

# Irina V Balalaeva

## List of Publications by Year in descending order

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Version: 2024-02-01

86  
papers

2,110  
citations

304368

22  
h-index

329751

37  
g-index

93  
all docs

93  
docs citations

93  
times ranked

2311  
citing authors

#	ARTICLE	IF	CITATIONS
1	Which cell death modality wins the contest for photodynamic therapy of cancer?. <i>Cell Death and Disease</i> , 2022, 13, 455.	2.7	86
2	Targeting immunogenic cancer cell death by photodynamic therapy: past, present and future. , 2021, 9, e001926.		254
3	Novel porphyrazine-based photodynamic anti-cancer therapy induces immunogenic cell death. <i>Scientific Reports</i> , 2021, 11, 7205.	1.6	36
4	Upconversion Nanoparticles Decorated with Polysialic Acid for Solid Tumors Visualization In Vivo. <i>Doklady Biochemistry and Biophysics</i> , 2021, 497, 81-85.	0.3	1
5	Controlled Formation of a Protein Corona Composed of Denatured BSA on Upconversion Nanoparticles Improves Their Colloidal Stability. <i>Materials</i> , 2021, 14, 1657.	1.3	12
6	Effect of chronic $\hat{1}^2$ -radiation on long-distance electrical signals in wheat and their role in adaptation to heat stress. <i>Environmental and Experimental Botany</i> , 2021, 184, 104378.	2.0	19
7	The localization of the photosensitizer determines the dynamics of the secondary production of hydrogen peroxide in cell cytoplasm and mitochondria. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2021, 219, 112208.	1.7	11
8	Ferroptosis and Photodynamic Therapy Synergism: Enhancing Anticancer Treatment. <i>Trends in Cancer</i> , 2021, 7, 484-487.	3.8	65
9	Poly(methacrylic Acid)-Cellulose Brushes as Anticancer Porphyrazine Carrier. <i>Nanomaterials</i> , 2021, 11, 1997.	1.9	5
10	Cyanoarylporphyrazines with High Viscosity Sensitivity: A Step towards Dosimetry-Assisted Photodynamic Cancer Treatment. <i>Molecules</i> , 2021, 26, 5816.	1.7	6
11	Electrical Signaling of Plants under Abiotic Stressors: Transmission of Stimulus-Specific Information. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10715.	1.8	18
12	A method of drug delivery to tumors based on rapidly biodegradable drug-loaded containers. <i>Applied Materials Today</i> , 2021, 25, 101199.	2.3	17
13	Photoluminescent Nanomaterials for Medical Biotechnology. <i>Acta Naturae</i> , 2021, 13, 16-31.	1.7	3
14	Effect of novel porphyrazine photosensitizers on normal and tumor brain cells. <i>Journal of Biophotonics</i> , 2020, 13, e201960077.	1.1	19
15	UCNP-based Photoluminescent Nanomedicines for Targeted Imaging and Theranostics of Cancer. <i>Molecules</i> , 2020, 25, 4302.	1.7	16
16	Comparative Analysis of Cellâ€™Cell Contact Abundance in Ovarian Carcinoma Cells Cultured in Two- and Three-Dimensional In Vitro Models. <i>Biology</i> , 2020, 9, 446.	1.3	13
17	Synthesis and antiproliferative activity of new chlorin e6 glycoconjugates. <i>Mendeleev Communications</i> , 2020, 30, 159-161.	0.6	10
18	Automatic Determination of the Parameters of Electrical Signals and Functional Responses of Plants Using the Wavelet Transformation Method. <i>Agriculture (Switzerland)</i> , 2020, 10, 7.	1.4	5

