Alexander K Andrianov

List of Publications by Year
in descending order

70 papers	2,738 citations	172386 29 h-index	189801 50 g-index
80 all docs	80 docs citations	80 times ranked	1935 citing authors

#	Article	IF	Citations
1	Microneedle-Based Vaccines. Current Topics in Microbiology and Immunology, 2009, 333, 369-393.	0.7	229
2	Poly[di(carboxylatophenoxy)phosphazene] is a potent adjuvant for intradermal immunization. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18936-18941.	3.3	141
3	Polymeric carriers for oral uptake of microparticulates. Advanced Drug Delivery Reviews, 1998, 34, 155-170.	6.6	138
4	Synthesis and Biologically Relevant Properties of Polyphosphazene Polyacids. Biomacromolecules, 2004, 5, 1999-2006.	2.6	111
5	Protein release from polyphosphazene matrices. Advanced Drug Delivery Reviews, 1998, 31, 185-196.	6.6	109
6	Poly[di(carboxylatophenoxy)phosphazene] (PCPP) is a potent immunoadjuvant for an influenza vaccine. Vaccine, 1998, 16, 92-98.	1.7	102
7	Poly[di(sodium carboxylatoethylphenoxy)phosphazene] (PCEP) is a potent enhancer of mixed Th1/Th2 immune responses in mice immunized with influenza virus antigens. Vaccine, 2007, 25, 1204-1213.	1.7	100
8	Polyphosphazene Polyelectrolytes:Â A Link between the Formation of Noncovalent Complexes with Antigenic Proteins and Immunostimulating Activity. Biomacromolecules, 2005, 6, 1375-1379.	2.6	97
9	Polyionic vaccine adjuvants: another look at aluminum salts and polyelectrolytes. Clinical and Experimental Vaccine Research, 2015, 4, 23.	1.1	91
10	Preparation of hydrogel microspheres by coacervation of aqueous polyphosphazene solutions. Biomaterials, 1998, 19, 109-115.	5.7	88
11	Synthesis, Properties, and Biological Activity of Poly[di(sodium) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 342 Td (carboxylatoeth	2.6	85
12	Poly(dichlorophosphazene) As a Precursor for Biologically Active Polyphosphazenes:â€‰ Synthesis, Characterization, and Stabilization. Macromolecules, 2004, 37, 414-420.	2.2	83
13	Rational design of a trispecific antibody targeting the HIV-1 Env with elevated anti-viral activity. Nature Communications, 2018, 9, 877.	5.8	65
14	Controlled release using ionotropic polyphosphazene hydrogels. Journal of Controlled Release, 1993, 27, 69-77.	4.8	64
15	Degradation of Polyaminophosphazenes:Â Effects of Hydrolytic Environment and Polymer Processing. Biomacromolecules, 2006, 7, 1581-1586.	2.6	60
16	Water-Soluble Phosphazene Polymers for Parenteral and Mucosal Vaccine Delivery. Pharmaceutical Biotechnology, 1995, 6, 473-493.	0.3	57
17	Water-Soluble Biodegradable Polyphosphazenes Containing N-Ethylpyrrolidone Groups. Macromolecules, 2005, 38, 7972-7976.	2.2	53
18	Effect of Environmental Factors on Hydrolytic Degradation of Water-Soluble Polyphosphazene Polyelectrolyte in Aqueous Solutions. Biomacromolecules, 2010, 11, 2033-2038.	2.6	52

