12. Target-oriented search for antidiabetic agents: monograph edited by RAS Academician **A.A. Spasov** and RAS Academician V.I. Petrov. – Volgograd : VolgSMU Publishing. 2016. – 232 p. **[Russian]** ISBN 978-5-9652-0470-0
13. Functional Morphology Of The Uterus And Ovaries In Deficiency Of Magnesium And Its Pharmacological Correction: monograph Spasov A.A., Smirnov A.V., Bugaeva L.I., Tolokolnikov V.A., Lebedeva S.A. – Volgograd : VolgSMU Publishing. 2017. – 212 p. **[Russian]** ISBN 978-5-9652-0470-0
14. Chemistry and Applications of Benzimidazole and its Derivatives. Chapter 5. Antidiabetogenic Features of Benzimidazoles, Academician **A.A. Spasov** IntechOpen, United Kingdom, 2019 **[Russian]** ISBN 978-1-78984-552-5
15. Application of bishofit in local therapy. Edited by professor **Spasov A.A**., Second edition Volgograd 2022 **[Russian]** ISBN 5-88462-065-9
16. Effect of medicines on the results of laboratory tests. Edited by professor **Spasov A.A**.. Edition Volgograd 2022 **[Russian]** ISBN: 978-5-9652-0771-8

DISSERTATIONS

1. **Spasov A.A.** *Biochemical aspects of selected vasoactive substances* – Dissertation for **PhD degree** (candidate of medical sciences – name of the academic degree as used in Russia), Russia, Volgograd: Volgograd Volgograd State Medical Unistitute, 1975, 273 pp.

2. **Spasov A.A.** *Imidazo(1,2-α) benzimidazoles, a new class of cardiotropic medications* – Dissertation for **Dr. Sci. Medical degree** (doctor of medical sciences – name of the academic degree as used in Russia), Russia, Volgograd: Volgograd State Medical Unistitute, 1984, 301 pp.

NATIONAL PATENTS GRANTED

1. **Spasov A.A**., Anisimova V.A., Vasiliev P.M., Grechko O. Yu., Eliseeva N.V., Tolpygin I.E., Minkin V.I. *Kappa-opioid receptor (KOPr) agonists.* Patent RU № 2 413 512 C1. Date of application: July 29, 2009 Date of publication: March 3, 2011. – Bull. №7.
2. *Oral Medical Preparation for Repletion of Magnesium Deficiency.* Patent Publication Number: 2336076 (2008.10.20); Reg. number: RU 2006122160/15; Applicant's Name: Zakrytoe aktsionernoe obshchestvo "Bioamid" (RU) [Joint Stock Company "Bioamid" (RU)]; Inventors: Sergyeĭ Petrovich Voronin (RU), Igor Nikolayevich Iezhitsa (RU), Vladimir Ivanovich Petrov (RU), **Spasov Alexander Alexeevich** (RU), Maxim Konstantinovich Sinolitskiy (RU), Stella Vladimirovna Sinolitskaya (RU).
3. Brel A.K., Lisina S.V., **Spasov A.A**., Mazanova L.S. *Antipyretic activity of dialkyl β-(O-* salicyloyl*) ethylphosphonates*. Patent RU № 2420532. Application № 2009142680, Date of application: November 11, 2009. – Date of publication: June 10, 2011.
4. Anisimova V.A., **Spasov A.A**., Kosolapov V.A., Tibirkova E.V., Minkin V.I. *Antioxidant and antiradical activity of 2-aryl -4-dialkyl aminoethyl -3-phenyl pyrrole[1,2-α]benzimidazole sulfates*. Patent RU №2443704. Date of application: October 29, 2010. Date of publication: February 27, 2012. Bull. №6.
5. **Spasov A.A.**, Anisimova V.A., Kosolapov V.A., Eltsova L.V., Minkin V.I. *An antiradical, cerebroprotective and anti-ischemic agent.* Patent RU №2445090 Date of application: October 29, 2010 Date of publication: March 20, 2012. Bull. №8.
6. **Spasov A.A.**, Anisimova V.A., Petrov V.I., Kucheryavenko A.F., Tolpygin I.E., Minkin V.I. *An antiaggregant and antithrombotic agent.* Patent RU №2453312 Date of application: November 10, 2010 Date of publication: June 20, 2012. Bull. №17.
7. **Spasov A.A.**, Petrov V.I., Gurova N.A., Pyatin B.M., Anisimova V.A., Minkin V.I. *A pharmaceutical composition for the treatment of WPW syndrome.* Patent RU №2453313 Date of application: February 1, 2011 Date of publication: June 20, 2012. Bull. №17.
8. **Spasov A.A.**, Anisimova V.A., Yakovlev D.S., Kolobrodova N.A., Tolpygin I.E., Minkin V.I. *A serotonin 5-HT3-receptor antagonist.* Patent RU №2438669 C1. Date of publication: November 10, 2012. Bull. №1.
9. Vasiliev P.M., **Spasov A.A.**, Kuznetsova V.A. *The Maillard reaction inhibitors.* Patent RU № 2015620157. Date of publication: January 29, 2015.
10. Vasiliev P.M., **Spasov A.A.**, Cheplyaeva N.I., Litvinov R.A. *Dipeptidyl peptidase-4* inhibitors. Patent RU №2015620158 Date of publication: January 29, 2015.
11. Vasiliev P.M., **Spasov A.A.**, Kuznetsova V.A., Frantseva V.V. *Breakers of transverse cross-linkages of glycated proteins* Patent RU № 2015621298 Date of publication: August 20, 2015.

