Sumantra Kumar Pradhan

List of Publications by Year
in descending order

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191 papers	4,662 citations	101543 36 h-index	144013 57 g-index
193 all docs	193 docs citations	193 times ranked	5136 citing authors

#	Article	IF	Citations
1	Microstructure characterization and cation distribution of nanocrystalline magnesium ferrite prepared by ball milling. Materials Chemistry and Physics, 2005, 93, 224-230.	4.0	182
2	Preparation of zinc ferrite by high-energy ball-milling and microstructure characterization by Rietveldâ€™s analysis. Materials Chemistry and Physics, 2003, 82, 27-37.	4.0	160
3	Synthesis of nanocrystalline nickel-zinc ferrite by the sol-gel method. Journal of Magnetism and Magnetic Materials, 1993, 127, 214-218.	2.3	151
4	Annealing effect on nano-ZnO powder studied from positron lifetime and optical absorption spectroscopy. Journal of Applied Physics, 2006, 100, 114328.	2.5	135
5	Size Tunable Cesium Antimony Chloride Perovskite Nanowires and Nanorods. Chemistry of Materials, 2018, 30, 2135-2142.	6.7	132
6	A critical evaluation on efficacy of recrystallization vs. strain induced boundary migration in achieving grain boundary engineered microstructure in a Ni-base superalloy. Acta Materialia, 2018, 146, 187-201.	7.9	120
7	Influence of processing parameters on dynamic recrystallization and the associated annealing twin boundary evolution in a nickel base superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 700, 49-58.	5.6	103
8	Preparation and microstructure characterization of ball-milled ZrO2powder by the Rietveld method: monoclinic to cubic phase transformation without any additive. Journal of Applied Crystallography, 2002, 35, 517-525.	4.5	91
9	Structure of nanocrystalline MgFe2O4from X-ray diffraction, Rietveld and atomic pair distribution function analysis. Journal of Applied Crystallography, 2005, 38, 772-779.	4.5	91
10	Microstructure characterization of hydrothermally synthesized PANI/V2O5Â·nH2O heterojunction photocatalyst for visible light induced photodegradation of organic pollutants and non-absorbing colorless molecules. Journal of Hazardous Materials, 2017, 339, 161-173.	12.4	88
11	Characterization of crystalline structure of ball-milled nano-Niâ€“Zn-ferrite by Rietveld method. Materials Chemistry and Physics, 2004, 84, 291-301.	4.0	81
12	Stability of cubic phase in nanocrystalline ZrO₂. Journal of Materials Research, 1994, 9, 263-265.	2.6	75
13	Microstructure characterization of polymorphic transformed ball-milled anatase TiO2 by Rietveld method. Materials Chemistry and Physics, 2003, 77, 153-164.	4.0	67
14	Influence of the individual microstructural features on pitting corrosion in type 304 austenitic stainless steel. Corrosion Science, 2019, 158, 108091.	6.6	67
15	Influence of Size and Shape on the Photocatalytic Properties of SnO₂ Nanocrystals. ChemPhysChem, 2015, 16, 1017-1025.	2.1	64
16	Atomic-Scale Structure of Nanosized Titania and Titanate: Particles, Wires, and Tubes. Chemistry of Materials, 2007, 19, 6180-6186.	6.7	60
17	Facile synthesis of SnO₂â€“PbS nanocomposites with controlled structure for applications in photocatalysis. Nanoscale, 2016, 8, 2727-2739.	5.6	60
18	Microstructure characterization of nanocrystalline Ni3C synthesized by high-energy ball milling. Journal of Alloys and Compounds, 2009, 479, 193-200.	5.5	58

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19	Microstructure characterization of nanocrystalline TiC synthesized by mechanical alloying. Materials Chemistry and Physics, 2010, 120, 537-545.	4.0	57
20	Structural interpretation of SnO₂nanocrystals of different morphologies synthesized by microwave irradiation and hydrothermal methods. CrystEngComm, 2014, 16, 1079-1090.	2.6	57
21	Morphological effects on the photocatalytic properties of SnO2 nanostructures. Journal of Alloys and Compounds, 2019, 810, 151718.	5.5	57
22	Microstructure characterization of mechanosynthesized nanocrystalline NiFe2O4 by Rietveld's analysis. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 39, 175-184.	2.7	55
