PANEL OF EXPERT:3

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List of publication for last five years:

TITLE	YEAR
Process optimization, green chemistry balance and technoeconomic analysis of biodiesel production from castor oil using heterogeneous nanocatalyst N Rajendran, B Gurunathan Bioresource Technology, 124347	2020
Optimization and techno-economic analysis of biodiesel production from Calophylluminophyllum oil using heterogeneous nanocatalyst R Naveenkumar, G Baskar Bioresource Technology 315, 123852	2020
Algal biomass as a source for novel oral nano-antimicrobial agent M Vikneshan, R Saravanakumar, R Mangaiyarkarasi, S Rajeshkumar, Saudi Journal of Biological Sciences	2020
I Vikneshan, R Saravanakumar, R Mangaiyarkarasi, S Rajeshkumar, audi Journal of Biological Sciences	2020
Enzyme Biosensors Based on Enzyme Inhibition for Pesticide and Heavy Metal Detection E Cherian, G Baskar Enzyme Inhibition-Environmental and Biomedical Applications 1, 59-72	2020

Product Inhibition in Bioethanol Fermentation: An Overview ER Sathendra, G Baskar, RP Kumar Enzyme Inhibition-Environmental and Biomedical Applications 1, 122-147	2020
Bioethanol production from Codiumtomentosum residue K Gengiah, GLP Moses, G Baskar Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1-10	2020
Contemporary approaches towards augmentation of distinctive heterogeneous catalyst for sustainable biodiesel production A Ravi, B Gurunathan, N Rajendiran, S Varjani, E Gnansounou, A Pandey, Environmental Technology & Innovation, 100906	2020
Anticancer activity of gelatin-asparaginasenanobiocomposite against cervical and brain cancer cell lines G Baskar, NS Sree Journal of Drug Delivery Science and Technology, 101689	2020
Enhanced malic acid production using Aspergillusniger coupled with in situ product recovery J Iyyappan, G Baskar, B Bharathiraja, M Gopinath Bioresource Technology, 123259	2020
Synthesis, characterization and anticancer activity of β-cyclodextrin- Asparaginasenanobiocomposite on prostate and lymphoma cancer cells G Baskar, NS Sree Journal of Drug Delivery Science and Technology 55, 101417	2020
Application of proteometric approach for identification of functional mutant sites to improve the binding affinity of anticancer biologic trastuzumab with its antigen human N Balakrishnan, B Gurunathan, KM Surapaneni Journal of Molecular Recognition 33 (2), e2818	2020
A Biorefinery approach towards development of renewable platform chemicals from sustainable biomass G Baskar, R Aiswarya, G Kalavathy, A Pandey, E Gnansounou, JK Raman, Refining Biomass Residues for Sustainable Energy and Bioproducts, 135-147	2020

Bioethanol production from woody stem Prosopisjuliflora using thermo tolerant yeast Kluyveromycesmarxianus and its kinetics studies S Sivarathnakumar, J Jayamuthunagai, G Baskar, R Praveenkumar, Bioresource Technology 293, 122060	2019
Refining Biomass Residues for Sustainable Energy and Bioproducts: Technology, Advances, Life Cycle Assessment, and Economics RP Kumar, E Gnansounou, JK Raman, G Baskar Academic Press	2019
International Journal of Advances in Computer Science and Technology F Fouad International Journal 8 (10)	2019
Green Synthesis and Characterization of Cadmium-Tellurium Quantum Dots Using Pomelo Peel Aqueous Extract A Mahalakhsmi, G Baskar Journal of Electronic Materials 48 (9), 5975-5979	2019
Recent advances in microbial production of malic acid from renewable byproducts J Iyyappan, G Baskar, E Gnansounou, A Pandey, JK Raaman, Reviews in Environmental Science and Bio/Technology, 1-17	2019
Ultrasonic assisted extraction of oil from castor seeds: optimization using response surface methodology, extraction kinetics and characterization R Naveenkumar, G Baskar Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1-12	2019
Production of biodiesel from pork fat using alumina-doped calcium oxide nanocomposite as heterogeneous catalyst E Cherian, D Yazhini, M Victor, G Baskar Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1-10	2019
Production of bioethanol from lignocellulosic banana peduncle waste using Kluveromycesmarxianus ER Sathendra, G Baskar, R Praveenkumar Journal of Environmental Biology 40 (4), 769-774	2019

