Christophe Drouet

List of Publications by Year
in descending order

88	4,447	87888 38	106344 65
papers	citations	h-index	g-index

89	89	89	4874
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bone mineral: update on chemical composition and structure. Osteoporosis International, 2009, 20, 1013-1021.	3.1	430
2	Physico-chemical properties of nanocrystalline apatites: Implications for biominerals and biomaterials. Materials Science and Engineering C, 2007, 27, 198-205.	7.3	252
3	Progress on the preparation of nanocrystalline apatites and surface characterization: Overview of fundamental and applied aspects. Progress in Crystal Growth and Characterization of Materials, 2013, 59, 1-46.	4.0	219
4	Apatite Formation: Why It May Not Work as Planned, and How to Conclusively Identify Apatite Compounds. BioMed Research International, 2013, 2013, 1-12.	1.9	199
5	Bone mineral: new insights into its chemical composition. Scientific Reports, 2019, 9, 8456.	3.3	161
6	Synthesis, characterization, and thermochemistry of K-Na-H3O jarosites. Geochimica Et Cosmochimica Acta, 2003, 67, 2063-2076.	3.9	158
7	Ion exchanges in apatites for biomedical application. Journal of Materials Science: Materials in Medicine, 2005, 16, 405-409.	3.6	151
8	Revisiting carbonate quantification in apatite (bio)minerals: a validated FTIR methodology. Journal of Archaeological Science, 2014, 49, 134-141.	2.4	141
9	Biomimetic apatite-based biomaterials: on the critical impact of synthesis and post-synthesis parameters. Journal of Materials Science: Materials in Medicine, 2012, 23, 2593-2606.	3.6	125
10	Surface Characteristics of Nanocrystalline Apatites: Effect of Mg Surface Enrichment on Morphology, Surface Hydration Species, and Cationic Environments. Langmuir, 2009, 25, 5647-5654.	3.5	124
11	Adsorption and release of BMPâ€2 on nanocrystalline apatiteâ€coated and uncoated hydroxyapatite/Î²â€tricalcium phosphate porous ceramics. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 706-715.	3.4	105
12	Nanocrystalline apatites in biological systems: characterisation, structure and properties. Materialwissenschaft Und Werkstofftechnik, 2007, 38, 996-1002.	0.9	95
13	Surface enrichment of biomimetic apatites with biologically-active ions Mg2+ and Sr2+: A preamble to the activation of bone repair materials. Materials Science and Engineering C, 2008, 28, 1544-1550.	7.3	92
14	Biomimetic apatite sintered at very low temperature by spark plasma sintering: Physico-chemistry and microstructure aspects. Acta Biomaterialia, 2010, 6, 577-585.	8.3	91
15	Surface properties of biomimetic nanocrystalline apatites; applications in biomaterials. Progress in Crystal Growth and Characterization of Materials, 2014, 60, 63-73.	4.0	80
16	Protein-free formation of bone-like apatite: New insights into the key role of carbonation. Biomaterials, 2017, 127, 75-88.	11.4	77
17	Nanocrystalline apatites: From powders to biomaterials. Powder Technology, 2009, 190, 118-122.	4.2	76
18	A comprehensive guide to experimental and predicted thermodynamic properties of phosphate apatite minerals in view of applicative purposes. Journal of Chemical Thermodynamics, 2015, 81, 143-159.	2.0	70

