

# Subramshu S Bhattacharya

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/5681234/subramshu-s-bhattacharya-publications-by-year.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

56  
papers

1,607  
citations

17  
h-index

39  
g-index

58  
ext. papers

2,211  
ext. citations

5.2  
avg, IF

4.85  
L-index

#	Paper	IF	Citations
56	Structural and Electrochemical Investigations on Nanocrystalline High Entropy Spinel Oxides for Battery-Like Supercapacitor Applications. <i>ChemistrySelect</i> , <b>2022</b> , 7, e202104015	1.8	1
55	Comprehensive investigation of crystallographic, spin-electronic and magnetic structure of (Co <sub>0.2</sub> Cr <sub>0.2</sub> Fe <sub>0.2</sub> Mn <sub>0.2</sub> Ni <sub>0.2</sub> ) <sub>3</sub> O <sub>4</sub> : Unraveling the suppression of configuration entropy in high entropy oxides. <i>Acta Materialia</i> , <b>2022</b> , 226, 117581	8.4	5
54	Determining role of individual cations in high entropy oxides: Structure and reversible tuning of optical properties. <i>Scripta Materialia</i> , <b>2022</b> , 207, 114273	5.6	2
53	Dielectric and ferroelectric properties of multicomponent equiatomic calcium lead strontium titanate (Ca <sub>0.33</sub> Pb <sub>0.33</sub> Sr <sub>0.33</sub> )TiO <sub>3</sub> . <i>Open Ceramics</i> , <b>2021</b> , 6, 100130	3.3	0
52	High Entropy and Low Symmetry: Triclinic High-Entropy Molybdates. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 115-123	1.5	3
51	Mechanochemical synthesis of novel rutile-type high entropy fluorides for electrocatalysis. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 8998-9009	13	11
50	High entropy spinel metal oxide (CoCrFeMnNi) <sub>3</sub> O <sub>4</sub> nanoparticles as a high-performance supercapacitor electrode material. <i>Journal of Energy Storage</i> , <b>2021</b> , 42, 103004	7.8	10
49	Factors influencing phase formation and band gap studies of a novel multicomponent high entropy (Co,Cu,Mg,Ni,Zn) <sub>2</sub> TiO <sub>4</sub> orthotitanate spinel. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 888, 161390	5.7	3
48	A comparative study of the mechanical and tribological properties of intermittently and continuously grown multilayer diamond films on RB-SiC. <i>Diamond and Related Materials</i> , <b>2020</b> , 110, 108140	2.5	2
47	Role of intermediate 4f states in tuning the band structure of high entropy oxides. <i>APL Materials</i> , <b>2020</b> , 8, 051111	5.7	22
46	Role of size, alio-/multi-valency and non-stoichiometry in the synthesis of phase-pure high entropy oxide (Co,Cu,Mg,Na,Ni,Zn)O. <i>Dalton Transactions</i> , <b>2020</b> , 49, 7123-7132	4.3	13
45	Gassing Behavior of High-Entropy Oxide Anode and Oxyfluoride Cathode Probed Using Differential Electrochemical Mass Spectrometry. <i>Batteries and Supercaps</i> , <b>2020</b> , 3, 361-369	5.6	18
44	Effect of defect states in the optical and magnetic properties of nanocrystalline NiO synthesised in a single step by an aerosol process. <i>Ceramics International</i> , <b>2020</b> , 46, 5671-5680	5.1	8
43	Multicomponent equiatomic lead strontium calcium titanate (Pb Sr Ca) Ti O <sub>3</sub> prepared by reverse co-precipitation. <i>Materialia</i> , <b>2020</b> , 9, 100571	3.2	2
42	Antiferromagnetism in a nanocrystalline high entropy oxide (Co,Cu,Mg,Ni,Zn)O: Magnetic constituents and surface anisotropy leading to lattice distortion. <i>Acta Materialia</i> , <b>2020</b> , 200, 526-536	8.4	12
41	Lithium containing layered high entropy oxide structures. <i>Scientific Reports</i> , <b>2020</b> , 10, 18430	4.9	22
40	High entropy oxides as anode material for Li-ion battery applications: A practical approach. <i>Electrochemistry Communications</i> , <b>2019</b> , 100, 121-125	5.1	73

