## Rajendran Venkatachalam

List of Publications by Year in descending order

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204 papers

6,300 citations

66343 42 h-index 98798 67 g-index

206 all docs

 $\begin{array}{c} 206 \\ \\ \text{docs citations} \end{array}$ 

206 times ranked 7330 citing authors

#	Article	IF	CITATIONS
1	Study of structural and optical properties of cupric oxide nanoparticles. Applied Nanoscience (Switzerland), 2016, 6, 933-939.	3.1	275
2	Silica Nanoparticles for Increased Silica Availability in Maize (Zea mays. L) Seeds Under Hydroponic Conditions. Current Nanoscience, 2012, 8, 902-908.	1.2	173
3	Growth and physiological responses of maize (Zea mays L.) to porous silica nanoparticles in soil. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	171
4	High-purity nano silica powder from rice husk using a simple chemical method. Journal of Experimental Nanoscience, 2014, 9, 272-281.	2.4	151
5	Characterisation of semiconducting V2O5–Bi2O3–TeO2 glasses through ultrasonic measurements. Journal of Non-Crystalline Solids, 2003, 320, 195-209.	3.1	143
6	Acalypha indica– mediated green synthesis of ZnO nanostructures under differential thermal treatment: Effect on textile coating, hydrophobicity, UV resistance, and antibacterial activity. Advanced Powder Technology, 2017, 28, 3184-3194.	4.1	143
7	Effect of nanosilica and silicon sources on plant growth promoting rhizobacteria, soil nutrients and maize seed germination. IET Nanobiotechnology, 2013, 7, 70-77.	3.8	139
8	Application of silica nanoparticles in maize to enhance fungal resistance. IET Nanobiotechnology, 2014, 8, 133-137.	3.8	138
9	Rambutan peels promoted biomimetic synthesis of bioinspired zinc oxide nanochains for biomedical applications. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 137, 250-258.	3.9	138
10	Physical & Description of Alloys and Compounds, 2016, 681, 561-570.	5 <b>.</b> 5	136
11	Development of nanocomposites based on hydroxyapatite/sodium alginate: Synthesis and characterisation. Materials Characterization, 2011, 62, 469-479.	4.4	110
12	Binder-free rice husk-based silicon–graphene composite as energy efficient Li-ion battery anodes. Journal of Materials Chemistry A, 2014, 2, 13437-13441.	10.3	109
13	Effect of silica nanoparticles and BTCA on physical properties of cotton fabrics. Materials Research, 2011, 14, 552-559.	1.3	102
14	Enhancing of the tribological characteristics of the lubricant oils using Ni-promoted MoS2 nanosheets as nano-additives. Tribology International, 2018, 118, 314-328.	5.9	101
15	Influence of Nanosilica Powder on the Growth of Maize Crop ( <i>Zea Mays</i> L.). International Journal of Green Nanotechnology, 2011, 3, 180-190.	0.3	92
16	In situ synthesized novel biocompatible titania–chitosan nanocomposites with high surface area and antibacterial activity. Carbohydrate Polymers, 2013, 93, 731-739.	10.2	77
17	Electrospun MgO/Nylon 6 Hybrid Nanofibers for Protective Clothing. Nano-Micro Letters, 2014, 6, 46-54.	27.0	76
18	Structural, optical and photocatalytic applications of biosynthesized NiO nanocrystals. Green Chemistry Letters and Reviews, 2018, 11, 166-175.	4.7	76