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19	Quantification of water content by laser induced breakdown spectroscopy on Mars. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 130, 82-100.	2.9	65
20	New Advances in Nanocrystalline Apatite Colloids Intended for Cellular Drug Delivery. Langmuir, 2009, 25, 12256-12265.	3.5	62
21	Thermochemistry of jarosite-alunite and natrojarosite-natroalunite solid solutions. Geochimica Et Cosmochimica Acta, 2004, 68, 2197-2205.	3.9	61
22	Preparation and Physicochemical Characteristics of Luminescent Apatite-Based Colloids. Journal of Physical Chemistry C, 2010, 114, 2918-2924.	3.1	61
23	Superparamagnetic iron-doped nanocrystalline apatite as a delivery system for doxorubicin. Journal of Materials Chemistry B, 2016, 4, 57-70.	5.8	61
24	Hydroxyapatite coating on titanium by a low energy plasma spraying mini-gun. Surface and Coatings Technology, 2012, 206, 2346-2353.	4.8	60
25	Tetracycline-Loaded Biomimetic Apatite: An Adsorption Study. Journal of Physical Chemistry B, 2015, 119, 3014-3024.	2.6	60
26	X-ray photoelectron spectroscopic study of non-stoichiometric nickel and nickelâ€“copper spinel manganites. Solid State Sciences, 2000, 2, 419-426.	0.7	57
27	Apatite nanoparticles strongly improve red blood cell cryopreservation by mediating trehalose delivery via enhanced membrane permeation. Biomaterials, 2017, 140, 138-149.	11.4	55
28	Biomimetic nanocrystalline apatites: Emerging perspectives in cancer diagnosis and treatment. International Journal of Pharmaceutics, 2012, 423, 26-36.	5.2	53
29	Synthesis, characterization and thermochemistry of a Pb-jarosite. Geochimica Et Cosmochimica Acta, 2010, 74, 215-224.	3.9	52
30	Adsorption of DNA on biomimetic apatites: Toward the understanding of the role of bone and tooth mineral on the preservation of ancient DNA. Applied Surface Science, 2014, 292, 867-875.	6.1	48
31	CO Oxidation over Nonstoichiometric Nickel Manganite Spinels. Journal of Catalysis, 2001, 198, 266-276.	6.2	45
32	Formation and Evolution of Hydrated Surface Layers of Apatites. Key Engineering Materials, 2005, 284-286, 3-6.	0.4	45
33	Nanocrystalline apatites: The fundamental role of water. American Mineralogist, 2018, 103, 550-564.	1.9	43
34	Thermodynamic basis for evolution of apatite in calcified tissues. American Mineralogist, 2013, 98, 2037-2045.	1.9	42
35	Consolidation of bone-like apatite bioceramics by spark plasma sintering of amorphous carbonated calcium phosphate at very low temperature. Journal of the European Ceramic Society, 2018, 38, 2098-2109.	5.7	42
36	Jarosite stability on Mars. Icarus, 2005, 176, 250-253.	2.5	41

