



# M.I.E.T. ENGINEERING COLLEGE

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)  
 UG - CSE, EEE & MECH Programs Accredited by NBA, New Delhi.  
 (An ISO 9001:2015 Certified Institution)  
 TRICHY - PUDUKKOTTAI ROAD, TIRUCHIRAPPALLI - 620 007.  
 Email: principalengg@miet.edu, contact@miet.edu  
 Website: - www.miet.edu



Ph: 0431 - 2660 303

### 3.3.2 Number of research papers published per teacher in the Journals notified on UGC website during the last five years

#### INDEX

S.No	Description	Page No. From -To
1	List of research papers published per teacher in the Journals notified on UGC website during the last five years	3-43

#### SUMMARY

Duration	Number of research papers published
2015-2016	50
2016-2017	79
2017-2018	66
2018-2019	94
2019-2020	52
<b>Total</b>	<b>341</b>

#### SCANNED DOCUMENTS FOR THE LIST OF SAMPLE JOURNALS LISTED BELOW

S.No	Academic Year	Title of the Article	Name of the Journal	Name of the Author	Page No. From - To
1	2016-2017	Biosorption of Heavy metals by Clostridium sp bacteria	World Journal of Pharmaceutical Research	Abbas Ali A.	44
2	2017-2018	FT-IR, FT-Raman and UV-Visible Spectral Analysis on (E)-N'-(thiophen-2-ylmethylene) Nicotinohydrazide	Archives in Chemical research	Ramesh Babu N.	45
3	2018-2019	Synthesis and characterization of Bi doped ZnO thin films using SILAR method for ethanol sensor	Materials Letters	Syed Zahirullah S.	46
4	2020-2021	Optimization and thermal analysis of friction stir welding of AA 6061-AA 8011 joints	Materials Testing	Naveen sait A.	47

*[Signature]*  
**PRINCIPAL**  
 M.I.E.T. ENGINEERING COLLEGE  
 GUNDUR, TIRUCHIRAPPALLI-620 007.

5	2017-2018	Synthesis and characterization of high entropy alloy (CrMnFeNiCu) reinforced AA6061 aluminium matrix composite	Mechanics and Mechanical Engineering	Naveen said A.	48
6	2015-2016	Compact photonic crystal integrated circuit for all-optical logic operation	International Journal of Optoelectronics Research Article	Susan Christina X.	49
7	2015-2016	Performance analysis of solar cell antenna (SOLAN) using different material like AgHT-8, AgHT-4 and ITO	International Journal of Applied Engineering Research	Suresh Kumar A.	50
8	2017-2018	Radioactivity in Building Materials of Pudukkottai Geological Region	Earth Syst Environ	Shahul Hameed P.	51
9	2018-2019	Experimental investigation on strengthening of RCC beams by wrapping glass fibre reinforced polymer sheet	International research Journal of engineering and technology	Sekar B.	52
10	2018-2019	Design optimization sensitivity analysis and optimal system types of hybrid renewable energy system	International Journal of Computational Engineering Research	Suresh kumar U.	53
11	2020-2021	Conversion of petroleum-based fuel from waste plastics	Journal of Applied Science and Computations	Sarojini Mary S.	54
12	2020-2021	Disease prediction based on micro array classification using deep learning techniques	Microprocessors and Micro systems	Chandrasekar V.	55
13	2020-2021	Brain Tumor Detection and Disease Prediction using CNN Algorithm	Test Engineering and Management	ShanmugaPriya S.	56
14	2019-2020	Job satisfaction after privitisation of higher education	Journal of inter disciplinary cyclic process	Suganya D.	57

**List of research papers published per teacher in the Journals notified on  
UGC website during the last five years**

S.No	Year	Title of the Article	Name of the Journal	Name of the Author	Link to the Journal
1.	2016	Biosorption of Heavy metals by Clostridium sp bacteria	World Journal of Pharmaceutical Research	Abbas Ali A.	<a href="https://www.wjpr.net/">https://www.wjpr.net/</a>
2.	2016	Assessment of Physico-Chemical quality of Ground Water samples in and around Trichy Town, Tamilnadu, India	Archives of Applied Science Research	Abbas Ali A.	<a href="http://www.scholarresearchlibrary.com">www.scholarresearchlibrary.com</a>
3.	2016	Biosorption of Heavy metals by pseudomonas bacteria	IRJET	Abbas Ali A.	<a href="https://www.irjet.net/">https://www.irjet.net/</a>
4.	2015	Studies on heavy metal pollution of ground water in and around Trichy town, Tamilnadu, India	Advances in Applied Science Research	Abbas Ali A.	<a href="https://www.imedpub.com/advances-in-applied-science-research/">https://www.imedpub.com/advances-in-applied-science-research/</a>
5.	2015	Physico – Chemical Analysis of Selected Ground Water Samples in and around Trichy town, Tamilnadu	International Journal of Nano Corrosion Science and Engineering	Abbas Ali A.	<a href="https://portal..org/resource//2395-7018">https://portal..org/resource//2395-7018</a>
6.	2015	Removal of Heavy Metals from Ground Water using Eucalyptus Carbon as Adsorbent	International Journal of ChemTech Research	Abbas Ali A.	<a href="http://www.sphinx.sai.com/chemtech.php">http://www.sphinx.sai.com/chemtech.php</a>
7.	2016	Adsorption of heavy metals by chitosan coated zerovalent iron nano particles	Archives of Applied Science Research	Abbas Ali A.	<a href="https://www.scholarresearchlibrary.com/journals/archives-of-applied-science-research/">https://www.scholarresearchlibrary.com/journals/archives-of-applied-science-research/</a>
8.	2016	Physico-Chemical Characteristics of Ground Water samples in and around Tiruchirappalli Town, Tamilnadu, India	International Journal of Applied Sciences and Engineering Research	Abbas Ali A.	<a href="https://www.ijapsc engr.com/">https://www.ijapsc engr.com/</a>
9.	2015	Monitoring the quality of ground water pollution in and around Trichy town, Tamilnadu	Der Chemica Sinica	Abbas Ali A.	<a href="https://www.imedpub.com/der-chemica-sinica/">https://www.imedpub.com/der-chemica-sinica/</a>

10.	2015	Study on ground water pollution at Tiruchirappalli town, Tamil Nadu	Advances in Applied Science Research	Abbas Ali A.	<a href="https://www.imedpub.com/advances-in-applied-science-research/">https://www.imedpub.com/advances-in-applied-science-research/</a>
11.	2015	Playing sound files in LAB VIEW using AUDACITY toolkit	International Journal of Research in Engineering and Technology	Abirami A.	<a href="https://ijret.org/">https://ijret.org/</a>
12.	2018	Implementation Of Fly-back Micro Inverter With Dual Transformer To Achieve High Efficiency For Photovoltaic Applications	Global Journal of Engineering Science and Researches	Abirami A.	<a href="http://www.gjesr.com/">http://www.gjesr.com/</a>
13.	2018	Newly Configured High Step-Up Chopper With Coupled Inductor And Voltage Doubler Circuits	International Journal of Electronics Engineering	Abirami A.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
14.	2018	Single Phase Cascaded Half Bridge Inverter Based On Photovoltaic Applications	International Journal of Electronics Engineering.	Abirami A.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
15.	2017	Modeling and Prediction of Shell and Tube Heat Exchanger Performance using ANN	International Journal of Scientific Research and Review	Ahilan C.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
16.	2017	Application of artificial neural networks on predicting the performance characteristics of CNC turning process	International Journal of Scientific Research and Review	Ahilan C.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
17.	2015	Performance assessment of heat exchanger using intelligent decision making tools.	Applied Soft Computing,	Ahilan C.	<a href="https://www.journals.elsevier.com/applied-soft-computing">https://www.journals.elsevier.com/applied-soft-computing</a>
18.	2017	Experimental Analysis on physical and mechanical properties of 3Y- TZP toughened alumina (ZTA) composites using conventional sintering	Journal of applied science and computations	Ahilan C.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>

19.	2017	Comparative Study Of Bipolar Fuzzy Soft Category Action For Assistant Professor Recruitment In Government Sectors	Inter national Research Journal of Pure Algebra	Anitha S.	<a href="http://www.rjpa.info/index.php/rjpa">http://www.rjpa.info/index.php/rjpa</a>
20.	2017	Construction Of Bipolar $\delta$ -Fuzzy s-Extension And Its Decision Making.	Inter national Journal of Engineering, Science and Mathematics	Anitha S.	<a href="https://www.indianjournals.com/ijor.aspx?target=ijor:ijesm&amp;type=home">https://www.indianjournals.com/ijor.aspx?target=ijor:ijesm&amp;type=home</a>
21.	2018	Group Action On Bipolar Fuzzy Soft r-Near Ring Over Ideal Structures	International Journal of Engineering, Science and Mathematics	Anitha S.	<a href="https://www.indianjournals.com/ijor.aspx?target=ijor:ijesm&amp;type=home">https://www.indianjournals.com/ijor.aspx?target=ijor:ijesm&amp;type=home</a>
22.	2018	Bipolar (S,T) Smooth Fuzzy Soft Normal Subgroupoids Over Smooth Fuzzy Soft Cosets	International Journal of Engineering, Science and Mathematics	Anitha S.	<a href="https://www.indianjournals.com/ijor.aspx?target=ijor:ijesm&amp;type=home">https://www.indianjournals.com/ijor.aspx?target=ijor:ijesm&amp;type=home</a>
23.	2018	A comprehensive review of low cost biodiesel production from waste chicken fat	Renewable and Sustainable Energy Reviews	Arul MozhiSelvan V.	<a href="https://sci-hub.se/10.1016/j.rsener.2017.09.039">https://sci-hub.se/10.1016/j.rsener.2017.09.039</a>
24.	2018	Eggshell as heterogeneous catalyst for synthesis of biodiesel from high free fatty acid chicken fat and its working characteristics on a C.I.Engine	Journal of environmental chemical Engineering	Arul MozhiSelvan V.	<a href="https://sci-hub.se/10.1016/j.jece.2018.06.027">https://sci-hub.se/10.1016/j.jece.2018.06.027</a>
25.	2016	A Service Centric Framework for Dependable Service Composition	International Journal of Scientific Research and Review	ArunPrasath M.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
26.	2016	Static VAR Compensation Using Multilevel Inverter	Inter national Journal of Electronics Engineering.	Arunkumaran K.	<a href="http://www.csjournals.com/?cat=2">http://www.csjournals.com/?cat=2</a>
27.	2017	Dynamic Simulation Of Switched Reluctance Motor Using Matlab	Inter national Journal of Electronics Engineering.	Arunkumaran K.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>

28.	2020	Fetus Fege Monitoring Sytem	International Journal Of Current Engineering And Scientific Research (IJCESR)	Ayesha Shereen A.K.	<a href="http://troindia.in/journal/ijcesr/index.html">http://troindia.in/journal/ijcesr/index.html</a>
29.	2018	Influence of mineral admixtures on strength and durability properties of concrete	Indian Journal of Scientific Research	BalaVignesh U.	<a href="http://www.ijsr.in/index.php">http://www.ijsr.in/index.php</a>
30.	2016	Damage Assessment in Reinforced Concrete Structures	Recent Trends in Civil Engineering & Technology – STM Journals	Barkavi T.	<a href="https://publons.com/journal/28588/recent-trends-in-civil-engineering-technology-stm/">https://publons.com/journal/28588/recent-trends-in-civil-engineering-technology-stm/</a>
31.	2018	Building crack evaluation program for the identification of its causes	International Journal of Forensic Engineering	Barkavi T.	<a href="https://www.inderscience.com/jhome.php?jcode=ijfe">https://www.inderscience.com/jhome.php?jcode=ijfe</a>
32.	2018	Knowledge-based decision support system for identification of crack causes in concrete buildings	Asian Journal of Civil Engineering, Building and Housing Research Centre, Springer	Barkavi T.	<a href="https://www.springer.com/journal/42107">https://www.springer.com/journal/42107</a>
33.	2018	Structural health monitoring: detection of concrete flaws using ultrasonic pulse velocity	Journal of Building Pathology and Rehabilitation, Springer	Barkavi T.	<a href="https://www.springer.com/journal/41024">https://www.springer.com/journal/41024</a>
34.	2019	Processing Digital Image for Measurement of Crack Dimensions in Concrete	Civil Engineering Infrastructures Journal	Barkavi T.	<a href="https://publons.com/journal/46192/civil-engineering-infrastructures-journal/">https://publons.com/journal/46192/civil-engineering-infrastructures-journal/</a>
35.	2019	Selfitis Affects Concentration of the Higher Education Students During Lecture Hours	IEEE Explore	Barveen A.	<a href="https://ieeexplore.ieee.org/Xplore/home.jsp">https://ieeexplore.ieee.org/Xplore/home.jsp</a>
36.	2015	Deduce User Search Progression with Feedback Session	Advances in Systems Science and Application	BazeerAhamed B.	<a href="https://ijassa.ipu.ru/index.php/ijassa">https://ijassa.ipu.ru/index.php/ijassa</a>
37.	2015	Uncertainty Relations system in Semantic Web Search Engine	International Journal of Applied Engineering	BazeerAhamed B.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>

			Research		
38.	2016	An intelligent web search framework for performing efficient retrieval of data	Computers and Electrical Engineering - Elsevier	BazeerAhamed B.	<a href="https://www.journals.elsevier.com/computers-and-electrical-engineering">https://www.journals.elsevier.com/computers-and-electrical-engineering</a>
39.	2016	Data Integration – Challenges, Techniques and Future Directions: A Comprehensive Study	Indian Journal of Science and Technology	BazeerAhamed B.	<a href="https://www.indjst.org/">https://www.indjst.org/</a>
40.	2016	An intelligent web search framework for performing efficient retrieval of data	Computers and Electrical Engineering	BazeerAhamed B.	<a href="https://www.journals.elsevier.com/computers-and-electrical-engineering">https://www.journals.elsevier.com/computers-and-electrical-engineering</a>
41.	2018	Performance evaluation of formed cellular lightweight concrete as a replacement of burnt clay bricks	International research Journal of engineering and technology	Belin Jude A.	<a href="https://www.springer.com/journal/41024">https://www.springer.com/journal/41024</a>
42.	2019	Study of durability properties on concrete by using industrial waste	International journal of recent trends in engineering and research	Belin Jude A.	<a href="https://www.ijrte.org/download/volume-8-issue-4/">https://www.ijrte.org/download/volume-8-issue-4/</a>
43.	2019	Experimental investigation on shear connectors in steel-concrete composite slab	International journal of recent trends in engineering and research	Belin Jude A.	<a href="https://publons.com/journal/67140/international-journal-of-recent-trends-in-engineer/">https://publons.com/journal/67140/international-journal-of-recent-trends-in-engineer/</a>
44.	2019	Comparison and test methodology to evaluate steel- concrete bonding strength of thin reinforcing bars	International journal of recent trends in engineering and research	Belin Jude A.	<a href="https://publons.com/journal/67140/international-journal-of-recent-trends-in-engineer/">https://publons.com/journal/67140/international-journal-of-recent-trends-in-engineer/</a>
45.	2017	Effect of copper slag, iron slag and recycled concrete aggregate on the mechanical properties of concrete	Elsevier-Resource Policy	Belin Jude A.	<a href="https://www.sciencedirect.com/journal/resources-policy">https://www.sciencedirect.com/journal/resources-policy</a>
46.	2018	Influence of mineral admixtures on strength and durability properties of concrete	Indian Journal of Scientific Research	Belin Jude A.	<a href="http://www.ijsr.in/index.php">http://www.ijsr.in/index.php</a>

