William T Self

List of Publications by Year
in descending order

46 papers	7,308 citations	117625 34 h-index	233421 45 g-index
49 all docs	49 docs citations	49 times ranked	7491 citing authors

#	Article	IF	Citations
1	Superoxide dismutase mimetic properties exhibited by vacancy engineered ceria nanoparticles. Chemical Communications, 2007, , 1056.	4.1	1,009
2	Nanoceria exhibit redox state-dependent catalase mimetic activity. Chemical Communications, 2010, 46, 2736.	4.1	912
3	The role of cerium redox state in the SOD mimetic activity of nanoceria. Biomaterials, 2008, 29, 2705-2709.	11.4	813
4	Redox-active radical scavenging nanomaterials. Chemical Society Reviews, 2010, 39, 4422.	38.1	458
5	Catalytic properties and biomedical applications of cerium oxide nanoparticles. Environmental Science: Nano, 2015, 2, 33-53.	4.3	341
6	Fenton-Like Reaction Catalyzed by the Rare Earth Inner Transition Metal Cerium. Environmental Science & Technology, 2008, 42, 5014-5019.	10.0	306
7	PEGylated Nanoceria as Radical Scavenger with Tunable Redox Chemistry. Journal of the American Chemical Society, 2009, 131, 14144-14145.	13.7	302
8	A phosphate-dependent shift in redox state of cerium oxide nanoparticles and its effects on catalytic properties. Biomaterials, 2011, 32, 6745-6753.	11.4	285
9	The induction of angiogenesis by cerium oxide nanoparticles through the modulation of oxygen in intracellular environments. Biomaterials, 2012, 33, 7746-7755.	11.4	247
10	Cerium oxide nanoparticles scavenge nitric oxide radical (Ë™NO). Chemical Communications, 2012, 48, 4896.	4.1	222
11	Proline-Dependent Regulation of Clostridium difficile Stickland Metabolism. Journal of Bacteriology, 2013, 195, 844-854.	2.2	185
12	Cellular Interaction and Toxicity Depend on Physicochemical Properties and Surface Modification of Redox-Active Nanomaterials. ACS Nano, 2013, 7, 4855-4868.	14.6	179
13	Oxygenated Functional Group Density on Graphene Oxide: Its Effect on Cell Toxicity. Particle and Particle Systems Characterization, 2013, 30, 148-157.	2.3	173
14	Exposure to Titanium Dioxide Nanomaterials Provokes Inflammation of an <i>in Vitro</i> Human Immune Construct. ACS Nano, 2009, 3, 2523-2532.	14.6	152
15	Analysis of Proline Reduction in the Nosocomial Pathogen Clostridium difficile. Journal of Bacteriology, 2006, 188, 8487-8495.	2.2	145
16	Unveiling the mechanism of uptake and sub-cellular distribution of cerium oxide nanoparticles. Molecular BioSystems, 2010, 6, 1813.	2.9	144
17	Molybdate transport. Research in Microbiology, 2001, 152, 311-321.	2.1	129
18	Multicolored redox active upconverter cerium oxide nanoparticle for bio-imaging and therapeutics. Chemical Communications, 2010, 46, 6915.	4.1	118

