

# Konstantin Ignatyev

## List of Publications by Year in descending order

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Version: 2024-02-01

29  
papers

1,746  
citations

516710

16  
h-index

552781

26  
g-index

36  
all docs

36  
docs citations

36  
times ranked

1904  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comet 81P/Wild 2 Under a Microscope. <i>Science</i> , 2006, 314, 1711-1716.	12.6	848
2	Elemental Compositions of Comet 81P/Wild 2 Samples Collected by Stardust. <i>Science</i> , 2006, 314, 1731-1735.	12.6	200
3	Phase and absorption retrieval using incoherent X-ray sources. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13922-13927.	7.1	124
4	Metal Tolerance Protein 8 Mediates Manganese Homeostasis and Iron Reallocation during Seed Development and Germination. <i>Plant Physiology</i> , 2017, 174, 1633-1647.	4.8	99
5	The relationship between wave and geometrical optics models of coded aperture type x-ray phase contrast imaging systems. <i>Optics Express</i> , 2010, 18, 4103.	3.4	52
6	Noninterferometric phase-contrast images obtained with incoherent x-ray sources. <i>Applied Optics</i> , 2011, 50, 1765.	2.1	51
7	Visualization of small lesions in rat cartilage by means of laboratory-based x-ray phase contrast imaging. <i>Physics in Medicine and Biology</i> , 2012, 57, 8173-8184.	3.0	50
8	Synchrotron imaging reveals bone healing and remodelling strategies in extinct and extant vertebrates. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140277.	3.4	47
9	Source size and temporal coherence requirements of coded aperture type x-ray phase contrast imaging systems. <i>Optics Express</i> , 2010, 18, 19681.	3.4	37
10	Pheomelanin pigment remnants mapped in fossils of an extinct mammal. <i>Nature Communications</i> , 2019, 10, 2250.	12.8	30
11	The mapping and differentiation of biological and environmental elemental signatures in the fossil remains of a 50 million year old bird. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 627-634.	3.0	28
12	A quantitative, non-interferometric X-ray phase contrast imaging technique. <i>Optics Express</i> , 2013, 21, 647.	3.4	27
13	Distinct chemical and mineralogical composition of Icelandic dust compared to northern African and Asian dust. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 13521-13539.	4.9	26
14	Recovering the elemental composition of comet Wild 2 dust in five Stardust impact tracks and terminal particles in aerogel. <i>Meteoritics and Planetary Science</i> , 2008, 43, 215-231.	1.6	24
15	<i>In situ</i> synchrotron XAS study of the decomposition kinetics of ZDDP triboreactive interfaces. <i>RSC Advances</i> , 2018, 8, 34168-34181.	3.6	24
16	Design of a novel phase contrast x-ray imaging system for mammography. <i>Physics in Medicine and Biology</i> , 2010, 55, 4169-4185.	3.0	18
17	Proof-of-concept demonstration of edge-illumination x-ray phase contrast imaging combined with tomosynthesis. <i>Physics in Medicine and Biology</i> , 2014, 59, N1-N10.	3.0	17
18	Iron from coal combustion particles dissolves much faster than mineral dust under simulated atmospheric acidic conditions. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 6045-6066.	4.9	11

#	ARTICLE	IF	CITATIONS
19	A New Generation of X-ray Baggage Scanners Based on a Different Physical Principle. <i>Materials</i> , 2011, 4, 1846-1860.	2.9	8
20	Micro-scale geochemical and crystallographic analysis of <i>Buccinum undatum</i> statoliths supports an annual periodicity of growth ring deposition. <i>Chemical Geology</i> , 2019, 526, 153-164.	3.3	7
21	First X-ray Fluorescence MicroCT Results from Micrometeorites at SSRL. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	3
22	"Edge illumination" in X-ray Phase Contrast Imaging. , 2012, , .		3
23	Tribochemistry evolution of DDP tribofilms over time using in-situ synchrotron XAS. <i>Tribology International</i> , 2021, 160, 107026.	5.9	3
24	Limitations imposed by specimen phase gradients on the design of grating based x-ray phase contrast imaging systems. <i>Applied Optics</i> , 2010, 49, 3860.	2.1	2
25	Geochemical investigations of noble metal-bearing ores: Synchrotron-based micro-analyses and microcosm bioleaching studies. <i>Chemosphere</i> , 2021, 270, 129388.	8.2	2
26	XRF microCT study of space objects at SSRL. , 2006, , .		1
27	Analytical methods for discriminating stardust in aerogel capture media. <i>Powder Diffraction</i> , 2008, 23, 81-86.	0.2	1
28	Design of a novel phase contrast X-ray imaging system for mammography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 652, 824-828.	1.6	1
29	First X-ray phase contrast images obtained with conventional X-ray source under exposure conditions compatible with real-world applications. , 2010, , .		0