47.	2018	Effect on concrete with engineered cementitious composite using polypropylene fibre	Indian Journal of Scientific Research	Belin Jude A.	<a href="http://www.ijsr.in/index.php">http://www.ijsr.in/index.php</a>
48.	2018	Experimental investigation on strengthening of RCC beams by wrapping glass fibre reinforced polymer sheet	International research Journal of engineering and technology	Belin Jude A.	<a href="https://www.irjet.net/">https://www.irjet.net/</a>
49.	2016	A Service Centric Framework for Dependable Service Composition	International Journal of Scientific Research and Review	Belin Jude A.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
50.	2016	Enhanced System for Energy – Efficient Co- operative Network	International Journal of Scientific Research and Review	Belin Jude A.	<a href="http://www.dynamicipublisher.org/">http://www.dynamicipublisher.org/</a>
51.	2020	Disease prediction based on micro array classification using deep learning techniques	Micro processors and Micro systems	Chandrasekar V.	<a href="https://www.journals.elsevier.com/microprocessors-and-microsystems">https://www.journals.elsevier.com/microprocessors-and-microsystems</a>
52.	2020	Improved performance accuracy in detecting tumor in liver using deep learning techniques	Journal of Ambient Intelligence and Humanized Computing	Chandrasekar V.	<a href="https://www.springer.com/journal/12652">https://www.springer.com/journal/12652</a>
53.	2016	A Service Centric Framework for Dependable Service Composition	International Journal of Scientific Research and Review	Christopher P.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
54.	2018	Exchanging Secure Data in Cloud with Owner Authorization and Verification	International Journal of Research in Electronics and Computer Engineering	Christopher P.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>
55.	2018	Structured Representations in a Content Based Image Retrieval Context	International Journal of Management, IT & Engineering	Christopher P.	<a href="https://www.ijmra.us/itjournal.php">https://www.ijmra.us/itjournal.php</a>



56.	2018	Self- Adjusting Slot Configurations For Hadoop Clusters Using Data Security In Cloud	International Research journal for engineering and technology	Christopher P.	<a href="https://www.irjet.net/">https://www.irjet.net/</a>
57.	2020	Fetus Fege Monitoring Sytem	International Journal Of Current Engineering And Scientific Research (IJCESR)	Christopher P.	<a href="http://troindia.in/journal/ijcesr/index.html">http://troindia.in/journal/ijcesr/index.html</a>
58.	2018	Multi-variant execution environment against code injection attacks	International Journal of Research in Electronics and Computer Engineering	Deepa R.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>
59.	2019	Characterization of Cuscutareflexa Silver Nanoparticle and its Amelioration effect on Waste Water Treatment	International Journal of Biological and Chemical Research	Devadoss A.	<a href="https://www.ajol.info/index.php/ijbcs/index">https://www.ajol.info/index.php/ijbcs/index</a>
60.	2019	Characterization of Foeniculum Vulgare Silver Nanoparticle and its Amelioration effect on Waste Water Treatment	International Journal of Research and Analytical Reviews	Devadoss A.	<a href="https://www.ijrar.org/">https://www.ijrar.org/</a>
61.	2017	Optimization of milling parameters of EN8 D using Taguchi methodology	Journal of applied science and computations	Devaraj I.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
62.	2019	A Comparative Study of Terminalia Chebula Seed Bio Diesel	Journal of applied science and computations	Devaraj I.	<a href="https://scihub.se/10.1016/j.matpr.2019.06.745">https://scihub.se/10.1016/j.matpr.2019.06.745</a>
63.	2018	Multi-objective optimization of end milling process parameter for stir casted alumina reinforced aluminium metal matrix composite using RSM	IOP Conference Series: Materials Science and Engineering	Dhamodaran K.	<a href="https://iopscience.iop.org/journal/1757-899X">https://iopscience.iop.org/journal/1757-899X</a>
64.	2018	Limbs related handicap drivable non-commercial electric shuttle vehicle	SAE Technical Papers	Dhamodaran K.	<a href="https://www.sae.org/publications/technical-papers">https://www.sae.org/publications/technical-papers</a>

65.	2016	Effect of Hardness and Fracture Toughness on the addition of Graphite in Aluminium –Silicon Carbide metal matrix composite.	International Journal of Research	Dhandayuthabani M.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
66.	2018	Thermal conductivity enhancement of paraffin wax blending with copper nano particle	Journal of Applied Science and Computations	Dhandayuthabani M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
67.	2017	Charging and Discharging analysis of Paraffin wax blending with Copper Micro particles in heat exchanger	Journal of Applied Science and Computations	Dhandayuthabani M.	<a href="https://www.journalguide.com/journals/international-journal-of-applied-science-and-computations">https://www.journalguide.com/journals/international-journal-of-applied-science-and-computations</a>
68.	2016	Thermal conductivity enhancement of paraffin waxBlending with copper nano particle	Journal of Applied Science and Computations	Dhandayuthabani M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
69.	2016	Optimization of SVM Parameters And Feature Selection Using Gravitational Search Algorithm.	Institute of Integrative Omics and Applied Biotechnology	Geetha K.	<a href="https://iioab.webs.com/">https://iioab.webs.com/</a>
70.	2016	Diversity based Internet access in Vehicular Networks	International journal of advanced research trends in engineering and technology	Geetha K.	<a href="https://portal..org/resource//2394-3785">https://portal..org/resource//2394-3785</a>
71.	2016	Using Multiple Interfaces with Guaranteed Quality of experience	International journal of advanced research trends in engineering and technology	Geetha K.	<a href="https://ijartet.com/">https://ijartet.com/</a>
72.	2017	Securing Patient Data in Wireless Body Area Sensor Network Using Biometrics Based Key Generation.	Current medical imaging reviews	Geetha K.	<a href="https://benthamscience.com/journals/current-medical-imaging/">https://benthamscience.com/journals/current-medical-imaging/</a>
73.	2018	An Enhanced Multi Hop Low Energy Adaptive Clustering Hierarchy Using Energy Aware Minimum Spanning	Global Journal of Engineering Science and Researches	Geetha K.	<a href="http://www.gjesrm.com/">http://www.gjesrm.com/</a>

		Tree			
74.	2019	A Novel Shape Feature Extraction Technique for Content Based Image Retrieval (CBIR) Systems	International Journal of Advanced Science and Technology	Geetha K.	<a href="http://sersec.org/journals/index.php/ijast">http://sersec.org/journals/index.php/ijast</a>
75.	2015	Optimal repair rate and area reduction for embedded memories by using bira & amt	International Journal of Engg. Res. & Sci. & Tech.	Geetha V.	<a href="https://portal..org/resource//2319-5991">https://portal..org/resource//2319-5991</a>
76.	2017	A Parallel Snubber Capacitor Based High Step Up Isolated Bidirectional Full Bridge Dc To Dc Converter	Inter national Journal of Pure and Applied Mathematics	Gopi J.	<a href="https://www.scimagojr.com/journalsearch.php?q=19700182690&amp;tip=sid">https://www.scimagojr.com/journalsearch.php?q=19700182690&amp;tip=sid</a>
77.	2017	Improved algorithm to identify the images in underwater	International Journal of Advanced research in management, architecture, technology and engineering	GowriPriya R.	<a href="https://www.ijarmate.com/">https://www.ijarmate.com/</a>
78.	2016	Model Analysis of Metallic Gears and Hybrid Spur Gear	Inter national Journal of Research	Gowthaman M.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
79.	2016	Study of aluminium-fly ash composite materials mechanical properties by stir casting method	Journal of applied science and computations	Gowthaman M.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
80.	2017	Influence of fly ash in AluminiumMMC by stir casting method	Journal of applied science and computations	Gowthaman M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
81.	2016	Analysis of the Mechanical Properties and Structure of Aluminium (Al 5083) Processed by Equal Channel Angular Pressing	Inter national Journal of Engineering Science and Computing	Guharaja S.	<a href="https://ijesc.org/">https://ijesc.org/</a>

82.	2016	Optimal Structures For Two Different Multi Level Inverter Topologies	Global Journal of Engineering Science and Researches	Gurumoorthy G.	<a href="https://studylib.net/doc/8216373/c---global-journal-of-engineering-science-and-researches...">https://studylib.net/doc/8216373/c---global-journal-of-engineering-science-and-researches...</a>
83.	2017	A Bidirectional Switch Based High Efficiency Resonant Converter For Photovoltaic Application DOI-10.5281	Global Journal of Engineering Science and Researches	Gurumoorthy G.	<a href="http://www.gjesr.com/">http://www.gjesr.com/</a>
84.	2018	ANFIS Based Fault Current Limiter With Energy Management System	International Journal of Scientific Research and Review	Gurumoorthy G.	<a href="http://www.dynamicipublisher.org/">http://www.dynamicipublisher.org/</a>
85.	2016	Static VAR Compensation Using Multilevel Inverter	International Journal of Electronics Engineering.	Jayaraj D.	<a href="http://www.csjournals.com/?cat=2">http://www.csjournals.com/?cat=2</a>
86.	2018	Horizontal Axis Sun Tracking System Is Implemented Through Arduino Microcontroller For Rural Healthcare Buildings	International Journal of scientific Research and Review	Jayaraj D.	<a href="http://www.dynamicipublisher.org/#:~:text=International%20Journal%20of%20Scientific%20Research%20and%20Review%20(%202279%2D543x,and%20dissemination%20of%20scientific%20knowledge.">http://www.dynamicipublisher.org/#:~:text=International%20Journal%20of%20Scientific%20Research%20and%20Review%20(%202279%2D543x,and%20dissemination%20of%20scientific%20knowledge.</a>
87.	2017	Dynamic Simulation Of Switched Reluctance Motor Using Matlab	International Journal of Electronics Engineering.	Jayaraj K.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
88.	2015	A New Multi Level Dc Link Inverter Topology With Variable Frequency Inverted Sine Carrier PWM Under Equal Switching Transition	International Conference on Innovations in Information, Embedded and Communication Systems	Jebaraj L.	<a href="https://publons.com/journal/33953/international-conference-on-innovations-in-informa/">https://publons.com/journal/33953/international-conference-on-innovations-in-informa/</a>
89.	2017	Application Of Differential Evolution Algorithm In Static And Dynamic Economic Or Emission Dispatch Problem: A	Renewable and Sustainable Energy Reviews.	Jebaraj L.	<a href="https://www.journals.elsevier.com/renewable-and-sustainable-energy-reviews">https://www.journals.elsevier.com/renewable-and-sustainable-energy-reviews</a>

		Review			
90.	2018	Thermal conductivity enhancement of paraffin wax blending with copper nano particle	Journal of Applied Science and Computations	Jegadheeswaran S.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
91.	2018	Influence of mineral admixtures on strength and durability properties of concrete	Indian Journal of Scientific Research	Jeganraj M.	<a href="http://www.ijsr.in/index.php">http://www.ijsr.in/index.php</a>
92.	2016	Comparison of Mechanical Properties on Al7175-SiC and Al7075Al2O3 metal matrix composites	Journal of applied science and computations	Jeyanthan A.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
93.	2017	Energy Conservation by Using Waste Heat Recovery System in Domestic Refrigerator	Journal of Global Engineering Problems and Solutions	Jeyanthan A.	<a href="https://publons.com/journal/327759/journal-of-global-engineering-problems-and-solutio/">https://publons.com/journal/327759/journal-of-global-engineering-problems-and-solutio/</a>
94.	2019	Experimental Investigation of Convective Heat Transfer through Rough and Smooth Surfaced Aluminium 6081 Pin-Fin Apparatus	Journal of applied science and computations	Jeyanthan A.	<a href="https://scihub.se/10.1016/j.matpr.2019.06.745">https://scihub.se/10.1016/j.matpr.2019.06.745</a>
95.	2017	Performance analysis of coldStorage system using phaseChange materials (pcms) part i:Experimental investigation	Journal of Global Engineering Problems and Solutions	Jeyanthan A.	<a href="https://publons.com/journal/327759/journal-of-global-engineering-problems-and-solutio/">https://publons.com/journal/327759/journal-of-global-engineering-problems-and-solutio/</a>
96.	2018	Multi-variant execution environment against code injection attacks	International Journal of Research in Electronics and Computer Engineering	John Ritchie Immanuel L.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>

97.	2016	Enhanced System for Energy – Efficient Co- operative Network	International Journal of Scientific Research and Review	Joshua Issac A.	<a href="http://www.dynamicipublisher.org/">http://www.dynamicipublisher.org/</a>
98.	2018	Self-Adjusting Slot Configurations For Hadoop Clusters Using Data Security In Cloud	International Research journal for engineering and technology	Joshua Issac A.	<a href="https://www.irjet.net/">https://www.irjet.net/</a>
99.	2020	Fetus Fege Monitoring Sytem	International Journal Of Current Engineering And Scientific Research (IJCESR)	Karishma R.	<a href="http://troindia.in/journal/ijcesr/index.html">http://troindia.in/journal/ijcesr/index.html</a>
100.	2015	Reuse of Sago Treated Wastewater Partially substitute in concrete	International Journal of Applied Engineering Research	Karthikeyan M.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
101.	2016	Adsorption of Toxic Metals from Fabric Dye Effluent by Utilize Azadirachta Indica Folia	International Journal of Printing, Packaging & Allied Sciences	Karthikeyan M.	<a href="https://publons.com/journal/718147/international-journal-of-printing-packaging-allied/">https://publons.com/journal/718147/international-journal-of-printing-packaging-allied/</a>
102.	2016	Cement Concrete behaviour with replaced of sewer water	Indian Journal of Environmental Protection	Karthikeyan M.	<a href="https://ijep.co.in/">https://ijep.co.in/</a>
103.	2016	Relative Analyze of Flexural Behavior of FRC using Recycled Aggregates with Quarry Dust Replacement	International Journal of Earth Sciences and Engineering	Karthikeyan M.	<a href="https://www.scimagojr.com/journalsearch.php?q=19700188324&amp;tip=sid">https://www.scimagojr.com/journalsearch.php?q=19700188324&amp;tip=sid</a>
104.	2017	Biosorption of Aqueous Nickel(II) by Psidium Guajava Leaves from Textile Wastewater	International Journal of Creative Research Thoughts	Karthikeyan M.	<a href="https://ijcrt.org/">https://ijcrt.org/</a>

