Sergey V Dorozhkin

List of Publications by Year
in descending order

143 papers	11,563 citations	61687 45 h-index	32181 105 g-index
177 all docs	177 docs citations	177 times ranked	11069 citing authors

#	Article	IF	Citations
1	Experimental characterization and theoretical investigation of Ce/Yb co-doped hydroxyapatites. Materials Chemistry and Physics, 2022, 276, 125444.	2.0	11
2	Calcium phosphates in geological, biological, and industrial systems. , 2022, , 141-165.		1
3	Calcium phosphate bioceramics for improved angiogenesis. , 2022, , 185-203.		1
4	Sintering of Potassium Doped Hydroxy-Fluorapatite Bioceramics. Coatings, 2021, 11, 858.	1.2	3
5	Theoretical and experimental characterization of Pr/Ce co-doped hydroxyapatites. Journal of Molecular Structure, 2021, 1240, 130557.	1.8	15
6	Synthetic amorphous calcium phosphates (ACPs): preparation, structure, properties, and biomedical applications. Biomaterials Science, 2021, 9, 7748-7798.	2.6	47
7	Calcium orthophosphate (CaPO4)â€“based bone-graft substitutes and the special roles of octacalcium phosphate materials. , 2020, , 213-288.		3
8	Effects of strontium - erbium co-doping on the structural properties of hydroxyapatite: An Experimental and theoretical study. Ceramics International, 2020, 46, 16354-16363.	2.3	31
9	Investigation of the effects of Pr doping on the structural properties of hydroxyapatite: an experimental and theoretical study. Journal of the Australian Ceramic Society, 2020, 56, 1501-1513.	1.1	17
10	Acknowledgement to Reviewers of Journal of Functional Biomaterials in 2019. Journal of Functional Biomaterials, 2020, 11, 6.	1.8	0
11	The effects of Mn and/or Ni dopants on the in vitro/in vivo performance, structural and magnetic properties of Î²-tricalcium phosphate bioceramics. Ceramics International, 2019, 45, 22752-22758.	2.3	15
12	Calcium orthophosphates as a dental regenerative material. , 2019, , 377-452.		2
13	Functionalized calcium orthophosphates (CaPO₄) and their biomedical applications. Journal of Materials Chemistry B, 2019, 7, 7471-7489.	2.9	55
14	Thermal Behavior, Sintering and Mechanical Characterization of Multiple Ion-Substituted Hydroxyapatite Bioceramics. Journal of Inorganic and Organometallic Polymers and Materials, 2019, 29, 87-100.	1.9	35
15	Structure and thermal stability of sodium and carbonate-co-substituted strontium hydroxyfluorapatites. New Journal of Chemistry, 2018, 42, 8469-8477.	1.4	16
16	Self-Setting Calcium Orthophosphate (CaPO4) Formulations. Springer Series in Biomaterials Science and Engineering, 2018, , 41-146.	0.7	4
17	Nanodimensional and Nanocrystalline Calcium Orthophosphates. Springer Series in Biomaterials Science and Engineering, 2018, , 355-448.	0.7	6
18	Recent progress on fabrication and drug delivery applications of nanostructured hydroxyapatite. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2018, 10, e1504.	3.3	119

