

# Parag Bhargava

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7377108/publications.pdf>

Version: 2024-02-01

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	A Simple Direct Casting Route to Ceramic Foams. <i>Journal of the American Ceramic Society</i> , 2003, 86, 1645-1650.	3.8	134
2	Composition dependent optical, structural and photoluminescence characteristics of cesium tin halide perovskites. <i>RSC Advances</i> , 2016, 6, 19857-19860.	3.6	115
3	Suppression of superconductivity in the oxide systems $R_{1-x}Pr_xBa_2Cu_3O_{7-y}$ (R=Sm, Gd, and Tm). <i>Physical Review B</i> , 1991, 44, 7042-7045.	3.2	104
4	Alternative quaternary chalcopyrite sulfides ( $Cu_2FeSnS_4$ and $Cu_2CoSnS_4$ ) as electrocatalyst materials for counter electrodes in dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2016, 305, 134-143.	7.8	92
5	Egg White as an Environmentally Friendly Low-Cost Binder for Gelcasting of Ceramics. <i>Journal of the American Ceramic Society</i> , 2001, 84, 3048-3050.	3.8	86
6	Synthesis and characterization of carbon based counter electrode for dye sensitized solar cells (DSSCs) using sugar free as a carbon material. <i>Solar Energy</i> , 2017, 144, 215-220.	6.1	68
7	Surface plasmon resonance effect of Cu nanoparticles in a dye sensitized solar cell. <i>Electrochimica Acta</i> , 2017, 249, 89-95.	5.2	63
8	Synthesis of $Cu_2NiSnS_4$ nanoparticles by hot injection method for photovoltaic applications. <i>Materials Letters</i> , 2014, 137, 440-443.	2.6	62
9	Low-temperature synthesis of $Cu_2CoSnS_4$ nanoparticles by thermal decomposition of metal precursors and the study of its structural, optical and electrical properties for photovoltaic applications. <i>RSC Advances</i> , 2015, 5, 96928-96933.	3.6	56
10	Effect of surfactant on dispersion of alumina in photopolymerizable monomers and their UV curing behavior for microstereolithography. <i>Ceramics International</i> , 2015, 41, 5301-5308.	4.8	54
11	<i>In situ</i> carbon-supported titanium dioxide ( $ICS-TiO_2$ ) as an electrode material for high performance supercapacitors. <i>Nanoscale Advances</i> , 2020, 2, 2376-2386.	4.6	50
12	Chemical synthesis and characterization of hydroxyapatite (HAp)-poly (ethylene co vinyl alcohol) (EVA) nanocomposite using a phosphonic acid coupling agent for orthopedic applications. <i>Materials Science and Engineering C</i> , 2009, 29, 228-236.	7.3	48
13	Single step synthesis of chalcogenide nanoparticles $Cu_2ZnSnS_4$ , $Cu_2FeSnS_4$ by thermal decomposition of metal precursors. <i>Materials Chemistry and Physics</i> , 2014, 147, 371-374.	4.0	45
14	Fluorescent ZnO for imaging and induction of DNA fragmentation and ROS-mediated apoptosis in cancer cells. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1968-1978.	5.8	45
15	Experimental evaluation of room temperature crystallization and phase evolution of hybrid perovskite materials. <i>CrystEngComm</i> , 2017, 19, 3834-3843.	2.6	43
16	Relationship Between Pack Chemistry and Growth of Silicide Coatings on Mo-TZM Alloy. <i>Journal of the Electrochemical Society</i> , 2008, 155, D734.	2.9	42
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). <i>Nanoscale Advances</i> , 2019, 1, 3192-3199.	4.6	42
18	A simple route to making counter electrode for dye sensitized solar cells (DSSCs) using sucrose as carbon precursor. <i>Journal of Colloid and Interface Science</i> , 2015, 459, 146-150.	9.4	40

