

Patents – Physics PDEU

Title of Investigation	Patent Type	Application Number	Status (Published/Granted)	Date of Publishing/Grant
Compact and Lightweight Cryostat for Optoelectronic Measurements of Thin Films and Devices	Design	333619-001	Published	20/11/2020
Development of an Artificial Nociceptor on a Biodegradable Substrate	Process	202521037104 A	Published	December 2025
Methodology for the Synthesis of Lead-Free Low-Dimensional Hybrid Perovskites and Memristor Devices on Biodegradable Paper Substrates	Process	202521039344 A	Published	October 2025
Copper Silicate Chemobrionic-Based Memristor Device.	Process	202421010847 A	Published	September 2024
Method for the Development of Memristors Using Dion–Jacobson Hybrid Perovskites.	Process	202421010840	Published	September 2024
Synthesis of Potassium Lead Triiodide (KPbI ₃) and Fabrication of a Memristor	Process	202521037097 A	Published	November 2023
Non-Newtonian Bio-Liquid Electrolyte-Based Memristor Devices	Process	202321018067 A	Published	July 2023
Perovskite Structure, Process for Production, and Use Thereof.	Process	10202002237T	Granted	
Halide Perovskite Film, Solar Cell Including, and Method of Forming the Same.	Process	PAT/152/16/19/PCT-CN	Granted	
A Photolithographic Process for the Preparation of OLED Displays.	Process	377474	Granted	
The cost effective and highly conductive HB graphite paint for printing electronics	Process	202321037917 A	Granted	08/12/2023
Novel SolvoThermal Synthesis of GGAG:Ce microparticles For Enhanced Scintillation	Process		Filed	3 Nov 2023
Method for Preparing Rare-earth oxide (REO)/Conjugate Polymer nanocomposite for Electrical Energy Storage (EES) Device	Process		Published	2 JUNE 2023
Method of synthesizing photoluminescent and radioluminescent CsI:Tl microcrystals by an antisolvent	Process		Published	2 JUNE 2023

approach for scintillator application				
Two single crystals based phoswich detector for discriminating various kinds of radiation	Process	10942283	Granted	Mar 9, 2021
Production of Ultra Low sulfurbase oil using ultrasonic assisted extractive/oxidated desulfurization process: Experimental investigation, optimization and validation	Process	202221029657A	Granted	2023
Photo-Electro Coagulation System For Wastewater Treatment	Process	Patent No. 415582-001 Serial No.: 173436	Granted	26/06/2024
Seaweed Cellulose Based Paper Super Capacitor	Process	202221068068 Patent Number: 511430	Granted	09/12/2022
Device For Measuring Solar Energy Production	Process	415558-001 Serial No.: 197634	Granted	24/04/2025
A Seaweed Cellulose Based Paper Battery	Process	202321041215 A	Filed	01/09/2023
Hybrid Electrocoagulation-Photocatalytic System For On-Site Treatment Of Textile Effluent	Process	202321037920 A	Filed	08/12/2023
Method Of Synthesizing CuO/TiO ₂ /POLYINDOLE (CTPIN) Nano Composite Catalytic Material For Solar Hydrogen Generation In Photovoltaic-Electrochemical (PV-EC) Coupled Membrane Less Electrolyzer	Process	202321037920 A	Filed	15/12/2023
Method For Preparing Rare-Earth Oxide (REO)/Conjugate Polymer Nano-Composite For Electrical Energy Storage	Process	202321038057 A	Filed	15/12/2023
Method Of Synthesizing Photoluminescent And Radioluminescent Cs:Ti Microcrystals By An Antisolvent Approach For Scintillator Application	Process	202321037920 A	Filed	15/12/2023
Novel Solvo Thermal Synthesis Of GGAG:Ce Microparticles For Enhanced Scintillation	Process	202321075001 A	Filed	16/08/2024
Method Of Fabrication Of Hybrid DION-JACOBSON Perovskite-		202421012235 A	Filed	13/09/2024

Based Multifunctional Self-Rectifying Memristor				
Testing device for measurement of light response of Luminescent Solar Concentrator system	Process	202421090459	Filed	21 Nov, 2024
Efficient Energy Harvesting Using Rare-Earth Doped Fluorides and Oxides Nanoparticles	Process		Filed	2025
Boosting Hydrogen Evolution Efficiency Using CuO/TiO ₂ /PPy in Alkaline Electrolytes Under Diffused Light	Process		Filed	2025
Laser Based Solid State Lighting Device for White Light Generation and Method Thereof	Process	201811035300	Granted	28 March 2024
Single Tower with Mirror Reflection	Process	343150-001	Granted	13 March 2023
Double Tower with Mirror Reflection	Process	343151-001	Granted	13 March 2023
Triple Tower with Mirror Reflection	Process	343152-001	Granted	09 March 2023
Base for Mechanical Tracking Solar Tower	Process	343153-001	Granted	27 January 2023
Synthesis of Potassium Lead Iodide (KPbI ₃) and Fabrication of Memristor	Process	202521037097	Filed	
Development of Artificial Nociceptor on Biodegradable Substrate	Process	202521037104	Filed	
Methodology for Synthesis of Lead-Free Low Dimension Hybrid Perovskite and Memristor Device on Biodegradable Paper Substrate	Process	202521039344	Filed	
Thin Film Cupric Oxide Photocathode and Method of Manufacturing The Same	Process	961/MUM/2015	Granted	22/04/2024
A Process for Electro deposition of Silicon Nano- Spheres	Process	TEMP/E-1/16748/2017-MUM	Granted	17/02/2020
Nanostructured Metal Oxide Particles and Process Thereof	Process	TEMP/E-1/844/2019-MUM	Granted	23/01/2025
A process for developing Cu ₂ SnS ₃	Process	TEMP/E-1/543/2019-MUM	Granted	20/07/2023
A Self-standing Electrode and Process Thereof	Process	TEMP/E-1/13762/2023-MUM	Published	07/2024
Process for developing CuFe ₂ O ₄ -Fe ₂ O ₃ nanocomposite magnetic photocatalyst	Process	202321038025	Filed	15/12/2023