

Department of physics

Authors	Title	Year	Source title	Volume	Issue	Art. No.	Page start	Page end	DOI
K. Sakthipandi	First-principles study on rare earth-based equiatomic quaternary Heusler alloys YbCoCrSb and YbCoTiSn: New candidates for spintronics	2024	Materials Today Communications	39		108599			10.1016/j.mtcomm.2024.108599
K. Sakthipandi	Synthesis and luminescence investigation of mirror symmetric europium and dysprosium co-doped barium vanadate phosphor for optoelectronic applications	2024	Chemical Physics Impact	8		100506			10.1016/j.chphi.2024.100506
K. Sakthipandi, K. Venkatesan, G. Purshothan	Study of phase transition temperature in defect-induced barium hexaferrite	2024	Materials Letters	363		136257			10.1016/j.matlet.2024.136257
K. Sakthipandi	Exploring the impact of rare-earth (La ³⁺) ions doping on structural, magnetic, and dielectric properties of Co _{0.50} Ni _{0.50} La _x Fe _{2-x} O ₄ nano spinel ferrite	2024	Journal of Alloys and Compounds	981		173708			10.1016/j.jallcom.2024.173708
K. Sakthipandi	Synthesis, Structure, Morphology, Element composition, Electrochemical, and Optical studies of Zn _{0.98} XMn _{0.02} CeX Quantum dots	2023	Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy	303		123140			10.1016/j.saa.2023.123140
K. Sakthipandi	Green synthesis of copper oxide nanoparticles using Amaranthus dubius leaf extract for sensor and photocatalytic applications	2023	Chemical Physics Impact	7		100374			10.1016/j.chphi.2023.100374
K. Sakthipandi	Novel approach for green synthesis of Cu-NPs using Centella asiatica leaf extract, assisted by BiFeO ₃ nanoparticles for electrochemical glucose- and fructose-sensing applications	2023	Inorganic Chemistry Communications	158		111669			10.1016/j.inoche.2023.111669
K. Sakthipandi	Tuning of the optical and magnetic properties of Nd ₂ Ni _{1-x} CoxMnO _{6-δ} (0.2 ≤ x ≤ 0.5) perovskite by cobalt doping	2023	Ceramics International	49	17	29229	29236		10.1016/j.ceramint.2023.06.209
K. Sakthipandi	Role of TiO ₂ in modifying elastic moduli and enhancing in vitro bioactivity of fluorophosphate glasses	2023	Journal of Non-Crystalline Solids	608		122250			10.1016/j.jnoncrysol.2023.122250
K. Sakthipandi	Investigations on anomalous behavior of ionic conductivity in NaPF ₆ salt loaded hydroxyethyl cellulose biodegradable polymer electrolyte for energy storage applications	2023	Polymers for Advanced Technologies	34		5	1698	1715	10.1002/pat.6004
K. Sakthipandi	Synthesis and luminescence investigation of BaZrV ₂ O ₇ -co-doped Dy ³⁺ /Eu ³⁺ phosphors for white light-emitting diode applications	2023	Indian Journal of Physics	97		5	1437	1444	10.1007/s12648-022-02503-z
K. Sakthipandi	Redefining Chalcone Synthesis: Aldol Adduct Elimination for the Rapid Access to Thienyl Chalcones	2023	ACS Omega						10.1021/acsomega.3c05897
K. Sakthipandi, B. Ganesh Babu	Exploring the electromagnetic shielding behavior of lanthanum doped calcium nanoferrites	2023	Journal of Rare Earths						10.1016/j.jre.2023.11.002
K. Sakthipandi	Biosynthesized Silver Nanoparticles Encapsulated in a Poly(vinyl alcohol) Matrix: Dielectric and Structural Properties	2022	ChemistrySelect	7	47	e202201771			10.1002/slct.202201771
K. Sakthipandi	Investigation of magnetic phase transitions in Ni _{0.5} Cu _{0.25} Zn _{0.25} Fe _{2-x} La _x O ₄ nanoferrites using magnetic and in-situ ultrasonic measurements	2022	Physica B: Condensed Matter	645		414280			10.1016/j.physb.2022.414280
K. Sakthipandi	Growth, Structural, Vibrational, Optical, Electrical and Thermal Properties of Transition Metal and Zinc Oxide added Glycine Semi-organic Crystal	2022	Indian Journal of Pure and Applied Physics	60	11		941	950	10.56042/jipap.v60i11.63670
K. Sakthipandi	Assimilation of manganese metal ion doped hydroxyapatite by Co-Precipitation technique	2022	Journal of the Indian Chemical Society	99	11	100779			10.1016/j.jics.2022.100779
K. Sakthipandi	Turning of luminescence properties of BaZrV ₂ O ₇ phosphors by co-doping Eu ³⁺ /Dy ³⁺ ions	2022	Bulletin of Materials Science	45	3	172			10.1007/s12034-022-02741-1