#	Article	IF	Citations
19	Hydrolytic degradation of ionically cross-linked polyphosphazene microspheres. Journal of Applied Polymer Science, 1994, 53, 1573-1578.	1.3	43
20	Molecular-Level Interactions of Polyphosphazene Immunoadjuvants and Their Potential Role in Antigen Presentation and Cell Stimulation. Biomacromolecules, 2016, 17, 3732-3742.	2.6	43
21	Novel Route to Sulfonated Polyphosphazenes:Â Single-Step Synthesis Using â€œNoncovalent Protectionâ€• of Sulfonic Acid Functionality. Macromolecules, 2004, 37, 4075-4080.	2.2	41
22	Biodegradable â€œSmartâ€•Polyphosphazenes with Intrinsic Multifunctionality as Intracellular Protein Delivery Vehicles. Biomacromolecules, 2017, 18, 2000-2011.	2.6	41
23	Polyphosphazene microspheres: Preparation by ionic complexation of phosphazene polyacids with spermine. Journal of Applied Polymer Science, 2006, 101, 414-419.	1.3	40
24	Microneedles with Intrinsic Immunoadjuvant Properties: Microfabrication, Protein Stability, and Modulated Release. Pharmaceutical Research, 2011, 28, 58-65.	1.7	40
25	Water-Soluble Polyphosphazenes for Biomedical Applications. Journal of Inorganic and Organometallic Polymers and Materials, 2007, 16, 397-406.	1.9	38
26	Protein Stabilization in Aqueous Solutions of Polyphosphazene Polyelectrolyte and Non-Ionic Surfactants. Biomacromolecules, 2010, 11, 2268-2273.	2.6	38
27	Biodegradable Polyphosphazene Based Peptide-Polymer Hybrids. Polymers, 2016, 8, 161.	2.0	33
28	Polyphosphazene immunoadjuvants: Historical perspective and recent advances. Journal of Controlled Release, 2021, 329, 299-315.	4.8	33
29	Characterization of poly[di(carboxylatophenoxy) phosphazene] by an aqueous gel permeation chromatography. Journal of Applied Polymer Science, 1996, 60, 2289-2295.	1.3	31
30	Synthesis, Physico-Chemical Properties and Immunoadjuvant Activity of Water-Soluble Phosphazene Polyacids. Journal of Bioactive and Compatible Polymers, 1998, 13, 243-256.	0.8	30
31	PCPP-Formulated H5N1 Influenza Vaccine Displays Improved Stability and Dose-Sparing Effect in Lethal Challenge Studies. Journal of Pharmaceutical Sciences, 2011, 100, 1436-1443.	1.6	30
32	The effect of stable macromolecular complexes of ionic polyphosphazene on HIV Gag antigen and on activation of human dendritic cells and presentation to T-cells. Biomaterials, 2014, 35, 8876-8886.	5.7	30
33	Hydrolytically Degradable PEGylated Polyelectrolyte Nanocomplexes for Protein Delivery. Biomacromolecules, 2018, 19, 3467-3478.	2.6	29
34	PCPP-Adjuvanted Respiratory Syncytial Virus (RSV) sF Subunit Vaccine: Self-Assembled Supramolecular Complexes Enable Enhanced Immunogenicity and Protection. Molecular Pharmaceutics, 2017, 14, 2285-2293.	2.3	28
35	Biocompatible Nanocoatings of Fluorinated Polyphosphazenes through Aqueous Assembly. ACS Applied Materials & Interfaces, 2018, 10, 9756-9764.	4.0	28
36	Carboxymethylcelluloseâ€"Chitosanâ€coated microneedles with modulated hydration properties. Journal of Applied Polymer Science, 2011, 121, 395-401.	1.3	26

#	Article	IF	Citations
37	Polyphosphazenes enable durable, hemocompatible, highly efficient antibacterial coatings. Biomaterials, 2021, 268, 120586.	5.7	26
38	Supramolecular Assembly of Toll-like Receptor 7/8 Agonist into Multimeric Water-Soluble Constructs Enables Superior Immune Stimulation <i>In Vitro</i> and <i>In Vivo</i>. ACS Applied Bio Materials, 2020, 3, 3187-3195.	2.3	23
39	Fluorinated polyphosphazene polyelectrolytes. Journal of Applied Polymer Science, 2007, 103, 53-58.	1.3	21
40	Self-assembly of polyphosphazene immunoadjuvant with poly(ethylene oxide) enables advanced nanoscale delivery modalities and regulated pH-dependent cellular membrane activity. Heliyon, 2016, 2, e00102.	1.4	20
41	Design of a native-like secreted form of the hepatitis C virus E1E2 heterodimer. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	19
42	Structure-Based Design of Hepatitis C Virus E2 Glycoprotein Improves Serum Binding and Cross-Neutralization. Journal of Virology, 2020, 94, .	1.5	17
43	Transport Properties of Polyphosphazenes. , 0, , 325-344.		16
44	<i>In Vivo</i> and <i>In Vitro</i> Potency of Polyphosphazene Immunoadjuvants with Hepatitis C Virus Antigen and the Role of Their Supramolecular Assembly. Molecular Pharmaceutics, 2021, 18, 726-734.	2.3	16
45	Intradermal immunization using coated microneedles containing an immunoadjuvant. Vaccine, 2012, 30, 4355-4360.	1.7	15
46	Protein-loaded soluble and nanoparticulate formulations of ionic polyphosphazenes and their interactions on molecular and cellular levels. Materials Science and Engineering C, 2020, 106, 110179.	3.8	15
47	Next generation polyphosphazene immunoadjuvant: Synthesis, self-assembly and in vivo potency with human papillomavirus VLPs-based vaccine. Nanomedicine: Nanotechnology, Biology, and Medicine, 2021, 33, 102359.	1.7	13
48	New Family of Water-Soluble Sulfoâ€“Fluoro Polyphosphazenes and Their Assembly within Hemocompatible Nanocoatings. ACS Applied Bio Materials, 2019, 2, 3897-3906.	2.3	11
49	Improvement of RG1-VLP vaccine performance in BALB/c mice by substitution of alhydrogel with the next generation polyphosphazene adjuvant PCEP. Human Vaccines and Immunotherapeutics, 2021, 17, 2748-2761.	1.4	11
50	Polyphosphazenes as Vaccine Adjuvants. , 0, , 355-378.		10
51	Intracellular Delivery of Active Proteins by Polyphosphazene Polymers. Pharmaceutics, 2021, 13, 249.	2.0	9
52	Fluorinated Polyphosphazene Coatings Using Aqueous Nano-Assembly of Polyphosphazene Polyelectrolytes. ACS Symposium Series, 2018, , 101-118.	0.5	8
53	Immunopotentiating and Delivery Systems for HCV Vaccines. Viruses, 2021, 13, 981.	1.5	7
54	Induction of broadly neutralizing antibodies using a secreted form of the hepatitis C virus E1E2 heterodimer as a vaccine candidate. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2112008119.	3.3	7