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37	MinÃ©ralisations biologiques Ã base de phosphate de calcium. Comptes Rendus - Palevol, 2004, 3, 563-572.	0.2	40
38	Medical Potentialities of Biomimetic Apatites through Adsorption, Ionic Substitution, and Mineral/Organic Associations: Three Illustrative Examples. Advanced Engineering Materials, 2010, 12, B224.	3.5	39
39	Bioactive Ceramics: Physical Chemistry. , 2011, , 187-221.		39
40	Bioceramics: Spark Plasma Sintering (SPS) of Calcium Phosphates. Advances in Science and Technology, 2006, 49, 45.	0.2	37
41	Characterization of Calcium Phosphates Using Vibrational Spectroscopies. Springer Series in Biomaterials Science and Engineering, 2014, , 229-266.	1.0	37
42	Luminescent biomimetic citrate-coated europium-doped carbonated apatite nanoparticles for use in bioimaging: physico-chemistry and cytocompatibility. RSC Advances, 2018, 8, 2385-2397.	3.6	36
43	Chemical Diversity of Apatites. Advances in Science and Technology, 2006, 49, 27.	0.2	34
44	Novel contribution on the diagenetic physicochemical features of bone and teeth minerals, as substrates for ancient DNA typing. Analytical and Bioanalytical Chemistry, 2014, 406, 4691-4704.	3.7	31
45	Synthesis and characterization of non-stoichiometric nickelâ€“copper manganites. Solid State Ionics, 1999, 123, 25-37.	2.7	30
46	On the thermochemistry of the solid solution between jarosite and its chromate analog. American Mineralogist, 2003, 88, 1949-1954.	1.9	26
47	Novel contributions on luminescent apatite-based colloids intended for medical imaging. Journal of Biomaterials Applications, 2014, 28, 697-707.	2.4	25
48	Mechanism of Calcium Incorporation Inside Solâ€“Gel Silicate Bioactive Glass and the Advantage of Using Ca(OH)₂ over Other Calcium Sources. ACS Biomaterials Science and Engineering, 2019, 5, 5906-5915.	5.2	25
49	Brushite (Ca,M)HPO4, 2H2O doping with bioactive ions (MÂ= Mg2+, Sr2+, Zn2+, Cu2+, and Ag+): a new path to functional biomaterials?. Materials Today Chemistry, 2020, 16, 100230.	3.5	25
50	Interaction of Folic Acid with Nanocrystalline Apatites and Extension to Methotrexate (Antifolate) in View of Anticancer Applications. Langmuir, 2018, 34, 12036-12048.	3.5	24
51	Thermochemistry of yavapaiite KFe(SO4)2: Formation and decomposition. Geochimica Et Cosmochimica Acta, 2005, 69, 2133-2140.	3.9	23
52	Enzyme-functionalized biomimetic apatites: concept and perspectives in view of innovative medical approaches. Journal of Materials Science: Materials in Medicine, 2014, 25, 595-606.	3.6	21
53	Adsorption of tranexamic acid on hydroxyapatite: Toward the development of biomaterials with local hemostatic activity. Materials Science and Engineering C, 2016, 66, 1-7.	7.3	21
54	Production, by co-grinding in a media mill, of porous biodegradable polylactic acidâ€“apatite composite materials for bone tissue engineering. Powder Technology, 2009, 190, 89-94.	4.2	19

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55	Adsorption of nucleotides on biomimetic apatite: The case of adenosine 5â€² monophosphate (AMP). Applied Surface Science, 2015, 353, 165-172.	6.1	19
56	Synthesis, thermogravimetric and high temperature X-ray diffraction analyses of zinc-substituted nickel manganites. Materials Research Bulletin, 2000, 35, 431-439.	5.2	18
57	Purification of biomimetic apatite-based hybrid colloids intended for biomedical applications: A dialysis study. Colloids and Surfaces B: Biointerfaces, 2011, 82, 378-384.	5.0	17
58	Nanomedicine: Interaction of biomimetic apatite colloidal nanoparticles with human blood components. Colloids and Surfaces B: Biointerfaces, 2016, 145, 87-94.	5.0	17
59	IR spectroscopic study of NO and CO adsorptions on nonstoichiometric nickelâ€“copper manganites. Physical Chemistry Chemical Physics, 2001, 3, 3826-3830.	2.8	15
60	New spinel materials for catalytic NOâ€“CO reaction: nonstoichiometric nickelâ€“copper manganites. Applied Catalysis B: Environmental, 2001, 33, 35-43.	20.2	15
61	Adsorption of nucleotides on biomimetic apatite: The case of cytidine 5â€² monophosphate (CMP). Journal of Colloid and Interface Science, 2015, 456, 132-137.	9.4	15
62	First successful stabilization of consolidated amorphous calcium phosphate (ACP) by cold sintering: toward highly-resorbable reactive bioceramics. Journal of Materials Chemistry B, 2020, 8, 629-635.	5.8	15
63	Study on the stability of suspensions based on biomimetic apatites aimed at biomedical applications. Powder Technology, 2014, 255, 17-22.	4.2	14
64	Biomimetic apatite-based composite materials obtained by spark plasma sintering (SPS): physicochemical and mechanical characterizations. Journal of Materials Science: Materials in Medicine, 2015, 26, 223.	3.6	14
65	Adsorption of nucleotides on biomimetic apatite: The case of adenosine 5â¿² triphosphate (ATP). Applied Surface Science, 2016, 360, 979-988.	6.1	14
66	Energetics of lanthanide-doped calcium phosphate apatite. American Mineralogist, 2014, 99, 2320-2327.	1.9	13
67	Electrodeposition of HAp coatings on Ti6Al4V alloy and its electrochemical behavior in simulated body fluid solution. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2016, 7, 025008.	1.5	13
68	Influence of carbonation on the low-temperature consolidation by Spark Plasma Sintering of carbonated calcium phosphate bioceramics. Ceramics International, 2020, 46, 5799-5810.	4.8	13
69	Bioinspired crystallization, sensitized luminescence and cytocompatibility of citrate-functionalized Ca-substituted europium phosphate monohydrate nanophosphors. Journal of Colloid and Interface Science, 2019, 538, 174-186.	9.4	11
70	Electrodeposition and Characterization of Hydroxyapatite on TiN/316LSS. Journal of Nanoscience and Nanotechnology, 2015, 15, 9991-10001.	0.9	10
71	Synthesis of mixed manganites with high surface area by thermal decomposition of oxalates. Journal of Materials Chemistry, 2002, 12, 3058-3063.	6.7	9
72	Peroxide-doped apatites: Preparation and effect of synthesis parameters. Powder Technology, 2014, 255, 3-9.	4.2	9