K. Sakthipandi	Impact of silver on fluorophosphate glasses to improve in vitro bioactivity and antibacterial efficacy	2022	Ceramics International	48	17	25346	25354		10.1016/j.ceramint.2022.05.208
K. Sakthipandi	Exploration of free volume behavior and ionic conductivity of PVA: x (x = 0, Y ₂ O ₃ , ZrO ₂ , Y ₂ S ₃) ion-oxide conducting polymer ceramic composites	2022	Journal of Non-Crystalline Solids	590		121696			10.1016/j.jnoncrysol.2022.121696
K. Sakthipandi	Structural, mechanical, dielectric, thermal, and nonlinear optical properties of zinc-doped ninhydrin single crystals	2022	Indian Journal of Physics	96	8		2313	2321	10.1007/s12648-021-02163-5
K. Sakthipandi, B. Ganesh Babu	Lanthanum substitution effect on the structural, optical, and dielectrical properties of nanocrystalline BaFe ₂ O ₄ ferrites	2022	Physica B: Condensed Matter	635		413849			10.1016/j.physb.2022.413849
K. Sakthipandi	Ion dynamics and positron annihilation studies on polymer ceramic composite electrolyte system (PVA/NaClO ₄ /Y ₂ O ₃): Application in electrochemical devices	2022	Ceramics International	48	12	17864	17884		10.1016/j.ceramint.2022.03.058
K. Sakthipandi	Ultrasonic investigation of materials - An avenue for project-based learning	2022	Journal of the Acoustical Society of America	151	4	2732	2738		10.1121/1.0010310
K. Sakthipandi	The hybrid halide perovskite: Synthesis strategies, fabrications, and modern applications	2022	Ceramics International	48	6	7325	7343		10.1016/j.ceramint.2021.11.313
K. Sakthipandi	Role of Purged Air in the Synthesis of the Mesoporous NiO/C Composite and Its Application in Wastewater Treatment	2022	Water, Air, and Soil Pollution	233	2	53			10.1007/s11270-022-05527-7
B. Sethuraman	MWCNT attached mesoporousAg ₃₀₄ @NiO nanocomposite for hybrid supercapacitor applications	2022	Materials Technology	37	14	3167	3173		10.1080/10667857.2022.2135474
K. Sakthipandi	Structural and Mechanical Properties of Lignite Fly Ash and Flax-added Polypropylene Polymer Matrix Composite	2022	Journal of Natural Fibers	19	13	6534	6552		10.1080/15440478.2021.1927929
K. Sakthipandi	Effects of strontium-containing fluorophosphate glasses for enhancing bioactivity and enamel remineralization	2021	Materials Characterization	181		111496			10.1016/j.matchar.2021.111496
K. Sakthipandi	Indigenously designed and fabricated mechanical milling set-up to synthesis nanoparticles: A cost-effective method	2021	Indian Journal of Pure and Applied Physics	59	9	603	611		
K. Sakthipandi	Designed and fabricated a low-cost E-Spun experimental tool for polymer processing	2021	Indian Journal of Engineering and Materials Sciences	28	4	343	349		
K. Sakthipandi	Synthesis and characterization of polythiophene/zinc oxide nanocomposites for chemiresistor organic vapor-sensing application	2021	Journal of Polymer Research	28	7	251			10.1007/s10965-021-02618-7
K. Sakthipandi	Enhanced mechanical, thermal, photoluminescence, NLO and antifungal activities of magnesium doped ninhydrin crystals	2021	Indian Journal of Pure and Applied Physics	59	4	349	355		
K. Sakthipandi	Structural, mechanical, thermal, optical and antifungal properties of pure and nickel doped ninhydrin non liner single crystals	2021	Indian Journal of Engineering and Materials Sciences	28	1	82	88		
K. Sakthipandi	Enhancing structural and optical properties of ZnO nanoparticles induced by the double co-doping of iron and cobalt	2021	Materials Today: Proceedings	49		2598	2601		10.1016/j.matpr.2021.06.433
B. Sethuraman	Synthesis and characterization of 3d flower like Co ₃₀₄ for supercapacitor application	2020	AIP Conference Proceedings	2270		110041			10.1063/5.0019465
B. Saravanakumar, K. K. Purushothaman	Fabrication of two-dimensional reduced graphene oxide supported V ₂ O ₅ networks and their application in supercapacitors	2016	Materials Chemistry and Physics	170		266	275		10.1016/j.matchemphys.2015.12.051
