Parag Bhargava

List of Publications by Year in descending order

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118 papers	2,485 citations	159585 30 h-index	243625 44 g-index
120 all docs	120 docs citations	120 times ranked	3012 citing authors

#	Article	IF	Citations
1	EDTA derived graphene supported porous cobalt hexacyanoferrate nanospheres as a highly electroactive nanocomposite for hydrogen peroxide sensing. Catalysis Science and Technology, 2022, 12, 2369-2383.	4.1	6
2	Mechanical properties and machinability of lithium silicate glass-ceramics with varying MgO content. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 132, 105296.	3.1	2
3	Dye-Sensitized Solar Cells. Springer Handbooks, 2022, , 1137-1214.	0.6	1
4	Natural solvent facilitated high-shear exfoliated graphene nanoplatelets enabled economically-efficient and stable DSSC. Materials Letters, 2021, 287, 129263.	2.6	9
5	Nanoporous Cobalt Hexacyanoferrate Nanospheres for Screen-Printed H₂O₂ Sensors. ACS Applied Nano Materials, 2021, 4, 5564-5576.	5.0	17
6	Improved non-enzymatic H2O2 sensors using highly electroactive cobalt hexacyanoferrate nanostructures prepared through EDTA chelation route. Materials Chemistry and Physics, 2021, 267, 124593.	4.0	12
7	Firstâ€principles study of Cs 2 Ti 1â^' x M x Br 6 (M = Pb, Sn) and numerical simulation of the solar cells based on Cs 2 Ti 0.25 Sn 0.75 Br 6. International Journal of Energy Research, 2021, 45, 8049-8060.	4.5	5
8	Influence of solvent on the performance of liquid and silica nanoparticle loaded quasi solid electrolytes based dye sensitized solar cells. Materials Technology, 2020, , 1-6.	3.0	1
9	Carbon nano-onion-powered optically transparent and economical dye-sensitized solar cells. Nanoscale, 2020, 12, 20621-20630.	5.6	18
10	Additive engineering of 4, 4â€²-Bis (N-carbazolyl)-1, 1â€²-biphenyl (CBP) molecules for defects passivation and moisture stability of hybrid perovskite layer. Solar Energy, 2020, 211, 1084-1091.	6.1	6
11	Conventional or Microwave Sintering: A Comprehensive Investigation to Achieve Efficient Clean Energy Harvesting. Energies, 2020, 13, 6208.	3.1	2
12	Characteristics of ionic adsorption on silica nanoparticles and its impact on the long term stability of dye-sensitized solar cells. Bulletin of Materials Science, 2020, 43, 1.	1.7	2
13	In situcarbon-supported titanium dioxide (ICS-TiO₂) as an electrode material for high performance supercapacitors. Nanoscale Advances, 2020, 2, 2376-2386.	4.6	50
14	Effect of Curing Protocol on Mechanical Behavior of Green Ceramic Bodies Fabricated in Ceramic Microstereolithography. Transactions of the Indian Ceramic Society, 2020, 79, 232-238.	1.0	2
15	Al and Mg Co-Doping Towards Development of Air-Stable and Li-Ion Conducting Li-La-Zirconate Based Solid Electrolyte Exhibiting Low Electrode/Electrolyte Interfacial Resistance. Journal of the Electrochemical Society, 2020, 167, 120519.	2.9	23
16	Phase and microstructural evolution in lithium silicate glassâ€ceramics with externally added nucleating agent. Journal of the American Ceramic Society, 2019, 102, 7312-7328.	3.8	11
17	Fabrication of a counter electrode for dye-sensitized solar cells (DSSCs) using a carbon material produced with the organic ligand 2-methyl-8-hydroxyquinolinol (Mq). Nanoscale Advances, 2019, 1, 3192-3199.	4.6	42
18	Carbon Derived from Sucrose as Anode Material for Lithium-Ion Batteries. Journal of Electronic Materials, 2019, 48, 7389-7395.	2.2	14