23	Structural interpretation, growth mechanism and optical properties of ZnO nanorods synthesized by a simple wet chemical route. RSC Advances, 2015, 5, 23101-23113.	3.6	52
24	Magnesium substitution in carbonated hydroxyapatite: Structural and microstructural characterization by Rietveld's refinement. Materials Chemistry and Physics, 2016, 170, 319-329.	4.0	51
25	Effect of doping (Mg,Mn,Zn) on the microstructure and mechanical properties of spark plasma sintered hydroxyapatites synthesized by mechanical alloying. Ceramics International, 2017, 43, 2389-2397.	4.8	51
26	Hydrothermal synthesis of polyaniline intercalated vanadium oxide xerogel hybrid nanocomposites: effective control of morphology and structural characterization. New Journal of Chemistry, 2017, 41, 3634-3645.	2.8	50
27	Microstructure characterization and phase transformation kinetics of ball-milled prepared nanocrystalline Zn2TiO4 by Rietveld method. Materials Chemistry and Physics, 2003, 82, 837-847.	4.0	49
28	Preparation of nanocrystalline microwave dielectric Zn2TiO4 and ZnTiO3 mixture and X-ray microstructure characterization by Rietveld method. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 33, 69-76.	2.7	49
29	Comprehending the role of individual microstructural features on electrochemical response and passive film behaviour in type 304 austenitic stainless steel. Corrosion Science, 2021, 180, 109187.	6.6	47
30	Individual and synergistic influences of microstructural features on intergranular corrosion behavior in extra-low carbon type 304L austenitic stainless steel. Corrosion Science, 2018, 139, 319-332.	6.6	45
31	Rietveld analysis of polymorphic transformations of ball milled anatase TiO2. Materials Chemistry and Physics, 2003, 80, 73-81.	4.0	44
32	Microstructure characterization of nanocrystalline Fe3C synthesized by high-energy ball milling. Journal of Alloys and Compounds, 2009, 477, 127-132.	5.5	44
33	Biocompatible nanocrystalline natural bonelike carbonated hydroxyapatite synthesized by mechanical alloying in a record minimum time. Materials Science and Engineering C, 2014, 42, 647-656.	7.3	44
34	Microstructural characterization of nanocrystalline SiC synthesized by high-energy ball-milling. Journal of Alloys and Compounds, 2009, 486, 480-485.	5.5	41
35	Ultra-Low-Temperature CO Oxidation Activity of Octahedral Site Cobalt Species in Co₃O₄ Based Catalysts: Unravelling the Origin of the Unique Catalytic Property. Journal of Physical Chemistry C, 2019, 123, 19557-19571.	3.1	41
36	X-ray diffraction studies of the decomposition and microstructural characterization of cold-worked powders of Cuâ€“15Niâ€“Sn alloys by Rietveld analysis. Journal of Alloys and Compounds, 2004, 377, 103-116.	5.5	40

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37	Quickest ever single-step mechanosynthesis of Cd0.5Zn0.5S quantum dots: Nanostructure and optical characterizations. Materials Research Bulletin, 2012, 47, 1062-1072.	5.2	37
38	Effect of sodium doping on the microstructure, lattice distortion and magnetic properties of GdMnO₃ tiny single crystals. RSC Advances, 2016, 6, 20609-20620.	3.6	37
39	Enhanced antifungal activity of fluconazole conjugated with Cu-Ag-ZnO nanocomposite. Materials Science and Engineering C, 2020, 106, 110160.	7.3	37
40	Microstructure characterization and phase transformation kinetics of polymorphic transformed ball milled a-TiO2â€“10 mol% m-ZrO2 mixture by Rietveld method. Materials Chemistry and Physics, 2003, 82, 848-859.	4.0	35
41	Microstructure characterization of ball milled prepared nanocrystalline perovskite CaTiO3 by Rietveld method. Materials Chemistry and Physics, 2004, 86, 284-292.	4.0	35
42	Nanophase iron oxides by ball-mill grinding and their MÃ¶ssbauer characterization. Journal of Alloys and Compounds, 2001, 326, 292-297.	5.5	33
43	X-ray studies on the kinetics of microstructural evolution of Ni3Al synthesized by ball milling elemental powders. Materials Chemistry and Physics, 2001, 68, 166-174.	4.0	32