105.	2017	Diminution of Toxic Ions by using Mangifera Indica Foliages as Adsorbent from Textile Effluent	International Journal of Advances in Scientific Research and Engineering	Karthikeyan M.	<a href="https://www.ijasre.net/index.php/ijasre">https://www.ijasre.net/index.php/ijasre</a>
106.	2017	Feasibility study on using low cost adsorbents for the removal of Cd(II) from textile wastewater	International Journal for Science and Advance Research in Technology	Karthikeyan M.	<a href="http://ijsart.com/">http://ijsart.com/</a>
107.	2015	Investigation on Mechanical Properties of Welded Aluminum Joints Using Friction Stir Welding	International Journal of Applied Engineering Research	Karthikeyan T.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
108.	2016	Reduction of components in new family of diode clamp multilevel inverter ordeal to induction motor	Journal of Semi-conductor Technology and Science	Karthikeyan T.	<a href="https://www.koreascience.or.kr/article/JAKO201608450940800.pdf">https://www.koreascience.or.kr/article/JAKO201608450940800.pdf</a>
109.	2016	Tribological Properties Study on Polyamide with Incorporated Lubrication	Asian Journal of Research in Social Sciences and Humanities	Karthikeyan T.	<a href="https://www.indianjournals.com/ijor.aspx">https://www.indianjournals.com/ijor.aspx</a>
110.	2018	Microstructure and Mechanical Properties Study on Aluminum Metal Matrix Composites with Boron Nitride by Friction Stir Welding	Journal of Computational and Theoretical Nano-science	Karthikeyan T.	<a href="https://scihub.se/10.1166/jctn.2018.7161">https://scihub.se/10.1166/jctn.2018.7161</a>
111.	2019	Development and investigation of Pongamiapinnata epoxy composites	Materials Today	Karthikeyan T.	<a href="https://scihub.se/10.1016/j.matpr.2019.05.376">https://scihub.se/10.1016/j.matpr.2019.05.376</a>
112.	2019	Structural analysis of natural fiber reinforced polymer matrix composite	Materials Today	Karthikeyan T.	<a href="https://scihub.se/10.1016/j.matpr.2019.05.295">https://scihub.se/10.1016/j.matpr.2019.05.295</a>
113.	2019	Assessment on aerosol exposure in asbestos Usage industries and occupation health Associated risk	Journal of the Balkan Tribological Association	Karthikeyan T.	<a href="https://scibulcom.net/en/home">https://scibulcom.net/en/home</a>

114.	2015	A New Multi Level Dc Link Inverter Topology With Variable Frequency Inverted Sine Carrier PWM Under Equal Switching Transition DOI: 10.1109/	International Conference on Inno-vations in Information, Embedded and Communi-cation Systems	Keerthana M.	<a href="https://publons.com/journal/33953/international-conference-on-innovations-in-informa/">https://publons.com/journal/33953/international-conference-on-innovations-in-informa/</a>
115.	2017	Friction Welding of MgAz31 Alloy Tube to MgAz91 Plate Configuration by using Zinc Interlayer	Journal of applied science and computations	Kirubakaran M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
116.	2018	Production of biodiesel from waste cooking oil as a suitable alternative for diesel	Journal of applied science and computations	Kirubakaran M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
117.	2016	Experimental investigation of production of biodiesel from pongamiapinnata oil	Journal of applied science and computations	Kirubakaran M.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
118.	2018	A comprehensive review of low cost biodiesel production from waste chicken fat	Renewable and Sustainable Energy Reviews	Kirubakaran M.	<a href="https://sci-hub.se/10.1016/j.erser.2017.09.039">https://sci-hub.se/10.1016/j.erser.2017.09.039</a>
119.	2018	Eggshell as heterogeneous catalyst for synthesis of biodiesel from high free fatty acid chicken fat and its working characteristics on a C.I.Engine	Journal of environment al chemical Engineering	Kirubakaran M.	<a href="https://sci-hub.se/10.1016/j.jece.2018.06.027">https://sci-hub.se/10.1016/j.jece.2018.06.027</a>
120.	2016	Simple model of solar cooling system	Inter national Journal of Research	Kumaradevan S.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
121.	2019	Development of aluminum based silicon carbide and CNT Particulate metal matrix composite (MMC's) for spur gear	Inter national Journal of Research	Kumaradevan S.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
122.	2017	Charging and Discharging analysis of Paraffin wax blending with Copper Micro particles in heat exchanger	Journal of Applied Science and Computa-tions	Kumaradevan S.	<a href="https://www.journalguide.com/journals/international-journal-of-applied-science-and-computations">https://www.journalguide.com/journals/international-journal-of-applied-science-and-computations</a>



123.	2017	Two sided assembly balancing- An Industrial case study	Inter national Journal of Research	Kumaradevan S.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
124.	2018	Thermal conductivity enhancement of paraffin wax blending with copper nano particle	Journal of Applied Science and Computations	Kumaradevan S.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
125.	2015	Application of lean six sigma in Automobile Industry	International Journal of Applied Engineering Research	Kumaravadivel A.	<a href="http://www.ripublication.com/ijaer.htm">www.ripublication.com/ijaer.htm</a>
126.	2016	Error Detection and Correction between the router in NOC using Decimal Matrix Code	Journal of Applied Science and Computations	Latha K.	<a href="https://portal..org/resource//1076-5131">https://portal..org/resource//1076-5131</a>
127.	2017	Experimental Analysis on physical and mechanical properties of 3Y- TZP toughened alumina (ZTA) composites using conventional sintering	Journal of applied science and computations	Manikandan D.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
128.	2018	Experimental Analysis of Electro Chemical Micro Machining on Nickel	Journal of applied science and computations	Manikandan D.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
129.	2018	Fact-Finding on Physical and Mechanical Properties of 3Y- TZP Toughened Alumina (ZTA) Composites Incorporation of Functionalized Multi-walled Carbon Nanotubes.	Advances in Materials and Metallurgy	Manikandan D.	<a href="https://www.springer.com/gp/book/9789811317798">https://www.springer.com/gp/book/9789811317798</a>
130.	2016	Experimental investigation of production of biodiesel from pongamiapinnata oil	Journal of applied science and computations	Manikandan E.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
131.	2018	Production of biodiesel from waste cooking oil as a suitable alternative for diesel	Journal of applied science and computations	Manikandan E.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>

132.	2019	Experimental Investigation of Convective Heat Transfer through Rough and Smooth Surfaced Aluminium 6081 Pin-Fin Apparatus	Journal of applied science and computations	Manikandan E.	<a href="https://sci-hub.se/10.1016/j.matpr.2019.06.745">https://sci-hub.se/10.1016/j.matpr.2019.06.745</a>
133.	2018	Structured Representations in a Content Based Image Retrieval Context	International Journal of Management, IT & Engineering	Manikandan P.	<a href="https://www.ijmra.us/itjournal.php">https://www.ijmra.us/itjournal.php</a>
134.	2018	A Top Web Security Vulnerability: SQL Injection attack – Survey	International Journal of Engineering Research in Computer Science and Engineering	Manikandan P.	<a href="http://ijercse.com/">http://ijercse.com/</a>
135.	2018	A concise Analysis on fuzzy graph theoretical dominations	International Journal for Research in Engineering Application and Management	Manikandan R.	<a href="https://www.ijream.org/">https://www.ijream.org/</a>
136.	2018	Some basic diophantine Equations	International Journal of Innovative knowledge concepts	Manikandan R.	<a href="https://portal.org/resource/2454-2415">https://portal.org/resource/2454-2415</a>
137.	2018	A Zoned Node Interconnection For The Optimization And Implementation of Two Adaptive Routing Algorithms For XGFTN networks	International Journal of Management, IT & Engineering	Manikandan S.	<a href="https://www.ijmra.us/itjournal.php">https://www.ijmra.us/itjournal.php</a>
138.	2019	Preliminary phytochemical Exploration of hibiscus cannabinus Plant leaf extracts using different Solvents	Journal of Emerging Technologies and Innovative Research	Manikandan S.	<a href="http://www.jetir.org">http://www.jetir.org</a>
139.	2018	Design Of Soft-Switched CCM Boost Converters For High-Power Applications	International Journal of Engineering & Science Research	Manohar P.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>

140.	2018	Intelligent server based data security enhanced with attack avoidance scheme	Inter national journal of innovative research in computer and communication engineering	Megala G.	<a href="https://journals.indexcopernicus.com/search/details?id=47423">https://journals.indexcopernicus.com/search/details?id=47423</a>
141.	2019	Biometric Security and Performance Metrics: FAR, FER, CER, FRR	IEEEExplore	Megala G.	<a href="https://ieeexplore.ieee.org/Xplore/home.jsp">https://ieeexplore.ieee.org/Xplore/home.jsp</a>
142.	2018	Self-Adjusting Slot Configurations For Hadoop Clusters Using Data Security In Cloud	International Research journal for engineering and technology	Mohamed Faizal M.K.	<a href="https://www.irjet.net/">https://www.irjet.net/</a>
143.	2018	Exchanging Secure Data in Cloud with Owner Authorization and Verification	Inter national Journal of Research in Electronics and Computer Engineering	Mohamed Faizal M.K.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>
144.	2018	Conceptual Design of Green façade to provide thermal comfort	International Journal of Advanced Research Methodology in Engineering & Technology	Mohamed Mansoor A.	<a href="https://portal..org/resource//2456-6446">https://portal..org/resource//2456-6446</a>
145.	2017	A novel approach for protecting the user walls in the online social network	Inter national Journal of Research Science and Engineering	Mohana S.	<a href="https://scientificrc.com/journals/international-journal-of-research-in-science-and-engineering/">https://scientificrc.com/journals/international-journal-of-research-in-science-and-engineering/</a>
146.	2017	Speed Control Of Three Phase Induction Motor Using VSI Based SVPWM Technique	Inter national Journal of Scientific Research and Review	Muthukumaran E.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
147.	2016	A Novel Five Level Inverter With Reduced Switches For DC- AC Conversion	Inter national Journal of Electronics Engineering.	Muthukumaran E.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
148.	2016	A Novel Five Level Inverter With Reduced Switches For DC- AC Conversion	Inter national Journal of Electronics Engineering.	Muthuselvi B.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>

149.	2018	Newly Configured High Step-Up Chopper With Coupled Inductor And Voltage Doubler Circuits	International Journal of Electronics Engineering	Muthuselvi B.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
150.	2018	Single Phase Cascaded Half Bridge Inverter Based On Photovoltaic Applications	International Journal of Electronics Engineering.	Muthuselvi B.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
151.	2015	Application on Partial Substitute of Cement by Bentonite in Concrete	International Journal of ChemTech Research	Nandhini A.	<a href="http://sphinxesai.com/index.htm">http://sphinxesai.com/index.htm</a>
152.	2017	Friction Welding of MgAz31 Alloy Tube to MgAz91 Plate Configuration by using Zinc Interlayer	Journal of applied science and computations	Narendhira L.S.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
153.	2015	Interaction Effect of seam welding parameters for Stainless Steel (SS 304) sheet	International Journal of Applied Engineering Research	Naveen sait A.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
154.	2015	Optimization of the Parameters of Friction Stir Welding for AZ91D Magnesium Alloy Using the Taguchi Design	Materials Science	Naveen sait A.	<a href="https://link.springer.com/article/10.1007%2Fs11003-015-9826-8">https://link.springer.com/article/10.1007%2Fs11003-015-9826-8</a>
155.	2015	Parametric optimization of seam welding of stainless steel (SS 304) sheets	Materials Science	Naveen sait A.	<a href="https://www.degruyter.com/document/doi/10.3139/120.110733/html">https://www.degruyter.com/document/doi/10.3139/120.110733/html</a>
156.	2015	Synthesis and forming characteristics of Al-TiO <sub>2</sub> powder metallurgy composites during cold upsetting under plane stress state conditions	Journal of Sandwich Structures & Materials	Naveen sait A.	<a href="https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.981.2665&amp;rep=rep1&amp;type=pdf">https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.981.2665&amp;rep=rep1&amp;type=pdf</a>
157.	2017	Investigation on TIG welding parameters of 2205 duplex stainless steel	International Journal of Automotive and Mechanical Engineering	Naveen sait A.	<a href="https://journal.ump.edu.my/ijame/">https://journal.ump.edu.my/ijame/</a>

158.	2017	Synthesis and characterization of high entropy alloy (CrMnFeNiCu) reinforced AA6061 aluminium matrix composite	Mechanics and Mechanical Engineering	Naveen sait A.	<a href="https://journals.indexpublish.com/search/details?id=16036">https://journals.indexpublish.com/search/details?id=16036</a>
159	2017	Mechanical properties and microstructure of stir casted Al/B4C/garnet composites	Materials Testing	Naveen sait A.	<a href="https://www.degruyter.com/journal/key/MT/html">https://www.degruyter.com/journal/key/MT/html</a>
160.	2017	Investigation on TIG welding parameters of 2205 duplex stainless steel.	International Journal of Automotive & Mechanical Engineering	Naveen sait A.	<a href="https://journal.ump.edu.my/ijame/">https://journal.ump.edu.my/ijame/</a>
161.	2017	Modelling and optimisation of machining parameters for composite pipes using artificial neural network and genetic algorithm	International Journal on Interactive Design and Manufacturing	Naveen sait A.	<a href="https://scihub.se/10.1007/s12008-014-0253-0">https://scihub.se/10.1007/s12008-014-0253-0</a>
162.	2020	Surface Modification of AZ61 Magnesium Alloy with Nano TiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> using Laser Cladding Technique	Materials Today	Naveen sait A.	<a href="https://scihub.se/10.1016/j.matpr.2019.06.745">https://scihub.se/10.1016/j.matpr.2019.06.745</a>
163.	2020	Optimization and thermal analysis of friction stir welding of AA 6061-AA 8011 joints	Materials Today	Naveen sait A.	<a href="https://www.degruyter.com/document/doi/10.3139/120.111473/html">https://www.degruyter.com/document/doi/10.3139/120.111473/html</a>
164.	2015	Evaluation of seam welding parameters of stainless steel (ss 316) sheets using taguchi technique	Journal of Manufacturing Technology Research	Naveen sait A.	<a href="https://search.proquest.com/openview/add2df21c0b25e1f85695c6ae55b2b8c/1?pq-origsite=gscholar&amp;cbl=2034835">https://search.proquest.com/openview/add2df21c0b25e1f85695c6ae55b2b8c/1?pq-origsite=gscholar&amp;cbl=2034835</a>
165.	2015	Hot upset forging studies on al-2.5% tio <sub>2</sub> -c hybrid powder metallurgy composite.	Transactions of PMAI	Naveen sait A.	<a href="https://www.researchgate.net/profile/Manickam-Ravichandran-2/publication/286933246_Hot_upset_forging_studies_on_Al-25TiO2-Gr_hybrid_powder_metalurgy_composite/links/573bf2b">https://www.researchgate.net/profile/Manickam-Ravichandran-2/publication/286933246_Hot_upset_forging_studies_on_Al-25TiO2-Gr_hybrid_powder_metalurgy_composite/links/573bf2b</a>