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19	Characterization of Co0.5Mn0.5Fe2O4 nanoparticles. Materials Chemistry and Physics, 2009, 113, 10-13.	4.0	73
20	Foliar Application of Silica Nanoparticles on the Phytochemical Responses of Maize ( <i>Zea mays</i> ) Tj ETQq0 0 Metal Chemistry, 2014, 44, 1128-1131.	0 rgBT /Ov 0.6	erlock 10 Tf 73
21	Water soluble graphene as electrolyte additive in magnesium-air battery system. Journal of Power Sources, 2015, 276, 32-38.	7.8	73
22	In-vitro bioactivity, biocorrosion and antibacterial activity of silicon integrated hydroxyapatite/chitosan composite coating on 316L stainless steel implants. Materials Science and Engineering C, 2013, 33, 4046-4054.	7.3	72
23	Synergetic effect of DC air plasma and cellulase enzyme treatment on the hydrophilicity of cotton fabric. Carbohydrate Polymers, 2011, 83, 1652-1658.	10.2	69
24	A lucrative chemical processing of bamboo leaf biomass to synthesize biocompatible amorphous silica nanoparticles of biomedical importance. Applied Nanoscience (Switzerland), 2017, 7, 145-153.	3.1	67
25	Physicochemical studies of phosphate based P2O5–Na2O–CaO–TiO2 glasses for biomedical applications. Journal of Non-Crystalline Solids, 2007, 353, 77-84.	3.1	66
26	Corrosion behavior of Mg/graphene composite in aqueous electrolyte. Materials Chemistry and Physics, 2016, 172, 129-136.	4.0	66
27	Biomimetic TiO2-chitosan/sodium alginate blended nanocomposite scaffolds for tissue engineering applications. Materials Science and Engineering C, 2020, 110, 110710.	7.3	65
28	Screening of in vitro cytotoxicity, antioxidant potential and bioactivity of nano- and micro-ZrO2 and -TiO2 particles. Ecotoxicology and Environmental Safety, 2013, 93, 191-197.	6.0	62
29	Ultrasonic Investigation on Ferroelectric BaTiO3 Doped 80V2O5?20PbO Oxide Glasses. Physica Status Solidi A, 2000, 180, 467-477.	1.7	61
30	Synthesis of Monoclinic and Cubic ZrO2 Nanoparticles from Zircon. Journal of the American Ceramic Society, 2011, 94, 1410-1420.	3.8	60
31	Psidium guajava leaf extract-mediated synthesis of ZnO nanoparticles under different processing parameters for hydrophobic and antibacterial finishing over cotton fabrics. Progress in Organic Coatings, 2018, 124, 80-91.	3.9	60
32	Influence of ZrO <sub>2</sub> , SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> and TiO <sub>2</sub> nanoparticles on maize seed germination under different growth conditions. IET Nanobiotechnology, 2016, 10, 171-177.	3.8	58
33	Microstructural dependence on relevant physical–mechanical properties on SiO2–Na2O–CaO–P2O5 biological glasses. Biomaterials, 2002, 23, 4263-4275.	11.4	52
34	Preparation and characterisation of NiCo ferrite nanoparticles. Materials Letters, 2007, 61, 2616-2619.	2.6	52
35	Nano Silicon from Nano Silica Using Natural Resource (Rha) for Solar Cell Fabrication. Phosphorus, Sulfur and Silicon and the Related Elements, 2013, 188, 1178-1193.	1.6	51
36	Magnetic behavior of biosynthesized Co 3 O 4 nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 424, 251-255.	2.3	50