#	Article	IF	Citations
19	Calcium-orthophosphate-based bioactive ceramics. , 2018, , 297-405.		4
20	Calcium Orthophosphate (CaPO4) Scaffolds for Bone Tissue Engineering Applications. Journal of Biotechnology and Biomedical Science, 2018, 1, 25-93.	0.6	22
21	Calcium Orthophosphate-Based Bioceramics and Its Clinical Applications. , 2017, , 123-226.		5
22	Physico-mechanical properties of Mg and Ag doped hydroxyapatite/chitosan biocomposites. New Journal of Chemistry, 2017, 41, 13773-13783.	1.4	103
23	Calcium orthophosphates (CaPO 4): Occurrence and properties. Morphologie, 2017, 101, 125-142.	0.5	18
24	A history of calcium orthophosphates (CaPO 4) and their biomedical applications. Morphologie, 2017, 101, 143-153.	0.5	15
25	Biphasic calcium phosphates bioceramics (HA/TCP): Concept, physicochemical properties and the impact of standardization of study protocols in biomaterials research. Materials Science and Engineering C, 2017, 71, 1293-1312.	3.8	217
26	Calcium Orthophosphate Coatings and Other Deposits. Frontiers in Nanobiomedical Research, 2017, , 1-84.	0.1	0
27	Calcium Orthophosphates (CaPo) and Dentistry. Bioceramics Development and Applications, 2016, 06, .	0.3	11
28	A History of Calcium Orthophosphates (CaPO4) from 1770s till 1950. , 2016, , .		0
29	Composition, structure and mechanical properties of the titanium surface after induction heat treatment followed by modification with hydroxyapatite nanoparticles. Ceramics International, 2016, 42, 10838-10846.	2.3	62
30	Calcium Phosphates. , 2016, , 91-118.		5
31	The effect of simulating body fluid on the structural properties of hydroxyapatite synthesized in the presence of citric acid. Progress in Biomaterials, 2016, 5, 173-182.	1.8	24
32	Multiphasic calcium orthophosphate (CaPO 4) bioceramics and their biomedical applications. Ceramics International, 2016, 42, 6529-6554.	2.3	128
33	Calcium orthophosphates (CaPO4): occurrence and properties. Progress in Biomaterials, 2016, 5, 9-70.	1.8	171
34	PSi-Based Preconcentrators, Filters, and Gas Sources. , 2016, , 239-254.		0
35	Investigation of the crystal structure, dielectrical, electrical and microstructural properties of cobalt-containing calcium orthophosphates. Medziagotyra, 2015, 21, .	0.1	1
36	Calcium Orthophosphate-Containing Biocomposites and Hybrid Biomaterials for Biomedical Applications. Journal of Functional Biomaterials, 2015, 6, 708-832.	1.8	118

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37	Strontium substituted hydroxyapatites: Synthesis and determination of their structural properties, in vitro and in vivo performance. Materials Science and Engineering C, 2015, 55, 538-546.	3.8	72
38	Surface modification of magnesium and its biodegradable alloys by calcium orthophosphate coatings to improve corrosion resistance and biocompatibility. , 2015, , 151-191.		2
39	Calcium orthophosphate deposits: Preparation, properties and biomedical applications. Materials Science and Engineering C, 2015, 55, 272-326.	3.8	230
40	Calcium Phosphates. , 2015, , 1-22.		0
41	Calcium orthophosphate bioceramics. Ceramics International, 2015, 41, 13913-13966.	2.3	201
42	Structural and dielectric properties of yttrium-substituted hydroxyapatites. Materials Science and Engineering C, 2015, 47, 333-338.	3.8	54
43	Calcium Orthophosphate Bioceramics. Eurasian Chemico-Technological Journal, 2015, 12, 247.	0.3	5
44	Calcium Orthophosphates: Occurrence, Properties and Major Applications. Bioceramics Development and Applications, 2014, 4, .	0.3	12
45	Calcium orthophosphate coatings on magnesium and its biodegradable alloys. Acta Biomaterialia, 2014, 10, 2919-2934.	4.1	267
46	Synthesis and characterization of Ce-substituted hydroxyapatite by solâ€“gel method. Materials Science and Engineering C, 2014, 42, 78-82.	3.8	81
47	History of Calcium Phosphates in Regenerative Medicine. Springer Series in Biomaterials Science and Engineering, 2014, , 435-483.	0.7	3
48	Structural and Dielectrical Properties of Ag- and Ba-Substituted Hydroxyapatites. Journal of Inorganic and Organometallic Polymers and Materials, 2014, 24, 1001-1008.	1.9	26
49	Dielectric properties of Fe doped hydroxyapatite prepared by solâ€“gel method. Ceramics International, 2014, 40, 9395-9402.	2.3	113
50	Chapter 7: Nanodimensional and Nanocrystalline Calcium Orthophosphates. Frontiers in Nanobiomedical Research, 2014, , 219-341.	0.1	5
51	Calcium Orthophosphate-Based Bioceramics. Materials, 2013, 6, 3840-3942.	1.3	219
52	A detailed history of calcium orthophosphates from 1770s till 1950. Materials Science and Engineering C, 2013, 33, 3085-3110.	3.8	122
53	Calcium orthophosphates in dentistry. Journal of Materials Science: Materials in Medicine, 2013, 24, 1335-1363.	1.7	133
54	Self-Setting Calcium Orthophosphate Formulations. Journal of Functional Biomaterials, 2013, 4, 209-311.	1.8	141

