

# Anirban Chowdhury

## List of Publications by Year in descending order

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49  
papers

719  
citations

516561

16  
h-index

580701

25  
g-index

49  
all docs

49  
docs citations

49  
times ranked

859  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural properties and the fluorite→pyrochlore phase transition in La <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> : The role of oxygen to induce local disordered states. Journal of Alloys and Compounds, 2016, 686, 130-136.	2.8	65
2	Nano-powders of Na <sub>0.5</sub> K <sub>0.5</sub> NbO <sub>3</sub> made by a sol→gel method. Journal of Nanoparticle Research, 2010, 12, 209-215.	0.8	48
3	Effect of rare-earth doping in CeO <sub>2</sub> matrix: Correlations with structure, catalytic and visible light photocatalytic properties. Ceramics International, 2017, 43, 17041-17047.	2.3	46
4	Effect of compaction on the kinetics of thermal decomposition of dolomite under non-isothermal condition. Journal of Materials Science, 2005, 40, 4749-4751.	1.7	45
5	Nanopowders of Na <sub>0.5</sub> K <sub>0.5</sub> NbO <sub>3</sub> Prepared by the Pechini Method. Journal of the American Ceramic Society, 2009, 92, 758-761.	1.9	43
6	Fundamental Issues in the Synthesis of Ferroelectric Na <sub>0.5</sub> K <sub>0.5</sub> NbO <sub>3</sub> Thin Films by Sol→Gel Processing. Chemistry of Materials, 2010, 22, 3862-3874.	3.2	35
7	Synergistic effects of ultrasonication and ethanol washing in controlling the stoichiometry, phase-purity and morphology of rare-earth doped ceria nanoparticles. Ultrasonics Sonochemistry, 2017, 36, 182-190.	3.8	33
8	Antibacterial and natural room-light driven photocatalytic activities of CuO nanorods. Materials Chemistry and Physics, 2019, 226, 106-112.	2.0	32
9	Synthesis of La-doped ceria nanoparticles: impact of lanthanum depletion. Journal of Materials Science, 2016, 51, 4134-4141.	1.7	29
10	Structural Investigations on the Compositional Anomalies in Lanthanum Zirconate System Synthesized by Coprecipitation Method. Journal of the American Ceramic Society, 2014, 97, 718-724.	1.9	28
11	The effect of refluxing on the alkoxide-based sodium potassium niobate sol→gel system: Thermal and spectroscopic studies. Journal of Solid State Chemistry, 2011, 184, 317-324.	1.4	26
12	Exceptionally high fracture toughness of carbon nanotube reinforced plasma sprayed lanthanum zirconate coatings. Journal of Alloys and Compounds, 2019, 777, 1133-1144.	2.8	25
13	Investigations on the role of alkali to obtain modulated defect concentrations for Cu <sub>2</sub> O thin films. Applied Surface Science, 2014, 289, 430-436.	3.1	23
14	Nano-twinned structure and photocatalytic properties under visible light for undoped nano-titania synthesised by hydrothermal reaction in water→ethanol mixture. Journal of Supercritical Fluids, 2011, 58, 136-141.	1.6	22
15	TEM and XPS studies on the faceted nanocrystals of Ce <sub>0.8</sub> Zr <sub>0.2</sub> O <sub>2</sub> . Materials Characterization, 2015, 100, 31-35.	1.9	18
16	Use of Novel Nanostructured Photocatalysts for the Environmental Sustainability of Wastewater Treatments. , 2020, , 949-964.		17
17	Facile synthesis of CuO nanorods obtained without any template and/or surfactant. Ceramics International, 2017, 43, 13943-13947.	2.3	16
18	Structure→property relations for a phase→pure, nanograined tetragonal zirconia ceramic stabilized with minimum CaO doping. Journal of the American Ceramic Society, 2021, 104, 3497-3507.	1.9	15

