

# Alexander B Shcherbakov

## List of Publications by Year in descending order

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Version: 2024-02-01

52  
papers

1,293  
citations

331670

21  
h-index

377865

34  
g-index

56  
all docs

56  
docs citations

56  
times ranked

1438  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure-sensitive properties and biomedical applications of nanodispersed cerium dioxide. Russian Chemical Reviews, 2009, 78, 855-871.	6.5	145
2	UV-shielding property, photocatalytic activity and photocytotoxicity of ceria colloid solutions. Journal of Photochemistry and Photobiology B: Biology, 2011, 102, 32-38.	3.8	143
3	CeO <sub>2</sub> Nanoparticle-Containing Polymers for Biomedical Applications: A Review. Polymers, 2021, 13, 924.	4.5	67
4	Cerium fluoride nanoparticles protect cells against oxidative stress. Materials Science and Engineering C, 2015, 50, 151-159.	7.3	50
5	Can tailored nanoceria act as a prebiotic? Report on improved lipid profile and gut microbiota in obese mice. EPMA Journal, 2019, 10, 317-335.	6.1	44
6	Nanocrystalline ceria based materials – Perspectives for biomedical application. Biophysics (Russian) Tj ETQq0 0 0 rgBT / Overlock 10 Tf	0.7	41
7	Ceria Nanoparticles-Decorated Microcapsules as a Smart Drug Delivery/Protective System: Protection of Encapsulated <i>P. pyralis</i> Luciferase. ACS Applied Materials & Interfaces, 2018, 10, 14367-14377.	8.0	39
8	Panthenol-stabilized cerium dioxide nanoparticles for cosmeceutic formulations against ROS-induced and UV-induced damage. Journal of Photochemistry and Photobiology B: Biology, 2014, 130, 102-108.	3.8	37
9	Facile fabrication of luminescent organic dots by thermolysis of citric acid in urea melt, and their use for cell staining and polyelectrolyte microcapsule labelling. Beilstein Journal of Nanotechnology, 2016, 7, 1905-1917.	2.8	35
10	Photo-induced toxicity of tungsten oxide photochromic nanoparticles. Journal of Photochemistry and Photobiology B: Biology, 2018, 178, 395-403.	3.8	35
11	Synthesis and thermal stability of nanocrystalline ceria sols stabilized by citric and polyacrylic acids. Russian Journal of Inorganic Chemistry, 2010, 55, 328-332.	1.3	33
12	Biological, biomedical and pharmaceutical applications of cerium oxide. , 2020, , 279-358.		30
13	One-stage synthesis of ceria colloid solutions for biomedical use. Doklady Chemistry, 2011, 437, 103-106.	0.9	29
14	Advances and prospects of using nanocrystalline ceria in cancer theranostics. Russian Journal of Inorganic Chemistry, 2014, 59, 1556-1575.	1.3	29
15	Highly reversible photochromism in composite WO <sub>3</sub> /nanocellulose films. Cellulose, 2019, 26, 9095-9105.	4.9	29
16	Highly Crystalline WO <sub>3</sub> Nanoparticles Are Nontoxic to Stem Cells and Cancer Cells. Journal of Nanomaterials, 2019, 2019, 1-13.	2.7	27
17	Photodynamic activity of hematoporphyrin conjugates with gold nanoparticles: experiments in vitro. Experimental Oncology, 2010, 32, 44-7.	0.1	25
18	Determination of cerium(III) and cerium(IV) in nanodisperse ceria by chemical methods. Russian Journal of Inorganic Chemistry, 2014, 59, 15-23.	1.3	24