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55	Calcium orthophosphates and human beings. Biomatter, 2012, 2, 53-70.	2.6	48
56	Dissolution mechanism of calcium apatites in acids: A review of literature. World Journal of Methodology, 2012, 2, 1.	1.1	180
57	Nanodimensional and Nanocrystalline Calcium Orthophosphates. , 2012, , 221-327.		0
58	The Dissolution Mechanism of Calcium Apatites in Acids. , 2012, , 761-802.		0
59	Calcium Apatites and Other Calcium Orthophosphates. , 2012, , 1-151.		0
60	Amorphous Calcium (Ortho) Phosphates. , 2012, , 153-220.		0
61	Calcium Orthophosphates as Bioceramics. , 2012, , 329-458.		0
62	The History of Calcium Orthophosphates from 1770s till 1950. , 2012, , 803-843.		0
63	Calcium orthophosphate coatings, films and layers. Progress in Biomaterials, 2012, 1, 1.	1.8	114
64	Biphasic, triphasic and multiphasic calcium orthophosphates. Acta Biomaterialia, 2012, 8, 963-977.	4.1	303
65	Synthesis and dispersion of hydroxyapatite nanopowders. Materials Science and Engineering C, 2012, 32, 1237-1240.	3.8	29
66	Nanodimensional and Nanocrystalline Calcium Orthophosphates. American Journal of Biomedical Engineering, 2012, 2, 48-97.	0.9	42
67	Self-Setting Calcium Orthophosphate Formulations: Cements, Concretes, Pastes and Putties. International Journal of Materials and Chemistry, 2012, 1, 1-48.	1.0	52
68	Amorphous Calcium Orthophosphates: Nature, Chemistry and Biomedical Applications. International Journal of Materials and Chemistry, 2012, 2, 19-46.	1.0	109
69	Biocomposites and hybrid biomaterials based on calcium orthophosphates. Biomatter, 2011, 1, 3-56.	2.6	139
70	Calcium orthophosphates. Biomatter, 2011, 1, 121-164.	2.6	286
71	Medical Application of Calcium Orthophosphate Bioceramics. Bio, 2011, 1, 1-51.	0.6	85
72	Preparation of porous biphasic .BETA.-TCP/HA bioceramics with a natural trabecular structure from calcined cancellous bovine bone. Journal of the Ceramic Society of Japan, 2010, 118, 52-56.	0.5	9

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73	Nanosized and nanocrystalline calcium orthophosphates. Acta Biomaterialia, 2010, 6, 715-734.	4.1	470
74	Amorphous calcium (ortho)phosphates. Acta Biomaterialia, 2010, 6, 4457-4475.	4.1	398
75	Bioceramics of calcium orthophosphates. Biomaterials, 2010, 31, 1465-1485.	5.7	1,012
76	Calcium Orthophosphates as Bioceramics: State of the Art. Journal of Functional Biomaterials, 2010, 1, 22-107.	1.8	197
77	Toughening of porous bioceramic scaffolds by bioresorbable polymeric coatings. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 459-470.	1.0	28
78	Nano-Sized and Nanocrystalline Calcium Orhophosphates in Biomedical Engineering. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 2009, 3, 59-92.	0.7	7
79	Calcium orthophosphate-based biocomposites and hybrid biomaterials. Journal of Materials Science, 2009, 44, 2343-2387.	1.7	263
80	Nanodimensional and Nanocrystalline Apatites and Other Calcium Orthophosphates in Biomedical Engineering, Biology and Medicine. Materials, 2009, 2, 1975-2045.	1.3	224
81	Calcium Orthophosphates in Nature, Biology and Medicine. Materials, 2009, 2, 399-498.	1.3	613
82	Calcium Orthophosphate Cements and Concretes. Materials, 2009, 2, 221-291.	1.3	192
83	Variations in the Compression Strength of Cylindrical Samples Made of Dense Hydroxyapatite. Key Engineering Materials, 2008, 361-363, 103-106.	0.4	1
84	Calcium orthophosphate cements for biomedical application. Journal of Materials Science, 2008, 43, 3028-3057.	1.7	280
85	A novel, environmentally friendly process for the fabrication of calcium phosphate bioceramics. Inorganic Materials, 2008, 44, 207-210.	0.2	6
86	Green chemical synthesis of calcium phosphate bioceramics. Journal of Applied Biomaterials and Biomechanics, 2008, 6, 104-9.	0.4	4
87	Crystallization from a milk-based revised simulated body fluid. Biomedical Materials (Bristol), 2007, 2, 87-92.	1.7	11
88	The Differences between the Direct and Sol-Gel Syntheses of Silicon-Contained Calcium Phosphates. Key Engineering Materials, 2007, 361-363, 107-110.	0.4	0
89	Crystallization of a Bone-like Apatite from a Milk-Containing Revised Simulated Body Fluid (SBF). Key Engineering Materials, 2007, 330-332, 641-644.	0.4	0
90	A Simplified Preparation Method of Silicon-Substituted Calcium Phosphates According to Green Chemistry Principles. Key Engineering Materials, 2007, 330-332, 55-58.	0.4	5