					<a href="https://www.researchgate.net/publication/328602456/Hot-upset-forging-studies-on-Al-25TiO2-Gr-hybrid-powder-metallurgy-composite.pdf">e08ae298602e45eb 6/Hot-upset- forging-studies-on- Al-25TiO2-Gr- hybrid-powder- metallurgy- composite.pdf</a>
166.	2018	Application of the grey based Taguchi method and Deform-3D for optimizing multiple responses in turning of Inconel 718	Material Testing	Naveen sait A.	<a href="https://www.degruyter.com/document/doi/10.3139/120.111230/html">https://www.degruyter.com/document/doi/10.3139/120.111230/html</a>
167.	2018	Experimental Investigation on machining of Titanium Alloy (Ti 6Al 4V) and Optimization of its Parameters using ANN	Design and optimization of mechanical systems	Naveen sait A.	<a href="https://www.springer.com/gp/book/9783540343547">https://www.springer.com/gp/book/9783540343547</a>
168.	2017	Two sided assembly balancing- An Industrial case study	International Journal of Research	Pandianathan A.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
169.	2018	Implementation of "six sigma DMAIC" methodology to increase productivity of sand casting by reducing its defects	International Journal of Research	Pandianathan A.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
170.	2016	Simple model of solar cooling system	International Journal of Research	Pandianathan A.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
171.	2019	Development of aluminum based silicon carbide and CNT Particulate metal matrix composite (MMC's) for spur gear	International Journal of Research	Pandianathan A.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
172.	2017	Optimization of milling parameters of EN8 D using Taguchi methodology	Journal of applied science and computations	Pandiaraj V.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
173.	2019	A Comparative Study of TerminaliaChebula Seed Bio Diesel	Journal of applied science and computations	Pandiaraj V.	<a href="https://scihub.se/10.1016/j.matpr.2019.06.745">https://scihub.se/10.1016/j.matpr.2019.06.745</a>

174.	2017	A Bidirectional Switch Based High Efficiency Resonant Converter For Photovoltaic Application DOI-10.5281	Global Journal of Engineering Science and Researches	Pandiarajan S.	<a href="http://www.gjesr.com/">http://www.gjesr.com/</a>
175.	2016	Optimal Structures For Two Different Multi Level Inverter Topologies	Global Journal of Engineering Science and Researches	Pandiarajan S.	<a href="https://studylib.net/doc/8216373/c---global-journal-of-engineering-science-and-researches...">https://studylib.net/doc/8216373/c---global-journal-of-engineering-science-and-researches...</a>
176.	2019	Analysis of Composite leaf spring over Metal leaf spring of light motor vehicle suspension	Journal of applied science and computations	Panneerselvam K.	<a href="https://scihub.se/10.1016/j.matpr.2019.06.745">https://scihub.se/10.1016/j.matpr.2019.06.745</a>
177.	2019	Mathematical Modeling and Transient Respons Analysis of SAE 6150 Steel Stepped Torsion Bar Spring	Journal of the Balkan Tribological Association	Panneerselvam K.	<a href="https://scibulcom.net/en/home">https://scibulcom.net/en/home</a>
178.	2017	Comparison Of TIG Welding And Plasma Arc Welding On Duplex Stainless Steel	Inter national Journal of Research	Prabakaran T.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
179.	2018	Evaluation of corrosion properties of Supermartensitic stainless steel using GMAW	Journal of applied science and computations	Prabakaran T.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
180.	2016	Shielding gas and heat input effects On the mechanical and metallurgical Characterization of gas metal arc Welding of super martensitic stainless steel (12cr5ni2mo) joints	Surface Review and Letters	Prabakaran T.	<a href="https://scihub.se/10.1142/s0218625x1750069x">https://scihub.se/10.1142/s0218625x1750069x</a>
181.	2017	Modeling and Prediction of Shell and Tube Heat Exchanger Performance using ANN	Inter national Journal of Scientific Research and Review	Pradeep P.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>

182.	2018	Implementation of "six sigma DMAIC" methodology to increase productivity of sand casting by reducing its defects	Inter national Journal of Research	Pradeep P.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
183.	2018	Production of biodiesel from waste cooking oil as a suitable alternative for diesel	Journal of applied science and computations	Pradeep P.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
184.	2017	Optimization of milling parameters of EN8 D using Taguchi methodology	Journal of applied science and computations	Rajasekar K.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
185.	2019	A Comparative Study of Terminalia Chebula Seed Bio Diesel	Journal of applied science and computations	Rajasekar K.	<a href="https://sci-hub.se/10.1016/j.matpr.2019.06.745">https://sci-hub.se/10.1016/j.matpr.2019.06.745</a>
186.	2017	Speed Control Of Three Phase Induction Motor Using VSI Based SVPWM Technique	Inter national Journal of Scientific Research and Review	Rajasekar S.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
187.	2018	SUFFOCATION OF WOMEN IN GEORGE RYGA'S <i>SUNRISE ON SARAH</i>	Journal of Applied Science and Computations	Rajasekaran M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
188.	2015	Evaluation of Mechanical Properties of Al6061 Metal Matrix Composite Reinforced with fused Zirconia Alumina	International Journal of Advances in Engineering Research	Rajesh P.V.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
189.	2018	An Enhanced Multi Hop Low Energy Adaptive Clustering Hierarchy Using Energy Aware Minimum Spanning Tree	Global Journal of Engineering Science and Researches	Rama B.	<a href="http://www.giesrm.com/">http://www.giesrm.com/</a>
190.	2017	Effect of silver doping on optical properties of nanoflower ZnO thin films prepared by spray pyrolysis thenique	Journal of Material Science : Materials in Electronics	Ramesh Babu N.	<a href="https://www.springer.com/journal/10854">https://www.springer.com/journal/10854</a>



191.	2018	Morphology-controllable of Sn doped ZnO nanorods prepared by spray pyrolysis for transparent electrode application	AIP Proceedings	Ramesh Babu N.	<a href="https://aip.scitation.org/journal/apc">https://aip.scitation.org/journal/apc</a>
192.	2017	FT-IR, FT-Raman and UV-Visible Spectral Analysis on (E)-N'-(thiophen-2-ylmethylene) Nicotinothiazide	Archives in Chemical research	Ramesh Babu N.	<a href="https://www.imedpub.com/archives-in-chemical-research/#:~:text=Archives%20in%20Chemical%20Research%20(in%20the%20field%20of%20Chemistry.">https://www.imedpub.com/archives-in-chemical-research/#:~:text=Archives%20in%20Chemical%20Research%20(in%20the%20field%20of%20Chemistry.</a>
193.	2015	Vibrational Spectroscopy investigation and density functional theory calculations on (E)-N'-(4-methoxybenzylidene) benzohydrazide	Molecular and Biomolecular Spectroscopy	Ramesh Babu N.	<a href="https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy">https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy</a>
194.	2015	Vibrational Studies on (E)-1-((pyridine-2-yl)methylene) semicarbazide using experimental and theoretical method	Journal of Molecular Structure	Ramesh Babu N.	<a href="https://www.sciencedirect.com/journal/journal-of-molecular-structure">https://www.sciencedirect.com/journal/journal-of-molecular-structure</a>
195.	2016	Structural and vibrational studies on 1-(5-methyl-[1,3,4]thiadiazol-2-yl)-pyrrolidin-2-ol	Molecular and Biomolecular Spectroscopy	Ramesh Babu N.	<a href="https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy">https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy</a>
196.	2016	Vibrational Spectroscopy (FT- IR, FT-Raman and UV) studies of E- [1-Methyl-2,6- diphenyl-3- (propan-2-yl) piperidin-4-ylidene]amino-3-methylbenzoate] using DFT method	International Journal of Scientific research	Ramesh Babu N.	<a href="https://www.worldwidejournals.com/international-journal-of-scientific-research-(IJSR)/">https://www.worldwidejournals.com/international-journal-of-scientific-research-(IJSR)/</a>

197.	2016	Vibrational, Ultra Violet, Natural Bond Orbital analysis of E-[1-3- methythienyl)-5-Phenyl-2, 4-Pentadiene-3-one] using Quantum Mechanical Computations and Experimental Spectra	Journal of new developments in Chemistry	Ramesh Babu N.	<a href="https://openaccess.pub.org/journal/jndc/about#:~:text=Journal%20of%20New%20Developments%20in%20Chemistry%20(JND C)%20is%20an%20international,conference%20pro">https://openaccess.pub.org/journal/jndc/about#:~:text=Journal%20of%20New%20Developments%20in%20Chemistry%20(JND C)%20is%20an%20international,conference%20pro</a>
198.	2016	An Application Traditional and Nontraditional Approach on Lock Industry for Optimization of Cutting Layout	Asian Journal of Research in Social Sciences and Humanities	Ramesh K.	<a href="https://www.indianjournals.com/ijor.aspx">https://www.indianjournals.com/ijor.aspx</a>
199.	2019	Analysis of Composite leaf spring over Metal leaf spring of light motor vehicle suspension	Journal of applied science and computations	Ramesh K.	<a href="https://sci-hub.se/10.1016/j.matpr.2019.06.745">https://sci-hub.se/10.1016/j.matpr.2019.06.745</a>
200.	2016	Shrinkage characteristics studies on conventional sintered zirconia toughened alumina using computed tomography imaging technique	International Journal of Refractory Metals and Hard Materials	Ramesh T.	<a href="https://sci-hub.se/10.1016/j.ijrmhm.2015.09.008">https://sci-hub.se/10.1016/j.ijrmhm.2015.09.008</a>
201.	2016	Analysis and optimization of dry sliding wear characteristics of zirconia reinforced alumina composites formed by conventional sintering using response surface method	International Journal of Refractory Metals and Hard Materials	Ramesh T.	<a href="https://sci-hub.se/10.1016/j.ijrmhm.2016.04.007">https://sci-hub.se/10.1016/j.ijrmhm.2016.04.007</a>
202.	2018	Experimental Analysis of Electro Chemical Micro Machining on Nickel	Journal of applied science and computations	Ramkumar T.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
203.	2016	Experimental investigation of production of biodiesel from pongamiapinnata oil	Journal of applied science and computations	Ramkumar T.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>

204.	2016	Design of multi operational Tool holder to increase the productivity	Journal of applied science and computations	Ramkumar T.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
205.	2016	Study of aluminium-fly ash composite materials mechanical properties by stir casting method	Journal of applied science and computations	Ramkumar T.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
206.	2017	Comparison Of TIG Welding And Plasma Arc Welding On Duplex Stainless Steel	Inter national Journal of Research	Ramkumar T.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
207.	2017	Influence of fly ash in AluminiumMMC by stir casting method	Journal of applied science and computations	Ramkumar T.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
208.	2017	Design and analysis of EEBF composite material	Inter national Journal of Research	Ramkumar T.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
209.	2018	Effect of deposition temperature on Key optoelectronic properties of electrodeposited cuprous oxide thin films.	Optical and Quantum Electronics. (Springer).	Ravi chandiran C.	<a href="https://www.springer.com/journal/11082">https://www.springer.com/journal/11082</a>
210.	2018	Influence of rare earth material (Sm <sup>3+</sup> ) doping on the properties of electrodeposited Cu <sub>2</sub> O films for optoelectronics	Journal of Materials Science: Materials in Electronics. (Springer).	Ravi chandiran C.	<a href="https://www.springer.com/journal/10854">https://www.springer.com/journal/10854</a>
211.	2018	An Effect of Rare Earth Nd <sup>3+</sup> doping on the Properties of Electrodeposited	Thin solid films.	Ravi chandiran C.	<a href="https://www.journals.elsevier.com/thin-solid-films">https://www.journals.elsevier.com/thin-solid-films</a>
212.	2018	Effect of solution pH on structural, optical, photoluminescence, electrical properties of electrodeposited Cuprous Oxide Thin Films	Micro electronics engineering	Ravi chandiran C.	<a href="https://www.sciencedirect.com/journal/microelectronic-engineering">https://www.sciencedirect.com/journal/microelectronic-engineering</a>

213.	2018	An Effect of Rare Earth Pr <sup>3+</sup> doping on the Properties of Electrodeposited Cuprous Oxide Thin Films	Journal of Sol-Gel Science and Technology.	Ravi chandiran C.	<a href="https://www.springer.com/journal/10971">https://www.springer.com/journal/10971</a>
214.	2016	Analysis of the Mechanical Properties and Structure of Aluminium (Al 5083) Processed by Equal Channel Angular Pressing	International Journal of Engineering Science and Computing	Ravisankar B.	<a href="https://ijesc.org/">https://ijesc.org/</a>
215.	2018	Fact-Finding on Physical and Mechanical Properties of 3Y-TZP Toughened Alumina (ZTA) Composites Incorporation of Functionalized Multi-walled Carbon Nanotubes.	Advances in Materials and Metallurgy	RenoldElsen S.	<a href="https://www.springer.com/gp/book/9789811317798">https://www.springer.com/gp/book/9789811317798</a>
216.	2015	Optimization to develop multiple response hardness and compressive strength of zirconia reinforced alumina by using RSM and GRA	International Journal of Refractory Metals and Hard Materials	RenoldElsen S.	<a href="https://sci-hub.se/10.1016/j.ijrmhm.2015.06.007">https://sci-hub.se/10.1016/j.ijrmhm.2015.06.007</a>
217.	2016	Analysis and optimization of dry sliding wear characteristics of zirconia reinforced alumina composites formed by conventional sintering using response surface method	International Journal of Refractory Metals and Hard Materials	RenoldElsen S.	<a href="https://sci-hub.se/10.1016/j.ijrmhm.2016.04.007">https://sci-hub.se/10.1016/j.ijrmhm.2016.04.007</a>
218.	2017	X-Ray Diffraction Analysis of Mechanically Milled Alumina and Zirconia Powders	Nano Hybrids and Composites	RenoldElsen S.	<a href="https://www.scientific.net/NHC">https://www.scientific.net/NHC</a>
219.	2017	Taguchi Based Analysis on Hole Diameter Error of Drilled Glass/BahuniaRacemos a Fiber Polymer Composites	SAE Technical Paper	RenoldElsen S.	<a href="https://www.scimagojr.com/journalsearch.php?q=21100239259&amp;tip=sid">https://www.scimagojr.com/journalsearch.php?q=21100239259&amp;tip=sid</a>