#	ARTICLE	IF	CITATIONS
19	Synthesis and antioxidant activity of biocompatible maltodextrin-stabilized aqueous sols of nanocrystalline ceria. Russian Journal of Inorganic Chemistry, 2012, 57, 1411-1418.	1.3	22
20	The first inorganic mitogens: Cerium oxide and cerium fluoride nanoparticles stimulate planarian regeneration via neoblastic activation. Materials Science and Engineering C, 2019, 104, 109924.	7.3	22
21	PVP-stabilized tungsten oxide nanoparticles: pH sensitive anti-cancer platform with high cytotoxicity. Materials Science and Engineering C, 2020, 108, 110494.	7.3	22
22	Antioxidant activity of nanocrystalline ceria to anthocyanins. Russian Journal of Inorganic Chemistry, 2009, 54, 1522-1527.	1.3	21
23	Cerium dioxide nanoparticles as third-generation enzymes (nanozymes). Nanosystems: Physics, Chemistry, Mathematics, 2017, , 760-781.	0.4	21
24	Direct monitoring of the interaction between ROS and cerium dioxide nanoparticles in living cells. RSC Advances, 2014, 4, 51703-51710.	3.6	20
25	Cerium dioxide nanoparticles increase immunogenicity of the influenza vaccine. Antiviral Research, 2016, 127, 1-9.	4.1	20
26	Interaction of nanoceria with microorganisms. , 2016, , 419-450.		16
27	Facile method for fabrication of surfactant-free concentrated CeO <sub>2</sub> sols. Materials Research Express, 2017, 4, 055008.	1.6	16
28	Thermal stability of nanocrystalline CeO <sub>2</sub> prepared through freeze drying. Inorganic Materials, 2010, 46, 43-46.	0.8	15
29	Microwave-hydrothermal synthesis of gadolinium-doped nanocrystalline ceria in the presence of hexamethylenetetramine. Russian Journal of Inorganic Chemistry, 2012, 57, 1303-1307.	1.3	15
30	Efficacy of nanoceria for periodontal tissues alteration in glutamate-induced obese rats – multidisciplinary considerations for personalized dentistry and prevention. EPMA Journal, 2017, 8, 43-49.	6.1	15
31	Deactivation of singlet oxygen by cerium oxide nanoparticles. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 382, 111925.	3.9	15
32	Nanoceria-curcumin conjugate: Synthesis and selective cytotoxicity against cancer cells under oxidative stress conditions. Journal of Photochemistry and Photobiology B: Biology, 2020, 209, 111921.	3.8	15
33	Antibacterial activity of cerium colloids against opportunistic microorganisms in vitro. MikrobiologichnyĖ Zhurnal, 2012, 74, 54-62.	0.6	15
34	Photochromic and Photocatalytic Properties of Ultra-Small PVP-Stabilized WO <sub>3</sub> Nanoparticles. Molecules, 2020, 25, 154.	3.8	12
35	Microwave-hydrothermal synthesis of stable nanocrystalline ceria sols for biomedical uses. Russian Journal of Inorganic Chemistry, 2010, 55, 1-5.	1.3	11
36	Layer-by-layer capsules as smart delivery systems of CeO <sub>2</sub> nanoparticle-based theranostic agents. Nanosystems: Physics, Chemistry, Mathematics, 2017, , 282-289.	0.4	11

#	ARTICLE	IF	CITATIONS
37	Inactivation of the nitroxyl radical by ceria nanoparticles. Doklady Chemistry, 2010, 430, 43-46.	0.9	10
38	Ceria nanoparticles boost activity of aged murine oocytes. Nano Biomedicine and Engineering, 2012, 4, .	0.9	9
39	Comparative Analysis of Sun Protection Characteristics of Nanocrystalline Cerium Dioxide. Russian Journal of Inorganic Chemistry, 2020, 65, 960-966.	1.3	8
40	Nanoparticles of cerium dioxide “an effective antiviral agent and adjuvant of biologically active molecules. ScienceRise Biological Science, 2018, .	0.1	8
41	UV-Induced Photocatalytic Reduction of Methylene Blue Dye in the Presence of Photochromic Tungsten Oxide Sols. Russian Journal of Inorganic Chemistry, 2020, 65, 1088-1092.	1.3	7
42	Advances and prospects of using nanocrystalline ceria in prolongation of lifespan and healthy aging. Russian Journal of Inorganic Chemistry, 2015, 60, 1595-1625.	1.3	5
43	Synthesis of nanocrystalline solid solutions $Ce_{1-x}R_xO_2$ (R = Nd, Eu) by the homogeneous hydrolysis method. Doklady Chemistry, 2010, 433, 183-185.	0.9	4
44	Polyol-mediated synthesis of nanocrystalline ceria doped with neodymium, europium, gadolinium, and ytterbium. Doklady Chemistry, 2012, 443, 82-85.	0.9	4
45	Inhibition of adrenaline autooxidation by nanocrystalline ceria. Doklady Chemistry, 2011, 437, 60-62.	0.9	3
46	PVP-stabilized tungsten oxide nanoparticles (WO <sub>3</sub> ) nanoparticles cause hemolysis of human erythrocytes in a dose-dependent manner. Nanosystems: Physics, Chemistry, Mathematics, 2019, 10, 199-205.	0.4	3
47	Amorphous and crystalline cerium(IV) phosphates: biocompatible ROS-scavenging sunscreens. Journal of Materials Chemistry B, 2022, 10, 1775-1785.	5.8	3
48	Photodynamic Activity of Nanogold-Doped Fotonol: Free Radicals Versus Singlet Oxygen. Forum on Immunopathological Diseases and Therapeutics, 2011, 2, 237-246.	0.1	2
49	Cytotoxicity analysis of gadolinium doped cerium oxide nanoparticles on human mesenchymal stem cells. Nanosystems: Physics, Chemistry, Mathematics, 2018, , 430-438.	0.4	2
50	Synergetic action of ceria nanoparticles and doxorubicin on the early development of two fish species, Danio rerio and Puntius tetrazona. Nanosystems: Physics, Chemistry, Mathematics, 2019, 10, 289-302.	0.4	2
51	Preparation of aqueous sols of $Ce_{1-x}Gd_xO_2$ , $Y_{0.9}Eu_{0.1}VO_4$ and nanocomposites $Ce_{1-x}Gd_xO_2$ /Y <sub>0.9</sub> Eu <sub>0.1</sub> VO <sub>4</sub> stabilized by polyacrylic acid. Russian Journal of Inorganic Chemistry, 2013, 58, 1287-1293.	1.3	1
52	Cerium oxide nanoparticles increase the cytotoxicity of TNF-α in vitro. Nanosystems: Physics, Chemistry, Mathematics, 2018, , 537-543.	0.4	1