12. Vasiliev P.M., **Spasov A.A.**, Cheplyaeva N.I., Yanalieva L.R., Vorobiev E.S. *Glycogen phosphorylase inhibitors* Patent RU № 2015621313 Date of publication: 25.08.2015.
13. **Spasov A.A.**, Kholuiskaya S.N., Voronkova M.P., Cheplyaeva N.I. *Synthesis of an oxovanadium (IV) and DMSO complex exhibiting antidiabetic activity.* Patent RU №2559894 Date of publication: May 22, 2015.
14. Pyatin B.M., Alekseev K.V., Avdiunina N.I., Grushevskaya L.N., Blynskaya E.V., Illarionov A.A., Gayevaya L.M., Tikhonova N.V., Mikheeva A.S., **Spasov A.A.**, Petrov V.I., Grechko O.Yu., Raschenko A.I., Shtareva D.M., Anisimova V.A., Minkin V.I. *Pharmaceutical composition in solid form with analgesic activity*. Patent RU № 2545861 Priority date 26.02.2015.
15. Pyatin B.M., Alekseev K.V., Avdyunina N.I., Grushevskaya L.N., Blynskaya E.V., Illarionov A.A., Gayevaya L.M., Tikhonova N.V., **Spasov A.A.**, Petrov V.I., Grechko O.Yu., Raschenko A.I., Shtareva D.M., Anisimova V.A., Minkin V.I. *Pharmaceutical composition in injectable form with analgesic activity (variants)*. Patent RU № 2563211 Priority date 19.08.2015.
16. **Spasov A.A.**, Petrov V.I., Anisimova V.A., Minkin V.I., Grechko O.Yu., Kalitin K.Yu. *Anticonvulsant agent*. Patent RU № 2568841. Date of publication: 20.11.2015.
17. Divaeva L.N., Kuzmenko T.A., **Spasov A.A.**, Morkovnik A.S., Anisimova V.A., Kucheryavenko A.F., Sirotenko V.S. *Hydrohalides of 11-phenoxyethyl and 11-benzyl substituted 2,3,4,5-benzimidazole, tetrahydro[1,3]diazepino[1,2-a]benzimidazole with antiplatelet activity*. Patent RU No. 2582618. Date of publication: 27.04.2016.
18. Divaeva L.N., Kuzmenko T.A., Aleshin D.A., **Spasov A.A.**, Morkovnik A.S., Anisimova V.A., Chepelyaeva N.I. *11-[(4-tert-Butylphenoxymethyl)-11-benzyl-substituted-2,3,4,5-tetrahydro[1,3]diazepino[1,2-a]benzimidazole hydrohalides with α-glucosidase inhibitory activity*. Patent RU No. 2602504. Date of publication 20.11.2016.
19. Pyatin B.M., Alekseev K.V., Avdiunina N.I., Grushevskaya L.N., Blynskaya E.V., Illarionov A.A., Gayevaya L.M., Tikhonova N.V., Mikheeva A.S., **Spasov A.A.**, Petrov V.I., Grechko O.Yu., Raschenko A.I., Shtareva D.M., Anisimova V.A., Minkin V.I. *Pharmaceutical composition in solid form with analgesic activity*. Patent RU № 2545861 Date of publication 10.04.2015.
20. Rusinov V., Chupakhin O., Charushin V.N., Sapozhnikova I.M., Bliznik A.M., **Spasov A.A.**, Petrov V.I., Kuznetsova V.A., Matyevich O.A., Matsevich A.I. *The sodium salt of diethyl 4-oxo-1,4-dihydropyrazolo[5,1-c]-1,2,4-triazine-3,8-dicarboxylic acid, monohydrate*. Patent RU No. 2612300. Date of publication 06.03.2017.
21. **Spasov A.A.**, Shtyrlin Yu.G., Balakin K., Ziganshin A.U., Kuznetsova V.A., Petrov V.I., Strelnik A.D. *The use of azo-derivatives of phenylsulphonic acids as inhibitors of the formation of final glycation products*. Patent RU No. 2628605. Date of publication 21.08.2017.
22. Divaeva L.N., **Spasov A.A.**, Petrov V.I., Kuzmenko T.A., Morkovnik A.S., Yakovlev D.S., Maltsev D.V., Taran A.S., Anisimova V.A. *11-(4-tert-Butylbenzyl)- and phenacyl substituted 2,3,4,5-tetrahydro[1,3]diazepino[1,2-a] benzimidazole with anxiolytic activity*. Patent RU No. 2629022. Date of publication 24.08.2017.
