

Ashish K Agrawal

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6464917/publications.pdf>

Version: 2024-02-01

51
papers

726
citations

759233

12
h-index

580821

25
g-index

51
all docs

51
docs citations

51
times ranked

848
citing authors

#	ARTICLE	IF	CITATIONS
1	Low density and high strength nanofibrillated cellulose aerogel for thermal insulation application. <i>Materials and Design</i> , 2018, 158, 224-236.	7.0	167
2	Esterified superhydrophobic nanofibrillated cellulose based aerogel for oil spill treatment. <i>Carbohydrate Polymers</i> , 2019, 226, 115286.	10.2	98
3	Design, development and first experiments on the X-ray imaging beamline at Indus-2 synchrotron source RRCAT, India. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 1531-1539.	2.4	43
4	Experimental investigations on melting of lead in a cuboid with constant heat flux boundary condition using thermal neutron radiography. <i>International Journal of Thermal Sciences</i> , 2012, 61, 15-27.	4.9	33
5	Monochromatic X-Ray Induced Novel Synthesis of Plasmonic Nanostructure for Photovoltaic Application. <i>Scientific Reports</i> , 2016, 6, 22394.	3.3	33
6	Morphological and micro-tomographic study on evolution of struvite in synthetic urine infected with bacteria and investigation of its pathological biomineralization. <i>PLoS ONE</i> , 2018, 13, e0202306.	2.5	31
7	Investigation of porosity, microstructure and mechanical properties of additively manufactured graphene reinforced AlSi10Mg composite. <i>Additive Manufacturing</i> , 2020, 33, 101095.	3.0	28
8	Chemical intervention for enhancing growth and reducing grain arsenic accumulation in rice. <i>Environmental Pollution</i> , 2021, 276, 116719.	7.5	22
9	Macroporous SiOC Ceramics with Dense Struts by Positive Sponge Replication Technique. <i>Advanced Engineering Materials</i> , 2018, 20, 1700586.	3.5	17
10	Preparation and application of silica nanoparticles-Ocimum basilicum seeds bio-hybrid for the efficient immobilization of invertase enzyme. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 188, 110796.	5.0	14
11	Digital light processing mediated 3D printing of biocomposite bone scaffolds: Physicochemical interactions and in vitro biocompatibility. <i>Polymer Composites</i> , 2022, 43, 3175-3188.	4.6	14
12	Study of hydride blisters in Zr-alloy using neutron tomography. <i>Journal of Nuclear Materials</i> , 2012, 421, 47-53.	2.7	13
13	Morphological characteristics and microstructure of kidney stones using synchrotron radiation μ CT reveal the mechanism of crystal growth and aggregation in mixed stones. <i>PLoS ONE</i> , 2019, 14, e0214003.	2.5	13
14	Monetite addition into gelatin based freeze-dried scaffolds for improved mechanical and osteogenic properties. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 065030.	3.3	13
15	Synchrotron-based phase-sensitive imaging of leaves grown from magneto-primed seeds of soybean. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 232-239.	2.4	12
16	Magnetopriming effects on arsenic stress induced morphological and physiological variations in soybean involving synchrotron imaging. <i>Physiologia Plantarum</i> , 2021, 173, 88-99.	5.2	12
17	Deminerlization of tooth enamel following radiation therapy; An in vitro microstructure and microhardness analysis. <i>Journal of Cancer Research and Therapeutics</i> , 2020, 16, 612-618.	0.9	11
18	Preparation and characterization of glass ceramic reinforced alginate scaffolds for bone tissue engineering. <i>Journal of Materials Research</i> , 2019, 34, 3798-3809.	2.6	10

