S Roger Qiu

List of Publications by Year
in descending order

29 papers	1,417 citations	516710 16 h-index	552781 26 g-index
30 all docs	30 docs citations	30 times ranked	1332 citing authors

#	Article	IF	Citations
1	Molecular modulation of calcium oxalate crystallization by osteopontin and citrate. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1811-1815.	7.1	258
2	Rethinking Classical Crystal Growth Models through Molecular Scale Insights: Consequences of Kink-Limited Kinetics. Crystal Growth and Design, 2009, 9, 5135-5144.	3.0	162
3	Acceleration of Calcite Kinetics by Abalone Nacre Proteins. Advanced Materials, 2005, 17, 2678-2683.	21.0	123
4	Modulation of Calcium Oxalate Monohydrate Crystallization by Citrate through Selective Binding to Atomic Steps. Journal of the American Chemical Society, 2005, 127, 9036-9044.	13.7	117
5	Subnanometer atomic force microscopy of peptideâ€“mineral interactions links clustering and competition to acceleration and catastrophe. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11-15.	7.1	99
6	Dynamics of Biomineral Formation at the Near-Molecular Level. Chemical Reviews, 2008, 108, 4784-4822.	47.7	96
7	Inhibition of calcium oxalate monohydrate growth by citrate and the effect of the background electrolyte. Journal of Crystal Growth, 2007, 306, 135-145.	1.5	86
8	Molecular modulation of calcium oxalate crystallization. American Journal of Physiology - Renal Physiology, 2006, 291, F1123-F1132.	2.7	80
9	Inhibition of calcium oxalate monohydrate crystallization by the combination of citrate and osteopontin. Journal of Crystal Growth, 2006, 291, 160-165.	1.5	62
10	Improved Model for Inhibition of Pathological Mineralization Based on Citrateâ€“Calcium Oxalate Monohydrate Interaction. ChemPhysChem, 2006, 7, 2081-2084.	2.1	45
11	Growth inhibition of calcium oxalate monohydrate crystal by linear aspartic acid enantiomers investigated by in situatomic force microscopy. CrystEngComm, 2013, 15, 54-64.	2.6	33
12	Impact of laser-contaminant interaction on the performance of the protective capping layer of 1ÂÏ‰ high-reflection mirror coatings. Applied Optics, 2015, 54, 8607.	2.1	32
13	Constant Composition Studies Verify the Utility of the Cabreraâ^'Vermilyea (C-V) Model in Explaining Mechanisms of Calcium Oxalate Monohydrate Crystallization. Crystal Growth and Design, 2006, 6, 1769-1775.	3.0	31
14	Searching for optimal mitigation geometries for laser-resistant multilayer high-reflector coatings. Applied Optics, 2011, 50, C373.	2.1	24
15	Impact of Chiral Molecules on the Formation of Biominerals: A Calcium Oxalate Monohydrate Example. Crystal Growth and Design, 2012, 12, 5939-5947.	3.0	21
16	Origins of optical absorption characteristics of Cu²⁺complexes in aqueous solutions. Physical Chemistry Chemical Physics, 2015, 17, 18913-18923.	2.8	19
17	Switchable Chiral Selection of Aspartic Acids by Dynamic States of Brushite. Journal of the American Chemical Society, 2017, 139, 8562-8569.	13.7	16
18	The impact of nano-bubbles on the laser performance of hafnia films deposited by oxygen assisted ion beam sputtering method. Applied Physics Letters, 2019, 115, .	3.3	16

#	Article	IF	Citations
19	Efficient and interpretable graph network representation for angle-dependent properties applied to optical spectroscopy. Npj Computational Materials, 2022, 8, .	8.7	13
20	Amelogenin Processing by MMP-20 Prevents Protein Occlusion Inside Calcite Crystals. Crystal Growth and Design, 2012, 12, 4897-4905.	3.0	11
21	Dynamics of secondary contamination from the interaction of high-power laser pulses with metal particles attached on the input surface of optical components. Optics Express, 2019, 27, 23515.	3.4	11
22	Impact of substrate surface scratches on the laser damage resistance of multilayer coatings. , 2010, , .		10
23	Integration of atomic force microscopy and a microfluidic liquid cell for aqueous imaging and force spectroscopy. Review of Scientific Instruments, 2010, 81, 053704.	1.3	9
24	Mirrors for petawatt lasers: Design principles, limitations, and solutions. Journal of Applied Physics, 2020, 128, .	2.5	9
25	Origin and effect of film sub-stoichiometry on ultraviolet, ns-laser damage resistance of hafnia single layers. Optical Materials Express, 2020, 10, 937.	3.0	9
26	Modeling of light intensification by conical pits within multilayer high reflector coatings. , 2009, , .		8
27	Shape dependence of laserâ€“particle interaction-induced damage on the protective capping layer of 1 Ï‰ high reflector mirror coatings. Optical Engineering, 2016, 56, 011108.	1.0	8
28	The effects of different types of additives on growth of biomineral phases investigated by in situ atomic force microscopy. Journal of Crystal Growth, 2019, 509, 8-16.	1.5	7
29	Investigation of UV, ns-laser damage resistance of hafnia films produced by electron beam evaporation and ion beam sputtering deposition methods. Journal of Applied Physics, 2021, 130, 043103.	2.5	2