

1. Muthu Senthil Pandian, Sunil Verma, P Karuppasamy, P Ramasamy, VS Tiwari, AK Karnal., 2021. Unidirectional crystal growth of L-alanine doped triglycine sulphate crystals along [010] polar direction in ferroelectric and paraelectric temperature ranges, and their comparative characterizations. *Materials Research Bulletin*, 134, 111118.
2. MW Carry, MS Pandian, P Ramasamy., 2020. Top-seeded solution growth and investigation of electrical and energy storage performance of pure and doped $(1-x)$ Na 0.5 Bi 0.5 TiO 3- x BaTiO 3 ferroelectric single crystals. *Journal of Materials Science: Materials in Electronics*, 16, pp. 13714-13723.
3. V Mohankumar, N Karunagaran, MS Pandian, P Ramasamy., 2020. Density functional theory calculations and Hirshfeld surface analysis of propyl-para-hydroxybenzoate (PHB) for optoelectronic application. *Materials Science-Poland*, 38 (3), pp.386-393.
4. MW Carry, K Ramachandran, A Raja, MS Pandian, P Ramasamy., 2020. Bulk growth, structural and electrical properties of $(1-x)$ Na0. 5Bi0. 5TiO3- x BaTiO3 piezoelectric single crystals by top seeded solution growth method. *Materials Letters*, 276, 128248.
5. P Pounraj, P Ramasamy, MS Pandian., 2020. The influence of π -linkers configuration on properties of 10-hexylphenoxazine donor-based sensitizer for dye-sensitized solar cell application–Theoretical approach. *Journal of Molecular Graphics and Modelling*, 102, 107779.
6. P Karuppasamy, DJ Daniel, HJ Kim, MS Pandian, P Ramasamy., 2020. Studies on semi-organic $(C_8H_{11}NO)_2 [ZnCl_4]$ single crystal for nonlinear optical (NLO) applications. *Journal of Crystal Growth*, 535, pp.125528.
7. KB Bhojanaa, S Kannadhasan, N Santhosh, P Vijayakumar, M Senthil Pandian, P Ramasamy, A Pandikumar., 2020. Enhanced electrochemical and photovoltaic performance for MoO3 nanorods at different calcination temperature based counter electrode in Pt-free dye-sensitized solar cells applications. *SN Applied Sciences*, 10, pp.1-9.
8. V Mohankumar, P Pounraj, MS Pandian, P Ramasamy., 2019. Effect of Flavone and Isoflavone in the Triphenylamine-Based Sensitizers for Dye-Sensitized Solar Cell Applications: DFT and TD-DFT Approach. *Silicon*, 3, pp.1205-1220.
9. V Mohankumar, P Pounraj, MS Pandian, P Ramasamy., 2019. Tuning the lifetime from molecular engineering of carbazole donor based metal-free organic dyes for dye sensitized solar cells–A computational approach. *Journal of Molecular Structure*, 1195, pp.494-505.
10. P Karuppasamy, T Kamalesh, MS Pandian, P Ramasamy, S Verma., 2019. Growth of high-quality organic single crystal of 2-aminopyridinium 4-nitrophenolate 4-nitrophenol (2AP4N) by a novel Rotational Sankaranarayanan–Ramasamy (RSR) method. *Journal of Crystal Growth*, 518, pp.59-72.
11. K Sundaramoorthy, SP Muthu, R Perumalsamy., 2018. Enhanced performance of 4, 4'-bipyridine-doped PVDF/KI/I 2 based solid state polymer electrolyte for dye-sensitized solar cell applications. *Journal of Materials Science: Materials in Electronics*, 29 (21), pp.18074-18081.

12. S Kotteswaran, MS Pandian, P Ramasamy., 2018. Synthesis, optical, electrochemical and photovoltaic properties of donor modified organic dyes for dye-sensitized solar cell (DSSC) applications. *Journal of Materials Science: Materials in Electronics*, 29 (8), pp.6672-6678.
13. V Sivasubramani, M Senthil Pandian, K Boopathi, P Ramasamy., 2018. Crystal growth, structural, optical, thermal and dielectric studies of non-linear optical 2-amino-5-nitropyridinium nitrate (2A5NPN) single crystals. *Materials research innovations*, 22 (3), pp.128-136.
14. C Brundha, R Govindaraj, N Santhosh, M Senthil Pandian, P Ramasamy, S Karuppuchamy., 2017. Preparation of one dimensional titanium dioxide nanowires using electrospinning process for dye-sensitized solar cells. *Journal of Materials Science: Materials in Electronics*, 15(28), pp. 11509-11514.
15. P Vijayakumar, MS Pandian, A Pandikumar, P Ramasamy., 2017. A facile one-step synthesis and fabrication of hexagonal palladium-carbon nanocubes (H-Pd/C NCs) and their application as an efficient counter electrode for dye-sensitized solar cell (DSSC). *Ceramics International*, 11(43), pp. 8466-8474.
16. K Veerathangam, MS Pandian, P Ramasamy., 2017. Photovoltaic performance of Ag-doped CdS quantum dots for solar cell application. *Materials Research Bulletin*, 94, pp.371-377.
17. K Pichan, SP Muthu, R Perumalsamy., 2017. Crystal growth and characterization of third order nonlinear optical piperazinium bis (4-hydroxybenzenesulphonate)(P4HBS) single crystal. *Journal of Crystal Growth*, 473, pp.39-54.
18. P Karuppasamy, V Sivasubramani, MS Pandian, P Ramasamy., 2016. Growth and characterization of semi-organic third order nonlinear optical (NLO) potassium 3, 5-dinitrobenzoate (KDNB) single crystals. *RSC advances*, 6 (110), pp.109105-109123.
19. Vijayakumar Paranthaman, Senthil pandian Muthu, Pandikumar Alagarsamy, Huang nay Ming, Ramasamy Perumalsamy., 2016. Influence of zirconium dioxide and titanium dioxide binders on the photovoltaic performance of dye sensitized solar cell tungsten carbide nanorods based counter electrode. *Electrochimica Acta*, 211, pp. 375-384.
20. N Santhosh, R Govindaraj, MS Pandian, P Ramasamy, S Mukhopadhyay., 2016. Mesoporous TiO₂ microspheres synthesized via a facile hydrothermal method for dye sensitized solar cell applications. *Journal of Porous Materials*, 23 (6), pp.1483-1487.
21. V Sivasubramani, SA Britto Dhas, M Senthil Pandian, P Ramasamy., 2016. Growth of organic nonlinear optical (NLO) ammonium D, L-tartrate (AMT) single crystal by conventional and unidirectional method and its characterization. *Materials Research Innovations*, 20 (1), pp.67-75.
22. V Sivasubramani, MS Pandian, P Ramasamy., 2016. Studies on 2-amino-5-nitropyridinium nitrate (2A5NPN): A semi-organic third order nonlinear optical single crystal. *AIP Conference Proceedings*, 1731 (1), pp.100007
23. R Govindaraj, M Magesh, M Senthil Pandian, P Ramasamy, Sumita Mukhopadhyay., 2016. Nanorods and nanoparticles of titanium dioxide and their use in dye sensitized solar cells. *AIP Conference Proceedings*, 1731 (1), pp.050111
24. S Kotteswaran, M Senthil Pandian, P Ramasamy., 2016. Synthesis of 2-cyano 3-(4 dimethylaminophenyl) prop 2-enoic acid dye derived from 4-

dimethylaminobenzaldehyde and methyl cyanoacetate and its properties. *Materials Research Innovations*, 20 (2), pp.112-116.