44	Synthesis of nanocomposites comprising iron and barium hexaferrites. Journal of Magnetism and Magnetic Materials, 2004, 269, 42-47.	2.3	32
45	Microstructure, optical, dielectric and electrical characterizations of Mn doped ZnO nanocrystals synthesized by mechanical alloying. Ceramics International, 2018, 44, 7110-7121.	4.8	32
46	Enhanced photocatalytic and antibacterial activities of mechanosynthesized TiO2â€“Ag nanocomposite in wastewater treatment. Journal of Molecular Structure, 2020, 1211, 128076.	3.6	32
47	Phase transformation kinetic study and microstructure characterization of ball-milledm-ZrO2â€“10â€…mol%a-TiO2by Rietveld method. Journal of Applied Crystallography, 2003, 36, 260-268.	4.5	31
48	X-ray microstructure characterization of ball-milled nanocrystalline microwave dielectric CaZrO3by Rietveld method. Journal of Applied Crystallography, 2005, 38, 291-298.	4.5	31
49	Effects of monovalent cation doping on the structure, microstructure, lattice distortion and magnetic behavior of single crystalline NdMnO₃compounds. Dalton Transactions, 2015, 44, 17229-17240.	3.3	31
50	Structural interpretation of chemically synthesized ZnO nanorod and its application in lithium ion battery. Applied Surface Science, 2015, 329, 206-211.	6.1	30
51	Microstructure characterization and phase transformation kinetics of ball-mill prepared nanocrystalline Mgâ€“Zn-ferrite by Rietveld's analysis and electron microscopy. Materials Chemistry and Physics, 2007, 105, 31-37.	4.0	29
52	Mechanochemical solid state synthesis of (Cd0.8Zn0.2)S quantum dots: Microstructure and optical characterizations. Journal of Alloys and Compounds, 2011, 509, 4176-4184.	5.5	29
53	Enhanced photocatalytic performance of V₂O₅â€“TiO₂ nanocomposites synthesized by mechanical alloying with morphological hierarchy. New Journal of Chemistry, 2019, 43, 2804-2816.	2.8	29
54	Microstructure, optical and electrical characterizations of Mn doped ZnS nanocrystals synthesized by mechanical alloying. Materials Research Bulletin, 2018, 97, 169-175.	5.2	28

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55	Composition related structural transition between mechanosynthesized CsPbBr3 and CsPb2Br5 perovskites andÂtheirÂoptical properties. Journal of Alloys and Compounds, 2020, 816, 152612.	5.5	28
56	Advanced asymmetric supercapacitor with NiCo2O4 nanoparticles and nanowires electrodes: A comparative morphological hierarchy. Journal of Alloys and Compounds, 2020, 821, 153503.	5.5	28
57	Preparation of nanodimensional CdS by chemical dipping technique and their characterization. Materials Research, 2011, 14, 17-20.	1.3	27
58	Microstructure, optical and electrical characterizations of nanocrystalline ZnAl2O4 spinel synthesized by mechanical alloying: Effect of sintering on microstructure and properties. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 108, 411-420.	2.7	27
59	Effect of alloying on the microstructure and mechanical properties of Ni3Al. Journal of Alloys and Compounds, 1998, 265, 249-256.	5.5	26
60	Microstructure characterization of high energy ball-milled nanocrystalline V2O5 by Rietveld analysis. Materials Chemistry and Physics, 2003, 77, 868-877.	4.0	26
61	Microstructure evolution during low-strain thermo-mechanical processing and its repercussion on intergranular corrosion in alloy 600H. Materials Characterization, 2018, 145, 582-593.	4.4	26
62	Enhanced photocatalysis performance of mechano-synthesized V2O5â€“TiO2 nanocomposite for wastewater treatment: Correlation of structure with photocatalytic performance. Materials Chemistry and Physics, 2020, 248, 122947.	4.0	25
63	Structural and microstructural characterizations of nanocrystalline hydroxyapatite synthesized by mechanical alloying. Materials Science and Engineering C, 2013, 33, 2891-2898.	7.3	24
64	Mechanical preparation of nanocrystalline biocompatible single-phase Mn-doped A-type carbonated hydroxyapatite (A-cHAp): effect of Mn doping on microstructure. Dalton Transactions, 2015, 44, 20087-20097.	3.3	24