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19	Evidence of phase heterogeneity in sol-gel Na <sub>0.5</sub> K <sub>0.5</sub> NbO <sub>3</sub> system. <i>Materials Chemistry and Physics</i> , 2010, 124, 159-162.	2.0	12
20	CaO-doped tetragonal ZrO <sub>2</sub> nanoparticles as an effective adsorbent for the removal of organic dye waste. <i>Applied Surface Science</i> , 2022, 596, 153651.	3.1	12
21	Photo-assisted control of gold and silver nanostructures on silicon and its SERRS effect. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 275303.	1.3	11
22	Morphology, surface topography and optical studies on electron beam evaporated MgO thin films. <i>Bulletin of Materials Science</i> , 2006, 29, 513-521.	0.8	10
23	Attaining near-theoretical densification in nanograined pyrochlore La <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> (LZ) ceramic at 1150 Å°C by spark plasma sintering. <i>Scripta Materialia</i> , 2016, 117, 37-40.	2.6	9
24	TGA-FTIR study of a lead zirconate titanate gel made from a triol-based sol-gel system. <i>Thermochimica Acta</i> , 2008, 475, 59-64.	1.2	8
25	La <sup>3+</sup> -doped CeO <sub>2</sub> system: Negating the myths with a tailor-made ceramic. <i>Scripta Materialia</i> , 2018, 157, 138-141.	2.6	8
26	LASER TRANSFER PROCESSING AND THE INTEGRATION OF FERROELECTRIC FILMS. <i>Integrated Ferroelectrics</i> , 2009, 106, 40-48.	0.3	7
27	Reaping the remarkable benefits of a "burst nucleation" approach for a ceria doped zirconia system. <i>Journal of Alloys and Compounds</i> , 2019, 802, 318-325.	2.8	7
28	Can a shape factor in bulk ceramics mitigate unwanted phase transformations?. <i>Scripta Materialia</i> , 2021, 190, 52-56.	2.6	7
29	Appearance of Fröhlich-like phonon mode and defect dynamics in La <sup>3+</sup> -doped ceria. <i>Journal of Applied Physics</i> , 2017, 122, 135108.	1.1	7
30	Discrepancies in the hardness data and the role of grinding-induced surface effects for a porous zirconate ceramic. <i>Journal of the American Ceramic Society</i> , 2017, 100, 1717-1723.	1.9	6
31	Constitutive modelling and Weibull statistical analysis for the porosity - Mechanical property correlations in 3% yttria-stabilized zirconia system. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 70, 246-252.	1.7	6
32	Role of various alcohol washing media in obtaining a remarkable texture for La <sub>2</sub> Ce <sub>2</sub> O <sub>7</sub> powders and ceramics. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1563-1574.	1.9	5
33	Reviewing the cases of Nanoscale Heterogeneity in Ceramics: Boon or Bane?. <i>Materialia</i> , 2021, 16, 101109.	1.3	5
34	Structure-property correlations for the surfactant-free faceted nanocrystals of Ce <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> and their bulk ceramics. <i>Materials Research Bulletin</i> , 2019, 112, 38-45.	2.7	4
35	Phase integrity of zinc oxide doped zirconia under low compacting pressure. <i>Journal of Alloys and Compounds</i> , 2020, 843, 155927.	2.8	4
36	On the peculiarities of phase developments involving Zn <sup>2+</sup> -doped ZrO <sub>2</sub> system. <i>Scripta Materialia</i> , 2017, 138, 71-74.	2.6	4

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37	Noteworthy differences between vertical and horizontal sintering of ceramic samples. Journal of Alloys and Compounds, 2022, 923, 166309.	2.8	4
38	Structural, thermal, dielectric studies on sol-gel derived MgO from non-alkoxide route. Materials Science and Technology, 2006, 22, 1249-1254.	0.8	3
39	Densification and enhanced polarisation in lead zirconate titanate sol-gel thin films. Materials Chemistry and Physics, 2009, 113, 135-139.	2.0	3
40	Pushing the limits of analytical characterization tools: How much is too much?. , 2020, , 239-275.		3
41	Structural and dielectric properties of the fluorite-type $\text{La}_x\text{Ce}_{1-x}\text{O}_2$ ceramics. Journal Physics D: Applied Physics, 2017, 50, 495601.	1.3	2
42	Crucial dependence of sintering processing factors on the texture-electrical resistivity relationship of $\text{La}_2\text{Ce}_2\text{O}_7$ ceramic. Materials Letters, 2022, 314, 131858.	1.3	2
43	Impact of different metallic forms of nickel on hydrogen evolution reaction. Scripta Materialia, 2022, 218, 114829.	2.6	2
44	Stabilization of $\text{ZrO}_2$ matrix: Revisiting the "archaic" issue with a peculiar example. Scripta Materialia, 2019, 162, 408-411.	2.6	1
45	Structure, Property, Processing and Applications of Fire Retardant Materials: A Brief Review. Advanced Materials Research, 0, 1170, 87-116.	0.3	1
46	Structural and spectroscopic characterisations of the surface oxide scales and inclusions present on edge-burst hot-rolled steel coils. Materials Chemistry and Physics, 2014, 148, 276-283.	2.0	0
47	Functional properties of $\text{La}_x\text{Ce}_{1-x}\text{O}_2$ nanocrystals and their bulk ceramics. Journal of Materials Science: Materials in Electronics, 2019, 30, 2096-2106.	1.1	0
48	Reviewing the Potential of Novel Nanofillers in Polymer Matrices for Advanced Technological Applications. , 2021, , .		0
49	Process-structure correlations in complex $\text{A}_2\text{B}_2\text{O}_7$ systems: Nanoparticles and ceramics. , 2022, , 181-240.		0