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19	Multipodal formation of Tio2 nanotubes using anodization. AIP Conference Proceedings, 2019, , .	0.4	2
20	In-situ carbon coated manganese oxide nanorods (ISCC-MnO2NRs) as an electrode material for supercapacitors. Diamond and Related Materials, 2019, 94, 110-117.	3.9	34
21	Investigation on Organic Molecule Additive for Moisture Stability and Defect Passivation via Physisorption in CH₃NH₃PbI₃ Based Perovskite. ACS Applied Energy Materials, 2018, 1, 1870-1877.	5.1	37
22	Influence of spinning parameters on synthesis of alumina fibres by centrifugal spinning. Ceramics International, 2018, 44, 11644-11649.	4.8	23
23	Lightâ€weight thermal insulating fly ash cenosphere ceramics. International Journal of Applied Ceramic Technology, 2018, 15, 1467-1477.	2.1	7
24	Enhanced photovoltaic performance of a dye sensitized solar cell with Cu/N Co-doped TiO2 nanoparticles. Journal of Materials Science: Materials in Electronics, 2018, 29, 6274-6282.	2.2	25
25	Electrolyte pH dependent controlled growth of co-electrodeposited CZT films for application in CZTS based thin film solar cells. Journal of Materials Science: Materials in Electronics, 2018, 29, 4065-4074.	2.2	15
26	Few layers graphene based conductive composite inks for Pt free stainless steel counter electrodes for DSSC. Solar Energy, 2018, 169, 67-74.	6.1	28
27	Synthesis and characterization of carbon based counter electrode for dye sensitized solar cells (DSSCs) using organic precursor 2-2â€²Bipyridine (Bpy) as a carbon material. Journal of Alloys and Compounds, 2018, 748, 905-910.	5.5	32
28	Sucrose derived carbon coated silicon nanowires for supercapacitor application. Journal of Materials Science: Materials in Electronics, 2018, 29, 1947-1954.	2.2	21
29	Titania Nanobelts as a Scattering Layer with Cu2ZnSnS4 as a Counter Electrode for DSSC with Improved Efficiency. Materials Today: Proceedings, 2018, 5, 23351-23357.	1.8	5
30	Stability study of co-electrodeposited CZTS counter electrode for dye sensitized solar cells. Solar Energy, 2018, 176, 325-333.	6.1	20
31	Lead free, air stable perovskite derivative Cs2SnI6 as HTM in DSSCs employing TiO2 nanotubes as photoanode. Materials Research Bulletin, 2018, 108, 113-119.	5.2	24
32	Novel High Pressure Exfoliated Graphene-Based Semitransparent Stable DSSCs for Building Integrated Photovoltaics. ACS Applied Energy Materials, 2018, 1, 2512-2519.	5.1	22
33	Novel high-pressure airless spray exfoliation method for graphene nanoplatelets as a stable counter electrode in DSSC. Electrochimica Acta, 2018, 285, 86-93.	5.2	33
34	Effect of Br-doping and choice of precursor solvent on morphology of lead free (CH3NH3)3Bi2I9 perovskites. Journal of Renewable and Sustainable Energy, 2018, 10, 043506.	2.0	9
35	Water-Based High Shear Exfoliated Graphene-Based Semi-Transparent Stable Dye-Sensitized Solar Cells for Solar Power Window Application. IEEE Journal of Photovoltaics, 2018, 8, 1252-1258.	2.5	16
36	Synthesis and characterization of carbon based counter electrode for dye sensitized solar cells (DSSCs) using sugar free as a carbon material. Solar Energy, 2017, 144, 215-220.	6.1	68

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37	High efficiency dye sensitized solar cell made by carbon derived from sucrose. Optical Materials, 2017, 64, 401-405.	3.6	25
38	Experimental evaluation of room temperature crystallization and phase evolution of hybrid perovskite materials. CrystEngComm, 2017, 19, 3834-3843.	2.6	43