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91	In Vitro Mineralization of Silicon Containing Calcium Phosphate Bioceramics. Journal of the American Ceramic Society, 2007, 90, 244-249.	1.9	43
92	Bioceramics based on calcium orthophosphates (Review). Glass and Ceramics (English Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.2	55
93	Calcium orthophosphates. Journal of Materials Science, 2007, 42, 1061-1095.	1.7	512
94	A hierarchical structure for apatite crystals. Journal of Materials Science: Materials in Medicine, 2007, 18, 363-366.	1.7	24
95	Calcium Phosphates and Human Beings. Journal of Chemical Education, 2006, 83, 713.	1.1	8
96	Process of epitaxial crystal growth for CaSO4 Â· 0.5H2O on a surface of dissolving fluorapatite crystals studied by scanning electron microscopy. Scanning, 2006, 18, 119-124.	0.7	8
97	In vitro simulation of vascular calcification by the controlled crystallization of amorphous calcium phosphates onto porous cholesterol. Journal of Materials Science, 2005, 40, 6417-6422.	1.7	7
98	A First Approach to in vitro Simulation of Vascular Calcification by the Controlled Crystallization of Poorly Crystalline Calcium Phosphates onto Porous Cholesterol. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2005, 219, 477-482.	1.0	4
99	Composition and Properties of Crystals Growing in the Ca2+â€“Mg2+â€“HPO2-4â€“HCO-3System in the Presence of Na+, K+, Clâ€“, and SO2-4Ions. Inorganic Materials, 2004, 40, 66-72.	0.2	0
100	A Model System to Provide a Good in Vitro Simulation of Biological Mineralization. Crystal Growth and Design, 2004, 4, 389-395.	1.4	36
101	Mechanism of solid-state conversion of non-stoichiometric hydroxyapatite to diphase calcium phosphate. Russian Chemical Bulletin, 2003, 52, 2369-2375.	0.4	17
102	Structure and properties of the precipitates formed from condensed solutions of the revised simulated body fluid. Journal of Biomedical Materials Research Part B, 2003, 67A, 578-581.	3.0	38
103	The influence of bovine serum albumin on the crystallization of calcium phosphates from a revised simulated body fluid. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 215, 191-199.	2.3	44
104	In vitro crystallization of carbonateapatite on cholesterol from a modified simulated body fluid. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 223, 231-237.	2.3	15
105	The Influence of Glucose and Bovine Serum Albumin on the Crystallization of a Bone-Like Apatite from Revised Simulated Body Fluid. Key Engineering Materials, 2003, 254-256, 327-330.	0.4	2
106	Crystallization of a Bone-Like Apatite onto Cholesterol from Aqueous Solutions. Key Engineering Materials, 2003, 240-242, 529-532.	0.4	1
107	Biomimetic Crystallization of Calcium Phosphates under Constant Conditions from the Revised SBF. Key Engineering Materials, 2003, 240-242, 85-88.	0.4	3
108	Precipitation of carbonateapatite from a revised simulated body fluid in the presence of glucose. Journal of Applied Biomaterials and Biomechanics, 2003, 1, 200-8.	0.4	5