220.	2016	Empirical and finite element prediction and validation of weld bead profile generated during TIG welding process	Global Journal of Pure and Applied Mathematics (GJPAM)	RenoldElsen S.	<a href="https://www.ripublication.com/gjpam.htm">https://www.ripublication.com/gjpam.htm</a>
221.	2018	Bike with Modified Steering System to Assist People with Forearm Disability	SAE International	RenoldElsen S.	<a href="https://www.sae.org/">https://www.sae.org/</a>
222.	2018	A preliminary study on the physical and biocompatibility characteristics of Zirconia-Silicon Nitride bio- ceramics	IOP Conference Series: Materials Science and Engineering	RenoldElsen S.	<a href="https://iopscience.iop.org/journal/1757-899X">https://iopscience.iop.org/journal/1757-899X</a>
223.	2016	Analysis and optimization of dry sliding wear characteristics of zirconia reinforced alumina composites formed by conventional sintering using response surface method	International Journal of Refractory Metals and Hard Materials	RenoldElsen S.	<a href="https://sci-hub.se/10.1016/j.ijrmhm.2016.04.007">https://sci-hub.se/10.1016/j.ijrmhm.2016.04.007</a>
224.	2016	Shrinkage characteristics studies on conventional sintered zirconia toughened alumina using computed tomography imaging technique	International Journal of Refractory Metals and Hard Materials	RenoldElsen S.	<a href="https://sci-hub.se/10.1016/j.ijrmhm.2015.09.008">https://sci-hub.se/10.1016/j.ijrmhm.2015.09.008</a>
225.	2015	The Effect Of Organic Compound On Corrosion Behavior Of Copper InNitric Acid	International Journal of chemistry and bio technology	Rethinagiri V.	<a href="https://portal..org/resource//2395-289X">https://portal..org/resource//2395-289X</a>
226.	2015	The effect of organic sulphide compound on corrosion behavior of metal in acidic medium	International journal of Nano corrosion Science and Engineering	Rethinagiri V.	<a href="https://portal..org/resource//2395-7018">https://portal..org/resource//2395-7018</a>
227.	2015	Evaluation of Mechanical Properties of Al6061 Metal Matrix Composite Reinforced with fused Zirconia Alumina	International Journal of Advances in Engineering Research	Roseline S.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>

228.	2016	Effect of Hardness and Fracture Toughness on the addition of Graphite in Aluminium – Silicon Carbide metal matrix composite.	Inter national Journal of Research	Roseline S.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
229.	2017	Evaluation of Structural and mechanical properties of zirconia reinforced aluminium matrix composites	Journal of Computational and Theoretical nanoscience	Roseline S.	<a href="https://www.scijournal.org/impact-factor-of-j-comput-theor-nanos.shtml">https://www.scijournal.org/impact-factor-of-j-comput-theor-nanos.shtml</a>
230.	2018	Numerical evaluation of zirconia reinforced aluminium matrix composites for sustainable environment	Annals of operation Research, Springer	Roseline S.	<a href="https://www.springer.com/journal/10479">https://www.springer.com/journal/10479</a>
231.	2016	Input Current Ripple Reduction Based Boost Converter Through T-Filter Network	Inter national Journal of Electronics Engineering.	SamayaSanjeevi S.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
232.	2016	Model Analysis of Metallic Gears and Hybrid Spur Gear	Inter national Journal of Research	Sankaradoss R.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
233.	2018	Implementation of “six sigma DMAIC” methodology to increase productivity of sand casting by reducing its defects	Inter national Journal of Research	Sankaradoss R.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
234.	2018	Effect on concrete with engineered cementitious composite using polypropylene fibre	Indian Journal of Scientific Research	SanthoshKumar	<a href="http://www.ijsr.in/index.php">http://www.ijsr.in/index.php</a>
235.	2018	Experimental Analysis of Electro Chemical Micro Machining on Nickel	Journal of applied science and computations	Saravanan D.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
236.	2017	Energy Assessment over a solar cladding by using Geographic Information system	International journal Engineering and Applied Sciences. (Medwell Journals)	Saravanan R.	<a href="https://medwelljournals.com/inpress.php?jid=1816-949x">https://medwelljournals.com/inpress.php?jid=1816-949x</a>

237.	2017	Analysis of solar Radiation In External wall by using Remote Sensing And GIS	International journal of Advanced Research in Basic Engineering Science and Technology	Saravanan R.	<a href="http://www.ijarset.com/">http://www.ijarset.com/</a>
238.	2017	Experimental Investigation of Strength and Characteristics of Geopolymer Concrete by using Flyash And Quarry Dust	International journal of Advanced Research in Basic Engineering Science and Technology	Saravanan R.	<a href="http://www.ijarset.com/">http://www.ijarset.com/</a>
239.	2018	Conceptual Design of Green façade to provide thermal comfort	International Journal of Advanced Research Methodology in Engineering & Technology	Saravanan R.	<a href="https://portal..org/resource//2456-6446">https://portal..org/resource//2456-6446</a>
240.	2019	Impact of Industrial waste water disposal on surface water in Kalasalingam canal, Erode district.	Archieves of Agriculture and Environmental Science	Saravanan R.	<a href="https://www.aesacademy.org/?s=indexing">https://www.aesacademy.org/?s=indexing</a>
241.	2019	Solar Photovoltaic Array Reconfiguration using Magic Su- Do-Ku algorithm for Maximum Power Production under Partial Shading Conditions	International Journal of Ambient Energy	Sarojini Mary S.	<a href="https://www.tandfonline.com/toc/taen20/current">https://www.tandfonline.com/toc/taen20/current</a>
242.	2020	Conversion of petroleum-based fuel from waste plastics	Journal of Applied Science and Computations	Sarojini Mary S.	<a href="https://portal..org/resource//1076-5131">https://portal..org/resource//1076-5131</a>
243.	2020	Hybrid lighting using fiber optic cables	WutanHuatanJisuanJishu	Sarojini Mary S.	<a href="http://www.wthtjss.cn/">http://www.wthtjss.cn/</a>
244.	2020	Enhanced power generation from Plants Plant-e technology using high voltage gain DC-DC converter topology	International Journal of Electrical Engineering & Technology	Sarojini Mary S.	<a href="http://www.iaeme.com/Ijeet/index.asp">http://www.iaeme.com/Ijeet/index.asp</a>

245.	2016	Power enhancement of partially shaded PV arrays through shade dispersion using magic square configuration	AIP. J. of Renewable and Sustainable Energy	Sarojini Mary S.	<a href="https://aip.scitation.org/journal/rse">https://aip.scitation.org/journal/rse</a>
246.	2015	A Dual DC Output Power Supply for a Stand-Alone Photo voltaic System	International Journal on Electric Power Components & Systems (Taylor & Francis Publications )	Sarojini Mary S.	<a href="https://www.tandfonline.com/toc/uemp20/current">https://www.tandfonline.com/toc/uemp20/current</a>
247.	2018	High Voltage Gain DC-DC Converter with a Three Winding Coupled Inductor	Journal of Applied Science and Computations	Sarojini Mary S.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
248.	2016	Current trends in marketing strategies adopted by banks	Archars and elevators publishing house Bangalore	Sathishkumar G.	<a href="https://aeph.in/?page_id=939">https://aeph.in/?page_id=939</a>
249.	2015	Reuse of Sago Treated Wastewater Partially substitute in concrete	International Journal of Applied Engineering Research	Sekar B.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
250.	2018	Experimental investigation on strengthening of RCC beams by wrapping glass fibre reinforced polymer sheet	International research Journal of engineering and technology	Sekar B.	<a href="https://www.irjet.net/">https://www.irjet.net/</a>
251.	2016	Enhanced System for Energy – Efficient Co- operative Network DOI: 10.32968 / 2279-543X	International Journal of Scientific Research and Review	Selvashanthi S.	<a href="http://www.dynamicipublisher.org/">http://www.dynamicipublisher.org/</a>
252.	2016	A survey on maintain Data Privacy-A different Perspective	Advances in Natural and Applied Sciences	SenthamilSelvi R.	<a href="http://www.aensiw eb.com/journals.html">http://www.aensiw eb.com/journals.html</a>
253.	2017	An improved firefly heuristics for efficient feature selection and its application in big data.	Biomedical research	SenthamilSelvi R.	<a href="https://www.biomedres.info/">https://www.biomedres.info/</a>
254.	2016	Comparison of Mechanical Properties on Al7175-SiC and Al7075Al2O3 metal matrix composites	Journal of applied science and computations	Senthil Kumar D.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>



PRINCIPAL

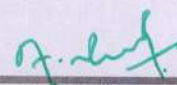
M.I.E.T. ENGINEERING COLLEGE  
GUNDUR, TIRUCHIRAPPALLI-620 007.



255.	2017	Design and analysis of EEBF composite material	Inter national Journal of Research	Senthil Kumar D.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
256.	2019	Experimental Investigation of Convective Heat Transfer through Rough and Smooth Surfaced Aluminium 6081 Pin-Fin Apparatus	Journal of applied science and computations	Senthil Kumar D.	<a href="https://sci-hub.se/10.1016/j.matpr.2019.06.745">https://sci-hub.se/10.1016/j.matpr.2019.06.745</a>
257.	2016	Effect of Hardness and Fracture Toughness on the addition of Graphite in Aluminium –Silicon Carbide metal matrix composite.	Inter national Journal of Research	Senthil Kumar S.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
258.	2016	Design of multi operational Tool holder to increase the productivity	Journal of applied science and computations	Senthil Kumar S.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
259.	2015	Graceful labeling of komodo dragon graphs	Journal of Scientific Research in Physical and Mathematical Science	Shahul Hameed A.R.	<a href="https://journals.indexcopernicus.com/search/journal/issue?issueId=all&amp;journalId=31871">https://journals.indexcopernicus.com/search/journal/issue?issueId=all&amp;journalId=31871</a>
260.	2015	Graceful labeling of Extended squid graphs	Journal of Scientific Research in Physical and Mathematic al Science	Shahul Hameed A.R.	<a href="https://journals.indexcopernicus.com/search/journal/issue?issueId=all&amp;journalId=31871">https://journals.indexcopernicus.com/search/journal/issue?issueId=all&amp;journalId=31871</a>
261.	2017	Indoor Radon ( $^{222}\text{Rn}$ ) and Thoron ( $^{220}\text{Rn}$ ) Measurements and Assessment of Human Risk in the Dwellings of Tiruchirappalli City (Tamil Nadu, India).	Journal of Chemical Data Collections	Shahul Hameed P.	<a href="https://www.journals.elsevier.com/chemical-data-collections">https://www.journals.elsevier.com/chemical-data-collections</a>
262.	2017	Radioactivity in Building Materials of Pudukkottai Geological Region	Earth Syst Environ	Shahul Hameed P.	<a href="https://www.springer.com/journal/41748">https://www.springer.com/journal/41748</a>

263.	2017	Assessment of Radioactivity in Concrete made with E-waste plastic	Journal of Testing and Evaluation, American Society for Testing Materials (ASTM)	Shahul Hameed P.	<a href="https://www.astm.org/DIGITAL_LIBRARY/JOURNALS/TESTEVAL/">https://www.astm.org/DIGITAL_LIBRARY/JOURNALS/TESTEVAL/</a>
264.	2018	Distribution and bioaccumulation of <sup>210</sup> Po and <sup>210</sup> Pb in abiotic and biotic components of the Bay of Bengal.	Journal of Radiation Protection Dosimetry Volume	Shahul Hameed P.	<a href="https://portal..org/resource//0144-8420">https://portal..org/resource//0144-8420</a>
265.	2015	A Study on Radon( <sup>222</sup> Rn ) Exhalation Rate in the Rocks Used as Building Materials in Tiruchirappalli District, Tamil Nadu, India	Journal of Environmental Nanotechnology	Shahul Hameed P.	<a href="https://portal..org/resource//2279-0748">https://portal..org/resource//2279-0748</a>
266.	2015	Natural radioactivity levels in the soils and human risk assessment in Tiruchirappalli district (Tamil Nadu, India)	Journal of Radio-analytical and Nuclear Chemistry	Shahul Hameed P.	<a href="https://www.springer.com/journal/10967">https://www.springer.com/journal/10967</a>
267.	2015	Evaluation of radioactivity in soils of Chidambaram taluk of Cuddalore district (Tamil Nadu, India)	International Journal of Applied Research	Shahul Hameed P.	<a href="https://www.allresearchjournal.com/">https://www.allresearchjournal.com/</a>
268.	2019	Activity concentration of polonium <sup>210</sup> and lead- <sup>210</sup> in tobacco products and annual committed effective dose to tobacco users in Tiruchirappalli District (Tamil Nadu, India)	Journal of Radio analytical and nuclear chemistry	Shahul Hameed P.	<a href="https://www.springer.com/journal/10967">https://www.springer.com/journal/10967</a>
269.	2016	Radioactivity in Building Materials and Assessment of Risk of Human Exposure in Tiruchirappalli District (Tamil Nadu, India)	Journal of Hazardous, Toxic, and Radioactive Waste.	Shahul Hameed P.	<a href="https://ascelibrary.org/journal/jhtrbp">https://ascelibrary.org/journal/jhtrbp</a>
270.	2016	Assessment of Ambient Gamma Radiation Level in Tobacco Cultivated Soil Samples of Dindigul and Erode Districts, Tamil Nadu	International Journal of Current Research	Shahul Hameed P.	<a href="https://www.journalcra.com/">https://www.journalcra.com/</a>