65	Microstructure characterization of nanocrystalline ZrSiO4synthesized by ball-milling and high-temperature annealing. Journal of Applied Crystallography, 2005, 38, 951-957.	4.5	23
66	Microstructural evolution on ball-milling elemental blends of Ni, Al and Ti by Rietveldâ€™s method. Materials Chemistry and Physics, 2002, 74, 167-176.	4.0	22
67	Microstructural, optical and quantum confinement effect study of mechanically synthesized ZnTe quantum dots. Acta Materialia, 2012, 60, 131-138.	7.9	22
68	Through-thickness microstructural evolution during grain boundary engineering type thermomechanical processing and its implication on sensitization behavior in austenitic stainless steel. Materials Characterization, 2017, 134, 134-142.	4.4	22
69	An xâ€ray diffraction study of lattice imperfections in coldâ€worked faceâ€centeredâ€cubic alloys. VI. Copperâ€aluminum (Î± phase). Journal of Applied Physics, 1987, 62, 1521-1523.	2.5	21
70	X-ray powder profile analyses on nanostructured niobium metal powders. Scripta Materialia, 1995, 5, 53-61.	0.5	21
71	Enhanced electrochemical properties of Co3O4 with morphological hierarchy for energy storage application: A comparative study with different electrolytes. Journal of Physics and Chemistry of Solids, 2021, 148, 109733.	4.0	21
72	Phase Stability of Nanocrystalline Mgâ€“Zn Ferrite at Elevated Temperatures. Japanese Journal of Applied Physics, 2008, 47, 8667-8672.	1.5	20

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73	Targeting low-cost type-II heterostructures: Synthesis, structure and photoreactivity. Journal of Alloys and Compounds, 2017, 698, 944-956.	5.5	20
74	Mechanosynthesis of nanocrystalline chalcopyrite. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 33, 144-146.	2.7	18
75	Preparation of ternary Ti0.9Ni0.1C cermets by mechanical alloying: Microstructure characterization by Rietveld method and electron microscopy. Journal of Alloys and Compounds, 2010, 493, 666-671.	5.5	18
76	Mechanosynthesis of Nanocrystalline Fully Stabilized bcc Î³-phase of Bi2O3 without Any Additive: Manifestation of Ferroelasticity in Microstructure, Optical, and Transport Properties. Crystal Growth and Design, 2018, 18, 6564-6572.	3.0	18
77	X-ray characterization of nanocrystalline Ni3Fe. Journal of Alloys and Compounds, 2002, 343, 192-198.	5.5	17
78	Electrical conductivity in nanostructured magnetiteâ€“hematite composites produced by mechanical milling. Journal of Magnetism and Magnetic Materials, 2005, 288, 301-306.	2.3	17
79	Electrical transport behavior of nonstoichiometric magnesiumâ€“zinc ferrite. Materials Research Bulletin, 2010, 45, 954-960.	5.2	17
80	Evaluating the efficiency of grain boundary serrations in attenuating high-temperature hot corrosion degradation in Alloy 617. Corrosion Science, 2019, 149, 164-177.	6.6	17
81	â€˜Hall-Petchâ€™ type of relationship between the extent of intergranular corrosion and grain size in a Ni-based superalloy. Corrosion Science, 2020, 175, 108868.	6.6	17
82	Microstructure Characterization and Phase Transformation Kinetic Study of Mechanosynthesized Non-Stoichiometric CdFe2O4by Rietveld's Analysis. Japanese Journal of Applied Physics, 2004, 43, 5455-5464.	1.5	16
83	Microstructural, magnetic and optical characterizations of nanocrystalline Zn1â^'xMnxO dilute magnetic semiconductors synthesized by mechanical alloying. Journal of Alloys and Compounds, 2012, 519, 112-122.	5.5	16
84	Microstructural changes and effect of variation of lattice strain on positron annihilation lifetime parameters of zinc ferrite nanocomposites prepared by high enegy ball-milling. Materials Research, 2012, 15, 1022-1028.	1.3	16
85	Structural and magnetic characterizations of undoped and K-doped NdMnO3 single crystals synthesized by solâ€“gel route: A comparative study. Powder Technology, 2014, 254, 538-547.	4.2	16
86	Effect of Manganese (II) Oxide on microstructure and ionic transport properties of nanostructured cubic zirconia. Electrochimica Acta, 2015, 170, 360-368.	5.2	16
87	Structural and magnetic properties of La2Ni1â^'Co MnO6 compounds. Materials Research Bulletin, 2018, 102, 248-256.	5.2	16