39	Liquid phase high shear exfoliated graphene nanoplatelets as counter electrode material for dye-sensitized solar cells. Journal of Colloid and Interface Science, 2017, 499, 9-16.	9.4	34
40	TiO 2 colloid-based compact layers for hybrid lead halide perovskite solar cells. Applied Materials Today, 2017, 7, 112-119.	4.3	24
41	Fabrication of low specific resistance ceramic carbon composites by colloidal processing using glucose as soluble carbon source. Bulletin of Materials Science, 2017, 40, 1197-1202.	1.7	14
42	Influence of dipping cycles on physical, optical, and electrical properties of Cu2NiSnS4: Direct solution dip coating for photovoltaic applications. Journal of Alloys and Compounds, 2017, 725, 510-518.	5.5	36
43	Surface plasmon resonance effect of Cu nanoparticles in a dye sensitized solar cell. Electrochimica Acta, 2017, 249, 89-95.	5.2	63
44	Electrodeposited copper current collecting fingers for DSSCs. Materials Science in Semiconductor Processing, 2017, 68, 178-185.	4.0	1
45	In situ-growth of silica nanowires in ceramic carbon composites. Journal of Asian Ceramic Societies, 2017, 5, 304-312.	2.3	8
46	Green synthesis of Ag and the effect of Ag on the efficiency of TiO2 based dye sensitized solar cell. Journal of Materials Science: Materials in Electronics, 2017, 28, 15423-15434.	2.2	12
47	Acetylacetone: a promising electrolyte solvent for dye sensitized solar cells. RSC Advances, 2016, 6, 37167-37172.	3.6	6
48	Effect of Cleaning Process of Substrate on the Efficiency of the DSSC. Transactions of the Indian Ceramic Society, 2016, 75, 59-62.	1.0	10
49	Tuning flat band potential of TiO 2 using an electrolyte additive to enhance open circuit voltage and minimize current loss in dye sensitized solar cells. Electrochimica Acta, 2016, 209, 293-298.	5.2	21
50	Synthesis and Characterization of a New Photoluminescent Material Tris(5-Choloro) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (8-Hyc	1.8	0
51	Effect of solvent, reaction time on morphology of Cu2ZnSnS4 (CZTS) nanoparticles and its application in Dye Sensitized Solar Cells. Materials Today: Proceedings, 2016, 3, 1778-1784.	1.8	14
52	Cu2ZnSnS4/CNT composites as Pt free counter electrodes for dye sensitized solar cells with improved efficiency. Materials Today: Proceedings, 2016, 3, 1808-1814.	1.8	9
53	Effect of casting condition on the porosity of polymer membrane and its impact on the photoelectrochemical behavior of dye-sensitized solar cells. Ionics, 2016, 22, 1217-1223.	2.4	3
54	Alternative quaternary chalcopyrite sulfides (Cu2FeSnS4 and Cu2CoSnS4) as electrocatalyst materials for counter electrodes in dye-sensitized solar cells. Journal of Power Sources, 2016, 305, 134-143.	7.8	92

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55	Composition dependent optical, structural and photoluminescence characteristics of cesium tin halide perovskites. RSC Advances, 2016, 6, 19857-19860.	3.6	115
56	Synthesis and characterization of low specific resistance alumina-clayâ€“carbon composites by colloidal processing using sucrose as a soluble carbon source for electrical applications. RSC Advances, 2016, 6, 8705-8713.	3.6	20
57	A Study of Photocurrent Enhancement by Au, Ag and Cu Nanoparticles in Dye Sensitized Solar Cells. Advanced Science Letters, 2016, 22, 958-963.	0.2	3