39	Multi-anionic and -cationic compounds: new high entropy materials for advanced Li-ion batteries. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 2433-2442	35.4	121
38	High-Entropy Oxides: Fundamental Aspects and Electrochemical Properties. <i>Advanced Materials</i> , <b>2019</b> , 31, e1806236	24	197
37	On the homogeneity of high entropy oxides: An investigation at the atomic scale. <i>Scripta Materialia</i> , <b>2019</b> , 166, 58-63	5.6	53
36	Spark Plasma Sintering of Graded Dissimilar Metals. <i>Transactions of the Indian Institute of Metals</i> , <b>2019</b> , 72, 1837-1852	1.2	0
35	High-Entropy Oxides: High-Entropy Oxides: Fundamental Aspects and Electrochemical Properties (Adv. Mater. 26/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970189	24	5
34	Synthesis of nanocrystalline alumina (Al <sub>2</sub> O <sub>3</sub> ) particles from an aqueous precursor by flame-assisted spray pyrolysis. <i>Materials Today: Proceedings</i> , <b>2018</b> , 5, 10023-10027	1.4	1
33	Flame Synthesis of Nanocrystalline Zirconia and Yttria Stabilised Zirconia (YSZ) Composites Using Inorganic Precursors. <i>Materials Today: Proceedings</i> , <b>2018</b> , 5, 10000-10006	1.4	
32	Development of superplasticity in an AlMg alloy through severe plastic deformation. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2018</b> , 94, 2973-2979	3.2	3
31	High entropy oxides for reversible energy storage. <i>Nature Communications</i> , <b>2018</b> , 9, 3400	17.4	299
30	Structural and optical properties of nanocrystalline pure and indium doped tin oxide powders synthesized in a single step by flame spray pyrolysis. <i>Materials Research Express</i> , <b>2017</b> , 4, 075034	1.7	1
29	Multicomponent equiatomic rare earth oxides with a narrow band gap and associated praseodymium multivalency. <i>Dalton Transactions</i> , <b>2017</b> , 46, 12167-12176	4.3	128
28	Nanocrystalline multicomponent entropy stabilised transition metal oxides. <i>Journal of the European Ceramic Society</i> , <b>2017</b> , 37, 747-754	6	146
27	Multicomponent equiatomic rare earth oxides. <i>Materials Research Letters</i> , <b>2017</b> , 5, 102-109	7.4	148
26	On the power law description of low-stress uni-axial steady-state high-homologous-temperature deformation. <i>Mechanics of Materials</i> , <b>2015</b> , 91, 177-193	3.3	7
25	Effect of Process Parameters on the Characteristics of Nanocrystalline Alumina Particles Synthesized by Solution Combustion Process. <i>Transactions of the Indian Institute of Metals</i> , <b>2015</b> , 68, 147-151	1.2	5
24	Growth and characterization of diamond particles, diamond films, and CNT-diamond composite films deposited simultaneously by hot filament CVD. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 144-156	4.3	7
23	Spark Plasma Welding of Austenitic Stainless Steel AISI 304L to Commercially Pure Titanium. <i>Transactions of the Indian Institute of Metals</i> , <b>2015</b> , 68, 289-297	1.2	17
22	Nanocrystalline diamond coatings on the interior of WC/Co dies for drawing carbon steel tubes: Enhancement of tube properties. <i>Diamond and Related Materials</i> , <b>2014</b> , 50, 33-37	3.5	14

21	Effect of temperature on the stability of diamond particles and continuous thin films by Raman imaging. <i>Journal of Nanoparticle Research</i> , <b>2013</b> , 15, 1	2-3	7
20	Experimental Studies on the Superplastic Forming of Square Shaped Components and Diffusion Bonding Characteristics of Ti6Al4V Alloy. <i>Transactions of the Indian Institute of Metals</i> , <b>2013</b> , 66, 313-323	1-2	4
19	Chemical vapor deposition of diamond coatings on tungsten carbide (WC/Co) riveting inserts. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2013</b> , 37, 117-120	4-1	24
18	Integration of perovskite PZT thin films on diamond substrate without buffer layer. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 202001	3	19
17	A comparative study on wear behavior of TiN and diamond coated WC/Co substrates against hypereutectic AlSi alloys. <i>Applied Surface Science</i> , <b>2012</b> , 261, 520-527	6-7	14
16	Adhesive Microcrystalline Diamond Coating on Surface Modified Non-Carbide Forming Substrate Using Hot Filament CVD. <i>Materials Express</i> , <b>2012</b> , 2, 115-120	1-3	10
15	Coining Test for Evaluation of Tool Performance. <i>Transactions of the Indian Institute of Metals</i> , <b>2011</b> , 64, 359-363	1-2	
14	Experimental studies on the superplastic forming of square shaped components from sheets of Ti-6Al-4V alloy. <i>Transactions of the Indian Institute of Metals</i> , <b>2011</b> , 64, 21-25	1-2	3
13	Flame spray synthesis of nano lanthanum strontium manganite for solid oxide fuel cell applications. <i>Transactions of the Indian Institute of Metals</i> , <b>2011</b> , 64, 181-184	1-2	3
12	High temperature stability of nanocrystalline anatase powders prepared by chemical vapour synthesis under varying process parameters. <i>Applied Surface Science</i> , <b>2011</b> , 257, 6761-6767	6-7	3
11	Structure, thermal stability, and optical properties of boron modified nanocrystalline anatase prepared by chemical vapor synthesis. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 113526	2-5	1
10	Oxidative electrodeposition of nanocrystalline zinc oxide powders. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 115305	3	3
9	On the hot tensile deformation behavior of an AISI 316LN stainless steel. <i>Transactions of the Indian Institute of Metals</i> , <b>2009</b> , 62, 41-48	1-2	10
8	Size effect on the lattice parameters of nanocrystalline anatase. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 191906	4	58
7	Effect of gas flow rates on the anatase-rutile transformation temperature of nanocrystalline TiO <sub>2</sub> synthesised by chemical vapour synthesis. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2009</b> , 9, 5572-7	1-3	3
6	Microstructure and mechanical properties of Sc modified AlTi alloy (AA2219) electron beam welds. <i>Science and Technology of Welding and Joining</i> , <b>2008</b> , 13, 415-421	3-7	12
5	Effect of process parameters on the chemical vapour synthesis of nanocrystalline titania. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 155313	3	8
4	Improvement of mechanical properties of aluminium-copper alloy (AA2219) GTA welds by Sc addition. <i>Science and Technology of Welding and Joining</i> , <b>2008</b> , 13, 146-158	3-7	19

3	Synthesis, characterization and sintering of nanocrystalline titania powders produced by chemical vapour synthesis. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, 2248-2254	3	31
2	Model for grain boundary sliding and its relevance to optimal structural superplasticity Part 5: A unique numerical solution and its reliability. <i>Materials Science and Technology</i> , <b>1999</b> , 15, 673-682	1.5	8
1	A generic analysis for high-temperature power-law deformation: the case of linear ln (strain rate)-ln(stress) relationship. <i>Journal of Materials Science</i> , <b>1995</b> , 30, 5850-5866	4.3	7