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37	Enhancement of Thermal Stability, Flame Retardancy, and Antimicrobial Properties of Cotton Fabrics Functionalized by Inorganic Nanocomposites. Industrial & Engineering Chemistry Research, 2014, 53, 19512-19524.	3.7	49
38	Effect of silica nanoparticles on microbial biomass and silica availability in maize rhizosphere. Biotechnology and Applied Biochemistry, 2014, 61, 668-675.	3.1	48
39	Enhancement of antimicrobial and long-term biostability of the zinc-incorporated hydroxyapatite coated 316L stainless steel implant for biomedical application. Ceramics International, 2013, 39, 5205-5212.	4.8	47
40	Hydrophobicity, flame retardancy and antibacterial properties of cotton fabrics functionalised with MgO/methyl silicate nanocomposites. RSC Advances, 2014, 4, 32161.	3.6	47
41	Influence of the various synthesis methods on the ZnO nanoparticles property made using the bark extract of Terminalia arjuna. Materials Chemistry and Physics, 2018, 209, 208-216.	4.0	47
42	Structural and acoustic investigations of calcium borate glasses. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2356-2364.	1.8	46
43	Phase transformation of ZrO <sub>2</sub> nanoparticles produced from zircon. Phase Transitions, 2012, 85, 13-26.	1.3	46
44	Ultrasonic characterisation of ferroelectric BaTiO3 doped lead bismuth oxide semiconducting glasses. Journal of Non-Crystalline Solids, 2001, 296, 39-49.	3.1	42
45	Chitosan-incorporated different nanocomposite HPMC films for food preservation. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	40
46	Effects of rare earth, transition and post transition metal ions on structural and optical properties and photocatalytic activities of zirconia (ZrO2) nanoparticles synthesized via the facile precipitation process. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 124, 114342.	2.7	40
47	Synthesis, characterization and biological response of magnesium-substituted nanobioactive glass particles for biomedical applications. Ceramics International, 2013, 39, 1683-1694.	4.8	39
48	Effect of TiO <sub>2</sub> Nanoparticles on Properties of Silica Refractory. Journal of the American Ceramic Society, 2010, 93, 2236-2243.	3.8	38
49	Nanohydroxyapatite–chitosan–gelatin polyelectrolyte complex with enhanced mechanical and bioactivity. Materials Science and Engineering C, 2013, 33, 3237-3244.	7.3	38
50	Impact of Nano and Bulk ZrO <sub>2</sub> , TiO <sub>2</sub> Particles on Soil Nutrient Contents and PGPR. Journal of Nanoscience and Nanotechnology, 2013, 13, 678-685.	0.9	38
51	TiO2–graphene nanocomposites for enhanced osteocalcin induction. Materials Science and Engineering C, 2014, 38, 252-262.	7.3	38
52	Structural analysis of zirconia-doped calcium phosphate glasses. Journal of Non-Crystalline Solids, 2010, 356, 1432-1438.	3.1	37
53	Augmented biocontrol action of silica nanoparticles and Pseudomonas fluorescens bioformulant in maize (Zea mays L.). RSC Advances, 2014, 4, 8461.	3.6	37
54	Electrical measurement of PVA/graphene nanofibers for transparent electrode applications. Synthetic Metals, 2014, 191, 113-119.	3.9	35

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55	Structure, solubility and bioactivity in TiO2-doped phosphate-based bioglasses and glass–ceramics. Materials Chemistry and Physics, 2010, 124, 312-318.	4.0	34
56	Anomalies in elastic moduli and ultrasonic attenuation near ferromagnetic transition temperature in La0.67Sr0.33MnO3 perovskite. Physica Status Solidi A, 2003, 195, 350-358.	1.7	33
57	Synthesis and characterization of electrochemically-reduced graphene. Bulletin of Materials Science, 2013, 36, 1315-1321.	1.7	33
58	<i>In Vitro</i> Bioactivity and Antimicrobial Tuning of Bioactive Glass Nanoparticles Added with Neem ( <i>Azadirachta indica</i> ) Leaf Powder. BioMed Research International, 2014, 2014, 1-10.	1.9	33
59	Electrical and magnetic behavior of iron doped nickel titanate (Fe3+/NiTiO3) magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2016, 397, 281-286.	2.3	33
60	Characterization of Ca doped CeO2 quantum dots and their applications in photocatalytic degradation. OpenNano, 2018, 3, 38-47.	4.8	33
61	Electrocatalytic conversion of carbon dioxide to urea on nano-FeTiO3 surface. lonics, 2017, 23, 1871-1878.	2.4	32
62	Electrochemical supercapacitor studies of porous MnO2 nanoparticles in neutral electrolytes. Materials Chemistry and Physics, 2016, 183, 375-382.	4.0	31
63	An ecofriendly route to enhance the antibacterial and textural properties of cotton fabrics using herbal nanoparticles from Azadirachta indica (neem). Journal of Alloys and Compounds, 2017, 723, 698-707.	<b>5.</b> 5	31
64	Screening the UVâ€blocking and antimicrobial properties of herbal nanoparticles prepared from <i>Aloe vera</i> leaves for textile applications. IET Nanobiotechnology, 2018, 12, 459-465.	3.8	31
65	Anomalies of ultrasonic velocities, attenuation and elastic moduli in Nd 1â^' x Sr x MnO 3 perovskite manganite materials. Journal of Magnetism and Magnetic Materials, 2009, 321, 3611-3620.	2.3	30
66	Larvicidal, super hydrophobic and antibacterial properties of herbal nanoparticles from Acalypha indica for biomedical applications. RSC Advances, 2017, 7, 41763-41770.	3.6	30
67	Structure and elastic properties of TeO2–BaF2 glasses. Journal of Physics and Chemistry of Solids, 2006, 67, 1697-1702.	4.0	29
68	Structural investigation of bismuth borate glasses under the influence of $\hat{l}^3$ -irradiation through ultrasonic studies. Physica B: Condensed Matter, 2009, 404, 3371-3378.	2.7	29
69	Enhancing the thermophysical and tribological performance of gear oil using Ni-promoted ultrathin MoS 2 nanocomposites. Tribology International, 2018, 124, 156-168.	5.9	29
70	Microstructure and ultrasonic behaviour on thermal heat-treated Al–Li 8090 alloy. Journal of Alloys and Compounds, 2009, 478, 147-153.	5 <b>.</b> 5	28
71	Size, morphology and optical properties of SnO2 nanoparticles synthesized by facile surfactant-assisted solvothermal processing. Materials Science in Semiconductor Processing, 2012, 15, 393-400.	4.0	28
72	Mass production of Al2O3 and ZrO2 nanoparticles by hot-air spray pyrolysis. Powder Technology, 2013, 234, 84-90.	4.2	28