88	Effect of lattice distortion in optical properties of CeO2 nanocrystals on Mn substitution by mechanical alloying. Journal of Alloys and Compounds, 2019, 786, 215-224.	5.5	16
89	Synthesis of nanocrystalline Cdâ€“Zn ferrite by ball milling and its stability at elevated temperatures. Journal of Alloys and Compounds, 2010, 489, 91-98.	5.5	15
90	Microstructure characterization of ball-mill prepared ternary Ti0.9Al0.1C by X-ray diffraction and electron microscopy. Journal of Alloys and Compounds, 2010, 501, 198-203.	5.5	15

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91	Superior photocatalytic performance of mechanosynthesized Bi2O3â€“Bi2WO6 nanocomposite in wastewater treatment. Solid State Sciences, 2021, 115, 106587.	3.2	15
92	Microstructure and Phase-Transformation Studies of Cu-Ni-Sn Alloys. Japanese Journal of Applied Physics, 1995, 34, 1619-1626.	1.5	14
93	Microstructure characterization of ball-mill-prepared nanocrystalline CaCu3Ti4O12 by Rietveld method. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 33, 160-168.	2.7	14
94	Mechanosynthesis of nanocrystalline titanium nitride and its microstructure characterization. Journal of Alloys and Compounds, 2010, 493, 192-196.	5.5	14
95	Dielectric relaxation and magnetic field dependent alternating current conductivity of nanocrystalline cadmiumâ€“zinc ferrite below room temperature. Physica B: Condensed Matter, 2011, 406, 3261-3266.	2.7	14
96	Structural and microstructural interpretations of Zn-doped biocompatible bone-like carbonated hydroxyapatite synthesized by mechanical alloying. Journal of Applied Crystallography, 2015, 48, 138-148.	4.5	14
97	Sintering behavior and growth mechanism of Î²-TCP in nanocrystalline hydroxyapatite synthesized by mechanical alloying. Ceramics International, 2016, 42, 13176-13182.	4.8	14
98	Microstructure characterization of biocompatible heterojunction hydrogen titanate-Ag2O nanocomposites for superior visible light photocatalysis and antibacterial activity. Materials Science and Engineering C, 2019, 99, 374-386.	7.3	14
99	A potential insight into the serration behaviour of Î£3n (nâ‰3) boundaries in Alloy 617. Materials Chemistry and Physics, 2020, 248, 122919.	4.0	14
100	Microstructure and Mechanical Property of α-Al–Zn–Cu Alloys Aged at Room Temperature. Materials Transactions, JIM, 1995, 36, 490-495.	0.9	13
101	Photoswitching and Thermoresponsive Properties of Conjugated Multiâ€chromophore Nanostructured Materials. Small, 2015, 11, 6317-6324.	10.0	13
102	Grain size mediated electrical and thermoelectric performances of mechanically alloyed Sb2Te3 nanoparticles. Journal of Alloys and Compounds, 2021, 858, 157732.	5.5	13
103	Structural characterization of the CuIn intermetallic phase produced by interfacial reactions in Cu/In bimetallic films. Thin Solid Films, 1993, 229, 140-142.	1.8	12
104	X-ray characterization and phase transformation kinetics of ball-mill prepared nanocrystalline Mgâ€“Ni-ferrite at elevated temperatures. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 28, 43-49.	2.7	12
105	Quickest Single-Step Mechanosynthesis of CdS Quantum Dots and Their Microstructure Characterization. Journal of Nanoscience and Nanotechnology, 2011, 11, 4771-4780.	0.9	12
106	Nanoplate like heterostructured BiOBr/BiBr/FeBr2 nanocomposites with enhanced photocatalytic activity for wastewater treatment by removing organic dyes: Interfacial consecutive dual Z scheme electron transfer. Journal of Environmental Chemical Engineering, 2022, 10, 107240.	6.7	12
107	An xâ€ray diffraction line profile analysis on the microstructure of coldâ€worked faceâ€centeredâ€cubic Cuâ€Mnâ€Si alloys: Effects of Mn and Si as solutes. Journal of Applied Physics, 1988, 64, 2324-2327.	2.5	11
108	Anomalous electrical transport properties of nonstoichiometric nickel ferrite below room temperature. Materials Research Bulletin, 2011, 46, 1055-1064.	5.2	11