#	ARTICLE	IF	CITATIONS
19	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
20	Investigation on Organic Molecule Additive for Moisture Stability and Defect Passivation via Physisorption in $\text{CH}_3\text{NH}_3\text{PbI}_3$ Based Perovskite. ACS Applied Energy Materials, 2018, 1, 1870-1877.	5.1	37
21	Preparation of spherical ceria coated silica nanoparticle abrasives for CMP application. Applied Surface Science, 2015, 357, 1306-1312.	6.1	36
22	Influence of dipping cycles on physical, optical, and electrical properties of $\text{Cu}_2\text{NiSnS}_4$ : Direct solution dip coating for photovoltaic applications. Journal of Alloys and Compounds, 2017, 725, 510-518.	5.5	36
23	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
24	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
25	In-situ carbon coated manganese oxide nanorods (ISCC-MnO <sub>2</sub> NRs) as an electrode material for supercapacitors. Diamond and Related Materials, 2019, 94, 110-117.	3.9	34
26	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
27	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
28	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
29	Morphology dependent photocatalytic and magnetic properties of ZnO nanostructures. Physica B: Condensed Matter, 2014, 448, 16-19.	2.7	32
30	Synthesis and characterization of carbon based counter electrode for dye sensitized solar cells (DSSCs) using organic precursor 2,2'-Bipyridine (Bpy) as a carbon material. Journal of Alloys and Compounds, 2018, 748, 905-910.	5.5	32
31	Processing and properties of nano- and macro-hydroxyapatite/poly(ethylene-co-acrylic acid) composites. Polymer Composites, 2006, 27, 633-641.	4.6	30
32	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
33	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
34	Methotrexate conjugated magnetic nanoparticle for targeted drug delivery and thermal therapy. Journal of Applied Physics, 2014, 115, .	2.5	26
35	High efficiency dye sensitized solar cell made by carbon derived from sucrose. Optical Materials, 2017, 64, 401-405.	3.6	25
36	Enhanced photovoltaic performance of a dye sensitized solar cell with Cu/N Co-doped TiO <sub>2</sub> nanoparticles. Journal of Materials Science: Materials in Electronics, 2018, 29, 6274-6282.	2.2	25

#	ARTICLE	IF	CITATIONS
37	TiO <sub>2</sub> colloid-based compact layers for hybrid lead halide perovskite solar cells. <i>Applied Materials Today</i> , 2017, 7, 112-119.	4.3	24
38	Lead free, air stable perovskite derivative Cs <sub>2</sub> SnI <sub>6</sub> as HTM in DSSCs employing TiO <sub>2</sub> nanotubes as photoanode. <i>Materials Research Bulletin</i> , 2018, 108, 113-119.	5.2	24
39	Influence of spinning parameters on synthesis of alumina fibres by centrifugal spinning. <i>Ceramics International</i> , 2018, 44, 11644-11649.	4.8	23
40	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. <i>Journal of the Electrochemical Society</i> , 2020, 167, 120519.	2.9	23
41	Novel High Pressure Exfoliated Graphene-Based Semitransparent Stable DSSCs for Building Integrated Photovoltaics. <i>ACS Applied Energy Materials</i> , 2018, 1, 2512-2519.	5.1	22
42	Tuning flat band potential of TiO <sub>2</sub> using an electrolyte additive to enhance open circuit voltage and minimize current loss in dye sensitized solar cells. <i>Electrochimica Acta</i> , 2016, 209, 293-298.	5.2	21
43	Sucrose derived carbon coated silicon nanowires for supercapacitor application. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 1947-1954.	2.2	21
44	Defect and microstructural evolution during drying of soapnut-based alumina foams. <i>Journal of the European Ceramic Society</i> , 2008, 28, 3049-3057.	5.7	20
45	Evaluation of Experimental Coating to Improve the Zirconia/Veneering Ceramic Bond Strength. <i>Journal of Prosthodontics</i> , 2014, 23, 626-633.	3.7	20
46	Synthesis and characterization of low specific resistance alumina-clay/carbon composites by colloidal processing using sucrose as a soluble carbon source for electrical applications. <i>RSC Advances</i> , 2016, 6, 8705-8713.	3.6	20
47	Stability study of co-electrodeposited CZTS counter electrode for dye sensitized solar cells. <i>Solar Energy</i> , 2018, 176, 325-333.	6.1	20
48	Effect of amount of dye in the TiO <sub>2</sub> photoanode on electron transport, recombination, $J_{sc}$ and $V_{oc}$ of dye-sensitized solar cells. <i>RSC Advances</i> , 2013, 3, 2655-2661.	3.6	19
49	Carbon nano-onion-powered optically transparent and economical dye-sensitized solar cells. <i>Nanoscale</i> , 2020, 12, 20621-20630.	5.6	18
50	Nanoporous Cobalt Hexacyanoferrate Nanospheres for Screen-Printed H <sub>2</sub> O <sub>2</sub> Sensors. <i>ACS Applied Nano Materials</i> , 2021, 4, 5564-5576.	5.0	17
51	Recrystallization and phase stability study of cesium tin iodide for application as a hole transporter in dye sensitized solar cells. <i>Materials Science in Semiconductor Processing</i> , 2015, 33, 103-109.	4.0	16
52	Water-Based High Shear Exfoliated Graphene-Based Semi-Transparent Stable Dye-Sensitized Solar Cells for Solar Power Window Application. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1252-1258.	2.5	16
53	Fabrication of low specific resistance ceramic carbon composites by slip casting. <i>Journal of Asian Ceramic Societies</i> , 2015, 3, 262-265.	2.3	15
54	Mechanism of titania nanograin formation during anodization. <i>Chemical Physics Letters</i> , 2015, 626, 15-19.	2.6	15