271.	2016	Efficient resource allocation for spectrum leasing in co-operative radio networks	International Journal of innovative research in computer and communication engineering	ShanmugaPriya S.	<a href="https://www.ijircee.com/">https://www.ijircee.com/</a>
272.	2016	Multi copy routing techniques in mobile communal network using homing spread	International Journal of innovative research in computer and communication engineering	ShanmugaPriya S.	<a href="https://www.ijircee.com/">https://www.ijircee.com/</a>
273.	2017	Survey On Identification Of Brain Tumor Using Medical Image Segmentation And Edge Detection	Advances in natural and applied sciences	ShanmugaPriya S.	<a href="https://www.scimagojr.com/journalsearch.php?q=19500157807&amp;tip=sid">https://www.scimagojr.com/journalsearch.php?q=19500157807&amp;tip=sid</a>
274.	2017	Improved algorithm to identify the images in underwater	International Journal of Advanced research in management, architecture, technology and engineering	ShanmugaPriya S.	<a href="https://www.ijarmate.com/">https://www.ijarmate.com/</a>
275.	2018	The Personal Authentication Service and Security Enhancement for Optimal Strong Password	Concurrency and Computation: Practice and Experience	ShanmugaPriya S.	<a href="https://onlinelibrary.wiley.com/journal/15320634">https://onlinelibrary.wiley.com/journal/15320634</a>
276.	2018	Enhanced Mutual Authentication System in Mobile Cloud Environment	International Journal of Engineering and Technology	ShanmugaPriya S.	<a href="https://www.sciencedirect.com/index.php/ijet">https://www.sciencedirect.com/index.php/ijet</a>
277.	2018	Efficient fuzzy c-means based multilevel image segmentation for brain tumor detection in MR images	Design automation for embedded system	ShanmugaPriya S.	<a href="https://www.springer.com/journal/10617">https://www.springer.com/journal/10617</a>
278.	2019	Image Denoising With Linear and Non-linear Filters	IEEE Explore	ShanmugaPriya S.	<a href="https://ieeexplore.ieee.org/Xplore/home.jsp">https://ieeexplore.ieee.org/Xplore/home.jsp</a>
279.	2019	Load Predicting Model of Mobile Cloud Computing Based on Glowworm Swarm Optimization LSTM Network	International Journal of Interactive Mobile Technologies	ShanmugaPriya S.	<a href="https://www.online-journals.org/index.php/i-jim">https://www.online-journals.org/index.php/i-jim</a>

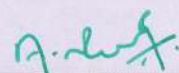


280.	2020	Disease prediction based on micro array classification using deep learning techniques	Micro processors and Micro systems	ShanmugaPriya S.	<a href="https://www.journals.elsevier.com/microprocessors-and-microsystems">https://www.journals.elsevier.com/microprocessors-and-microsystems</a>
281.	2020	Machine Learning based DDOS Detection	International Conference on Emerging Smart Computing and Informatics (ESCI)	ShanmugaPriya S.	<a href="https://ieeexplore.ieee.org/Xplore/home.jsp">https://ieeexplore.ieee.org/Xplore/home.jsp</a>
282.	2020	Brain Tumor Detection and Disease Prediction using CNN Algorithm	Test Engineering and Management	ShanmugaPriya S.	<a href="https://testmagzine.biz/index.php/testmagzine">https://testmagzine.biz/index.php/testmagzine</a>
283.	2019	Job satisfaction after privitisation of higher education	Journal of inter disciplinary cyclic process	Suganya D.	<a href="http://www.jicrjournal.com/ARCHIVES/">http://www.jicrjournal.com/ARCHIVES/</a>
284.	2018	Design of Soft-Switched CCM Boost Converters for High-Power Applications	Inter national Journal of Engineering & Science Research	Sugaraj S.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
285.	2017	Optimization of milling parameters of EN8 D using Taguchi methodology	Journal of applied science and computations	Sundaravadivel K.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
286.	2019	A Comparative Study of TerminaliaChebula Seed Bio Diesel	Journal of applied science and computations	Sundaravadivel K.	<a href="https://sci-hub.se/10.1016/j.matpr.2019.06.745">https://sci-hub.se/10.1016/j.matpr.2019.06.745</a>
287.	2017	Effectives of info and common Tech a studt with ref to selective Deemed University in Tamilnadu	JOJDEL	Surekha C.R.	<a href="https://1word.ws/jojdel">https://1word.ws/jojdel</a>
288.	2019	Job satisfaction after privitisation of higher education	Journal of inter disciplinary cyclic process	Surekha C.R.	<a href="http://www.jicrjournal.com/ARCHIVES/">http://www.jicrjournal.com/ARCHIVES/</a>
289.	2017	Design of Solar Cell Antenna (SOLAN) Using Indium Tin Oxide Mixed with Silver	African Journal of Basic & Applied Sciences	Suresh Kumar A.	<a href="https://idosi.org/ajbas/ajbas.htm">https://idosi.org/ajbas/ajbas.htm</a>

290.	2015	Design of solar cell antenna (SOLAN) in different AgHT- 8 patch shape for reflection co- efficient, gain, power and directivity compared with existing AgHT-4 and ITO	International Journal of Engineering and Technical Research (IJETR)	Suresh Kumar A.	<a href="https://www.erpulication.org/ijetr/page/home">https://www.erpulication.org/ijetr/page/home</a>
291.	2015	Performance analysis of solar cell antenna (SOLAN) using different material like AgHT-8, AgHT-4 and ITO	International Journal of Applied Engineering Research	Suresh Kumar A.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
292.	2018	Horizontal Axis Sun Tracking System Is Implemented Through Arduino	International Journal of scientific Research and Review	Suresh kumar U.	<a href="http://www.dynamicipublisher.org/#:~:text=International%20Journal%20of%20Scientific%20Research%20and%20Review%20(%202279%2D543x.and%20dissemination%20of%20scientific%20knowledge.">http://www.dynamicipublisher.org/#:~:text=International%20Journal%20of%20Scientific%20Research%20and%20Review%20(%202279%2D543x.and%20dissemination%20of%20scientific%20knowledge.</a>
293.	2018	Design optimization sensitivity analysis and optimal system types of hybrid renewable energy system	International Journal of Computational Engineering Research	Suresh kumar U.	<a href="http://www.ijceronline.com/">http://www.ijceronline.com/</a>
294.	2019	Comparison and test methodology to evaluate steel- concrete bonding strength of thin reinforcing bars	International journal of recent trends in engineering and research	Surya T.	<a href="https://publons.com/journal/67140/international-journal-of-recent-trends-in-engineer/">https://publons.com/journal/67140/international-journal-of-recent-trends-in-engineer/</a>
295.	2015	Optimal repair rate and area reduction for embedded memories by using bira&amt	International Journal of Engg. Res.& Sci. & Tech.	Susan Christina X.	<a href="https://portal..org/resource//2319-5991">https://portal..org/resource//2319-5991</a>
296.	2015	Compact photonic crystal integrated circuitfor all-optical logic operation	International Journal of IET Optoelectronics Research Article	Susan Christina X.	<a href="https://digital-library.theiet.org/content/journals/iet-opt">https://digital-library.theiet.org/content/journals/iet-opt</a>

297.	2015	Decomposition of Mammogram Images based on Bidimensional Complete Ensemble Empirical Mode Decomposition with Adaptive Noise	Australian Journal of Basic and Applied Sciences	Susan Christina X.	<a href="http://www.ajbasweb.com/">http://www.ajbasweb.com/</a>
298.	2015	Reuse of Sago Treated Wastewater Partially substitute in concrete	International Journal of Applied Engineering Research	Swaminathan P.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
299.	2015	Vibrational Spectroscopy investigation and density functional theory calculations on (E)-N'-(4-methoxybenzylidene) benzohydrazide	Molecular and Biomolecular Spectroscopy	Syed Ali Padusha M.	<a href="https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy">https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy</a>
300.	2015	Vibrational Studies on (E)-1-((pyridine-2-yl)methylene)semicarbazide using experimental and theoretical method	Journal of Molecular Structure	Syed Ali Padusha M.	<a href="https://www.sciencedirect.com/journal/journal-of-molecular-structure">https://www.sciencedirect.com/journal/journal-of-molecular-structure</a>
301.	2016	Structural and vibrational studies on 1-(5-methyl-[1,3,4]thiadiazol-2-yl)-pyrrolidin-2-ol	Molecular and Biomolecular Spectroscopy	Syed Ali Padusha M.	<a href="https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy">https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy</a>
302.	2015	The effect of organic sulphide compound on corrosion behavior of metal in acidic medium	International journal of Nano corrosion Science and Engineering	Syed Zahirullah S.	<a href="https://portal..org/resource//2395-7018">https://portal..org/resource//2395-7018</a>
303.	2015	Magnesium oxide nanoparticles – synthesis and characterization	International journal of Nano corrosion Science and Engineering	Syed Zahirullah S.	<a href="https://portal..org/resource//2395-7018">https://portal..org/resource//2395-7018</a>
304.	2015	A study of Electrical and Optical properties of Mercury doped Cadmium oxide Thin films by Spray Pyrolysis Method	International Journal of Chem Tech. Research	Syed Zahirullah S.	<a href="http://www.sphinxsai.com/chemtech.php">http://www.sphinxsai.com/chemtech.php</a>

305.	2016	Cannons of Dindigul Fort- A marvel of Indian metallurgical skill	Journal of Chemical Science and pharmaceutical Sciences	Syed Zahirullah S.	<a href="https://journals.indexcopernicus.com/search/details?id=33812#:~:text=This%20Journal%20publishes%20original%20research,Biopharmaceutics%2C%20Pharmacokinetics">https://journals.indexcopernicus.com/search/details?id=33812#:~:text=This%20Journal%20publishes%20original%20research,Biopharmaceutics%2C%20Pharmacokinetics</a>
306.	2016	Influence of Curcumin extract on the Characteristics of copper sulphide Thin film prepared by SILAR method	International Journal of Advanced Engineering Technology	Syed Zahirullah S.	<a href="http://www.technicjournalsonline.com/ijeat/">http://www.technicjournalsonline.com/ijeat/</a>
307.	2017	Structural and optical properties of Cu- doped ZnO nanorods by silar method	Materials Technology: Advanced Performance materials	Syed Zahirullah S.	<a href="https://www.tandfonline.com/toc/yimte20/current">https://www.tandfonline.com/toc/yimte20/current</a>
308.	2018	Synthesis and characterization of Bi doped ZnO thin films using SILAR method for ethanol sensor	Materials Letters	Syed Zahirullah S.	<a href="https://www.elsevier.com/journals/materials-letters/0167-577x/guide-for-authors">https://www.elsevier.com/journals/materials-letters/0167-577x/guide-for-authors</a>
309.	2018	Morphology controllable of Sn-doped ZnO nanorods prepared by spray pyrolysis for transparent electrode application	AIP conference proceedings	Syed Zahirullah S.	<a href="https://aip.scitation.org/journal/apc">https://aip.scitation.org/journal/apc</a>
310.	2018	Implementation Of Fly-back Micro Inverter With Dual Transformer To Achieve High Efficiency For Photovoltaic Applications	Global Journal of Engineering Science and Researches	Tamilselvan D.	<a href="http://www.gjesr.com/">http://www.gjesr.com/</a>
311.	2016	Input Current Ripple Reduction Based Boost Converter Through T-Filter Network	International Journal of Electronics Engineering.	Tamilselvan D.	<a href="https://www.csjournals.com/?cat=2">https://www.csjournals.com/?cat=2</a>
312.	2015	Input Current Ripple Reduction Based Boost Converter Through T-Filter Network	IEEE Sponsored 2nd International Conference on Innovations in Information Embedded and Communication Systems	Tamilselvan D.	<a href="https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7192780">https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7192780</a>



313.	2018	Multi-variant execution environment against code injection attacks	International Journal of Research in Electronics and Computer Engineering	Thenmozhi P.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>
314.	2018	An Improved Way To Compute Depth Maps For Multi-View Videos.	International Journal of Research in Electronics and Computer Engineering	Thirumalai Kumar V.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>
315.	2017	Modeling and Prediction of Shell and Tube Heat Exchanger Performance using ANN	International Journal of Scientific Research and Review	Thiyagarajan S.	<a href="http://www.ijssr.org/">http://www.ijssr.org/</a>
316.	2015	Mathematical Model for Ghrelin Suppresses Secretion of Luteinizing Hormone and Follicle-Stimulating Hormone in Women	International Refereed Journal of Engineering and Science (IRJES)	Velvizhi P.	<a href="http://www.irjes.com/">http://www.irjes.com/</a>
317.	2015	Estimation of the Parameters of Bivariate Minification Process for Ghrelin suppressed secretion of LH and FSH in Women	International Refereed Journal of Engineering and Science (IRJES)	Velvizhi P.	<a href="http://www.irjes.com/">http://www.irjes.com/</a>
318.	2016	Hazard function of fsh and lh responses to gnhr by ovaries steroids in the luteal phase of the cycle of the women	International Research Journal of Mathematics, Engineering and IT	Velvizhi P.	<a href="http://www.ipindexing.com/journal-details/International-Research-Journal-Of-Mathematics,-Engineering-And-IT/249">http://www.ipindexing.com/journal-details/International-Research-Journal-Of-Mathematics,-Engineering-And-IT/249</a>
319.	2016	Joint survival function for the effect of mifepristone on the pituitary response to FSH and LH by using MOBW Distribution"	Aryabhata journal of mathematics and informatics (AJMI)	Velvizhi P.	<a href="https://www.aryaneducationtrust.com/">https://www.aryaneducationtrust.com/</a>
320.	2016	Survival function of fsh and lh responses to gnhr by ovaries steroids in luteal phase of the cycle of women	Aryabhata Journal of Mathematics & Informatics	Velvizhi P.	<a href="https://www.aryaneducationtrust.com/">https://www.aryaneducationtrust.com/</a>



321.	2016	Mathematical Model for the Effect of Ghrelin on basal, GNRH Induced FSH and LH Secretion in Normal Women by using four Variate Weibull Distribution	American Journal of Engineering Research (AJER)	Velvizhi P.	<a href="http://www.ajer.org/">http://www.ajer.org/</a>
322.	2018	Mixture Pareto distribution of the circadian variation in AMH with PCOS differs significantly from normally ovulating	International Journal of Applied Engineering Research (IJAER)	Velvizhi P.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
323.	2018	A survival function of lh and fsh due to omega 3 fatty acid supplementation in normal and obese women by using generalization of uniform distribution	Aryabhata Journal of Mathematics & Informatics	Velvizhi P.	<a href="https://www.aryaneducationtrust.com/">https://www.aryaneducationtrust.com/</a>
324.	2020	Improved performance accuracy in detecting tumor in liver using deep learning techniques	Journal of Ambient Intelligence and Humanized Computing	Venkatesan R.	<a href="https://www.springer.com/journal/12652">https://www.springer.com/journal/12652</a>
325.	2020	Spectral and spatial features-based HSI classification using multiple neuron-based learning approach	International Journal of Cloud Computing	Venkatesan R.	<a href="https://www.inderscience.com/jhome.php?jcode=ijcc">https://www.inderscience.com/jhome.php?jcode=ijcc</a>
326.	2016	A Comparative study of various approaches used for the classification of Hyperspectral Satellite Imagery	International Journal of Applied Engineering Research	Venkatesan R.	<a href="https://www.ripublication.com/ijaer.htm">https://www.ripublication.com/ijaer.htm</a>
327.	2018	Pre-processing of Multimodal Hyperspectral Imaging Using Anisotropic Diffusion Approach	Journal of Computational and Theoretical Nano-Science	Venkatesan R.	<a href="https://www.scimagojr.com/journalsearch.php?q=28136&amp;tip=sid">https://www.scimagojr.com/journalsearch.php?q=28136&amp;tip=sid</a>
328.	2019	Hyper spectral dimensionality reduction using hybrid discriminative local metric learning	Microprocessors and Microsystems	Venkatesan R.	<a href="https://www.journals.elsevier.com/microprocessors-and-microsystems">https://www.journals.elsevier.com/microprocessors-and-microsystems</a>