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109	Microstructure characterization and electrical transport properties of nanocrystalline Fe and Fe-doped cubic zirconia cermets synthesized by mechanical alloying. Materials Research Bulletin, 2015, 68, 66-74.	5.2	11
110	Dielectric relaxation, AC conductivity behavior and its relation to microstructure in mechanochemically synthesized Mn-doped CeO2 nanocrystals. Solid State Sciences, 2019, 87, 93-100.	3.2	11
111	Synthesis of drug conjugated magnetic nanocomposite with enhanced hypoglycemic effects. Materials Science and Engineering C, 2021, 120, 111697.	7.3	11
112	Synthesis and characterization of a novel drug conjugated copper-silver- titanium oxide nanocomposite with enhanced antibacterial activity. Journal of Drug Delivery Science and Technology, 2021, 62, 102384.	3.0	11
113	Characterization of Deformed and As-cast Microstructure of Copper-Aluminium-Iron Alloys (Î±-Phase). Japanese Journal of Applied Physics, 1993, 32, 1164-1170.	1.5	10
114	Nanocrystalline CaTiO3 prepared by soft-chemical route. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 25, 421-424.	2.7	10
115	X-ray characterization and phase transformation kinetics of ball-mill prepared nanocrystalline Mgâ€“Zn-ferrite at elevated temperatures. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 33, 367-369.	2.7	10
116	Microstructure characterization and polymorphic transformation kinetic study of ball-milled nanocrystalline a-TiO2â€“20mol% m-ZrO2 mixture by X-ray diffraction and electron microscopy. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 36, 17-27.	2.7	10
117	Mechanosynthesis of nanocrystalline Ti0.9C0.1N at room temperature and its microstructural aspects. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 400-407.	5.6	10
118	Electrical transport and dielectric modulus formalism of CuO doped ZrO 2 partially stabilized solid solution. Materials Research Bulletin, 2017, 88, 272-280.	5.2	10
119	MWCNT incorporated wool-ball-like CuO@NiO hybrid nanostructures for high-performance energy storage device. Journal of Alloys and Compounds, 2021, 886, 161313.	5.5	10
120	One-step fastest method of nanocrystalline CuAlS2 chalcopyrite synthesis, and its nanostructure characterization. Journal of Nanoparticle Research, 2011, 13, 2343-2350.	1.9	9
121	Microstructure and photoluminescence properties of ternary Cd0.2Zn0.8S quantum dots synthesized by mechanical alloying. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	9
122	Microstructure characterization and electrical transport of nanocrystalline CdZnS quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 66, 59-66.	2.7	9
123	Structure and microstructure dependent ionic conductivity in 10 mol% Dy2O3 doped CeO2 nanoparticles synthesized by mechanical alloying. Materials Research Bulletin, 2016, 73, 446-451.	5.2	9
124	Electrical transport properties of nanocrystalline zinc ferrite. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2686-2693.	2.7	8
125	Alternate current conductivity and dielectric properties of nonstoichiometric nanocrystalline Mgâ€“Zn ferrite below room temperature. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1397-1405.	2.7	8
126	Microstructural evolution of nanostructured Ti0.9Al0.1N prepared by reactive ball-milling. Journal of Alloys and Compounds, 2011, 509, 620-626.	5.5	8

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127	Quickest single-step one pot mechanosynthesis and characterization of ZnTe quantum dots. Journal of Alloys and Compounds, 2011, 509, 5567-5570.	5.5	8
128	XRD and HRTEM characterization of mechanosynthesized Ti0.9W0.1C cermet. Journal of Alloys and Compounds, 2013, 581, 710-716.	5.5	8
129	Electric modulus formalism and electrical transport property of ball mill synthesized nanocrystalline Mn doped ZrO2 solid solution. Physica B: Condensed Matter, 2015, 479, 67-73.	2.7	8
130	Microstructure correlated electrical conductivity of Manganese alloyed nanocrystalline cubic zirconia synthesized by mechanical alloying. Advanced Powder Technology, 2017, 28, 618-628.	4.1	8
131	Ultrastable Asymmetric Supercapacitor Device with Chemically Derived and Mechanically Activated NiCo₂O₄. Energy & Fuels, 2022, 36, 7878-7889.	5.1	8