23. Zhukovskaya O.N., Anisimova V.A., Morkovnik A.S., Petrov V.I., **Spasov A.A.**, Rashchenko A.I., Brigadirova A.A., Abbas Kh.S.A. *9-Benzyl-2-biphenylimidazo[1,2-a]benzimidazole and its pharmaceutically acceptable salts showing the properties of glycated proteins crosslink breakers*. Patent RU No. 2627769. Date of publication 11.08.2017.
24. Anisimova V.A., Zhukovskaya O.N., Petrov V.I., **Spasov A.A.**, Kosolapov V.A., Kucheryavenko A.F., Gaidukova K.A., Sorotskiy D.V. *Bromides of 1-substituted-3- {[2- (3,5-di-tert-4-hydroxyphenyl) -2-oxoethyl]} -2-aminobenzimidazolium having antiplatelet and antioxidant properties*. Patent RU No. 2623439. Date of publication 26.06.2017.
25. Shtyrlin Y.G., **Spasov A.A**, Balakin K.V., Kuznetsova V. A., Petrov V. I., Strelnik A.D. *Application Of Sulfasalazine As An Inhibitor Of The Formation Glycation End Products.* Patent RU No 2680844. Date of publication 12.10.2017.
26. Stepanova E.F., Kuregyan A. G., **Spasov A.A.**, Yakovlev D. S., Smirnova L.A., Sultanova Ki. T., Agatsarskaya Y. Vl., Kornilov V.I., Petrov V.I., Adzhienko V. L. *Pharmaceutical Composition Of Antimigraine Action In Solid Dosage Form In The Form Of Tablets*. Patent RU No. 2696866 Date of publication 05.03.2019
27. Stepanova E.F., Remezova I.P., **Spasov A.A**., Kucheryavenko A.F., Smirnova L.A., Gajdukova K.A., Sirotenko V.S., Petrov V. I., Morozov A. V., Shevchenko A.M. *Pharmaceutical Composition Of Antithrombotic Action In Solid Dosage Form In The Form Of Tablets* Patent RU No. 2696869 Date of publication 05.03.2019
28. Zhukovskaya O.N., **Spasov A.A**., Petrov V.I., Rashchenko A.I, Litvinov R.A., Morkovnik A.S, Gurova N.A. , Smirnov A. V., Shmidt M. V., Panshin N.G., Maltsev D.V., Naumenko L.V., Anisimova V.A. *Agent Possessing Cardio-, Nephro-, Endothelial-, Microangio-, Macroangio- And Encephaloprotective Properties* Patent RU No. 2700791 Date of publication 23.09.2019
29. N.A. Lozinskaya E.V. Zyryanova D.A. Babkov V.G. Klochkov A.A. **Spasov A.A.,** Efremov E.N. Bezsonova M.D. Tsymlyakov Method of treating diabetes mellitus RU2019128937A Date of publication 2020-10-19
30. Bis[1,2,4]triazolo[4,3-b:3',4'-f][1,2,4,5]tetrazines with anti-glycing, anti-glycoxidation and anti-aggregation activities Charushin V.N. Korotina A.V., Thickness S.G., Rusinov G.L., Litvinov R. A.. Babkova V.A., Sirotenko V.S., Babkov D.A., **Spasov A.A**. Paten RU 2 755 897 C1 Date of publication 2021-09-22
31. Use of sodium salt of diethyl ester of 4-oxo-1,4-dihydropyrazolo[5,1-c]-1,2,4-triazine-3,8-dicarboxylic acid, monohydrate as drug for treatment and prevention of late complications of diabetes mellitus Babkova V.A, Govorova V.A., Gurova N.A., Kotovskaya S.K., Litvinov R.A.,,Naumenko L.V., Petrov V.I., Rusinov V.L., SapozhnokovaI.M.M, Smirnov A.V., **Spasov A.A.,** Shmidt M.V. Paten RU 2765117 c2, 25.01.2022. Date of publication 2019130147 от 24.09.2019
32. Compounds with anxiolytic activity Vasiliev P.M, Maltchev D.V., Perfiliev M.A., Spasov A.A.,, Skripka M.A., Kochetkov A.N., Paten RU 2022621744, 15.07.2022. Date of publication 2022621682 от 13.07.2022.