Synergism of clay with zinc oxide as nanocatalyst for production of biodiesel from marine Ulvalactuca	2019
G Kalavathy, G Baskar	
Bioresource technology 281, 234-238	
Process optimization and kinetic analysis of malic acid production from crude glycerol using	2019
Aspergillusniger	
J Iyyappan, B Bharathiraja, G Baskar, E Kamalanaban Bioresource technology 281, 18-25	
Biodiesel production from Calophylluminophyllum oil using zinc doped calcium oxide (Plaster of	2019
Paris) nanocatalyst	2017
R Naveenkumar, G Baskar Bioresource technology 280, 493-496	
Bioresource technology 200, 493-490	
Synthesis, characterization and anticancer activity of selenium nanobiocomposite of l-asparaginase	2019
G Baskar, K Lalitha, GB George Bulletin of Materials Science 42 (1), 4	
Dunctin of Materials Science 42 (1), 4	
Lineae Eventionalized Magnetic Nanabiacotalyst for Transactarification of Waste cooking oil into	2019
Lipase Functionalized Magnetic Nanobiocatalyst for Transesterification of Waste cooking oil into Biodiesel	2019
G Baskar, R Aiswarya	
Immobilized Biocatalysts in Bioethanol Production: Scale-up Opportunities for Commercialization	2019
E Cherian, G Baskar	
Horizons in Bioprocess Engineering, 241-262	
Madhucaindica seeds: A Potential Source for Industrial Production of Biodiesel G Baskar	2019
International Journal of Industrial Engineering 3 (2), 11-14	
Department of Biotechnology, St. Joseph's College of Engineering, Chennai, India	2019
G Baskar, G Kalavathy, R Aiswarya, IA Selvakumari	_01/
Advances in Eco-Fuels for a Sustainable Environment, 187	
Advances in bio-oil extraction from nonedible oil seeds and algal biomass	2019
G Baskar, G Kalavathy, R Aiswarya, IA Selvakumari	
Advances in Eco-Fuels for a Sustainable Environment, 187-210	

Applications of asparaginase in food processing G Baskar, R Aiswarya, S Renganathan Green Bio-processes, 83-98	2019
Bioethanol production from palm wood using Trichodermareesei and Kluveromycesmarxianus ER Sathendra, G Baskar, R Praveenkumar, E Gnansounou Bioresource technology 271, 345-352	2019
Malic acid production from biodiesel derived crude glycerol using morphologically controlled Aspergillusniger in batch fermentation J Iyyappan, G Baskar, B Bharathiraja, R Saravanathamizhan Bioresource technology 269, 393-399	2018
Synthesis, characterization and synergistic activity of cerium-selenium nanobiocomposite of fungal l-asparaginase against lung cancer G Baskar, K Lalitha, R Aiswarya, R Naveenkumar Materials Science and Engineering: C 93, 809-815	2018
Advances in bio-oil extraction from nonedible oil seeds and algal G Baskar, G Kalavathy, R Aiswarya, IA Selvakumari Advances in Eco-Fuels for a Sustainable Environment, 187	2018
Optimization and kinetics of ultrasonic assisted biooil extraction from Madhucaindica seeds G Baskar, R Naveenkumar, N Mohanapriya, R Aiswarya Industrial Crops and Products 124, 954-959	2018
A novel approach for extraction of algal oil from marine macroalgaeUlvafasciata T Veeranan, R Kasirajaan, B Gurunathan, R Sahadevan Renewable Energy 127, 64-73	2018
Ultrasonic assisted green synthesis of Fe and Fe/Zn bimetallic nanoparticles for invitro cytotoxicity study against HeLa cancer cell line K Sathya, R Saravanathamizhan, G Baskar Molecular biology reports 45 (5), 1397-1404	2018
Overview on mitigation of acrylamide in starchy fried and baked foods G Baskar, R Aiswarya Journal of the Science of Food and Agriculture 98 (12), 4385-4394	2018

Green synthesised iron and iron-based nanoparticle in environmental and biomedical application:— a review S Karunakaran, S Ramanujam, B Gurunathan IET nanobiotechnology 12 (8), 1003-1008	2018
ANN modeling for scale-up of green synthesis of iron oxide nanoparticle and its application for decolorization of dye effluent K Sathya, R Saravanathamizhan, G Baskar Desalin Water Treat 121, 158-165	2018
Microalgae—a source for third-generation biofuels G Baskar, S Soumiya, R Aiswarya, S Renganathan Bioprocess Engineering for a Green Environment, 297-306	2018
Gold nanoparticle mediated delivery of fungal asparaginase against cancer cells G Baskar, BG Garrick, K Lalitha, M Chamundeeswari Journal of Drug Delivery Science and Technology 44, 498-504	2018
Smanjenjeudjelaakrilamida u prženomčipsu od banana pomoćuimobiliziraneasparaginazeizoliraneizplijesni A Ravi, B Gurunathan Food Technology and Biotechnology 56 (1), 51-57	2018
Acrylamide mitigation in fried KochchiKesel chips using free and immobilized fungal asparaginase A Ravi, B Gurunathan Food technology and biotechnology 56 (1), 51-57	2018
Malic acid production by chemically induced Aspergillusniger MTCC 281 mutant from crude glycerol J Iyyappan, B Bharathiraja, G Baskar, J Jayamuthunagai, S Barathkumar Bioresource technology 251, 264-267	2018
Biodiesel production from castor oil using heterogeneous Ni doped ZnOnanocatalyst G Baskar, IAE Selvakumari, R Aiswarya Bioresource technology 250, 793-798	2018