#	Article	IF	Citations
55	Hierarchically Structured, All-Aqueous-Coated Hydrophobic Surfaces with pH-Selective Droplet Transfer Capability. ACS Applied Materials & Interfaces, 2022, 14, 26225-26237.	4.0	7
56	Biodegradable Polyphosphazene Scaffolds for Tissue Engineering. , 0, , 117-138.		6
57	Cationic Fluoropolyphosphazenes: Synthesis and Assembly with Heparin as a Pathway to Hemocompatible Nanocoatings. ACS Applied Bio Materials, 2022, 5, 313-321.	2.3	6
58	Ionically Cross-Linked Polyphosphazene Microspheres. ACS Symposium Series, 2000, , 395-406.	0.5	5
59	Expanding Options in Polyphosphazene Biomedical Research. , 0, , 15-43.		5
60	Ionic Fluoropolyphosphazenes as Potential Adhesive Agents for Dental Restoration Applications. Regenerative Engineering and Translational Medicine, 2021, 7, 10-20.	1.6	4
61	Graft polymerization of vinyl monomers on the surface of solid inorganic materials photoinitiated by the systems Rî—,CCl3-carbonyls of transition metals. Polymer Science USSR, 1984, 26, 2917-2923.	0.2	3
62	Kinetics of the solvolytic reaction between polymer hydrogels carrying oxime groups and O,Oâ€²-diethyl-O-p-nitrophenyl phosphate. Polymer Science USSR, 1991, 33, 1006-1012.	0.2	3
63	Potential of Polyphosphazenes in Modulating Vaccine-Induced Immune Responses: II. Investigations in Large Animals. , 0, , 77-84.		3
64	Biodegradable â€œScaffoldâ€•Polyphosphazenes for Non-Covalent PEGylation of Proteins. ACS Symposium Series, 2018, , 121-141.	0.5	3
65	The study of photo-initiated graft polymerization of vinyl monomers on inorganic materials. Polymer Science USSR, 1983, 25, 2314-2320.	0.2	2
66	Nano-Assembly of Quisinostat and Biodegradable Macromolecular Carrier Results in Supramolecular Complexes with Slow-Release Capabilities. Pharmaceutics, 2021, 13, 1834.	2.0	2
67	Self-Assembling Ionic Polyphosphazenes and Their Biomedical Applications. ACS Symposium Series, 2018, , 27-49.	0.5	1
68	Radical graft polymerization of methyl methacrylate on inorganic fillers initiated by surface S-methyl-N,N-diethyldithiocarbanate groups. Polymer Science USSR, 1987, 29, 657-662.	0.2	0
69	Synthesis and Chemical Regularity in Phosphazene Copolymers. , 0, , 377-410.		0
70	Microneedles for Intradermal Vaccination: Immunopotentiation and Formulation Aspects. , 2013, , 217-232.		0