INTERNATIONAL, NATIONAL AND REGIONAL SYMPOSIUM PARTICIPANT (OVER THE PERIOD OF THE LAST 5 YEARS)

1. Russian-Wide Conference with International Participation dedicated to the 85th Anniversary of V.A. Kukhtin "Grand Challenges for Chemists and Pharmaceutists". Cheboksary, Russian Federation. April 3-4, 2014
2. 20th EuroQSAR Understanding Chemical-Biological Interactions, III International Scientific and Practical

Conference "Academic Science: Challenges and achievements". St. Petersburg, Russian Federation. February 20-21, 2014

3. Symposium dedicated to the 75th Anniversary of Academician of the Russian Academy of Medical Sciences Yu. D. Ignatov "Recent Advances in pharmacological management of pain". St. Petersburg, Russian Federation. June 16, 2015
4. Russian Scientific Conference dedicated to the 150th Anniversary of N.P. Kravkov "Pharmacological treatment of emergency medical conditions". St. Petersburg, Russian Federation. June 29 –July 2, 2015
5. Scientific and Practical Conference with International Participataion "Disadaptation of various etiologies and ways of pharmacological treatment". Pyatigorsk, Russian Federation. November 2-3, 2015
6. ASCEPT-BPS joint scientific meeting "Tomorrow's medicines: pharmacology, patients and populations". [*The first joint meeting between the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) and the British Pharmacological Society (BPS) in association with the Hong Kong Pharmacology Society (HKPS) and the Asia Pacific Federation of Pharmacologists (APFP)*] University of Hong Kong, Hong Kong. May 19-21 2015
7. XX Mendeleev Congress on General and Applied Chemistry. Ekaterinburg, Russian Federation, September 26-30, 2016
8. 3rd Russian Conference on Medicinal Chemistry. September 28 – October 03, 2017. Kazan, Tatarstan, Russian Federation.
9. V Congress of pharmacologists of Russia "Scientific basis of search and development of new drugs", May 14-18, 2018. Yaroslavl, Russian Federation.
10. XXI Mendeleev Congress on General and Applied Chemistry. Saint Petersburg, 2019
11. 2nd Volga Pharma Summit. 13-14 September 2017. Volgograd, Russian Federation.
12. 3rd Russian Conference on Medicinal Chemistry. September 28 – October 03, 2017. Kazan, Tatarstan, Russian Federation.
13. V Congress of pharmacologists of Russia "Scientific basis of search and development of new drugs", May 14-18, 2018. Yaroslavl, Russian Federation.
14. 4th Russian Conference on Medicinal Chemistry with international participants MedChem Russia 2019.
15. International congress «Biotechnology: state of the art and perspectives» Russia ,Feb. 2019
16. XXI Mendeleev Congress on General and Applied Chemistry. Saint Petersburg, 2019. Satellite symposia: From empirical to predictive chemistry
17. V conference on Molecular or biological aspect of chemistry and pharmacology: MOBI-CHEMPHARMA2019, Sudak, Krim, Russia
18. 4th Russian Conference on Medicinal Chemistry with international participants Ekaterinburg, Russia, 10-14 june 2019
19. 24th Iranian and 3th International Congress of Physiology and Pharmacology (FAOPS Satellite Congress), 30 oct-01 nov 2019, Tehran, Iran
20. V International Conference Modern Synthetic Methodologies For Creating Drugs And Functional Materials (MOSM 2021) 16-20/11/2020 Yekaterinburg and Perm
21. Alzheimer's Association International Conference® (AAIC®) Satellite Symposium, May 12-13 2021, Online, Worldwide
22. 34th Scientific Meeting of Malaysian Society of Pharmacology & Physiology (MSPP2021) "Trailblazing the Translational Research". 15–17 July, 2021 • Virtual Meeting • Monash University Malaysia
23. Pharmacology 2021 | British Pharmacological Society. September 07-09 2021, Online, Worldwide, Oral Communications – Neuropharmacology
24. International Conference "The life path of drugs: a simple and complex task"Yaroslavl21-22.10.2021
25. International Conference MEDCHEM-RUSSIA Volgograd 16-19 May of 2022