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19	New Cyanoarylporphyrazines with High Sensitivity of Photophysical Parameters to Viscosity as Promising Agents for Photodynamic Therapy. Russian Journal of General Chemistry, 2020, 90, 249-256.	0.3	7
20	Model of Ovarian Adenocarcinoma Spheroids for Assessing Photodynamic Cytotoxicity. Sovremennyye Tehnologii V Medicine, 2020, 12, 34.	0.4	6
21	Targeted Delivery to Tumors: Multidirectional Strategies to Improve Treatment Efficiency. Cancers, 2019, 11, 68.	1.7	78
22	Nanoparticle-based drug delivery via RBC-hitchhiking for the inhibition of lung metastases growth. Nanoscale, 2019, 11, 1636-1646.	2.8	126
23	Hydrogen peroxide in the reactions of cancer cells to cisplatin. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 692-702.	1.1	15
24	Penetration Efficiency of Antitumor Agents in Ovarian Cancer Spheroids: The Case of Recombinant Targeted Toxin DARPIn-LoPE and the Chemotherapy Drug, Doxorubicin. Pharmaceutics, 2019, 11, 219.	2.0	21
25	HER2-Specific Targeted Toxin DARPIn-LoPE: Immunogenicity and Antitumor Effect on Intraperitoneal Ovarian Cancer Xenograft Model. International Journal of Molecular Sciences, 2019, 20, 2399.	1.8	25
26	Preclinical Study of Biofunctional Polymer-Coated Upconversion Nanoparticles. Toxicological Sciences, 2019, 170, 123-132.	1.4	27
27	Low-level laser therapy as a modifier of erythrocytes morphokinetic parameters in hyperadrenalinemia. Lasers in Medical Science, 2019, 34, 1603-1612.	1.0	10
28	Immunogenic cell death induced by a new photodynamic therapy based on photosens and photodithazine. , 2019, 7, 350.		183
29	Water-Soluble Chlorin/Arylaminoquinazoline Conjugate for Photodynamic and Targeted Therapy. Journal of Medicinal Chemistry, 2019, 62, 11182-11193.	2.9	38
30	Functionalized Upconversion Nanoparticles for Targeted Labelling of Bladder Cancer Cells. Biomolecules, 2019, 9, 820.	1.8	13
31	3D in vitro models of tumors expressing EGFR family receptors: a potent tool for studying receptor biology and targeted drug development. Drug Discovery Today, 2019, 24, 99-111.	3.2	11
32	Photobiological properties of phthalocyanine photosensitizers Photosens, Holosens and Phthalosens: A comparative in vitro analysis. Journal of Photochemistry and Photobiology B: Biology, 2019, 191, 128-134.	1.7	49
33	An emerging role for nanomaterials in increasing immunogenicity of cancer cell death. Biochimica Et Biophysica Acta: Reviews on Cancer, 2019, 1871, 99-108.	3.3	41
34	Effect of Photosensitizers Photosens, Photodithazine and Hypericin on Glioma Cells and Primary Neuronal Cultures: a Comparative Analysis. Sovremennyye Tehnologii V Medicine, 2019, 11, 52.	0.4	5
35	Cyano-Aryl Porphyrazine Pigments with Polycyclic Substituents as the Promising Agents for Photodynamic Therapy and Potential Sensors of Local Viscosity. Macrocyclic Chemistry, 2019, 12, 268-275.	0.9	9
36	Hydrogen peroxide level in tumor cells during cisplatin-induced apoptosis. , 2019, , .		0