58	Facile Synthesis of Cu₂ZnSnS₄ Nanoparticles by Thermal Decomposition Process and Application in Dye-Sensitized Solar Cells. Advanced Science Letters, 2016, 22, 1026-1028.	0.2	2
59	Synthesis and Photoresponse of Cu2CoSnS4 (CCoTS) Nanoparticles. Advanced Science Letters, 2016, 22, 1067-1070.	0.2	1
60	Synthesis and Characterization of Cu2NiSnS4 Nanoparticles for Photovoltaic Applications. Advanced Science Letters, 2016, 22, 1038-1041.	0.2	1
61	Fabrication Of Cost Effective Pt And FTO-Free Counter Electrode For ZnO Based Dye Sensitized Solar Cell Using Thermally Decomposed Cu2ZnSnS4 Nanoparticles. Advanced Materials Letters, 2016, 7, 861-865.	0.6	0
62	Preparation of spherical ceria coated silica nanoparticle abrasives for CMP application. Applied Surface Science, 2015, 357, 1306-1312.	6.1	36
63	Effect of aging conditions on the performance of dip coated platinum counter electrode based dye sensitized solar cells. RSC Advances, 2015, 5, 18647-18654.	3.6	10
64	Effect of surfactant on dispersion of alumina in photopolymerizable monomers and their UV curing behavior for microstereolithography. Ceramics International, 2015, 41, 5301-5308.	4.8	54
65	Recrystallization and phase stability study of cesium tin iodide for application as a hole transporter in dye sensitized solar cells. Materials Science in Semiconductor Processing, 2015, 33, 103-109.	4.0	16
66	Fluorescent ZnO for imaging and induction of DNA fragmentation and ROS-mediated apoptosis in cancer cells. Journal of Materials Chemistry B, 2015, 3, 1968-1978.	5.8	45
67	Fabrication of low specific resistance ceramic carbon composites by slip casting. Journal of Asian Ceramic Societies, 2015, 3, 262-265.	2.3	15
68	Fabrication of a counter electrode using glucose as carbon material for dye sensitized solar cells. Materials Science in Semiconductor Processing, 2015, 40, 331-336.	4.0	27
69	Mechanism of titania nanograss formation during anodization. Chemical Physics Letters, 2015, 626, 15-19.	2.6	15
70	Mechanism of Formation of Faceted Titania Nanoparticles from Anodized Titania Nanotubes. Journal of Physical Chemistry C, 2015, 119, 9574-9579.	3.1	4
71	Impact of Electrolytes Based on Different Solvents on the Long Term Stability of Dye Sensitized Solar Cells. Electrochimica Acta, 2015, 168, 111-115.	5.2	10
72	â€˜Age-hardened alloyâ€™ based on bulk polycrystalline oxide ceramic. Philosophical Magazine Letters, 2015, 95, 285-294.	1.2	7

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73	Low-temperature synthesis of Cu₂CoSnS₄ nanoparticles by thermal decomposition of metal precursors and the study of its structural, optical and electrical properties for photovoltaic applications. RSC Advances, 2015, 5, 96928-96933.	3.6	56
74	A simple route to making counter electrode for dye sensitized solar cells (DSSCs) using sucrose as carbon precursor. Journal of Colloid and Interface Science, 2015, 459, 146-150.	9.4	40
75	Synthesis and electroluminescence properties of a new aluminium complex [5-choloro-8-hydroxyquinoline] bis [2,2'bipyridine] Aluminium Al(Bpy)2(5-Clq). Journal of Molecular Structure, 2015, 1100, 592-596.	3.6	6
76	RF Sputtered Iridium (Ir) Film as a Counter Electrode for Dye-Sensitized Solar Cells. Journal of Electronic Materials, 2015, 44, 4400-4404.	2.2	9
77	Influence of iodide source on the performance of liquid and silica nanoparticle-loaded quasi-solid electrolyte-based dye-sensitized solar cells. Ionics, 2015, 21, 849-854.	2.4	2
78	Evaluation of Experimental Coating to Improve the Zirconiaâ€Veneering Ceramic Bond Strength. Journal of Prosthodontics, 2014, 23, 626-633.	3.7	20