WORKSHOPS AND ADVANCED SUBJECT TRAINING COURSES (ASTC) – OVER THE PERIOD OF THE LAST 5 YEARS

1. All-Russian conference dedicated to the 90th anniversary of the birth of AMS of USSR Academician A.V. Waldman "Innovations in Pharmacology: From Theory to Practice". St. Petersburg, Russian Federation. October 27-28, 2014 (**organizing committee**)
2. Scientific and Practical Conference with International Participataion "Disadaptation of various etiologies and ways of pharmacological treatment". Pyatigorsk, Russian Federation. November 2-3, 2015 (**organizing committee**)
3. Recent advances in modern pharmacology. 22-24 October 2015, Ryazan, Russian Federation. (**session chair**)
4. Volga Pharma Summit. 14 September 2016. Volgograd, Russian Federation. (**organizing committee**)
5. XX Mendeleev Congress on General and Applied Chemistry. Ekaterinburg, Russian Federation, September 26-30, 2016
6. 2nd Volga Pharma Summit. 13-14 September 2017. Volgograd, Russian Federation. (**organizing committee**)
7. 3rd Russian Conference on Medicinal Chemistry. September 28 – October 03, 2017. Kazan, Tatarstan, Russian

Federation. (**session chair**)

8. V Congress of pharmacologists of Russia “Scientific basis of search and development of new drugs”, May 14-18, 2018. Yaroslavl, Russian Federation. (**organizing committee**)
9. 4th Russian Conference on Medicinal Chemistry with international participants MedChem Russia 2019. (**organizing committee, speaker**)
10. International congress «Biotechnology: state of the art and perspectives» Russia ,Feb. 2019
11. XXI Mendeleev Congress on General and Applied Chemistry. Saint Petersburg, 2019. Satellite symposia: From empirical to predictive chemistry (**speaker**)
12. V conference on Molecular or biological aspect of chemistry and pharmacology: MOBI-CHEMPHARMA2019, Sudak, Krim, Russia (**session chair, speaker**)
13. 4th Russian Conference on Medicinal Chemistry with international participants Ekaterinburg, Russia, 10-14 june 2019 (**speaker**)
14. V International Conference Modern Synthetic Methodologies For Creating Drugs And Functional Materials (MOSM 2021) 16-20/11/2020 Yekaterinburg and Perm (**speaker**)
15. V International Conference Modern Synthetic Methodologies For Creating Drugs And Functional Materials (MOSM 2021) 16-20/11/2020 Yekaterinburg and Perm (**speaker**)
16. International Conference "The life path of drugs: a simple and complex task"Yaroslavl21-22.10.2021(**speaker**)
17. International Conference MEDCHEM-RUSSIA Volgograd 16-19 May of 2022 ((**organizing committee, speaker**)