329.	2019	Hyperspectral Image Features Classification Using Deep Learning Recurrent Neural Networks	Journal of Ambient Intelligence and Humanized Computing	Venkatesan R.	<a href="https://www.springer.com/journal/12652">https://www.springer.com/journal/12652</a>
330.	2018	Effect on concrete with engineered cementitious composite using polypropylene fibre	Indian Journal of Scientific Research	Venkatesh V.	<a href="http://www.ijsr.in/index.php">http://www.ijsr.in/index.php</a>
331.	2018	An Improved Way To Compute Depth Maps For Multi- View Videos.	International Journal of Research in Electronics and Computer Engineering	Vijayarathy M.	<a href="http://www.i2or-ijrece.com/">http://www.i2or-ijrece.com/</a>
332.	2017	Friction Welding of MgAz31 Alloy Tube to MgAz91 Plate Configuration by using Zinc Interlayer	Journal of applied science and computations	Vishnukumar M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
333.	2016	Analysis of the Mechanical Properties and Structure of Aluminium (Al 5083) Processed by Equal Channel Angular Pressing	International Journal of Engineering Science and Computing	Visvam M.	<a href="https://ijesc.org/">https://ijesc.org/</a>
334.	2017	Comparison Of TIG Welding And Plasma Arc Welding On Duplex Stainless Steel	International Journal of Research	Visvam M.	<a href="https://internationaljournalofresearch.com/">https://internationaljournalofresearch.com/</a>
335.	2018	Evaluation of corrosion properties of Supermartensitic stainless steel using GMAW	Journal of applied science and computations	Visvam M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
336.	2016	Study of aluminium-fly ash composite materials mechanical properties by stir casting method	Journal of applied science and computations	Vivekananthan M.	<a href="https://www.researchgate.net/signup.SignUp.html">https://www.researchgate.net/signup.SignUp.html</a>
337.	2017	Influence of fly ash in Aluminium MMC by stir casting method	Journal of applied science and computations	Vivekananthan M.	<a href="https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/">https://publons.com/journal/420884/jasc-journal-of-applied-science-and-computations/</a>
338.	2018	Bike with Modified Steering System to Assist People with Forearm Disability	SAE International	Vivekananthan M.	<a href="https://www.sae.org/">https://www.sae.org/</a>

339.	2018	A preliminary study on the physical and biocompatibility characteristics of Zirconia-Silicon Nitride bio-ceramics	IOPConference Series: Materials Science and Engineering	Vivekananthan M.	<a href="https://iopscience.iop.org/journal/1757-899X">https://iopscience.iop.org/journal/1757-899X</a>
340.	2018	Design optimization sensitivity analysis and optimal system types of hybrid renewable energy system	International Journal of Computational Engineering Research	Yoganathan P.	<a href="http://www.ijceronline.com/">http://www.ijceronline.com/</a>
341.	2016	Content based Image Retrieval based on Integrating Region Segmentation and Colour Histogram	The International Arab Journal of Information Technology	Yuvaraj D.	<a href="https://www.iajit.org/">https://www.iajit.org/</a>



**BIOSORPTION OF HEAVY METALS BY CLOSTRIDIUM SP BACTERIA**

Abbas Ali A<sup>1\*</sup>, Mohamed Sihabudeen M<sup>2</sup> And Zahir Hussain A<sup>3</sup>

<sup>1</sup>Professor, M. I. E. T Engineering College, Tiruchirappalli

<sup>2</sup>Associate Professor and Head, PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli

<sup>3</sup>Assistant Professor, Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli

Article Received on  
27 July 2016,

Revised on 16 Aug 2016,  
Accepted on 06 Sep 2016

DOI: 10.20959/wjpr.201610-7059

**\*Corresponding Author\***

Abbas Ali A

Professor, M. I. E. T  
Engineering College,  
Tiruchirappalli.

**ABSTRACT**

The present study is focused on the removal of heavy metals from ground water using on eco friendly adsorbent clostridium sp. Bio sorption is one of the economic methods that used for removal of heavy metals. The results revealed that the use of clostridium sp. is very effective for the treatment of heavy metals in the ground water.

**KEYWORDS:** Bio sorption, Clostridium sp, Heavy metal, AAS.

**INTRODUCTION**

Ground water is an important source of drinking water and its quality is currently threatened by the contamination of chemical pollution and microbiological contamination, especially microbes of sewage origin.<sup>[1]</sup> High incidence of diarrhoea, trachoma and the overall high mortality rates are associated with poor environmental sanitation.<sup>[4]</sup> Drinking water may be contaminated by the harmful bacteria resulting health problem.<sup>[1]</sup> The WHO reported that nearly half of the population in developing countries suffers from health problems associated with lack of drinking water of with microbiologically contaminated water.<sup>[2]</sup> However some of the bacterias are mainly used for removal of heavy metals in water.

The presence of heavy metals in aquatic environments is known to cause severe damage to aquatic life, beside the fact that these metals kill microorganisms during biological treatment of wastewater with a consequent delay of the process of water purification. Most of the

## FT-IR, FT-Raman and UV-Visible Spectral Analysis on (E)-N'-(thiophen-2-ylmethylene) Nicotinothiazide

Bharanidharan S<sup>1</sup>,  
Saleem H<sup>1</sup>,  
Subashchandrabose S<sup>2</sup>,  
Suresh M<sup>3</sup> and  
Ramesh Babu N<sup>4</sup>

### Abstract

Vibrational analysis of the (E)-N'-(thiophen-2-ylmethylene) nicotinothiazide (T2CNH) compound was carried out in solid phase using FTIR and FT-Raman spectroscopic techniques in the ranges: 400-4000 cm<sup>-1</sup> and 100-4000 cm<sup>-1</sup>, respectively. The molecular geometries and harmonic vibrational frequencies were calculated using CFT/6-311++G(d,p) basis set. A detailed interpretation of the IR and Raman spectra, based on the total energy distribution (TED) of the normal modes. The bond parameters such as bond lengths, bond angles and dihedral angles were calculated at the same level of theory. The natural bonding orbital (NBO) study reveals that inter and intra-molecular charge transfer of the molecule. The electronic transition was studied using UV-Vis spectrum. The NLO, band gap energy, MEP map, Mulliken atomic charges were calculated using the same level of basis set. In addition the thermodynamic properties were also calculated.

**Keywords:** FT-IR, FT-Raman; TED; NBO; T2CNH

- 1 Department of Physics, Annamalai University, Annamalainagar-608002, Tamil Nadu, India
- 2 Centre for Research and Development, PRIST University, Thanjavur-613403, Tamil Nadu, India
- 3 Department of Chemistry, College of Engineering, Guindy, Anna University, Chennai, 620 025, India
- 4 Dept. of Physics, M.I.E.T. Engineering College, Trichy-620007, Tamil Nadu, India

**Corresponding author:** Saleem H

✉ saleem\_h2001@yahoo.com

Received: December 21, 2016; Accepted: January 02, 2017; Published: January 09, 2017

Department of Physics, Annamalai University, Tamil Nadu, India.

Tel: +91 9443879295

### Introduction

Generally, Pyridine ring is a heterocyclic organic compound with the chemical formula C<sub>5</sub>H<sub>5</sub>N. Pyridine is structurally related to benzene, with one methylene group (=CH-) replaced by a nitrogen atom. It occurs in many important compounds, including azines and the vitamins nicotinic acid and pyridoxal. The precursor of pyridine is used to agrochemicals, pharmaceuticals and is also an important solvent and reagent. Mostly, it is used in the *in vitro* synthesis of DNA, sulfa pyridine (a drug against bacterial and viral infections), antihistaminic drugs triprolidine and mepyramine, as well as water repellents, bactericides, and herbicides. Some chemical compounds, although not synthesized from pyridine, contain its ring structure. They include B vitamins niacin and pyridoxal, an anti-tuberculosis drug isoniazide, nicotine and other nitrogen-containing plant products [1].

The ring of Thiophene and its derivatives have been reported to possess broad spectrum of biological properties including anti-inflammatory, analgesic, antidepressant, antimicrobial and anticonvulsant activities [2-4]. Antiepileptic drugs (AEDs) like tiagabine, etizimide, bromizolam are containing thiophene moiety

in their structures as active pharmacophore [5,6]. In addition, thiophene and its derivatives functionalized with the formyl group are versatile building blocks for the synthesis of donor-acceptor substituted p-conjugated systems for several optical applications.

The hydrazone group in the organic compound brings out several physical and chemical properties. The hydrazones are bearing the >C=N-N< which leads the molecule towards nucleophilic and electrophilic in nature. In the hydrazone moiety, the nitrogen atom behaves as nucleophilic and carbon atom behaves as nucleophilic as well as electrophilic in nature [7-9]. The benzohydrazone derivatives shows wide spectrum of

**Citation:** Bharanidharan S, Saleem H, Subashchandrabose S, et al. FT-IR, FT-Raman and UV-Visible Spectral Analysis on (E)-N'-(thiophen-2-ylmethylene) Nicotinothiazide. Arch Chem Res. 2017, 1:1.



## Synthesis and characterization of Bi doped ZnO thin films using SILAR method for ethanol sensor

S. Syed Zahirullah<sup>a,\*</sup>, P. Immanuel<sup>b</sup>, S. Pravinraj<sup>b</sup>, P. Femi Hilbert Inbaraj<sup>b</sup>, J. Joseph Prince<sup>b</sup>

<sup>a</sup> Department of Physics, M. I. E. T. Engineering College, Tiruchirappalli 620 007, Tamil Nadu, India

<sup>b</sup> Department of Physics, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli 620 024, Tamil Nadu, India

### ARTICLE INFO

#### Article history:

Received 26 June 2018

Received in revised form 13 July 2018

Accepted 16 July 2018

Available online 17 July 2018

#### Keywords:

Thin films

Sensor

Ethanol

SILAR

Bi doped ZnO

### ABSTRACT

Pure and Bi doped ZnO thin films prepared by Successive Ionic Layer Adsorption and Reaction (SILAR) method. The structural analysis shows that prepared films are polycrystalline in nature with preferential orientation along (100), (002) and (101) planes. Scanning electron microscope shows the morphological changes of the films with respect to increase in doping concentration. The average optical absorption value of all films was in the near visible range and the band gap of the films varies from 3.21 to 3.17 eV. The gas sensing study shows a maximum response of the films at 1000 ppm of ethanol was found to be around 60% with an operating temperature of 400 °C.

© 2018 Published by Elsevier B.V.

### 1. Introduction

As concern with earlier report on oxide materials, zinc oxide (ZnO) has emerged as one of the promising candidate, due to its optical and electrical properties, high chemical and mechanical stability, abundance, which tends to lower material cost as compared with most currently used transparent conductive oxide materials like tin oxide and indium tin oxide [1]. ZnO, n-type semiconducting material with a direct band gap of 3.37 eV. ZnO thin films have been deposited using various techniques such as spray pyrolysis [2,3], Wet chemical [4,5], SILAR [6] etc. Among these techniques, SILAR method has received much attention because of its simplicity and cost-effectiveness. Bismuth an important impurity in ZnO helps boosting performance in optoelectronic applications. Because of larger radius of Bi atoms than Zn atoms, they produce large mismatch in lattice constants thereby conductivity of Bi doped ZnO material may greatly change to semi-insulating. However, to our knowledge, there are few reports dealing with Bi-doped ZnO films compared to other metal doped ZnO films. Therefore, in the present investigation, Bi-doped ZnO thin films have been deposited on the glass substrate by SILAR method.

### 2. Material and methods

To synthesize pure and Bi doped ZnO thin films Zinc acetate dihydrate, Iso-propanol, Diethanolamine and Bismuth Chloride were used as precursors with propanol as base solvent. For synthesizing pure ZnO thin film, 0.1 M of zinc acetate was dissolved in propanol and then calculated volume of DEA solution was added. For synthesizing Bi doped ZnO thin films, 1, 3 and 5% of Bismuth Chloride was dissolved in a mixture of distilled water and propanol separately and mixed with zinc acetates. Then calculated volume of DEA solution was added into each of the complex solution. The precursor solution was made to stir for two hours at temperature of 60 °C until a clear and homogeneous solution is formed, and then aged for 24 h at room temperature (RT). The pre-cleaned glass substrates were first dipped in the precursor solutions for 30 s and then dipped in hot water (90 °C) for 30 s. The process was repeated for 50 cycles with retrieval period of 5 s on every dipping. Finally, the coated films were annealed at 400 °C under air atmosphere for an hour to obtain pure and Bi doped ZnO thin films. Finally the films were used for the Characterization and sensor studies.

#### 2.1. Characterisation

The structural analysis of the synthesized samples was carried out using a powder X-Ray diffractometer (PANalytical X'Pert Pro) with the Cu-K $\alpha$  radiation source (wavelength: 1.54 Å), UV-Vis

\* Corresponding author.

E-mail address: [syzedzahirullah@gmail.com](mailto:syzedzahirullah@gmail.com) (S. Syed Zahirullah).

<https://doi.org/10.1016/j.matlet.2018.07.067>

0167-577X/© 2018 Published by Elsevier B.V.

*M. I. E. T.*

# Optimization and thermal analysis of friction stir welding of AA 6061-AA 8011 joints

Navareethan Sabarirajan  
and Abdullah Naveen Sali,  
Pudukkottai, India

## Article Information

Correspondence Address  
Prof. Dr. Abdullah Naveen Sali  
M.I.E.T. Engineering College  
Trichy, Tamil Nadu, India  
E-mail: naveensali@ignited.com

## Keywords

Friction stir welding, AA6061, AA8011,  
Impact strength, ANOVA, COMSOL,  
transient temperature

Friction stir welding (FSW) is one of the advanced joining processes for similar or dissimilar materials. The schematic view of the FSW process is shown in Figure 1. The interaction of tool and material produces heat to form a soft region close to the tool and the work piece. The two materials intermix through mechanical pressure to form a uniform weld. Compared to other welding processes, it provides good strength with a minimal thickness of ductile materials and also inhibits bonding action during and after welding.