79	Effect of Heat Treatment Schedules and Glass Powder Particle Size on Glass Infiltration in Porous Alumina Preforms. International Journal of Applied Ceramic Technology, 2014, 11, 543-549.	2.1	0
80	Low Temperature Synthesis and Characterization of Cu2ZnSnS4 (CZTS) Nanoparticle by Solution Based Solid State Reaction Method. Energy Procedia, 2014, 57, 73-78.	1.8	12
81	Synthesis of highly crystalline ‘particle in tube’ TiO<inf>2</inf> nanostructures and its application in dye sensitized solar cells. , 2014, , .		0
82	Study of optimization of Zn salt concentration in co-electrodeposited Cu<inf>2</inf>ZnSnS<inf>4</inf> (CZTS) thin films. , 2014, , .		0
83	Morphology dependent photocatalytic and magnetic properties of ZnO nanostructures. Physica B: Condensed Matter, 2014, 448, 16-19.	2.7	32
84	Methotrexate conjugated magnetic nanoparticle for targeted drug delivery and thermal therapy. Journal of Applied Physics, 2014, 115, .	2.5	26
85	Synthesis of Cu2NiSnS4 nanoparticles by hot injection method for photovoltaic applications. Materials Letters, 2014, 137, 440-443.	2.6	62
86	Single step synthesis of chalcogenide nanoparticles Cu2ZnSnS4, Cu2FeSnS4 by thermal decomposition of metal precursors. Materials Chemistry and Physics, 2014, 147, 371-374.	4.0	45
87	Simple electrochemical synthesis of black metal oxides for enhanced visible light absorption. Materials Letters, 2014, 130, 131-134.	2.6	2
88	Synthesis and Characterization of Cadmium Complex and Its Application in Organic Light Emitting Diodes (OLEDs). Advanced Science Letters, 2014, 20, 1001-1004.	0.2	12
89	Influence of Ethanol Amount During Washing on Deagglomeration of Coâ€Precipitated Calcined Nanocrystalline 3<scp><scp>YSZ</scp></scp> Powders. International Journal of Applied Ceramic Technology, 2013, 10, E247.	2.1	12
90	Effect of Process Parameters and Binder Concentration on Mechanical Properties of Phosphate Bonded Alumina. Transactions of the Indian Ceramic Society, 2013, 72, 130-135.	1.0	6

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91	Effect of amount of dye in the TiO₂photoanode on electron transport, recombination, J_{sc}and V_{oc}of dye-sensitized solar cells. RSC Advances, 2013, 3, 2655-2661.	3.6	19
92	Magnesia nanoparticles in liquid electrolyte for dye sensitized solar cells: An effective recombination suppressant?. Electrochimica Acta, 2013, 90, 291-294.	5.2	8
93	Analysis of light harvest in terms of current per mole of dye in dye-sensitized solar cells made with opaque and transparent photoanodes. Renewable Energy, 2013, 53, 265-270.	8.9	5
94	Lithium Disilicate based Glass-Ceramics for Dental Applications. Transactions of the Indian Ceramic Society, 2013, 72, 56-60.	1.0	9
95	Impact of isoelectric points of nanopowders in electrolytes on electrochemical characteristics of dye sensitized solar cells. Journal of Power Sources, 2012, 218, 174-180.	7.8	9
96	Effect of Pore Characteristics in Slip Cast Alumina on Glass Infiltration and Mechanical Properties of the Composites. International Journal of Applied Ceramic Technology, 2012, 9, 625-635.	2.1	4
97	Characterization of agglomeration state in nanocrystalline 3YSZ powders through pressureâ€“displacement curves and nanoindentation of green compacts. Powder Technology, 2012, 228, 272-276.	4.2	2
98	An Optimized Composition for Making Dense Fused Silica Bodies from Highly Loaded Slurries Using Egg White and Sucrose. Journal of the American Ceramic Society, 2010, 93, 2215-2221.	3.8	12