132	PbZr1â^'xTixO3by soft synthesis: Structural aspects. Physical Review B, 2007, 76, .	3.2	7
133	Activation behavior and dielectric relaxation of nanocrystalline zinc ferrite. Materials Research Bulletin, 2014, 60, 446-452.	5.2	7
134	Electrical transport properties of nanocrystalline nonstoichiometric nickel ferrite at and above room temperature. Physica B: Condensed Matter, 2015, 457, 225-231.	2.7	7
135	Microstructure and optical characterizations of mechanosynthesized nanocrystalline semiconducting ZrTiO4 compound. Journal of Physics and Chemistry of Solids, 2016, 95, 56-64.	4.0	7
136	Structural, Optical Characterization and Growth Mechanism of Kadamba Flower like ZnO Nanocrystals Synthesized by a Simple Chemical Route.. ChemistrySelect, 2016, 1, 3705-3712.	1.5	7
137	Structure, optical and magnetic characterizations of Mn doped ZnS dilute magnetic semiconductor synthesized by mechanical alloying. Advanced Powder Technology, 2016, 27, 1790-1799.	4.1	7
138	Evolution of geometrically necessary dislocation at the Î³-Î³â€² interface and its effect on tensile deformation behaviour of disk super alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140855.	5.6	7
139	Microstructure and Electrical Characterization of Thermoelectric Nanocrystalline Bi2 Te3 Synthesized by Mechanical Alloying. Materials Research, 2019, 22, .	1.3	7
140	Microstructure Characterization of Nanocrystalline Magnesium Ferrite Annealed at Elevated Temperatures by Rietveld Method. ISRN Ceramics, 2011, 2011, 1-8.	0.2	7
141	Study of microstructural and electrical properties of silver substituted hydroxyapatite for drug delivery applications. Materials Today Communications, 2022, 31, 103360.	1.9	7
142	On the grain boundary character evolution in non equiatomic high entropy alloy during hot rolling induced dynamic recrystallization. Journal of Alloys and Compounds, 2022, 922, 166126.	5.5	7
143	Synthesis of aluminium matrix composites containing nanocrystalline oxide phases. Bulletin of Materials Science, 1994, 17, 849-853.	1.7	6
144	Preparation and microstructure characterization of m-ZrO2â€“20 mol% a-TiO2 ball milled mixture by Rietveld method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 359, 269-279.	5.6	6

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145	Microstructure and electrical transport phenomenon of yttria alloyed nanocrystalline ceria solid solution synthesized by mechanical alloying. Materials Research Bulletin, 2017, 93, 333-341.	5.2	6
146	Exploring (bio)catalytic activities of structurally characterised Cu(<scp>ii</scp>) and Mn(<scp>iii</scp>) complexes: histidine recognition and photocatalytic application of Cu(<scp>ii</scp>) complex and derived CuO nano-cubes. Dalton Transactions, 2018, 47, 14008-14016.	3.3	6
147	Spectacular photocatalytic activity of mechanosynthesized heterostructured Bi-Fe-O nanocomposites in wastewater treatment containing colored and colorless pollutants. Journal of Molecular Liquids,	4.9	6
148	Microstructure, MAssbauer, and Optical Characterizations of Nanocrystalline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="bold">Î±</mml:mi></mml:math>-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>Fe</mml:mtext><mml:mn mathvariant="bold">2</mml:mn></mml:msub><mml:msub><mml:mtext>O</mml:mtext><mml:mn mathvariant="bold">3</mml:mn></mml:msub></mml:math> Synthesized by Chemical Route. ISRN Cerami	0.2	6
149	Improved thermoelectric performance of nanostructured Bi2Te3 fabricated by solvent-free mechanical alloying. Materials Chemistry and Physics, 2022, 279, 125736.	4.0	6
150	Characterisation of Deformed and As-cast Microstructure of Copper-Aluminium-Iron Alloys-II: Influence of Increased Fe Solute (Î±+Î²-Phase). Japanese Journal of Applied Physics, 1996, 35, 1836-1841.	1.5	5
151	Characterization of crystalline structure of ball-milled nano-Niâ€“Zn-ferrite by Rietveld method. Materials Chemistry and Physics, 2004, 84, 291-291.	4.0	5
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