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73	Size-dependent physicochemical properties of mesoporous nanosilica produced from natural quartz sand using three different methods. RSC Advances, 2015, 5, 47390-47397.	3.6	28
74	Soluble Borate Glasses: In Vitro Analysis. Journal of the American Ceramic Society, 2007, 90, 467-471.	3.8	27
75	Effect of processing methods on physicochemical properties of titania nanoparticles produced from natural rutile sand. Advanced Powder Technology, 2013, 24, 972-979.	4.1	27
76	Hydroxyapatite, alumina/zirconia, and nanobioactive glass cement for tooth-restoring applications. Ceramics International, 2014, 40, 14355-14365.	4.8	27
77	Effect of contact angle, zeta potential and particles size on the <i>in vitro</i> studies of Al <sub>2</sub> O <sub>3</sub> and SiO <sub>2</sub> nanoparticles. IET Nanobiotechnology, 2015, 9, 27-34.	3.8	26
78	Optimization of Nano-Titania and Titania–Chitosan Nanocomposite to Enhance Biocompatibility. Current Nanoscience, 2013, 9, 308-317.	1.2	26
79	Enhanced functional properties of cotton fabrics using TiO2/SiO2 nanocomposites. Journal of Industrial Textiles, 2016, 45, 674-692.	2.4	25
80	A sensitive refining of in vitro and in vivo toxicological behavior of green synthesized ZnO nanoparticles from the shells of Jatropha curcas for multifunctional biomaterials development. Ecotoxicology and Environmental Safety, 2019, 184, 109621.	6.0	25
81	Effect of thermal treatment on physical properties of bioactive glass. Materials Chemistry and Physics, 2006, 96, 409-417.	4.0	24
82	Structure investigation of TeO2–BaO glass employing ultrasonic study. Materials Letters, 2007, 61, 2143-2146.	2.6	24
83	On-line phase transition in La <sub>1â^'</sub> <i><sub>x</sub></i> Sr <i><sub>x</sub></i> MnO <sub>3</sub> (0.28 <i>≤/i&gt; <i: 2011,="" 657-672.<="" 84,="" perovskites="" phase="" studies.="" td="" through="" transitions,="" ultrasonic=""><td>&gt;x<b>4</b>/&amp;â€%</td><td>oâ<b>‰</b>≇€‰0.3</td></i:></i>	>x <b>4</b> /&â€%	oâ <b>‰</b> ≇€‰0.3
84	Synthesis and on-line ultrasonic characterisation of bulk and nanocrystalline La0.68Sr0.32MnO3 perovskite manganite. Journal of Alloys and Compounds, 2011, 509, 3457-3467.	5 <b>.</b> 5	24
85	Mechanical properties of bulk and nanostructured La0.61Sr0.39MnO3 perovskite manganite materials. Journal of Physics and Chemistry of Solids, 2013, 74, 205-214.	4.0	24
86	Synthesis and characterisation of polymeric nanofibers poly (vinyl alcohol) and poly (vinyl) Tj ETQq0 0 0 rgBT /Ov	erlogk 10	Tf 50 222 Td
87	Mg-Doped Hydroxyapatite/Chitosan Composite Coated 316L Stainless Steel Implants for Biomedical Applications. Journal of Nanoscience and Nanotechnology, 2015, 15, 4178-4187.	0.9	23
88	Effect of EDTA on cadmium sulfide thin films for oxygen gas sensor applications. Journal of Alloys and Compounds, 2017, 706, 470-477.	5.5	23
89	Metal insulator transition of bulk and nanocrystalline La1â^'xCaxMnO3 perovskite manganite materials through in-situ ultrasonic measurements. Materials Characterization, 2013, 77, 70-80.	4.4	22
90	Effect of mineral acids on the production of alumina nanopowder from raw bauxite. Powder Technology, 2011, 211, 77-84.	4.2	21