#	ARTICLE	IF	CITATIONS
55	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
56	Effect of solvent, reaction time on morphology of Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) nanoparticles and its application in Dye Sensitized Solar Cells. Materials Today: Proceedings, 2016, 3, 1778-1784.	1.8	14
57	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
58	Carbon Derived from Sucrose as Anode Material for Lithium-Ion Batteries. Journal of Electronic Materials, 2019, 48, 7389-7395.	2.2	14
59	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
60	Influence of Ethanol Amount During Washing on Deagglomeration of Co-precipitated Calcined Nanocrystalline 3Y-SZ Powders. International Journal of Applied Ceramic Technology, 2013, 10, E247.	2.1	12
61	Low Temperature Synthesis and Characterization of Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) Nanoparticle by Solution Based Solid State Reaction Method. Energy Procedia, 2014, 57, 73-78.	1.8	12
62	Green synthesis of Ag and the effect of Ag on the efficiency of TiO <sub>2</sub> based dye sensitized solar cell. Journal of Materials Science: Materials in Electronics, 2017, 28, 15423-15434.	2.2	12
63	Improved non-enzymatic H <sub>2</sub> O <sub>2</sub> sensors using highly electroactive cobalt hexacyanoferrate nanostructures prepared through EDTA chelation route. Materials Chemistry and Physics, 2021, 267, 124593.	4.0	12
64	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
65	Phase and microstructural evolution in lithium silicate glass-ceramics with externally added nucleating agent. Journal of the American Ceramic Society, 2019, 102, 7312-7328.	3.8	11
66	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
67	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
68	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
69	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
70	Lithium Disilicate based Glass-Ceramics for Dental Applications. Transactions of the Indian Ceramic Society, 2013, 72, 56-60.	1.0	9
71	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
72	Cu <sub>2</sub> ZnSnS <sub>4</sub> /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

#	ARTICLE	IF	CITATIONS
73	Effect of Br-doping and choice of precursor solvent on morphology of lead free (CH <sub>3</sub> NH <sub>3</sub> ) <sub>3</sub> Bi <sub>2</sub> I <sub>9</sub> perovskites. Journal of Renewable and Sustainable Energy, 2018, 10, 043506.	2.0	9
74	Natural solvent facilitated high-shear exfoliated graphene nanoplatelets enabled economically-efficient and stable DSSC. Materials Letters, 2021, 287, 129263.	2.6	9
75	Magnesia nanoparticles in liquid electrolyte for dye sensitized solar cells: An effective recombination suppressant?. Electrochimica Acta, 2013, 90, 291-294.	5.2	8
76	In situ-growth of silica nanowires in ceramic carbon composites. Journal of Asian Ceramic Societies, 2017, 5, 304-312.	2.3	8
77	Age-hardened alloy™ based on bulk polycrystalline oxide ceramic. Philosophical Magazine Letters, 2015, 95, 285-294.	1.2	7
78	Lightweight thermal insulating fly ash cenosphere ceramics. International Journal of Applied Ceramic Technology, 2018, 15, 1467-1477.	2.1	7
79	Effect of K <sub>2</sub> O:Al <sub>2</sub> O <sub>3</sub> Ratio on Crystallization Phenomena and Microstructure of Lithium Silicate Glass-Ceramics. Transactions of the Indian Ceramic Society, 0, , 1-9.	1.0	7
80	Effect of Milling Time on the Rheology of Highly Loaded Aqueous Fused Silica Slurry. Journal of the American Ceramic Society, 2008, 91, 640-643.	3.8	6
81	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
82	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
83	Synthesis and electroluminescence properties of a new aluminium complex [5-chloro-8-hydroxyquinoline] bis [2,2'-bipyridine] Aluminium Al(Bpy) <sub>2</sub> (5-Clq). Journal of Molecular Structure, 2015, 1100, 592-596.	3.6	6
84	Acetylacetone: a promising electrolyte solvent for dye sensitized solar cells. RSC Advances, 2016, 6, 37167-37172.	3.6	6
85	Additive engineering of 4,4'-Bis (N-carbazolyl)-1,1'-biphenyl (CBP) molecules for defects passivation and moisture stability of hybrid perovskite layer. Solar Energy, 2020, 211, 1084-1091.	6.1	6
86	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
87	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
88	Titania Nanobelts as a Scattering Layer with Cu <sub>2</sub> ZnSnS <sub>4</sub> as a Counter Electrode for DSSC with Improved Efficiency. Materials Today: Proceedings, 2018, 5, 23351-23357.	1.8	5
89	First-principles study of Cs <sub>2</sub> Ti <sub>1-x</sub> M <sub>x</sub> Br <sub>6</sub> (M = Pb, Sn) and numerical simulation of the solar cells based on Cs <sub>2</sub> Ti <sub>0.25</sub> Sn <sub>0.75</sub> Br <sub>6</sub> . International Journal of Energy Research, 2021, 45, 8049-8060.	4.5	5
90	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