99	Chemical synthesis and characterization of hydroxyapatite (HAp)-poly (ethylene co vinyl alcohol) (EVA) nanocomposite using a phosphonic acid coupling agent for orthopedic applications. Materials Science and Engineering C, 2009, 29, 228-236.	7.3	48
100	Electrophoretic Deposition of 8YSZ on Lanthanum Strontium Manganite Substrates. Transactions of the Indian Ceramic Society, 2009, 68, 95-98.	1.0	1
101	Defect and microstructural evolution during drying of soapnut-based alumina foams. Journal of the European Ceramic Society, 2008, 28, 3049-3057.	5.7	20
102	Effect of Milling Time on the Rheology of Highly Loaded Aqueousâ€Fused Silica Slurry. Journal of the American Ceramic Society, 2008, 91, 640-643.	3.8	6
103	Tailoring Porosity and Pore Characteristics in Oxide Ceramic Foams through Controlled Processing. Transactions of the Indian Ceramic Society, 2008, 67, 101-117.	1.0	6
104	Relationship Between Pack Chemistry and Growth of Silicide Coatings on Moâ€“TZM Alloy. Journal of the Electrochemical Society, 2008, 155, D734.	2.9	42
105	Processing and Properties of Nano-Hydroxyapatite(n-HAp)/Poly(Ethylene-Co-Acrylic Acid)(EAA) Composite Using a Phosphonic Acid Coupling Agent for Orthopedic Applications. Journal of the American Ceramic Society, 2007, 90, 369-375.	3.8	33
106	Processing and properties of nano- and macro-hydroxyapatite/poly(ethylene-co-acrylic acid) composites. Polymer Composites, 2006, 27, 633-641.	4.6	30
107	Influence of Slurry Characteristics on Porosity and Mechanical Properties of Alumina Foams. International Journal of Applied Ceramic Technology, 2006, 3, 382-392.	2.1	39
108	Influence of Nature and Amount of Dispersant on Rheology of Aged Aqueous Alumina Gelcasting Slurries. Journal of the American Ceramic Society, 2005, 88, 547-552.	3.8	35

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109	Influence of Sucrose Addition on Rheology of Alumina Slurries Dispersed with a Polyacrylate Dispersant. Journal of the American Ceramic Society, 2005, 88, 833-838.	3.8	32
110	Comparison of Two Different Commercially Available Polyacrylate Dispersants for Gelcasting Alumina Slurries. Transactions of the Indian Ceramic Society, 2005, 64, 21-24.	1.0	2
111	Simplified Aqueous Gelcasting of Silicon Carbide Ceramics. Transactions of the Indian Ceramic Society, 2004, 63, 199-202.	1.0	3
112	Effect of Additives on Ceramic Foam Microstructure Processed by Direct Foaming of Aqueous Slurries. Transactions of the Indian Ceramic Society, 2004, 63, 151-154.	1.0	2
113	A Simple Direct Casting Route to Ceramic Foams. Journal of the American Ceramic Society, 2003, 86, 1645-1650.	3.8	134
114	Stereological characterization of crack path transitions in ceramic matrix composites. Bulletin of Materials Science, 2001, 24, 185-190.	1.7	2
115	Egg White as an Environmentally Friendly Lowâ€Cost Binder for Gelcasting of Ceramics. Journal of the American Ceramic Society, 2001, 84, 3048-3050.	3.8	86
116	Suppression of superconductivity in the oxide systemsR1â^'xPrxBa2Cu3O7â^'y(R=Sm, Gd, and Tm). Physical Review B, 1991, 44, 7042-7045.	3.2	104
117	Study of LSMO Ceramics through Different Synthesis Route. Advanced Materials Research, 0, 1141, 111-114.	0.3	0
118	Effect of K2O:Al2O3 Ratio on Crystallization Phenomena and Microstructure of Lithium Silicate Glass-Ceramics. Transactions of the Indian Ceramic Society, 0, , 1-9.	1.0	7