



Journal & Book Chapter

2021

1. A. Nawaz, **P.Saravanan***, Significance of rod shape transformation of Tetrahedral TiO₂ under thermal influence for enhanced solar photocatalysis. *Research on Chemical Intermediates*. Accepted (IF:2.262) #*Light Driven Nanomaterial's*
2. U. Sharma, S. Shalini, S. Basu, **P. Saravanan***, M, Jang Active layer modification of commercial nanofiltration membrane using CuBTC/PVA matrix for improved surface and separation characteristics, *Journal of Applied Polymer Science*, DOI: 10.1002/app.50508 (IF:2.52) #*Membranes*
3. A. Nawaz, A. Kuila, N S Mishra, K.H. Leong, L.C.Sim, **P. Saravanan***, M,Jang Challenges and implication of full solar spectrum driven photocatalyst, *Reviews in Chemical Engineering*, doi.org/10.1515/revce-2018-0069 (IF:5.315) #*Light Driven Nanomaterial's*
4. J.Y. Tai, K.H. Leong, **P Saravanan**, S.T. Tan, W.C. Chong L.C. Sim Facile green synthesis of fingernails derived carbon quantum dots for Cu²⁺ sensing and photodegradation of 2, 4-dichlorophenol. *Journal of Environmental Chemical Engineering*, 104622 (IF:4.3) #*Light Driven Nanomaterial's*
5. C.E.Choong, K.T. Wong, S.B. Jang, **S.Pichiah**, C. Park, S.H Kim, B.H. Jeon, J.Y.choi; Y.Yoon. Granular Mg-Fe-layered double hydroxide prepared by dual polymers: Insights into synergistic removal of As(III) and As(V). *Journal of Hazardous Materials*. 403, 123883 (IF: 9.038). #*Nanoadsorbent*

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6. A, Rani, **P. Saravanan***, M. Jang. Recent progress on visible active nanostructured energy materials for water split generated hydrogen. *Journal of Nanostructure in Chemistry*. doi.org/10.1007/s40097-020-00363-9 In press (IF4.077) #*Light Driven Nanomaterial's*
7. P. Mukherjee &**P. Saravanan*** Graphite nanopowder functionalized 3-D acrylamide polymeric anode for enhanced performance of microbial fuel cell, *International Journal of Hydrogen Energy*, In press (IF:4.939) #*Water-Energy Nexus*
8. A. Kuila, **P. Saravanan***, Intramolecular orbital engineered hetero bi-metallic Ce-Fe MOF with reduced transition energy and enhanced visible light property. *Applied Organometallic Chemistry*. 34 (8), e5728. (IF:3.14) #*Light Driven Nanomaterial's*
9. P. F. Lim, K. H. Leong, L. C.Sim, W.D Oh, Y.H. Chin, **P. Saravanan**, C.M. Dai Mechanism insight of dual synergistic effects of plasmonic Pd-SrTiO₃ for enhanced solar energy photocatalysis. *Applied Physics A* 126, 550 (2020). (IF:1.81) #*Light Driven Nanomaterial's*
10. A. Nawaz, **P.Saravanan***, C-Dots composited TiO₂ nanorods for enhanced quantum efficiency under direct sunlight. *RSC Advances*, 19490-19500 (IF:3.119) #*Light Driven Nanomaterial's*
11. C.H.Hak, K.H.Leong, Y.H. Chin, **P.Saravanan**, S.T. Tan, W.C.Chong, L.C. Sim Water hyacinth derived carbon quantum dots and g-C₃N₄ composites for sunlight driven photodegradation of 2,4-dichlorophenol, *SN Applied Sciences* 2, 1030 #*Light Driven Nanomaterial's*
12. L C Sim, K S Koh, K H Leong, Y H Chin, A A Aziz, **P. Saravanan** In situ growth of g-C₃N₄ on TiO₂ nanotube arrays: Construction of heterostructures for improved