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91	Production of Al <sub>2</sub> O <sub>3</sub> â€Stabilized Tetragonal ZrO <sub>2</sub> Nanoparticles for Thermal Barrier Coating. International Journal of Applied Ceramic Technology, 2013, 10, 887-899.	2.1	21
92	Influence of Nano and Bulk SiO <sub>2</sub> and Al <sub>2</sub> 223 Particles on PGPR and Soil Nutrient Contents. Current Nanoscience, 2014, 10, 604-612.	1.2	21
93	Temperature and Composition Dependence of the Elastic Properties of Semiconducting (100) Tj ETQq1 1 0.7843	14 rgBT /0 1.7	Overlock 10 7
94	Phase transitions of bulk and nanocrystalline La1â°'xSrxMnO3 (x=0.35 and 0.37) perovskite manganite materials using in situ ultrasonic studies. Materials Research Bulletin, 2013, 48, 1651-1659.	5.2	20
95	Dye-sensitized solar cells based on visible-light-active TiO2 heterojunction nanoparticles. Synthetic Metals, 2014, 188, 124-129.	3.9	20
96	Investigation of grapheneâ€onâ€metal substrates for SPRâ€based sensor using finiteâ€difference time domain. IET Nanobiotechnology, 2017, 11, 981-986.	3.8	20
97	Ultrathin sheet structure Ni-MoS2 anode and MnO2/water dispersion graphene cathode for modern asymmetrical coin cell supercapacitor. Journal of Alloys and Compounds, 2018, 731, 936-944.	5.5	20
98	On-line phase transitions of bulk and nanocrystalline La1â^'xPbxMnO3 (x=0.3, 0.4, and 0.5) perovskite manganite materials using ultrasonic measurements. Materials Chemistry and Physics, 2013, 138, 581-592.	4.0	19
99	Preparation and Characterization of Nano-Hydroxyapatite Nanomaterials for Liver Cancer Cell Treatment. Journal of Nanoscience and Nanotechnology, 2013, 13, 1631-1638.	0.9	19
100	Inexpensive approach for production of highâ€surfaceâ€area silica nanoparticles from rice hulls biomass. IET Nanobiotechnology, 2014, 8, 290-294.	3.8	19
101	Study on Production of Silicon Nanoparticles from Quartz Sand for Hybrid Solar Cell Applications. Journal of Electronic Materials, 2018, 47, 493-502.	2.2	19
102	<i>In vitro</i> and <i>in vivo</i> characteristics of biogenic high surface silica nanoparticles in A549 lung cancer cell lines and <i>Danio rerio</i> model systems for inorganic biomaterials development. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 1415-1424.	2.8	19
103	Enhanced Functional Properties of ZrO2/SiO2 Hybrid Nanosol Coated Cotton Fabrics. Journal of Nanoscience and Nanotechnology, 2013, 13, 4017-4024.	0.9	18
104	Antibacterial activity of hybrid chitosan–cupric oxide nanoparticles on cotton fabric. IET Nanobiotechnology, 2016, 10, 13-19.	3.8	18
105	Temperature dependent ultrasonic and thermo-physical properties of polyaniline nanofibers reinforced epoxy composites. Composites Part B: Engineering, 2016, 87, 40-46.	12.0	17
106	Influence of ball milling on the particle size and antimicrobial properties of <i>Tridax procumbens</i> leaf nanoparticles. IET Nanobiotechnology, 2017, 11, 12-17.	3.8	17
107	Stabilization of tetragonal zirconia in alumina-zirconia and alumina-yttria stabilized zirconia nanocomposites: A comparative structural analysis. Materials Characterization, 2019, 158, 109964.	4.4	17
108	Influence of addition of Al <sub>2</sub> O <sub>3</sub> on physical, structural, acoustical and inâ€vitro bioactive properties of phosphate glasses. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1447-1455.	1.8	16