#	ARTICLE	IF	CITATIONS
19	Gamma-irradiation-induced micro-structural variations in flame-retardant polyurethane foam using synchrotron X-ray micro-tomography. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1797-1807.	2.4	9
20	Development of X-ray CCD camera based X-ray micro-CT system. <i>Review of Scientific Instruments</i> , 2017, 88, 023702.	1.3	8
21	Correlationship of Drug-Polymer Miscibility, Molecular Relaxation and Phase Behavior of Dipyridamole Amorphous Solid Dispersions. <i>Journal of Pharmaceutical Sciences</i> , 2021, 110, 1470-1479.	3.3	8
22	Use of Synchrotron Phase-Sensitive Imaging for the Investigation of Magnetopriming and Solar UV-Exclusion Impact on Soybean (<i>Glycine max</i>) Leaves. <i>Cells</i> , 2021, 10, 1725.	4.1	8
23	Synchrotron X-ray phase contrast imaging of leaf venation in soybean (<i>Glycine max</i>) after exclusion of solar UV (280–400 nm) radiation. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 795-801.	2.4	7
24	Surface plasmon band tailoring of plasmonic nanostructure under the effect of water radiolysis by synchrotron radiation. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 1209-1217.	2.4	7
25	Thorium-induced Anatomical and Histopathological Changes in Liver of Swiss Mice. <i>Toxicology and Environmental Health Sciences</i> , 2018, 10, 97-106.	2.1	7
26	Bio-extract amalgamated sodium alginate-cellulose nanofibres based 3D-sponges with interpenetrating BioPU coating as potential wound care scaffolds. <i>Materials Science and Engineering C</i> , 2021, 118, 111348.	7.3	7
27	Differential Die-Away Analysis for detection of 235U in metallic matrix. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 806, 1-4.	1.6	6
28	Synchrotron Microtomography of Polymer Derived Macroporous SiOC Ceramics. <i>Advanced Engineering Materials</i> , 2019, 21, 1900172.	3.5	6
29	A variable-wavelength-based approach of phase retrieval for contrast transfer function based methods. <i>Journal of Synchrotron Radiation</i> , 2010, 17, 799-803.	2.4	5
30	Study of pyro-carbon coated alumina kernel using mixed contrast transfer based X-ray phase retrieval technique. <i>NDT and E International</i> , 2011, 44, 41-46.	3.7	5
31	Associated particle technique in single-sided geometry for detection of explosives. <i>Applied Physics Letters</i> , 2015, 106, 124103.	3.3	5
32	Non-destructive evaluation of teeth restored with different composite resins using synchrotron based micro-imaging. <i>Journal of X-Ray Science and Technology</i> , 2016, 24, 119-132.	1.0	5
33	Application of X-Ray CT for Non-destructive Characterization of Graphite Fuel-Tube. <i>Journal of Nondestructive Evaluation</i> , 2016, 35, 1.	2.4	5
34	Application of X-ray micro-CT for micro-structural characterization of APCVD deposited SiC coatings on graphite conduit. <i>Applied Radiation and Isotopes</i> , 2016, 108, 133-142.	1.5	5
35	Tailor-made design, fabrication and validation of SrO doped nanostructured ZTA ceramic Femoral head Acetabular socket liner assembly. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 114, 104178.	3.1	5
36	Application of X-ray phase-contrast imaging technique in the study of pyrocarbon-coated zirconia kernels. <i>NDT and E International</i> , 2009, 42, 384-388.	3.7	4

#	ARTICLE	IF	CITATIONS
37	Neutron phase contrast imaging beamline at CIRUS, reactor, India. Applied Radiation and Isotopes, 2012, 70, 625-631.	1.5	3
38	Laser produced thin metallic planar mini-flyer generation using fiber optic plate. Laser and Particle Beams, 2013, 31, 289-300.	1.0	3
39	3D spatial distribution of ore mineral phases using high resolution synchrotron micro-computed tomography (μ CT) combined with optical microscopy. Applied Radiation and Isotopes, 2019, 148, 49-59.	1.5	3
40	Thermal behaviour of PPC and OPC-53 when exposed to extreme temperatures. Advances in Cement Research, 2020, 32, 358-370.	1.6	3
41	Characterisation of micro- and mesoporosity in Portland cement at elevated temperatures. Magazine of Concrete Research, 2020, 72, 304-313.	2.0	3
42	X-ray tomography analysis reveals the influence of graphene on porous morphology of collagen cryogels. Micron, 2021, 150, 103127.	2.2	3
43	Phantom-based feasibility studies on phase-contrast mammography at Indian synchrotron facility indus-2. Journal of Medical Physics, 2019, 44, 39.	0.3	3
44	Micro-structural characterization of materials using synchrotron hard X-ray imaging techniques. AIP Conference Proceedings, 2015, , .	0.4	2
45	Cracking in a hot deformed SiC P /A6061 composite investigated using synchrotron microtomography. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 292-301.	5.6	2
46	The white beam station at imaging beamline BL-4, Indus-2. Journal of Synchrotron Radiation, 2021, 28, 1639-1648.	2.4	2
47	Development of neutron tomography and phase contrast imaging technique. , 2013, , .		1
48	Evaluation of Influence of Finish line Design on Marginal Discrepancy of All-ceramics Lithium disilicate Crown restorations using μ CT. IOP Conference Series: Materials Science and Engineering, 2020, 802, 012003.	0.6	1
49	Effect of monetite reinforced into the chitosan-based lyophilized 3D scaffolds on physicochemical, mechanical, and osteogenic properties. International Journal of Polymeric Materials and Polymeric Biomaterials, 2023, 72, 1161-1178.	3.4	1
50	Neutron imaging experiments at E-12 beam-line of CIRUS. , 2013, , .		0
51	Feasibility of osteoporosis studies in zebra fish model using SR-microCT. AIP Conference Proceedings, 2020, , .	0.4	0