Enzymatic mitigation of acrylamide in fried potato chips using asparaginase from Aspergillusterreus R Aiswarya, G Baskar International Journal of Food Science & Technology 53 (2), 491-498	2018
This journal GPA Islam, Z Yaakob, N Anuar, SRP Primandari, JA Ghani, SK Nayak,	2018
Thermal modeling and performance of a single slope passive solar still with phase change material. C Nithyanandam, G Baskar, R Umamaheswari Desalination and Water Treatment 103, 1-10	2018
Removal of methylene blue using polyacrylonitrile yarn waste/carboxylic group functionalized multiwall carbon nanotube nanofibrous composite. S Swaminathan, NM Imayathamizhan, A Muthumanickkam, G Baskar Desalination and Water Treatment 113, 244-253	2018
Acrylamide mitigation in fried kochchikesel chips using free and immobilized fungal asparaginase. R Aiswarya, G Baskar Food Technology and Biotechnology 56 (1), 51-57	2018
Evaluation of Catharanthusroseus Biodiesel as an Alternative Fuel to study the Performance and Emission Characteristics via 4-S Internal Combustion Engine M Karthikeyan, G Baskar, S Renganathan International Journal of Industrial Engineering 2 (7), 160-166	2018
of acrylamide in starchy fried and baked foods Jour nal of the Science of Food and Agriculture (2018) doi. org/10. 1002/jsfa. 9013 [published online before print: 23 March 20182]. G Baskar Proceedings, Vol 39 (1), 3-8	2018
Nanobiocomposite of fungal asparaginase and magnetic nanoparticle: Synthesis, Characterization and Anticancer Activity against MCF-7 and HT-29 Cancer cell lines G Baskar, GB George	2018

	I
Production of Biodiesel from Cordiamyxa seeds Biooil by Alkali-catalyzed Transesterification Reaction	2018
M Karthikeyan¹, G Baskar, S Renganathan International Journal of Industrial Engineering 2 (9), 197-201	
Kinetic Modeling and Evaluation of Optimal Growth, Lipid Enhancement and Harvesting Techniques of Green Microalgae Scenedesmus species G Baskar, IAE Selvakumari	2018
Microbial production of L-asparaginase and its immobilization on chitosan for mitigation of acrylamide in heat processed carrot slices R Aiswarya, G Baskar NISCAIR-CSIR, India	2018
Synthesis and Characterization of Cerium Oxide Nanobiocomposite of Asparaginase for Curbing Lung Cancer G Baskar, K Lalitha Int. J. Mod. Sci. Technol. 3, 104-111	2018
Marine Algae–Future Source of Biofuels G Baskar, IAE Selvakumari, R Aiswarya	2018
Bioremediation of Industrial and Municipal Wastewater Using Microalgae B Gurunathan, IAE Selvakumari, R Aiswarya, S Renganthan Bioremediation: Applications for Environmental Protection and Management	2018
Genetically modified organisms and its impact on the enhancement of bioremediation NM Kumar, C Muthukumaran, G Sharmila, B Gurunathan Bioremediation: Applications for Environmental Protection and Management, 53-76	2018
Bioremediation: applications for environmental protection and management SJ Varjani, AK Agarwal, E Gnansounou, B Gurunathan Springer	2018
Integration of Lignin Removal from Black Liquor and Biotransformation Process K Tamilarasan, PS Sellamuthu, B Gurunathan Bioremediation: Applications for Environmental Protection and Management, 77-97	2018

Introduction to environmental protection and management SJ Varjani, AK Agarwal, E Gnansounou, B Gurunathan	2018
Bioremediation: Applications for Environmental Protection and Management, 1-6	
Bioremediation of Volatile Organic Compounds in Biofilters	2018
M Gopinath, RH Pulla, KS Rajmohan, P Vijay, C Muthukumaran,	2010
Bioremediation: Applications for Environmental Protection and Management	
Bioremediation. Applications for Environmental Protection and Management	
Biomining of Natural Resources	2018
PS Kumar, PR Yaashikaa, G Baskar	2010
Waste Bioremediation, 313-342	
waste Bioremediation, 313-342	
Microbial transformation of heavy metals	2018
ER Sathendra, RP Kumar, G Baskar	2010
Waste Bioremediation, 249-263	
Waste Dioremediation, 217–200	
Introduction to waste bioremediation	2018
SJ Varjani, E Gnansounou, G Baskar, D Pant, ZA Zakaria	2010
Waste Bioremediation, 1-5	
Waste Bioreineanation, 1-5	
Waste bioremediation	2017
SJ Varjani, E Gnansounou, B Gurunathan, D Pant, ZA Zakaria	
Springer	
Production of biodiesel from waste cooking oil using MgMoO ₄ -supported TiO ₂ as a heterogeneous	2017
catalyst	
M Karthikeyan, S Renganathan, G Baskar	
Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 39	
Ultrasound assisted phytosynthesis of iron oxide nanoparticle	2017
K Sathya, R Saravanathamizhan, G Baskar	
UltrasonicsSonochemistry 39, 446–451	
• /	
ProsopisJuliflora Bark-An Alternate Feedstock in the Production of Bioethanol Using Thermo	2017
Tolerant Yeast KluyveromycesMarxianus	
S Sivarathnakumar, G Baskar, B Bharathiraja, RP Kumar,	
Biosciences Biotechnology Research Asia 14 (3), 945-951	

