



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF – 2023 - Among Colleges in India.



CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.7.1: COLLABRATIVE RESEARCH DURING 2020-2021

COLLABRATIVE RESEARCH DURING 2020-2021							
Title of paper	Name of the author/s	Name of the Institutions/ Corporates	Department of the teacher	Name of journal	Year of publication	ISSN number	
Rapid Green Synthesis Of Gold And Silver Nanoparticles Using Ethanol Extract Of Kedrostis Foetidissima (Jacq.) Cogn. And Its Anticancer Efficacy Against A549 Human Lung Cancer Cell Lines	Amutha Muthusamy, Lalitha Pottail	*Department of Chemistry, Nallamuthu Gounder Mahalingam College, Pollachi, India, **Department of Chemistry, Avinashilingam University(Deemed to be), Coimbatore, India	Chemistry	INDIAN DRUGS	2021	0019-462X	View
Effect of biological template on the performance of SnO ₂ dye sensitized solar cell.	R.Vasanthapriya, N.Neelakandeswarib*, K. Uthayarania, M.Chitraa	*Department of Physics, Sri Ramakrishna Engineering college, Vattamalaipalayam, Coimbatore 641022, India **Department of Chemistry, Nallamuthu Gounder Mahalingam College, Pollachi 642 001, India	Chemistry	Chalcogenide Letters	2021	1584-8663	View

Prediction Clue on the Fading Capacity of Multi-Walled Carbon Nanotube-Decorated $\text{Li}_2(\text{Fe}_{1-x}\text{Ti}_x)\text{SiO}_4/\text{C}$ High-Performance Cathode Materials	Sivaraj Pazhaniswamy, Abhilash Karuthedath Parameswaran, Nalini Balakrishnan, Sunkulp Goel, Zdenek Sofer, Sudheer Kumar Yadav, and Christopher Selvin Panneerselvam	*Materials Research Center, Department of Physics, Nallamuthu Gounder Mahalingam College (Bharathiar University), Coimbatore, India **Department of Inorganic Chemistry, Department of Inorganic Chemistry, University of Chemistry and Technology Prague, Technicka-5, 166 28 Prague 6, ***Czech Republic Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China University of Chemistry and Technology Prague, Technicka-5, 166 28 Prague 6, ****Czech Republic, Department of Physics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore 641 043, India	Physics	Energy and Fuels	2021	0887-0624	View
A Critical Review on Electrochemical Properties and Significance of Orthosilicate-Based Cathode Materials for Rechargeable Li/Na/Mg Batteries and Hybrid Supercapacitors	Pazhaniswamy Sivaraj, Karuthedath Parameswaran Abhilash, and Paneerselvam Christopher Selvin	*Luminescence and Solid-State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, 641046 Tamilnadu, India, **Materials Research Centre, Department of Physics, Nallamuthu Gounder Mahalingam College, Bharathiar University, Pollachi, 642001 Tamilnadu, India, ***Department of Inorganic Chemistry, University of Chemistry and Technology (UCT), Prague, Technicka 5, Pin, 16628, Prague-6 Czech Republic, Europe,	Physics	Materials Science inc. Nanomaterials & Polymers: Chemistry Select	2021	2365-6549	View

		****Luminescence and Solid-State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, 641046 Tamilnadu, India,					
Plasticized solid polymer electrolyte based on triblock copolymer poly(vinylidene chloride-co-acrylonitrile-co-methyl methacrylate) for magnesium ion batteries	T. Ponraj,A. Ramalingam, S. Selvasekarapandian, S. R. Srikumar R. Manjuladevi	*Department of Physics, Government Arts College, Udumalpet, TamilNadu, India **Department of Physics, Nallamuthu Gounder Mahalingam College, Pollachi, TamilNadu, India ***Materials Research Center, Coimbatore, TamilNadu, India, Kalasalingam Academy of Research and Education, Srivilliputhur, TamilNadu, India, ****PSG College of Arts and Science, Coimbatore, TamilNadu, India	Physics	Polymer Bulletin	2021	0170-0839	View
A study on the Cu-poor and Zn-poor CZTS nanoparticles and its influence on the photoconversion efficiency of non-toxic ZnO buffer layer solar cell	A.G. Kannan a, T.E. Manjulavalli a, M. Thambidurai, K. Habeeba, D.V. Ezhilarasi GnanaKumari	*Department of Physics, Nallamuthu Gounder Mahalingam College, Pollachi 642001, Tamil Nadu, India. **Energy Research Institute @NTU (ERI@N), Research Techno Plaza, X-Frontier Block, Level 5, 50 Nanyang Drive, 637553, Singapore, ***Department of Physics, Nallamuthu Gounder Mahalingam College, Pollachi 642001, Tamil Nadu, India	Physics	Materials Today Proceedings	2021	2214-7853	View
Band gap engineering in ZnO based nanocomposites	Chitra a, G. Man gamma b, K. Uthayarani a, N. Ne elakandeswari c, E.K. Girija d	1&3.Department of Physics, Sri Ramakrishna Engineering College, Coimbatore,2.Surface and Nanoscience Division, Material Science Group, Indira Gandhi Centre for Atomic Research, Homi Bhabha National Institute, Kalpakkam,	Chemistry &Physics	Elsevier	2020	Print ISSN: 1386-9477, Online ISSN:	View