#	ARTICLE	IF	CITATIONS
91	Mechanism of Formation of Faceted Titania Nanoparticles from Anodized Titania Nanotubes. Journal of Physical Chemistry C, 2015, 119, 9574-9579.	3.1	4
92	Simplified Aqueous Gelcasting of Silicon Carbide Ceramics. Transactions of the Indian Ceramic Society, 2004, 63, 199-202.	1.0	3
93	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
94	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
95	Stereological characterization of crack path transitions in ceramic matrix composites. Bulletin of Materials Science, 2001, 24, 185-190.	1.7	2
96	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
97	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
98	Characterization of agglomeration state in nanocrystalline 3YSZ powders through pressure displacement curves and nanoindentation of green compacts. Powder Technology, 2012, 228, 272-276.	4.2	2
99	Simple electrochemical synthesis of black metal oxides for enhanced visible light absorption. Materials Letters, 2014, 130, 131-134.	2.6	2
100	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
101	Multipodal formation of TiO <sub>2</sub> nanotubes using anodization. AIP Conference Proceedings, 2019, , .	0.4	2
102	Conventional or Microwave Sintering: A Comprehensive Investigation to Achieve Efficient Clean Energy Harvesting. Energies, 2020, 13, 6208.	3.1	2
103	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
104	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
105	Facile Synthesis of Cu <sub>2</sub> ZnSnS <sub>4</sub> Nanoparticles by Thermal Decomposition Process and Application in Dye-Sensitized Solar Cells. Advanced Science Letters, 2016, 22, 1026-1028.	0.2	2
106	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
107	Electrophoretic Deposition of 8YSZ on Lanthanum Strontium Manganite Substrates. Transactions of the Indian Ceramic Society, 2009, 68, 95-98.	1.0	1
108	Electrodeposited copper current collecting fingers for DSSCs. Materials Science in Semiconductor Processing, 2017, 68, 178-185.	4.0	1

#	ARTICLE	IF	CITATIONS
109	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
110	Synthesis and Photoresponse of Cu <sub>2</sub> CoSnS <sub>4</sub> (CCoTS) Nanoparticles. Advanced Science Letters, 2016, 22, 1067-1070.	0.2	1
111	Synthesis and Characterization of Cu <sub>2</sub> NiSnS <sub>4</sub> Nanoparticles for Photovoltaic Applications. Advanced Science Letters, 2016, 22, 1038-1041.	0.2	1
112	Dye-Sensitized Solar Cells. Springer Handbooks, 2022, , 1137-1214.	0.6	1
113	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
114	Synthesis of highly crystalline &#x2018;particle in tube&#x2019; TiO <sub>2</sub> nanostructures and its application in dye sensitized solar cells. , 2014, , .		0
115	Study of optimization of Zn salt concentration in co-electrodeposited Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) thin films. , 2014, , .		0
116	Study of LSMO Ceramics through Different Synthesis Route. Advanced Materials Research, 0, 1141, 111-114.	0.3	0
117	Synthesis and Characterization of a New Photoluminescent Material Tris(5-Choloro) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 42	1.8	0
118	Fabrication Of Cost Effective Pt And FTO-Free Counter Electrode For ZnO Based Dye Sensitized Solar Cell Using Thermally Decomposed Cu <sub>2</sub> ZnSnS <sub>4</sub> Nanoparticles. Advanced Materials Letters, 2016, 7, 861-865.	0.6	0