Cost Analysis of Solar Cabinet Dryer for Drying Dates NJ Selvi, G Baskar, A Singh Biosciences Biotechnology Research Asia 10 (3), 1055-1061	2017
biosciences biotechnology Research Asia 10 (5), 1055-1001	
Extraction of non-edible oil from Catharanthusroseus seeds and kinetics on oil extraction M Karthikeyan, S Renganathan, G Baskar, S Nambirajan Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 39	2017
Mineralization of aromatic amines liberated during the degradation of a sulfonated textile colorant using Klebsiellapneumoniae strain AHM MA Kumar, S Poonam, VV Kumar, G Baskar, M Seenuvasan, D Anuradha, Process Biochemistry 57, 181-189	2017
Optimization and kinetics of biodiesel production from Mahua oil using manganese doped zinc oxide nanocatalyst G Baskar, A Gurugulladevi, T Nishanthini, R Aiswarya, K Tamilarasan Renewable energy 103, 641-646	2017
Anticancer Activity of Iron oxide Nanobiocomposite of Fungal Asparaginase G Baskar, J Chandhuru, AS Praveen, KS Fahad International Journal of Modern Science and Technology, Vol. 2, No. 3, 2017	2017
Recent Advances in Heterogeneous Catalysts for Biodiesel Production G Baskar, R Aiswarya, S Soumiya, N Mohanapriya, SR Nivetha	2017
Statistical optimization of l-asparaginase production by E. coli K-12 MTCC 1302 J Iyyappan, B Gurunathan Int J IndEng 1, 178-182	2017
Identification of significant fermentation media components for milk clotting enzyme production by submerged fermentation of Aspergilluscandidus MTCC 1989 G Baskar, DV Sneha, SB Merlin, JA Vidhula International Journal of Industrial Engineering 1 (5), 166-170	2017
Microscopic and Spectroscopic analysis of asparaginase treated fried tapioca chips G Baskar, R Aiswarya, S Subanjalin Joy Int J IndEng 1, 135-140	2017

T C C C C C C C C C C C C C C C C C C C	
Non-edible oil seeds: Potential Source for Biodiesel Production G Baskar, SR Nivetha, N Mohanapriya, R Asiwarya International Journal of Industrial Engineering 1 (6), 183-187	2017
Optimization of microbial milk clotting enzyme production by Aspergilluscandidus MTCC1989 using statistical method G Baskar, DV Sneha, SB Merlin, JA Vidhula International Journal of Industrial Engineering 1 (5), 171-177	2017
Macroalgae: Source for Sustainable Production of Biodiesel S Soumiya, G Baskar International Journal of Industrial Engineering 1 (1), 1-7	2017
Conjugation, labeling and characterization of asparaginase bound silver nanoparticles for anticancer applications G Baskar, K Lalitha, BG Garrick, M Chamundeeswari NISCAIR-CSIR, India	2017
Simultaneous saccharification and fermentation of woody stem Prosopisjuliflora by Zymomonasmobilis for the production of cellulosic ethanol S Sivarathnakumar, G Baskar, R Praveenkumar, B Bharathiraja International Journal of Materials and Product Technology 55, 236–253.	2017
Dehydration kinetics of Musa acuminata in osmotics and microwave drying NJ Selvi, G Baskar, Aruna Singh International Journal of Materials and Product Technology 55, 173-187	2017
Synthesis and characterization of asparaginase bound silver nanocomposite against ovarian cancer cell line A2780 and lung cancer cell line A549 G Baskar, GB George, M Chamundeeswari Journal of Inorganic and Organometallic Polymers and Materials 27 (1), 87-94	2017
Sesbania aculeate biomass hydrolysis using magnetic nanobiocomposite of cellulase for bioethanol production G Baskar, RN Kumar, XH Melvin, R Aiswarya, S Soumya Renewable Energy 98, 23-28	2016
Production of biodiesel from castor oil using iron (II) doped zinc oxide nanocatalyst G Baskar, S Soumiya Renewable Energy 98, 101-107	2016

Microbial abatement of toluene using Aspergillusniger in upflow bioreactor M Gopinath, C Mohanapriya, K Sivakumar, G Baskar, C Muthukumaran, Ecotoxicology and environmental safety 134, 370-376	2016
■ Treatment of Textile Dyes Using Biosorption and Bioaccumulation Techniques S Renganathan, S Panneerselvam, B Gurunathan, V Mani, S Murugan Environmental Sustainability Using Green Technologies, 251-278	2016
Glutaraldehyde-mediated synthesis of asparaginase-bound maghemitenanocomposites: Cytotoxicity against human colon adenocarcinoma cells G Baskar, GB George Asian Pacific Journal of Cancer Prevention 17 (9), 4237-4240	2016
Enhanced pretreatment, characterization and utilization of Prosopisjuliflora stem for bioethanol production S Sivarathnakumar, G Baskar, RP Kumar, B Bharathiraja Management of Environmental Quality: An International Journal	2016
Synthesis of Phytonanocomposite of Zinc Oxide by Ixoracoccinea Linn for Cancer Treatment G Baskar, A Gurugulladevi, T Nishanthini, BG Garrick, R Aiswarya, Journal of Inorganic and Organometallic Polymers and Materials 26 (4), 876-880	2016
Trends in catalytic production of biodiesel from various feedstocks G Baskar, R Aiswarya Renewable and Sustainable Energy Reviews 57, 496-504	2016
Biodegradation of toluene vapor in coir based upflow packed bed reactor by Trichodermaasperellum isolate M Gopinath, C Mohanapriya, K Sivakumar, G Baskar, C Muthukumaran, Environmental Science and Pollution Research 23 (5), 4129-4137	2016
Magnetic nanocomposite of activated charcoal for removal of Congo red dye PK Ramanujam, B Gurunathan, D Viswanathan, S Rajasekar, GB George Management of Environmental Quality: An International Journal	2016
Production and optimization of cellulase from agricultural waste and its application in bioethanol production by simultaneous saccharification and fermentation PK Ramanujam, E Cherian, MD Kumar, G Baskar Management of Environmental Quality: An International Journal	2016