- photocatalysis properties, *Journal of Environmental Chemical Engineering* 8 (1), 103611(IF:4.3) #*Light Driven Nanomaterial's*
13. JJ Ng, KH Leong, LC Sim, WD Oh, C Dai, P Saravanan *Chapter 10: Environmental remediation using nano-photocatalyst under visible light irradiation: the case of bismuth phosphate*, Nanomaterials for Air Remediation, A volume in Micro and Nano Technologies 193-207, ISBN 978-0-12-818821-7, Elsevier #*Light Driven Nanomaterial's 2019*
 14. Sim, L. C., Khor, J. M., Leong, K. H., & Saravanan, P. Green Carbon Dots for Metal Sensing. *Materials Science Forum*, 962, 36-40. #*Light Driven Nanomaterial's*
 15. L.C.Sim, J.J.Lee, K.H.Leong, Y.H.Chin, P.Saravanan One Pot Synthesis of Pineapple Juice Derived - Carbon Quantum Dots and TiO₂ Composite for Solar Light Active Photocatalysis, *International Journal of Biomass and Renewables*, 8, 9-16 #*Light Driven Nanomaterial's*
 16. P.F.Lim, K.H.Leong, L.C.Sim, J.L.Wong, P. Saravanan, A.A. Aziz, *Chapter 2: Perovskite Oxide-Based Photocatalysts for Excellent Visible Light-Driven Photocatalysis and Energy Conversion* Plant Nanobionics: Volume 2, Approaches in Nanoparticles Biosynthesis and Toxicity (Nanotechnology in the Life Sciences) [Editor: Dr Ram Prasad], Springer; 1st ed. 2019 edition (July 21, 2019), ISBN-10: 3030163784, pp35-54. #*Light Driven Nanomaterial's*
 17. A.Nawaz , A. Kuila , A. Rani , N.S. Mishra, L.C. Sim , K.H. Leong, P. Saravanan* , *Chapter6: Industrial Applications of Nanomaterial*, Industrial Application of Light Driven [Editors: Sabu Thomas Yves Grohens Yasir Beeran Pottathara], 151-179, Elsevier, ISBN: 9780128157497, #*Light Driven Nanomaterial's*
 18. L.C. Sim, J.Y. Tai, J.M. Khor, J.L.Wong, J.Y. Lee, K.H. Leong, P. Saravanan, A.A. Aziz, *Chapter 1: Carbon Dots from Green Precursors with Amplified Photoluminescence: Synthesis, Characterization and Its Application*, Plant Nanobionics: Volume 2, Approaches in Nanoparticles Biosynthesis and Toxicity (Nanotechnology in the Life Sciences) [Editor: Dr Ram Prasad], Springer; 1st ed. 2019 edition (July 21, 2019), ISBN-10: 3030163784 #*Light Driven Nanomaterial's*
 19. A. Nawaz., S Singh., S.Pichiah* A real time analysis and statistical validation for black carbon aerosol from coal seam of eastern *Journal of Earth System Science*, 128,128 (IF:1.423) #*Air Pollution*
 20. P.Mukherjee, A.Rani, P.Saravanan*, *Chapter4: Polymeric Materials for 3D Bioprinting*, 3D Printing Technology in Nanomedicine 1st Edition [Editors: Dr. Nabeel Ahmad, Dr. P. Gopinath and Prof. Rajiv Dutta], ISBN: 9780128158906 Elsevier 2019 #*Biomaterials*
 21. S. Sharmini, K.H. Leong; T.K. Wong; G. Lee, S.Pichiah, I.W Na, B.H. Jeon, Y.Yoon; M. Jang, Sonophotocatalytic degradation of Bisphenol A and its intermediates with graphitic carbon nitride, *Environmental Science and Pollution Research*, 26 (2), 1082–1093. (IF:3.056) #*Sonochemistry*
 22. K. H. Leong, J.Q. Lee, A. Ashok Kumar, L. C. Sim, S. Pichiah. Immobilising TiO₂ nanoparticle onto glass substrates through a facile technique for photocatalytically self-cleaning of indoor air pollutant. *Malaysian Journal of Analytical Sciences*, 23 (1), 90-99. #*Light Driven Nanomaterial's*



23. P.Mukherjee, **P.Saravanan*** Perspective view on materialistic, mechanistic and operating challenges of Microbial Fuel Cell on commercialization and their way ahead. *ChemistrySelect*. 4 (5), 1601-1612. (IF: 1.811). # *Microbial Fuel Cell*
24. M. Vafaeifarda S. Ibrahim, K.T. Wong, P. Pasbakhsh, **S. Pichiah**, J. Choi, Y.Yoon, M.Jang. Novel self-assembled 3D flower-like magnesium hydroxide coated granular polyurethane: Implication of its potential application for the removal of heavy metals. *Journal of Cleaner Production*. 216, 495-503. (IF:7.246) #*Nanoadsorption*
25. R. Lim, K.H. leong, L.C. Sim, A.A.Azrina, **P.Saravanan** Amalgamation of N-graphene quantum dots with nanocubic like TiO₂: An insight study of sunlight sensitive photocatalysis *Environmental Science and Pollution Research*, 26 (4), 3455–3464 (IF: 3.056) #*Light Driven Nanomaterial's*
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29. J.Y.Tai, K.H. Leong, P. Saravanan, L.C. Sim, Bioinspired Synthesis of Carbon Dots/g-C₃N₄ Nanocomposites for Photocatalytic Application **E3S Web of Conferences**, 65, 05015. #*Light Driven Nanomaterial's*
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31. K.H. Leong, S.Y. Fong, P.F. Lim, L.C. Sim, **P. Saravanan** Physical Mixing Of N-Doped Graphene Quantum Dots Functionalized TiO₂ For Sustainable Degradation Of Methylene Blue, *IOP Conference Series: Materials Science and Engineering* 409 (1), 012009. #*Light Driven Nanomaterial's*
32. A.Rani, R.Reddy, U.Sharma, P.Mukherjee, P.Mishra, A.Kuila, L.C.Sim, **P.Saravanan** . A Review on the progress of nanostructure materials for energy harnessing and environmental remediation. *Journal of Nanostructure in Chemistry* 8 (3), 255-291(IF4.077) #*Light Driven Nanomaterial's*
33. Priya Mukherjee, Priyanka Mishra, **P. Saravanan**. Microbial fuel cell: A prospective sustainable solution for energy and environmental crisis. *International Journal of Biosensors & Bioelectronics* 4 (4), 191-193. # *Microbial Fuel Cell*
34. N.S. Mishra., **P. Saravanan**, Review on Synergistic Features of Hexagonal Boron Nitride (White Graphene) as Adsorbent-Photo Active Nanomaterial, *ChemistrySelect*. 3,8023-8034 (IF: 1.811). #*Nanoadsorbent- Light Driven Nanomaterial's*
35. C.H. Hak, L.C. Sim, K.H. Leong, P.F.Lim, Y.H. Chin, **P. Saravanan**, M/gC₃N₄(M= Ag, Au, and Pd) composite: synthesis via sunlight photodeposition and application



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