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37	Porphyrazine Structures with Electron-Withdrawing Substituents as the Base for Materials for Photonics and Biomedicine. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2018, 44, 301-315.	0.3	14
38	Liposomal Form of Tetra(Aryl)Tetracyanoporphyrazine: Physical Properties and Photodynamic Activity In Vitro. Journal of Fluorescence, 2018, 28, 513-522.	1.3	11
39	Synthesis and biological evaluation of new water-soluble photoactive chlorin conjugate for targeted delivery. European Journal of Medicinal Chemistry, 2018, 144, 740-750.	2.6	32
40	Monitoring of hydrogen peroxide production under photodynamic treatment using protein sensor HyPer. Journal of Photochemistry and Photobiology B: Biology, 2018, 178, 296-301.	1.7	13
41	Parameters of electrical signals and photosynthetic responses induced by them in pea seedlings depend on the nature of stimulus. Functional Plant Biology, 2018, 45, 160.	1.1	32
42	Novel Cyanoarylporphyrazines with Triazole Groups at the Macrocycle Periphery as Potential Sensibilizers of Photodynamic Therapy and Optical Probes of Intracellular Viscosity. Russian Journal of General Chemistry, 2018, 88, 2339-2346.	0.3	1
43	Radioactive ( <sup>90</sup> Y) upconversion nanoparticles conjugated with recombinant targeted toxin for synergistic nanotheranostics of cancer. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9690-9695.	3.3	58
44	Real-Time Tracking of Yb <sup>3+</sup> , Tm <sup>3+</sup> Doped NaYF <sub>4</sub> Nanoparticles in Living Cancer Cells. Sovremennyye Tehnologii V Medicine, 2018, 10, 57.	0.4	2
45	New promising porphyrazine-based agents for optical theranostics of cancer. Russian Journal of General Chemistry, 2017, 87, 479-484.	0.3	11
46	Effective delivery of porphyrazine photosensitizers to cancer cells by polymer brush nanocontainers. Journal of Biophotonics, 2017, 10, 1189-1197.	1.1	22
47	In vivo multimodal tumor imaging and photodynamic therapy with novel theranostic agents based on the porphyrazine framework-chelated gadolinium (III) cation. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 3120-3130.	1.1	29
48	HER2-specific recombinant immunotoxin 4D5scFv-PE40 passes through retrograde trafficking route and forces cells to enter apoptosis. Oncotarget, 2017, 8, 22048-22058.	0.8	22
49	Pharmacokinetics of Chlorin e6-Cobalt Bis(Dicarbollide) Conjugate in Balb/c Mice with Engrafted Carcinoma. International Journal of Molecular Sciences, 2017, 18, 2556.	1.8	10
50	Study of the tissue distribution of potential boron neutron-capture therapy agents based on conjugates of chlorin e 6 aminoamide derivatives with boron nanoparticles. Biophysics (Russian) Tj ETQq0 0 0 rgBTQ Overlock 110 Tf 50 2		
51	Hydrogen peroxide detection in viable and apoptotic tumor cells under action of cisplatin and bleomycin. Photonics & Lasers in Medicine, 2016, 5, .	0.3	6
52	New porphyrazine macrocycles with high viscosity-sensitive fluorescence parameters. Russian Journal of General Chemistry, 2016, 86, 1330-1338.	0.3	22
53	Recombinant targeted toxin based on HER2-specific DARPIn possesses a strong selective cytotoxic effect in vitro and a potent antitumor activity in vivo. Journal of Controlled Release, 2016, 233, 48-56.	4.8	57
54	Biodistribution of Amine-Amide Chlorin e6 Derivative Conjugate with a Boron Nanoparticle for Boron Neutron-Capture Therapy. Sovremennyye Tehnologii V Medicine, 2016, 8, 34-40.	0.4	3