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73	Applied predictive thermodynamics (ThermAP). Part 2. Apatites containing Ni2+, Co2+, Mn2+, or Fe2+ ions. Journal of Chemical Thermodynamics, 2019, 136, 182-189.	2.0	8
74	Activated Carbon Fiber Cloth/Biomimetic Apatite: A Dual Drug Delivery System. International Journal of Molecular Sciences, 2021, 22, 12247.	4.1	8
75	Bio-inspired apatite particles limit skin penetration of drugs for dermatology applications. Acta Biomaterialia, 2020, 111, 418-428.	8.3	7
76	Shaping of Nanostructured Materials or Coatings through Spark Plasma Sintering. Materials Science Forum, 0, 706-709, 24-30.	0.3	6
77	Toward a doxorubicin-loaded bioinspired bone cement for the localized treatment of osteosarcoma. Future Oncology, 2021, 17, 3511-3528.	2.4	6
78	Equilibrium and Kinetics of NO and CO Chemisorptions on Nonstoichiometric Nickelâ€“Copper Manganites. Journal of Colloid and Interface Science, 2000, 225, 440-446.	9.4	5
79	Adsorption of nitric oxide and temperature programmed desorption on nonstoichiometric nickelâ€“copper manganites. Applied Surface Science, 2001, 174, 289-295.	6.1	5
80	Direct evidence of amine-metal reaction in epoxy systems: An in situ calorimetry study of the interphase formation. Progress in Organic Coatings, 2020, 148, 105769.	3.9	5
81	Nanocrystalline Apatites: A Versatile Functionalizable Platform for Biomedical Applications for Bone Engineeringâ€¦ and beyond. Key Engineering Materials, 2016, 696, 14-22.	0.4	4
82	Further insight on amine-metal reaction in epoxy systems. Surfaces and Interfaces, 2021, 23, 100959.	3.0	3
83	Bioceramics: Spark Plasma Sintering (SPS) of Calcium Phosphates. Advances in Science and Technology, 0, , 45-50.	0.2	3
84	Impact of Calcium Phosphate Particle Morphology on Osteoconduction: an In Vivo Study. Key Engineering Materials, 2008, 361-363, 1237-1240.	0.4	2
85	Colloidal Apatite Nanoparticles: Insights on their Interaction with Cells and Artificial Lipid Membranes. Key Engineering Materials, 2016, 720, 95-101.	0.4	2
86	Synthesis and post-treatments of biomimetic apatites: How working conditions may configure final physico-chemical features. MATEC Web of Conferences, 2013, 7, 04008.	0.2	1
87	Fluorideâ€Based Bioceramics. , 2008, , 279-331.		0
88	Foam-Based Bionanocomposite Scaffold for Bone Tissue Engineering. Key Engineering Materials, 2017, 758, 145-149.	0.4	0