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109	In vitro and preliminary in vivo toxicity screening of high-surface-area TiO2–chondroitin-4-sulfate nanocomposites for bone regeneration application. Colloids and Surfaces B: Biointerfaces, 2015, 128, 347-356.	5.0	16
110	Structural and thermal studies of Ni0.25Mn0.75Fe2O4 composites by sol–gel combustion method. Journal of Alloys and Compounds, 2009, 472, 421-424.	5 <b>.</b> 5	15
111	Role of MgO on the HAp forming ability in phosphate based glasses. Ceramics International, 2012, 38, 3781-3790.	4.8	15
112	Synthesis of Geikielite (MgTiO <sub>3</sub> ) Nanoparticles via Sol–Gel Method and Studies on Their Structural and Optical Properties. Journal of Nanoscience and Nanotechnology, 2016, 16, 7635-7641.	0.9	15
113	Electrochemical capacitor study of spherical MnO2 nanoparticles utilizing neutral electrolytes. Frontiers in Nanoscience and Nanotechnology, 2015, 1, 13-20.	0.3	15
114	Influence of BaTiO3 on semiconducting V2O5-Bi2O3-TeO2 oxide glasses through ultrasonic studies. Journal of Materials Science Letters, 2002, 21, 1619-1622.	0.5	14
115	Analysis of Physical Properties and Hydroxyapatite Precipitation ⟨i>ln Vitro⟨/i> of TiO⟨sub>2⟨/sub⟩â€Containing Phosphateâ€Based Glass Systems. Journal of the American Ceramic Society, 2010, 93, 4053-4060.	3 <b>.</b> 8	14
116	Influence of <scp>Ag<sub>2</sub>O</scp> in Physicoâ€Chemical Properties and <scp>HAp</scp> Precipitation on Phosphateâ€Based Glasses. Journal of the American Ceramic Society, 2011, 94, 2918-2925.	3.8	14
117	Influence of sintering temperature and pH on the phase transformation, particle size and anti-reflective properties of RHA nano silica powders. Phase Transitions, 2012, 85, 1109-1124.	1.3	14
118	Effect of thermal treatment on hydrophobicity of methyl-functionalised hybrid nano-silica particles. Materials Letters, 2013, 90, 68-71.	2.6	14
119	Preparation and Characterization of Silver-Doped Nanobioactive Glass Particles and Their <l>ln Vitro</l> Behaviour for Biomedical Applications. Journal of Nanoscience and Nanotechnology, 2013, 13, 5327-5339.	0.9	14
120	EDTA-Decorated Nanostructured ZnO/CdS Thin Films for Oxygen Gas Sensing Applications. Journal of Electronic Materials, 2016, 45, 4100-4107.	2.2	14
121	High temperature corrosion resistance of silicate based nanostructured thermal barrier coatings using Al2O3–(Y2O3) ZrO2/SiO2 nanocomposite. Surface and Coatings Technology, 2016, 292, 110-120.	4.8	14
122	Structural and optical properties of CdS/PEO nanocomposite solid films. Materials Science in Semiconductor Processing, 2013, 16, 1502-1507.	4.0	13
123	Influence of solvents on the changes in structure, purity, and in vitro characteristics of green-synthesized ZnO nanoparticles from Costus igneus. Applied Nanoscience (Switzerland), 2018, 8, 1353-1360.	3.1	13
124	$\hat{l}^3$ -Irradiation effect on the acoustical properties of zinc lead borate glasses. Physica Status Solidi A, 2005, 202, 2720-2730.	1.7	12
125	On-line ultrasonic velocity measurements for characterisation of microstructural evaluation during thermal aging of $\hat{l}^2$ -quenched zircaloy-2. Materials Characterization, 2007, 58, 563-570.	4.4	12
126	Direct Synthesis of Nano Alumina from Natural Bauxite. Advanced Materials Research, 0, 67, 143-148.	0.3	12