		4.Department of Chemistry, N.G.M College, Pollachi, 5.Department of Physics, Periyar University, Salem,				1873-1759	
Free-standing, high Li-ion conducting hybrid PAN/PVdF/LiClO ₄ /Li _{0.5} La _{0.5} TiO ₃ nanocomposite solid polymer electrolytes for all-solid-state batteries	P. Sivaraj & K. P. Abhilash & B. Nalini & P. Perumal & P. Christopher Selvin	*Materials Research Centre, Department of Physics, Nallamuthu Gounder Mahalingam College, Pollachi, Coimbatore, Tamil Nadu, 642 001, India, **Luminescence and Solid State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, Tamil Nadu, 641046, India, ***Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing, 210094, China, Department of Physics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu, 641 043, India, ****Luminescence and Solid State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, Tamil Nadu, 641046, India.	Physics	Journal of Solid State Electrochemistry	2020	14328488	View
Green synthesized spinel lithium titanate nano anode material using Aloe Vera extract for potential application to lithium ion batteries	P. Perumal, P. Sivaraj, K.P. Abhilash, G.G. Soundarya, P. Balraju, P. Christopher Selvin	*Luminescence and Solid State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, India. **Material Reserach Centre, Department of Physics, Nallamuthu Gounder Mahalingam College, Pollachi, India, ***Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing,	Physics	Journal of Science: Advanced Materials and Devices	2020	2468-2284	View

		China. ****Department of Physics, Avinashilingam Institute of Home Science and Higher Education for Women, Coimbatore, India, *****Department of Physics, Coimbatore Institute of Technology, Coimbatore, India, *****Luminescence and Solid State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, India					
Surface Modification and Electrochemical Performance of Al ₂ O ₃ Coated and Ni- Doped Spinel LiMn ₂ O ₄ for Aqueous Rechargeable Battery Applications	S. Pavithra ,P. Sivaraj , P. Arjunan , S. Prabhu , R. Ramesh, P. Yuvaraj , and N. Sivakumar, P. Christopher Selvin	*PG and Research Department of Physics, Chikkaiah Naicker College, 638004, Erode, India, **Department of Physics, Nallamuthu Gounder Mahalingam College, 642001, Pollachi, India, ***Department of Physics, Alagappa University, 630003, Karaikudi, India, ****Department of Physics, Periyar University, 636011, Salem, India,Department of Physics, Periyar University, 636011, Salem, India, *****PG and Research Department of Physics, Chikkaiah Naicker College, 638004, Erode, India, *****PG and Research Department of Physics, Chikkaiah Naicker College, 638004, Erode, India	Physics	Surface Engineering and Applied Electrochemistry	2020	19348002	View
Tamarind seed polysaccharide biopolymer-assisted synthesis of spinel zinc iron oxide as a promising alternate	P. Perumal, T. Kiruthika,P. Sivaraj, D. Lakshmi	*Materials Research Center, Department of Physics, NGM College, Pollachi, 642001, India, **Luminescence and Solid State Ionics Laboratory, Department of Physics, Bharathiar University, Coimbatore, 641046, India,	Physics	Journal of Materials Science: Materials in Electronics	2020	0957- 4522	View

anode material for lithium-ion batteries		Department of Physics, Bharathiar University, Coimbatore, 641046, India					
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