Groundwater quality studies in Koraiyar watershed, Coimbatore district, Tamil Nadu-an Geoinformatic approach J Rajesh, TP Kumar, DSR Murthy, G Baskar, P Masilamani International Journal of Geomatics and Geosciences 7 (2), 143-158	2016
Synthesis of manganese dioxide nanoparticles using co-precipitation method and its antimicrobial activity E Cherian, A Rajan, G Baskar International Journal of Modern Science and Technology 1, 17-22	2016
Synthesis and Characterization of Gold Nanobiocomposite of Asparaginase using Aspergillusterreus G Baskar, J Chandhuru, AS Praveen, K SherazFahad International Journal of Modern Science and Technology 1 (8), 288-295	2016
Biosynthesis of zinc oxide nanoparticles using Aspergillusfumigatus JCF and its antibacterial activity A Rajan, E Cherian, G Baskar Int J Mod SciTechnol 1, 52-7	2016
Role of extrusion technology in food processing and its effect on nutritional values G Baskar, R Aiswarya Intern J of Modern Sci&Techn 1 (1), 1-4	2016
Biodiesel production from pongamia oil using magnetic composite of zinc oxide nanocatalyst G Baskar, S Soumiya, R Aiswarya International Journal of Modern Science and Technology 1 (4), 129-137	2016
Optimization of enzymatic pretreatment and frying conditions for acrylamide mitigation in fried tapioca chips G Baskar, S Subanjalin Joy, R Aiswarya International Journal of Modern Science and Technology 1 (6), 224-229	2016
Bioethanol production by the utilisation of Moringaoleifera stem with sono-assisted acid/alkali hydrolysis approach S Sivarathnakumar, G Baskar, RP Kumar, B Bharathiraja International Journal of Environment and Sustainable Development 15 (4), 392-403	2016

Optimisation and kinetics of biosorption of Coomassie Brilliant Blue G250 dye from synthetic effluent using Pennisetumpurpureumbiosorbent G Baskar, C Sriharini, R Sripriya, SK Pavithra International Journal of Environment and Sustainable Development 15 (3), 241-253	2016
In vitro cytotoxicity of copper oxide nanobiocomposites synthesized by Catharanthusroseus flower extract against breast cancer cell line G Baskar, K Sathivel, GB George J Chem Pharm Sci 9 (1), 211-214	2016
Magnetic nanocomposite of activated charcoal for removal of Congo red dye: equilibrium and kinetic modeling. G Baskar, V Dhanusree, R Shravanthi, GB George Management of Environmental Quality 27 (1), 45-58	2016
Magnetic immobilization and characterization of α -amylase as nanobiocatalyst for hydrolysis of sweet potato starch G Baskar, NA Banu, GH Leuca, V Gayathri, N Jeyashree Biochemical engineering journal 102, 18-23	2015
Characterization of newly isolated strain Aspergillusfumigatus JCF from spoiled jackfruit and optimization of cellulase for bioethanol production using fruit waste E Cherian, MD Kumar, G Baskar Journal of Environmental Biology 36 (5), 1229	2015
Immobilization of cellulase onto MnO2 nanoparticles for bioethanol production by enhanced hydrolysis of agricultural waste E Cherian, M Dharmendirakumar, G Baskar Chinese Journal of Catalysis 36 (8), 1223-1229	2015
Process optimization and kinetics of biodiesel production from neem oil using copper doped zinc oxide heterogeneous nanocatalyst B Gurunathan, A Ravi Bioresource technology 190, 424-428	2015
Fabrication of a Chitosan-Coated Magnetic Nanobiocatalyst for Starch Hydrolysis M Jain, M Sebatini, G Sharmila, C Muthukumaran, G Baskar, Chemical Engineering & Technology 38 (8), 1444-1451	2015

Biodiesel production from waste cooking oil using copper doped zinc oxide nanocomposite as heterogeneous catalyst	2015
B Gurunathan, A Ravi Bioresource technology 188, 124-127	
Mycological synthesis and characterization of silver nanoparticles by Aspergillus species G Baskar, J Chandhuru, KS Fahad, AS Praveen, R Bharathi, S Fyna J Chem Pharm Res 7, 300-306	2015
Nanocatalyst for transesterification of fatty acids into biodiesel G Baskar, R Aiswarya Int. J. Nanobiotechnol 1, 1-4	2015
Optimized production of cellulase using fruit waste and its application in bioethanol production. C Elsa, MD Kumar, G Baskar International Journal of Pharma and Bio Sciences 6 (2)	2015
Anticancer activity of fungal L-asparaginase conjugated with zinc oxide nanoparticles G Baskar, J Chandhuru, KS Fahad, AS Praveen, M Chamundeeswari, Journal of Materials Science: Materials in Medicine 26 (1), 43	2015

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List of publication for last five years:

1. Vadivu, Senthildevi, Karthika, U. (2019). TECHNIQUES OF SPAWN PRODUCTION AND CULTIVATING METHODS OF PLEUROTUS FLORIDA (WHITE OYSTER MUSHROOM). *International Journal of Scientific and Engineering Research*. 3. 8-15.