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127	Synthesis and characterisation of nanobioactive glass for biomedical applications. Materials Letters, 2011, 65, 31-34.	2.6	12
128	Influence Of Zro2 on The Physicochemical Properties of Phosphate-Based Glasses and Glass Ceramics. Phosphorus, Sulfur and Silicon and the Related Elements, 2012, 187, 1434-1449.	1.6	12
129	Nano-sized MnO <sub>2</sub> particles produced by spray pyrolysis for a Zn/MnO <sub>2</sub> primary cell: comparative discharge performance studies with their bulk counterparts. RSC Advances, 2014, 4, 42129-42136.	3.6	12
130	Novel modified nano-activated carbon and its influence on the metal–O2 battery system. Journal of Energy Storage, 2019, 22, 283-294.	8.1	12
131	Dependence of elastic properties and ultrasonic velocities on the structure of vanadate lead tellurite glasses. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2347-2355.	1.8	11
132	In situ high temperature ultrasonic evaluation for on-line characterisation of fine scale precipitation reactions in 8090 Al–Li alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 435-436, 29-39.	5 <b>.</b> 6	11
133	Investigations on <i>In Vitro</i> and Degradation Properties of <scp><scp>ZnO</scp></scp> â€Added Phosphateâ€Based Glasses and Glass Ceramics. Journal of the American Ceramic Society, 2012, 95, 3490-3500.	3.8	11
134	Temperature-dependent sound velocities, attenuation and elastic moduli anomalies in Pr <sub>1â^'</sub> <i><sub>×</sub></i> <manh m="" pr<=""> Pr<sub>&gt;  i&gt;MnO<sub>3</sub>perovskite manganite materials at 0.28 â‰<b>â</b>€‰<i>X</i>i&gt;à€‰â‰<b>â</b>€‰0.41. Phase Transitions, 2012, 85, 427-443.</sub></manh>	1.3	11
135	In vivo cytotoxicity of MgO-doped nanobioactive glass particles and their anticorrosive coating on Ti–6Al–4V and SS304 implants for high load-bearing applications. RSC Advances, 2014, 4, 43630-43640.	3.6	11
136	Structural and Electrical Properties of Cadmium Sulfide Nanoparticles: A Simple Chemical Route. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2016, 46, 1642-1646.	0.6	11
137	Silicon confers protective effect against ginseng root rot by regulating sugar efflux into apoplast. Scientific Reports, 2019, 9, 18259.	3.3	11
138	A device for the measurement of ultrasonic velocity and attenuation in solid materials under different thermal conditions. Measurement: Journal of the International Measurement Confederation, 2005, 38, 248-256.	5.0	10
139	First differential of temperature dependent ultrasonic parameters as an effective tool for identifying precipitation reactions in a slow heat-treated 8090 Al–Li alloy. Journal of Alloys and Compounds, 2008, 464, 150-156.	5.5	10
140	Application of silica nanoparticles for increased silica availability in maize. , 2013, , .		10
141	Effect of high temperature on the surface morphology and mechanical properties of nanostructured Al2O3–ZrO2/SiO2 thermal barrier coatings. Surface and Coatings Technology, 2015, 262, 154-165.	4.8	10
142	Fabrication of Nanocomposites of SnO2 and MgAl2O4 for Gas Sensing Applications. Journal of Electronic Materials, 2016, 45, 2193-2205.	2.2	10
143	An efficient photoanode for dye sensitized solar cells using naturally derived S/TiO <sub>2</sub> nanoparticles. Materials Research Express, 2017, 4, 035016.	1.6	10
144	Investigation and characterization of ZnO/CdS nanocomposites using chemical precipitation method for gas sensing applications. Journal of Materials Science: Materials in Electronics, 2017, 28, 18113-18120.	2.2	10

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145	Anomalies in ultrasonic velocity and attenuation in Nd0.67Sr0.33MnO3 perovskite. Physica B: Condensed Matter, 2003, 336, 261-266.	2.7	9
146	Catalytic Effect of Iron Nanoparticles on Heterocyst, Protein and Chlorophyll Content of Anabaena sp International Journal of Green Nanotechnology, 2012, 4, 326-338.	0.3	9
147	Comparative Study on Isolation and Characterization of Amorphous Silica Nanoparticles From Different Grades of Rice Hulls. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2016, 46, 445-452.	0.6	9
148	Toxicity evaluation based on particle size, contact angle and zeta potential of SiO <sub>2</sub> and Al <sub>2</sub> 0 <sub>3</sub> on the growth of green algae. Advances in Nano Research, 2015, 3, 243-255.	0.9	9
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