B. Saravanakumar, K. K. Purushothaman	Carbon Coated Flowery V ₂ O ₅ Nanostructure as Novel Electrode Material for High Performance Supercapacitors	2015	Electrochimica Acta	186		285	291		10.1016/j.electacta.2015.10.160
B. Saravanakumar, K. K. Purushothaman	High performance supercapacitor based on carbon coated V ₂ O ₅ nanorods	2015	Journal of Electroanalytical Chemistry	758		111	116		10.1016/j.jelechem.2015.10.031

P. Rajkumar	Influence of Zn doping on structural, optical and photocatalytic activity of WO ₃ nanoparticles by a novel microwave irradiation technique	2015	Journal of Materials Science: Materials in Electronics	26	9	6823	6830	10.1007/s10854-015-3296-5
P. Rajkumar	One-step synthesis, characterization, and visible light photocatalytic activity of pure and Zn-doped SnO ₂ nanoparticles	2015	Applied Physics A: Materials Science and Processing	120	2	463	469	10.1007/s00339-015-9240-y
B. Saravanakumar, K. K. Purushothaman	Fabrication of natural polymer assisted mesoporous Co ₃ O ₄ /carbon composites for supercapacitors	2015	Electrochimica Acta	168		50	58	10.1016/j.electacta.2015.04.019
K.K Purushothaman	Ag ₃ O ₄ grafted NiO nanosheets for high performance supercapacitors	2015	Journal of Materials Chemistry A	3	1	420	427	10.1039/c4ta04586f
B. Saravanakumar, K. K. Purushothaman	MnO ₂ grafted V ₂ O ₅ nanostructures: Formation mechanism, morphology and supercapacitive features	2014	CrystEngComm	16	46	10711	10720	10.1039/c4ce01476f
B. Sethuraman, K. K. Purushothaman	Synthesis of mesh-like Fe ₂ O ₃ /C nanocomposite via greener route for high performance supercapacitors	2014	RSC Advances	4	9	4631	4637	10.1039/c3ra45025b
B. Sethuraman, K. K. Purushothaman	V ₂ O ₅ /functionalized MWCNT hybrid nanocomposite: The fabrication and its enhanced supercapacitive performance	2014	RSC Advances	4	70	37437	37445	10.1039/c4ra05942e
K.K. Purushothaman, B. Saravanakumar, B. Sethuraman	Nanostructured CuO/reduced graphene oxide composite for hybrid supercapacitors	2014	RSC Advances	4	45	23485	23491	10.1039/c4ra02107j
K.K. Purushothaman, B. Sethuraman	Nanosheet-assembled NiO microstructures for high-performance supercapacitors	2013	ACS Applied Materials and Interfaces	5	21	10767	10773	10.1021/am402869p
K.K. Purushothaman, B. Sethuraman	Optical, structural, and electrochromic properties of cobalt oxide films prepared via the sol-gel route	2013	Materials Science in Semiconductor Processing	16	6	1410	1415	10.1016/j.mssp.2013.04.023
K.K. Purushothaman	Nanostructured nickel doped β-V ₂ O ₅ thin films for supercapacitor applications	2013	Materials Research Bulletin	48	7	2578	2582	10.1016/j.materresbull.2013.03.007
K.K. Purushothaman	Thickness dependent supercapacitor behaviour of sol-gel spin coated nanostructured vanadium pentoxide thin films	2013	Philosophical Magazine	93	13	1490	1499	10.1080/14786435.2012.745654
K. K. Purushothaman	Supercapacitor behavior of α-MnMoO ₄ nanorods on different electrolytes	2012	Materials Research Bulletin	47	11	3348	3351	10.1016/j.materresbull.2012.07.027
B. Saravanakumar, K. K. Purushothaman	Interconnected V ₂ O ₅ nanoporous network for high-performance supercapacitors	2012	ACS Applied Materials and Interfaces	4	9	4484	4490	10.1021/am301162p
K. K. Purushothaman	Electrochromic properties of nickel oxide and mixed Co/Ni oxide films prepared via sol-gel route	2012	Journal of Non-Crystalline Solids	358	2	354	359	10.1016/j.jnoncrystol.2011.10.003
K. K. Purushothaman	Supercapacitor behavior of spray deposited SnO ₂ thin films	2011	International Journal of Nanoscience	10	6	1245	1248	10.1142/S0219581X11008368
K. K. Purushothaman	Synthesising of ZnO nanopetals for supercapacitor applications	2011	Micro and Nano Letters	6	8	668	670	10.1049/ml.2011.0260
K. K. Purushothaman	Optical, structural and electrochromic properties of nickel oxide films produced by sol-gel technique	2011	Solar Energy	85	5	978	984	10.1016/j.solener.2011.02.012
K. K. Purushothaman	Effect of temperature of annealing on optical, structural and electrochromic properties of sol-gel dip coated molybdenum oxide films	2011	Applied Surface Science	257	6	2074	2079	10.1016/j.apsusc.2010.09.052