2. RavulathuNisha, A., Karunakaran, S., Dhanasekaran, S., &RojaBlessy, R. (2015). PRODUCTION AND PURIFICATION OF CELLULASE FROM Trichodermaviride BY OPTIMIZED MEDIUM USING VARIOUS AGROWASTE FOR POULTRY FEED SUPPLEMENT. International Journal Of Engineering Research And Management (IJERM), 2(1).

PANEL OF EXPERTS

PANEL OF EXPERT-5

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Designation : Associate Professor

No. of Publication

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List of publication for last five years:

TITLE		
Xylitol: A Nutritive Sweetener of Natural Origin R Balakrishnaraja Omniscriptum Publishers, Mauritius 1, 105 pages 978-620-2-53173-3	2020	
METHOD OF PRODUCING PREBIOTIC INFUSED EDIBLE FRUIT PRODUCT LG R Rajam, G R Jeevitha, K VasanthRagavan, R Balakrishnaraja IN Patent App. 202,041,016,846	2020	
Methods of Preparation of Plant Energy Drink JB R Balakrishnaraja, R K Sneha, R Sangeetha IN Patent App. 202,041,010,844	2020	
Quality Characteristics and Antioxidant Properties of Bread Supplemented with Iron Rich Black Strap Molasses R Balakrishnaraja, P Pavithra, C Sivapriya, K Saranya, T Vishnu, J Bindhu Indian Journal of Public Health Research and Development 11 (03), 274-279	2020	
Synthesis of Keratinase Enzyme from Sheep Wool for Bio-polishing KKP Selvakumar A, Saravanan D, Balaji S, Balakrishnaraja R Research Journal of Chemistry and Environment 23 (10), 46-49	2019	
Optimization of culture conditions for cellulase production from indigenous soil isolates of Aspergillusfumigatus VM BalakrishnarajaRengaraju, Vidhyadevi U, Selvapriya K, Ranganathan B V Research Journal of Chemistry and Environment 23 (7), 75-80	2019	

Development of Bacterial Biosensor for arsenite Detection in Potable water samples of gangetic Delta SJV R Balakrishnaraja, N Keerthana, R Sivaranjani, V N Logesh, B V Waste Water Management 208, 76 - 96	2019
Optimization of culture conditions for cellulase production from indigenous soil isolates of Aspergillusfumigatus SRKVM BalakrishnarajaRengaraju*, VidhyadeviU ,Selvapriya K, Ranganathan B.V. Research Journal of Chemistry and Environment 23 (7), 75-80	2019
Characterization of fruit Garbage Waste Containing VitisVinifera Seeds MK Balakrishnaraja R, Kavinaya K G Int J of Innovative Technology and Exploring Engineering 8 (2S2), 177-178	2018
Green and sustainable selenium nanoparticles and their biotechnological applications M Sardar, H Alam Green and Sustainable Advanced Materials: Processing and Characterization, 333	2018
IOT BASED FORECASTING DESIDERATUM FOR AGRICULTURAL CROPS USING SENSORS R Balakrishnaraja, R AravindChalapathy, M Oviyaasri IN Patent 63,765	2018
Factorial Optimization of Alkaline phosphatase production from indigenous isolates of phosphate solubilizing bacteria KP G Nadana Raja Vadivu, BalakrishnarajaRengaraju, G.Jothi Lakshmi Journal of Adv Research in Dynamic and Control System 10 (02), 550 - 556	2018
Gc-Ms Analysis of Albizia Amara and Phyla NodifloraEthanolic Leaf Extracts BR Tamilselvi S, DharaniT, Padmini S, Nivetha S, Sangeetha M, Arunava Das International Journal of Recent Technology and Engineering 7 (48), 466	2018
Inquest of the SNP in Cystic Fibrosis – A Bioinformatic Approach AD BalakrishnarajaRengaraju, Keerthana, Akila, K. Pavithra, D. Vinotha, Sri International Journal of Current Microbiology and Applied Sciences 6 (8	2017
FERMENTATIVE PRODUCTION AND STATISTICAL OPTIMIZATION OF ACTIVE PHARMACEUTICAL INGREDIENT, XYLITOL USING NOVEL ISOLATES OF CANDIDA PARAPSILOSIS BKR1 VD BalakrishnarajaRengaraju, Logesh V N INTERNATIONAL RESEARCH JOURNAL OF PHARMACY 8 (7), 52-59	2017