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109	Mechanism of the Solid-State Transformation of a Calcium-Deficient Hydroxyapatite (CDHA) into Biphasic Calcium Phosphate (BCP) at Elevated Temperatures. Chemistry of Materials, 2002, 14, 4267-4272.	3.2	78
110	Die biologische und medizinische Bedeutung von Calciumphosphaten. Angewandte Chemie, 2002, 114, 3260-3277.	1.6	94
111	Biological and Medical Significance of Calcium Phosphates. Angewandte Chemie - International Edition, 2002, 41, 3130-3146.	7.2	1,740
112	A review on the dissolution models of calcium apatites. Progress in Crystal Growth and Characterization of Materials, 2002, 44, 45-61.	1.8	173
113	Application of the turbidity measurements to study in situ crystallization of calcium phosphates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 203, 237-244.	2.3	17
114	Surface mineralisation of hydroxyapatite in modified simulated body fluid (mSBF) with higher amounts of hydrogencarbonate ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 210, 41-48.	2.3	41
115	Solid-Phase Conversion of Nonstoichiometric Hydroxoapatite into Two-Phase Calcium Phosphate. Russian Journal of Applied Chemistry, 2002, 75, 1897-1902.	0.1	2
116	Systems of Chemical Equations as Reasonable Reaction Mechanisms. Journal of Chemical Education, 2001, 78, 917.	1.1	2
117	Is there a chemical interaction between calcium phosphates and hydroxypropylmethylcellulose (HPMC) in organic/inorganic composites?. Journal of Biomedical Materials Research Part B, 2001, 54, 247-255.	3.0	19
118	Chemical transformation of some biologically relevant calcium phosphates in aqueous media during a steam sterilization. Journal of Materials Science: Materials in Medicine, 2000, 11, 779-786.	1.7	16
119	Unreactiveness of calcium phosphates and hydroxypropylmethylcellulose in organic-mineral composites. Inorganic Materials, 2000, 36, 1024-1031.	0.2	0
120	Solid-State Transformation of a Non-Stoichiometric Calcium Deficient Apatite into the Biphasic Calcium Phosphate. Key Engineering Materials, 2000, 192-195, 155-158.	0.4	3
121	Is There a Chemical Interaction between Calcium Phosphates and Organic Compounds in the Organic/Inorganic Composites?. Key Engineering Materials, 2000, 192-195, 689-692.	0.4	0
122	Hydrogencarbonate as a Biological Buffer in Simulated Plasma. Key Engineering Materials, 2000, 192-195, 27-30.	0.4	3
123	Surface Transformations of Hydroxyapatite during Acidic Dissolution. Phosphorus, Sulfur and Silicon and the Related Elements, 1999, 147, 73-73.	0.8	0
124	Inorganic Chemistry of the Dissolution Phenomenon: The Dissolution Mechanism of Calcium Apatites at the Atomic (Ionic) Level. Comments on Inorganic Chemistry, 1999, 20, 285-299.	3.0	48
125	Ecological principles of wet-process phosphoric acid technology. Journal of Chemical Technology and Biotechnology, 1998, 71, 227-233.	1.6	8
126	Fundamentals of the Wet-Process Phosphoric Acid Production. 2. Kinetics and Mechanism of CaSO4Â·0.5H2O Surface Crystallization and Coating Formation. Industrial & Engineering Chemistry Research, 1997, 36, 467-473.	1.8	30

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127	Acidic dissolution mechanism of natural fluorapatite. II. Nanolevel of investigations. Journal of Crystal Growth, 1997, 182, 133-140.	0.7	30
128	Surface Reactions of Apatite Dissolution. Journal of Colloid and Interface Science, 1997, 191, 489-497.	5.0	105
129	Acidic dissolution mechanism of natural fluorapatite. I. Milli- and microlevels of investigations. Journal of Crystal Growth, 1997, 182, 125-132.	0.7	20
130	An elaboration of the new dissolution mechanism for apatite. , 1997, , 187-190.		0
131	Fundamentals of the Wet-Process Phosphoric Acid Production. 1. Kinetics and Mechanism of the Phosphate Rock Dissolution. Industrial & Engineering Chemistry Research, 1996, 35, 4328-4335.	1.8	39
132	Dissolution kinetics of single fluoroapatite crystals in phosphoric acid solution under the conditions of the wet-process phosphoric acid production. Journal FÃ¼r Praktische Chemie, Chemiker-Zeitung, 1996, 338, 620-626.	0.5	13
133	Chemical Mechanism for Fluorapatite Dissolution in Acids. Phosphorus, Sulfur and Silicon and the Related Elements, 1996, 111, 4-4.	0.8	0
134	Chemical etching of natural fluorapatite crystals in acid solutions studied with the scanning electron microscope. Scanning, 1995, 17, 355-360.	0.7	6
135	Chemical preparation of dielectrics for studying their microtopography by the SEM. Scanning, 1992, 14, 112-117.	0.7	12
136	Phase transformation and dehydration of calcium sulphate dihydrate in solution studied by SEM. Scanning, 1992, 14, 269-275.	0.7	6
137	Bovine Hydroxyapatite (BHA) Boron Oxide Composites. Key Engineering Materials, 0, 396-398, 403-406.	0.4	3
138	Bovine Hydroxyapatite (BHA) Strontium Oxide Composites. Key Engineering Materials, 0, 396-398, 407-410.	0.4	2
139	Strengthening of Dense Bioceramic Samples Using Bioresorbable Polymers â€“ A Statistical Approach. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 4, 27-39.	0.7	11
140	Amorphous Calcium Phosphates. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 7, 27-53.	0.7	3
141	Calcium Orthophosphate Bioceramics. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 5, 57-100.	0.7	4
142	Biodegradable Polymeric Nanocomposites. , 0, , .		8
143	Biocomposites and Hybrid Biomaterials of Calcium Orthophosphates (CaPO4) with Polymers. , 0, , .		1