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55	Hydrogen Peroxide Level Changes in Viable and Apoptotic Tumor Cells under Cisplatin Action. , 2016, , .		0
56	Far-red fluorescent cell line for preclinical study of HER2-targeted agents. Doklady Biochemistry and Biophysics, 2015, 465, 410-412.	0.3	1
57	Dual use of porphyrazines as sensitizers and viscosity markers in photodynamic therapy. Journal of Materials Chemistry B, 2015, 3, 1089-1096.	2.9	39
58	A novel far-red fluorescent xenograft model of ovarian carcinoma for preclinical evaluation of HER2-targeted immunotoxins. Oncotarget, 2015, 6, 30919-30928.	0.8	32
59	Novel recombinant anti-HER2/neu immunotoxin: Design and antitumor efficiency. Biochemistry (Moscow), 2014, 79, 1376-1381.	0.7	21
60	The study of hydrogen peroxide level under cisplatin action using genetically encoded sensor hyper. Proceedings of SPIE, 2014, , .	0.8	0
61	Evaluation of oral mucosa collagen condition with cross-polarization optical coherence tomography. Journal of Biophotonics, 2013, 6, 321-329.	1.1	23
62	Novel regular polyimide-graft-(polymethacrylic acid) brushes: Synthesis and possible applications as nanocontainers of cyanoporphyrazine agents for photodynamic therapy. Journal of Polymer Science Part A, 2013, 51, 4267-4281.	2.5	50
63	Passive and active targeting of quantum dots for whole-body fluorescence imaging of breast cancer xenografts. Journal of Biophotonics, 2012, 5, 860-867.	1.1	32
64	Two subsystems of meniscal collagen and their different thermal stabilities. Doklady Biochemistry and Biophysics, 2012, 444, 175-177.	0.3	1
65	Design and testing of a new photosensitizer based on an ytterbium porphyrazine complex. Biophysics (Russian Federation), 2011, 56, 1083-1087.	0.2	5
66	Study of photosensitizers pharmacokinetics in mouse tumor model by transillumination fluorescence imaging in vivo. , 2011, , .		1
67	Cytostatic action of triazole and oxazolidinone derivatives. Russian Chemical Bulletin, 2011, 60, 1166-1171.	0.4	3
68	Cytotoxic properties of the nitrosyl iron complex with phenylthiyl. Russian Chemical Bulletin, 2011, 60, 1488-1494.	0.4	16
69	Synthesis of fluorescent coumarin triazolylglycosides. Tetrahedron Letters, 2011, 52, 4196-4199.	0.7	19
70	Imaging of human ovarian cancer SKOV-3 cells by quantum dot bioconjugates. Doklady Biochemistry and Biophysics, 2010, 430, 41-44.	0.3	8
71	Recording changes in extracellular pH via confocal microscopy during generation of excitation potentials in higher plants. Cell and Tissue Biology, 2010, 4, 471-475.	0.2	1
72	<italic>In vivo</italic> study of photosensitizer pharmacokinetics by fluorescence transillumination imaging. Journal of Biomedical Optics, 2010, 15, 048004.	1.4	17

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73	Novel PEG-organized biocompatible fluorescent nanoparticles doped with an ytterbium cyanoporphyrine complex for biophotonic applications. <i>Chemical Communications</i> , 2010, 46, 8398.	2.2	22
74	Whole-body imaging of HER2/neu-overexpressing tumors using scFv-antibody conjugated quantum dots. , 2010, , .		1
75	Fluorescent immunolabeling of cancer cells by quantum dots and antibody scFv fragment. <i>Journal of Biomedical Optics</i> , 2009, 14, 021004.	1.4	31
76	Application of optical coherence tomography in the diagnosis of mucositis in patients with head and neck cancer during a course of radio(chemo)therapy. <i>Medical Laser Application: International Journal for Laser Treatment and Research</i> , 2008, 23, 186-195.	0.4	10
77	Contrasting properties of gold nanoparticles for optical coherence tomography: phantom, <i>in vivo</i> studies and Monte Carlo simulation. <i>Physics in Medicine and Biology</i> , 2008, 53, 4995-5009.	1.6	125
78	Gold nanoshells for OCT imaging contrast: From model to in-vivo study. <i>Proceedings of SPIE</i> , 2008, , .	0.8	3
79	&lt;title&gt;Frequency domain fluorescence diffuse tomography of small animals&lt;/title&gt;. <i>Proceedings of SPIE</i> , 2007, , .	0.8	0
80	Diffuse fluorescence tomography of exo- and endogenously labeled tumors. <i>Proceedings of SPIE</i> , 2007, , .	0.8	0
81	<title>Fluorescence diffuse tomography for tumor detection and monitoring</title>. , 2007, , .		0
82	Optical coherence tomography in the diagnosis of dysplasia and adenocarcinoma in Barret's esophagus. , 2007, , .		2
83	OCT visualization of mucosal radiation damage in patients with head and neck cancer: pilot study. , 2006, , .		1
84	Fluorescence diffuse tomography of small animals with DsRed2 fluorescent protein. <i>Laser Physics</i> , 2006, 16, 741-746.	0.6	11
85	Imaging of QDs-labeled tumors in small animals by fluorescence diffuse tomography. <i>Laser Physics Letters</i> , 2006, 3, 208-211.	0.6	11
86	OCT Visualization of Acute Radiation Mucositis: Pilot Study. , 2005, , .		0