ANTIBACTERIAL ACTIVITY OF BACTERIOCIN PRODUCED FROM LACTOBACILLUS AND LACTOCOCCUS RB ARUNAVA DAS, M E SINDUJA, K HARSHADHA, J BINDHU International Journal of Pharma and Bio Sciences 8 (4), 432-439	2017
Optimization of ethanol production using pretreated corn cob and sugarcane bagasse hydrolysate by BKR1Candida parapsilosis strain BKR1 NR Balakrishnaraja R, Balasubramanian S, Aravindan P, Arulraj A, Selvapriya Journal of Environmental Biology 38 (November 2017), 1357-1363	2017
MOLECULAR CHARACTERIZATION OF METHICILLIN RESISTANT Staphylococcus auerus (MRSA) ISOLATED FROM PUS SAMPLES AD Pavithra V, R Balakrishnaraja, Sangeetha M, Sindhuja K, Ragunanthan R, B INTERNATIONAL RESEARCH JOURNAL OF PHARMACY	2017
DEVELOPMENT AND FORMULATION OF Azospirillumlipoferum AND Pseudomonas fluorescens AS EFFECTIVE BIOLOGICAL AGENTS FOR ENHANCED AGRO-PRODUCTIVITY S TAMILSELVI, A DUTTA, M SINDHU, G MURUGESAN, Bioscience Journal 32 (3), 670-683	2016
Development and formulation of Azospirillumlipoferum and Pseudomonas fluorescens as effective biological agents for enhanced agro-productivity. T Saravanakumar, D Asmita, M Sindhu, GS Murugesan, B Rengaraju Bioscience Journal 32 (3), 670-683	2016
Molecular Identification of Novel Yeast Isolate Associated with Xylitol Production and Its Physicochemical Parameters Optimization B Rengaraju, R Ponnuswamy, S Malayandi, V Lakshminarayanan	2016
Fermentative Production and Characterization of xylitol from indigenous isolate Candida parapsilosis BKR1 DV BalakrishnarajaRengaraju, P Ramalingam Journal of advances in chemistry 12 (7), 4214 - 4218	2016
Studies on antimicrobial activity against malassezia furfur KPK M K S Pavithra, S meenadeviha, R sowmya, M sowparnika, R Balakrishnaraja International journal of Research in Ayurveda and Pharmacy 7 (1), 73 -77	2016

Statistical Optimization of b-1,3 Glucan production from the Novel Strain Bacillus cereus LVK13 (KC 898956) L Vijayakumar, P Ramalingam, S Pavithra, R Balakrishnaraja Journal of pure and applied microbiology 9 (4), 3179-3185	2015
Alimentary exploration in the seeds of Phoenix dactylifera DV BalakrishnarajaRengaraju, SasirekaNallipalayamBalasubramanian Discovery 51 (240), 138-142	2015
Comparison of Xylitol Production from the isolated strain of Candida Sp., in Statistically Optimized modified minimal medium and corncob hydrolyzare medium SN R Balakrishnaraja, P Ramalingam, J S Nithyaa Asian Jr of Microbiol. Biotech. Env. Sc. 17 (spl Issue), 45 - 49	2015
Screening, Purification and Characterization of β-Glucan from a Novel Strain Bacillus cereus LVK13 (KC 898956) V Lakshminarayanan, R Ponnuswamy, B Rengaraju Screening 8 (3), 1156-1162	2015
Synthesis of copolymer from lactic acid-polyethylene terephthalate (LA-PET) copolymerization S Sasidharan, T Achuthan, E Tamilselvan, S Raju, B Rengaraju African Journal of Biotechnology 14 (11), 953-960	2015

PANEL OF EXPERTS

PANEL OF EXPERT-5

Name : Dr. K. Tamilarasan No. of Publication : 35

Designation : Associate Professor

No. of Publication

(for last five years) : 24

Address : Department of Chemical

Engineering, Kattankulathur Campus, SRM Institute of Science and Technology Specialization: Production of Bioenergy from lignocellulosic biomass, Renewable fine chemicals synthesis from Agro-biomass, Photonanocatalyst synthesis for the environmental applications

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List of publication for last five years

- 1. De S, S Mishra, E Poonguzhali, M Rajesh, K Tamilarasan, Fractionation and characterization of lignin from waste rice straw: Biomass surface chemical composition analysis. International journal of biological macromolecules. (Article in press) 2019 (IF 4.7)
- 2. Gunasekaran V, S Ramesh, K Sathiasivan, M Shankar, M Rajesh, K Tamilarasan, Simultaneous organosolv pretreatment and detoxification of agro-biomass for efficient lignin extraction and characterization. Chemical papers. 2019 (IF 1.5)
- 3. Shankar M, PK Chhotaray, R.L.Gardas, K Tamilarasan, M Rajeash, Application of carboxylate protic ionic liquids in simultaneous microalgal pretreatment and lipid recovery from marine Nannochloropsis sp. and chlorella sp. Biomass and Bioenergy. 123, 14-24, 2019. (IF 4.0)
- 4. Elango RK, K Sathiasivan, C Muthukumaran, V Thangavelu, M Rajesh, K Tamilarasan, Transesterification of castor oil for biodiesel production: Process optimization and characterization. Microchemical Journal. 145, 1162-1168, 2019. (IF-3.0)
- 5. Kumar N, S Vijayashankar, P Pasupathi, S Nirmalkumar, E Poonnguzhali, M Rajesh, K Tamilarasan, Optimal extraction, sequential fractionation and structural characterization of soda lignin. Research on Chemical Intermediate. 44, 5403-5413, 2018. (IF-2.0)
- 6. Manoj Kumar N, E Selvarajan, K Tamilarasan, M Rajesh, Purification, biochemical, and thermal properties of fibrinolytic enzyme secreted by Bacillus cereus SRM-001. Preparative Biochemistry and Biotechnology. 48, 34, 2017. (IF-1.36)
- 7. Praveenkumar J, C Muthukumaran, K Tamilarasan, A sequential pretreatment of lignocelluloses in bamboo biomass to fermentable sugars by acid/enzymatic hydrolysis. 3Biotech. 7, 260, 2017. (IF-1.7)
- 8. Felicia K R, C Muthukumaran, G Sharmila, N Manojkumar, K Tamilarasan, R Jaiganesh, Xanthan gum production using jackfruit-seed-powder-based medium: optimization and characterization. 3 Biotech. 7, 248, 2017. (IF-1.7)
- 9. Mukund S, K.C Pratap, AAyushi, L.G Ramesh, K Tamilarasan, M Rajesh, Protic Ionic Liquid-Assisted Cell Disruption and Lipid Extraction from Fresh Water Chlorella and Chlorococcum Microalgae. Algal Research. 25, 228-236, 2017. (IF-4.4)
- 10. Baskar G, A Gurugulladevi, T Nishanthini, R Aiswarya, K Tamilarasan, Optimization and kinetics of biodiesel production from Mahua oil using manganese doped zinc oxide nanocatalyst. Renewable Energy. 103, 641-646, 2017. (IF-5.2)
- 11. Maria S, J Manisha, P Radha, S Kiruthika, K Tamilarasan, Immobilized lipase catalyzing glucose stearate synthesis and their surfactant properties analysis. 3 Biotech. 6, 184, 2016. (IF-1.7)