#	Article	IF	Citations
19	Expression and Regulation of a Silent Operon, hyf , Coding for Hydrogenase 4 Isoenzyme in Escherichia coli. Journal of Bacteriology, 2004, 186, 580-587.	2.2	89
20	Cerium oxide nanoparticles accelerate the decay of peroxynitrite (ONOOâˆ’). Drug Delivery and Translational Research, 2013, 3, 375-379.	5.8	85
21	Protonated Nanoparticle Surface Governing Ligand Tethering and Cellular Targeting. ACS Nano, 2009, 3, 1203-1211.	14.6	82
22	Immunomodulation and T Helper TH1/TH2 Response Polarization by CeO2 and TiO2 Nanoparticles. PLoS ONE, 2013, 8, e62816.	2.5	80
23	Using CRISPR-Cas9-mediated genome editing to generate C. difficile mutants defective in selenoproteins synthesis. Scientific Reports, 2017, 7, 14672.	3.3	79
24	Exposure to Silver Nanoparticles Inhibits Selenoprotein Synthesis and the Activity of Thioredoxin Reductase. Environmental Health Perspectives, 2012, 120, 56-61.	6.0	73
25	Transcriptional regulation of molybdoenzyme synthesis in Escherichia coli in response to molybdenum: ModE-molybdate, a repressor of the modABCD (molybdate transport) operon is a secondary transcriptional activator for the hyc and nar operons. Microbiology (United Kingdom), 1999, 145, 41-55.	1.8	61
26	Up conversion luminescence of Yb3+â€“Er3+ codoped CeO2 nanocrystals with imaging applications. Journal of Luminescence, 2012, 132, 743-749.	3.1	59
27	Inhibition of hydrogen uptake in Escherichia coli by expressing the hydrogenase from the cyanobacterium Synechocystis sp. PCC 6803. BMC Biotechnology, 2007, 7, 25.	3.3	56
28	Impact of Trivalent Arsenicals on Selenoprotein Synthesis. Environmental Health Perspectives, 2007, 115, 346-353.	6.0	50
29	A facile synthesis of PLGA encapsulated cerium oxide nanoparticles: release kinetics and biological activity. Nanoscale, 2012, 4, 2597.	5.6	48
30	A Selenium-Dependent Xanthine Dehydrogenase Triggers Biofilm Proliferation in<i>Enterococcus faecalis</i>through Oxidant Production. Journal of Bacteriology, 2011, 193, 1643-1652.	2.2	42
31	Orphan SelD proteins and selenium-dependent molybdenum hydroxylases. Biology Direct, 2008, 3, 4.	4.6	40
32	Inhibition of Selenium Metabolism in the Oral Pathogen <i>Treponema denticola</i>. Journal of Bacteriology, 2009, 191, 4035-4040.	2.2	39
33	An Analysis of the Binding of Repressor Protein ModE to modABCD (Molybdate Transport) Operator/Promoter DNA of Escherichia coli. Journal of Biological Chemistry, 1999, 274, 24308-24315.	3.4	38
34	Tuning Hydrated Nanoceria Surfaces: Experimental/Theoretical Investigations of Ion Exchange and Implications in Organic and Inorganic Interactions. Langmuir, 2010, 26, 7188-7198.	3.5	35
35	High affinity selenium uptake in a keratinocyte model. FEBS Letters, 2008, 582, 299-304.	2.8	33
36	N-terminal truncations in the FhlA protein result in formate- and MoeA-independent expression of the hyc (formate hydrogenlyase) operon of Escherichia coli. Microbiology (United Kingdom), 2001, 147, 3093-3104.	1.8	31

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37	Regulation of Purine Hydroxylase and Xanthine Dehydrogenase from Clostridium purinolyticum in Response to Purines, Selenium, and Molybdenum. Journal of Bacteriology, 2002, 184, 2039-2044.	2.2	28
38	Cofactor Determination and Spectroscopic Characterization of the Selenium-Dependent Purine Hydroxylase fromClostridium purinolyticum. Biochemistry, 2003, 42, 11382-11390.	2.5	28
39	Molybdate-dependent transcription ofhycandnaroperons ofEscherichia colirequires MoeA protein and ModE-molybdate. FEMS Microbiology Letters, 1998, 169, 111-116.	1.8	26
40	Isolation and characterization of mutated FhlA proteins which activate transcription of thehycoperon (formate hydrogenlyase) ofEscherichia coliin the absence of molybdate. FEMS Microbiology Letters, 2000, 184, 47-52.	1.8	26
41	Transcriptional regulation of the moe (molybdate metabolism) operon of Escherichia coli. Archives of Microbiology, 2001, 175, 178-188.	2.2	21
42	Exposure to monomethylarsonous acid (MMAIII) leads to altered selenoprotein synthesis in a primary human lung cell model. Toxicology and Applied Pharmacology, 2009, 239, 130-136.	2.8	20
43	Bioavailability of selenium from the selenotrisulphide derivative of lipoic acid. Photodermatology Photoimmunology and Photomedicine, 2006, 22, 315-323.	1.5	7
44	<scp>d</scp> -Proline Reductase Underlies Proline-Dependent Growth of Clostridioides difficile. Journal of Bacteriology, 2022, 204, .	2.2	6
45	Specific and Nonspecific Incorporation of Selenium into Macromolecules. , 2010, , 121-148.		3
46	Exploring the selenium-over-sulfur substrate specificity and kinetics of a bacterial selenocysteine lyase. Biochimie, 2021, 182, 166-176.	2.6	3