- 12. Manisha J, S Mariya, P Radha, S Kiruthika, C Muthukumaran, K Tamilarasan, Synthesis, characterization and kinetic analysis of chitosan coated magnetic nanobiocatalyst and its application on glucose oleate ester synthesis. Journal of Molecular Catalysis B: Enzymatic. 128, 1-9, 2016. (IF-2.62)
- 13. Padmanaban S, N Balaji, C Muthukumaran, K Tamilarasan, Statistical optimization of process parameters for exopolysaccharide production by Aureobasidiumpullulans using sweet potato based medium. 3 Biotech. 5, 1067-1073, 2015. (IF-1.7)
- 14. Manisha J, S Mariya, G Sharmila, C Muthukumaran, G Baskar, K Tamilarasan, Fabrication of a Chitosan-Coated Magnetic Nano biocatalyst for Starch Hydrolysis. Chemical Engineering and Technology. 38, 1444-1451, 2015. (IF-2.4).
- 15. Sasidharan S, G Sharmila, C Muthukumaran, K Tamilarasan, M Gopinath, Statistical optimization of critical medium components for biosurfactant production by Bacillus subtilis. Journal of Bioscience and Biotechnology. 4. 123-129, 2015.
- 16. Praveenkumar J, C Muthukumaran, K Tamilarasan. A sequential pretreatment of lignocelluloses in bamboo biomass to fermentable sugars by acid/enzymatic hydrolysis. 3 Biotech. 7,260, 2017. (IF-1.36)
- 17. Felicia Katherine R, C Muthukumaran, G Sharmila, N Manoj Kumar, K Tamilarasan, R Jaiganesh. Xanthan gum production using jackfruit-seed-powder-based medium: optimization and characterization. 3 Biotech. 7, 248, 2017. (IF-1.36)
- 18. Mukund S, K Tamilarasan, M Rajesh. Protic Ionic Liquid-Assisted Cell Disruption and Lipid Extraction from Fresh Water Chlorella and Chlorococcum Microalgae. Algal Research. 25, 228-236, 2017. (IF-3.99)
- 19. Baskar G, A Gurugulladevi, T Nishanthini, R Aiswarya, K Tamilarasan. Optimization and kinetics of biodiesel production from Mahua oil using manganese-doped zinc oxide nanocatalyst. Renewable Energy. 103, 641-646, 2017. (IF-4.35)
- 20. Maria S, J Manisha, P Radha, S Kiruthika, K Tamilarasan. Immobilized lipase catalyzing glucose stearate synthesis and their surfactant properties analysis. 3 Biotech. 6, 184, 2016. (IF-1.36)
- 21. Manisha J, S Mariya, P Radha, S Kiruthika, C Muthukumaran, K Tamilarasan. Synthesis, characterization and kinetic analysis of chitosan-coated magnetic nanobiocatalyst and its application on glucose oleate ester synthesis. Journal of Molecular Catalysis B: Enzymatic. 128, 1-9, 2016. (IF-2.62).
- 22. Manisha J, S Mariya, G Sharmila, C Muthukumaran, G Baskar, K Tamilarasan. Fabrication of a Chitosan-Coated Magnetic Nanobiocatalyst for Starch Hydrolysis. Chemical Engineering and Technology. 38, 1444-1451, 2015. (IF-2.05)
- 23. Padmanaban S, N Balaji, C Muthukumaran, K Tamilarasan. Statistical optimization of process parameters for exopolysaccharide production by Aureobasidiumpullulans using a sweet potato based medium. 3 Biotech. 5, 1067-1073, 2015. (IF-1.36)
- 24. Satheeshkumar S, G Sharmila, C Muthukumaran, K Tamilarasan, M Gopinath. Statistical optimization of critical medium components for biosurfactant production by Bacillus subtilis. Journal of BioScience and Biotechnology. 4, 123-129, 2015.

Book Chapter

25. Tamilarasan K, S Periyarselvam, G Baskar. Integration of lignin removal from black liquor and Bio transformation process. Bioremediation: Applications for Environmental Protection and Management. Springer Nature Singapore pvt Ltd.2018.