Kottra et al. [1] investigated the optimum tensile strength of dissimilar aluminum alloys AA2219 and AA5083 based on input parameters. From the investigation, it was found that optimum parameters are most important for evaluating the predicted tensile strength. The study also reported that the tool shoulder diameter/pin diameter (D<sub>s</sub>/D<sub>p</sub>) ratio of the tool was a very significant factor and its contribution percentage is higher than that of other factors. The study clearly shows that the hardness value at the HAZ at the side of AA5083 is

In the present work, joining of dissimilar aluminum alloys AA 6061 and AA8011 was carried out by FSW butt joint. The Taguchi L<sub>9</sub> orthogonal array design of experiments was adopted for the experiments to estimate optimal process parameters such as rotational speed, welding speed and axial force using Minitab 18. In ANOVA analysis, the priority of input parameters and the contribution percentage of each factor were determined through response and analysis of variance tables. From the ANOVA analysis data, tensile strength, impact strength and hardness of substantial values were optimized. Further thermal analysis of optimized values were examined through COMSOL Multiphysics 5.3b model which also successfully predicted the maximum welding temperature obtained from pin and work piece interaction of each position during welding. In this investigation the transient temperature levels of the weld zone during welding and after welding were investigated. Likewise the curves of transient temperatures were plotted with the aid of Origin Pro 2018.

low. Mostafa Chatterpour et al. [2] investigated the tensile strength of dissimilar aluminum (5083-H12 and 6061-T6) taller welding blank (TWB) sheets by FSW. The study yielded the following results: 221 MPa and 41% of tensile strength and elongation respectively. Tool rotational speed and welding speed are the significant parameters in that investigation. Palnival et al. [3] studied the optimization parameters for friction stir welding of dissimilar aluminum alloys AA6351 and AA5083 based on pin profile, rotational speed, welding speed and axial force. Based on the parameters, the result with respect to tensile strength was studied with the assistance of response graphs and contour plots. The investigators concluded that the entire tool profile, straight square pin profiled tool, yields good tensile strength. Saedi et al. [4] joined AA5083-H12 and AA7075-T6 joints by friction stir welding. They introduced mathematical modeling to explain the parameters and tensile strength relationship. In this process, a GA-genetic algorithm tool played

the major role in conforming the maximum tensile strength at optimum condition. Since the error percentage (1%) was very minimum between the experimental value and the predicted value of FSW parameters, the prediction by genetic algorithm tool is found to be most suitable. Maximum tensile strength of 294.36 MPa was attained at 500 rpm and 50 mm × min<sup>-1</sup> of the tool rotation and welding speeds, respectively.

Mastanah et al. [5] performed the friction stir welding of aluminum alloys such as AA5083 and AA2219 with respect to the parameters of tool rotation speed (rpm),

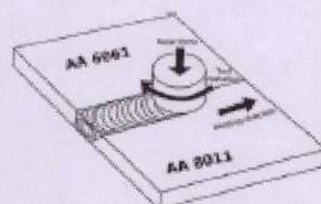


Figure 1: Schematic view of FSW

# Synthesis and Characterization of High Entropy Alloy (CrMnFeNiCu) Reinforced AA6061 Aluminium Matrix Composite

R. K. PRABAKARAN

*Government Industrial Training Institute  
Tiruchirappalli- 620014, Tamil Nadu, India*

A. NAVEEN SAIT

*Department of Mechanical Engineering  
Chendhuran College of Engineering & Technology  
Pudukkottai-622 507, Tamil Nadu, India  
naveensait@yahoo.co.in*

V. SENTHILKUMAR

*Department of Production Engineering  
National Institute of Technology  
Tiruchirappalli- 620 015, Tamil Nadu, India*

Received (10 February 2017)

Revised (12 March 2017)

Accepted (13 April 2017)

Quinary High Entropy Alloy (HEA) system consists of Cr-Mn-Fe-Ni-Cu elements were prepared through powder metallurgy route. With varying wt. % of above prepared HEA powder as reinforcements, two different (10% and 20%) A6061 aluminium matrix composites were produced. Sinterability of the composite powders was evaluated with different sintering time and temperature. The XRD results of HEA confirmed that the solid solution possess both FCC and BCC phases. Density, hardness and compressive strength of the fabricated composite were measured to evaluate the effect of HEA reinforcement. SEM micrographs of the composites were evaluated for the structure and to find the distribution of reinforcement particles.

*Keywords:* composites, HEA, AA6061, powder metallurgy.

## 1. Introduction

Metal matrix composites (MMCs) are well known engineering materials due to their excellent properties such as, high specific strength, superior mechanical and tribological properties, for which, they are replacing their monolithic alloys in the various structural and other applications. Two major techniques, liquid phase and solid phase methods are being used to fabricate MMCs [1]. Powder metallurgy route



# Compact photonic crystal integrated circuit for all-optical logic operation

 ISSN 1751-0758  
 Received on 30th June 2015  
 Revised on 2nd November 2015  
 Accepted on 20th November 2015  
 doi:10.1049/iet-opt.2015.0032  
 www.ietd.org

 Susan Christina Xavier<sup>1</sup>✉, B. Elizabeth Carolin<sup>2</sup>, Arunachalam P. Kabilan<sup>3</sup>, William Johnson<sup>4</sup>
<sup>1</sup>Department of Electronics and Communication Engineering MLET Engineering College, Trichy, Tamil Nadu, India

<sup>2</sup>Department of Electronics and Communication Engineering IJET College of Engineering, Villupuram, Tamil Nadu, India

<sup>3</sup>Department of Electronics and Communication Engineering Vivekananda College of Engineering for Women, Tiruchengodu, Tamil Nadu, India

<sup>4</sup>Department of Electronics and Communication Engineering M.A.M. College of Engineering & Technology, Trichy, Tamil Nadu, India  
 ✉ E-mail: feb\_jesu@jshoo.co.in

**Abstract:** Photonic integrated circuits (PICs) will be pushed to electronic integrated circuits in the forthcoming decade because of its package density, interconnections, improved functionality and cost effectiveness. In this study, the authors propose a new configuration of photonic crystal (PhC) integrated circuits to realise the operation of all-optical logic AND function that operates at a speed of hundreds of gigabits per second. The integrated circuit comprises of lasers, waveguide couplers, logic gate, amplifier and threshold limiter in a two-dimensional (2D) silicon PhC platform. The behaviour of the proposed structure is qualitatively analysed by the use of 2D finite-difference time-domain method. The results show that the integrated circuit performs the required logic operation. The average area required for the entire device including regenerated circuit is  $25 \times 10 \mu\text{m}^2$ . The overall response time is  $< 2$  ps. This device is one of the promising platforms for future optical computers and optical signal processor.

## 1 Introduction

With the rapid growth in science and technology, there is an ever-increasing demand for new information services, including data, Internet and broadband services. Therefore, higher speed and greater performance of computers are required. Researchers are reporting key milestones in developing new semiconductor devices and integrated circuits to cope up with the increasing requirements of high speed data transmission and processing. According to Moore's law, though the electronic processor speed doubles roughly every 18 months, it comes with the expense of increased chip power consumption, power dissipation and data stream distortion. Therefore, an innovative solution is needed to handle this problem and optical system is a better choice in the horizon because it provides transparency, high speed and high bandwidth and consuming significantly less energy. Optical computing devices and optical interconnects will use photons travelling in optical fibres or thin films instead of electrons to perform the appropriate functions. By processing signals with light rather than electrons, it might be possible to build a processor that operates at hundreds of terahertz [1].

The photonic integrated circuit (PIC) is a breakthrough technology that integrates multiple photonic functions similar to the integration of electronic devices on a single chip [2]. Its development is growing at a phenomenal rate as it provides significant improvements in system size, power consumption, reliability and cost. Similar to electronic integrated circuits, PICs are useful for a variety of applications for instance, in telecommunications, sensing, imaging, multicomputer architecture etc. In these applications, a large number of devices need to be placed in a confined space. In the current PIC, only a few different functions are allowed to be combined on the same chip because the size of the components is several mm to cm in length. The reduction of device dimensions is achieved by the use of photonic wire and photonic crystal (PhC) technology. Owing to the capability of manipulating photons in an easy-to-engineer manner and miniature in size, PhCs have been of a great interest as a platform for the development of PICs [3–6]. The fundamental

goal of PhC is to realise ultra-small integrated optical circuits on the back of different defects introduced within photonic bandgaps [7]. In PhC-PIC, a variety of different functions can be realised on a length scale of several 10's of micrometers. Our paper introduces a new way to design a PIC with PhC elements to realise logic function.

The paper is organised as follows. Section 2 describes the schematic diagram of the PhC integrated circuit for realisation of logic gate. In Section 3, design of the PhC layer is explained. Coupled cavity Y coupler is discussed in Section 4. Section 5 explains the operation of the PhC-based AND logic gate. The PhC limiter and amplifiers are elucidated in Sections 6 and 7, respectively. The results are discussed in Section 8. Finally, Section 9 ends with conclusions.

## 2 Schematic diagram of PhC integrated circuit for logic gate

The schematic circuit layout of a PhC-based PIC which includes laser source, Y coupler, logic gate, threshold limiter, amplifier and detector integrated on a single chip is shown in Fig. 1. Laser light sources are driven by electrical signals and generate optical signals which are applied as input signals to logic gates. Assume all the input signals including reference have the same frequency, polarisation, phase, and optical path. Two input signals from the laser are coupled using Y coupler and applied to one of the input ports of the AND logic gate and the reference signal  $I_{ref}$  is launched at the second input port. The combination of mirror and splitter structure performs a logic gate function by combining the reflected input signal and the partially transmitted reference signal. The resultant logic output is detected and converted into electrical signal by photo detector. This structure can be used for standalone logic gates. In an integrated circuit the logic gate output value is standardised using a threshold limiter that consists of an optical limiter and an amplifier, proceeds to the input signal of the subsequent logic gates.



## Performance analysis of solar cell antenna (SOLAN) using different material like AgHT-8, AgHT-4 and ITO

<sup>1</sup>A.Suresh Kumar and <sup>2</sup>S.Sundaravadivelu

<sup>1</sup>Department of Electronics and Communication Engineering,  
Pavendar Bharathidasan College of Engineering and Technology,  
Mathur, TrichyTamilnadu, India.  
[manaa\\_suresh@yahoo.com](mailto:manaa_suresh@yahoo.com)

<sup>2</sup>Department of Electronics and Communication Engineering,  
SSN Engineering College, Kalavakkam, Chennai  
Tamilnadu, India.[sundaravadivelus@ssn.edu.in](mailto:sundaravadivelus@ssn.edu.in)

### Abstract

Solar cell antenna is a combination of Solar cell and Microstrip antenna. SOLAN design is mainly used in autonomous property for transceiver. RF and Optic are the two intelligence components used to design the SOLAN. It generates DC power supply when light falls on the surface of AgHT-8 and penetrates towards the solar cell. Similarly EM wave falls on the surface of AgHT-8 and produce RF signal. By using SOLAN we can calculate reflection co-efficient, gain and power for different shapes, size and design when compared with existing AgHT-4 and ITO.

**Keyword:** Solar cell antenna (SOLAN), AgHT-4, AgHT-8, ITO, ADS, transceiver, hybrid.

### 1. INTRODUCTION

Solar cell antenna is used in different application such as environmental monitoring system, vehicular communication and Satellite systems. SOLAN is used in satellite communication<sup>[1]</sup>, metal plate of solar supports UMTS Pico-cell base station<sup>[2]</sup>, mesh patch antenna and circular grid antenna are used for car wind shields<sup>[3-5]</sup>, optically transparent wide band antenna supports communication system<sup>[6-12]</sup>, SOLAN array antenna power is more due to RF and Optic intelligence<sup>[13]</sup>.



## Radioactivity in Building Materials of Pudukkottai Geological Region, Tamil Nadu, India

G. Sankaran Pillai<sup>1</sup> · K. Jeevarenuka<sup>2</sup> · P. Shahul Hameed<sup>3</sup>

Received: 6 February 2017 / Accepted: 10 May 2017  
© Springer International Publishing Switzerland 2017

### Abstract

**Background** Since Pudukkottai district is naturally endowed with variety of building material resources such as stones, blocks, sand etc. These building materials are also exported to other district. So analysis of natural radioactivity in these building materials is important before these put into construction purpose.

**Purpose** WHO reported that indoor radon accumulation from soil and building materials is one of the major factors for human lung disorders. The main objective of the present study is to measure Naturally Occurring Radioactive Materials (NORM) in building materials of Pudukkottai and to assess the possible radiological risk.

**Methods** A total of 118 samples of building materials have been investigated for <sup>238</sup>U, <sup>232</sup>Th, and <sup>40</sup>K employing a 3" × 3" NaI(Tl) detector.

**Results** The mean Ra<sub>eq</sub> activity of the building materials maintained the following descending order: Stone (299 ± 206 Bq kg<sup>-1</sup>) > Soil (145 ± 54 Bq kg<sup>-1</sup>) Sand and Cement (117 ± 28 Bq kg<sup>-1</sup>) > Brick (110 ± 26 Bq kg<sup>-1</sup>). The present study identified seven stone quarries recorded Ra<sub>eq</sub> higher than the permissible limit (>370 Bq kg<sup>-1</sup>) as set by UNSCEAR, 2008. All other building materials mined and used from this district

recorded low Ra<sub>eq</sub> activity. Important radiological parameters such as ADRA, I<sub>γ</sub> and H<sub>in</sub> were also calculated.

**Conclusion** The results indicated that there is no elevated radioactivity observed in the studied materials. Therefore, it is concluded that the building materials used in the above mentioned district will not pose any hazard in terms of radioactivity.

**Keywords** Natural radioactivity · Pudukkottai · Building materials · Gamma ray spectrometry · Radium equivalent · Hazard indices

### 1 Introduction

The soil and rocks of the earth contain substances which are naturally radioactive and provide natural radiation exposures. The most important radioactive elements which occur in the soil and in rocks are the long-lived primordial isotopes of potassium (<sup>40</sup>K), uranium (<sup>238</sup>U), and thorium (<sup>232</sup>Th). Since these primordial radionuclides are ubiquitous in the earth crust, therefore, it is impossible to eliminate radiation exposure altogether, i.e., man cannot possibly avoid natural radioactivity from the environment. These radionuclides are occurring in almost all the building materials but in different concentration. Radon contributes about 55% of dose received by man (UNSCEAR 1993). The radiation level due to natural radioactivity is about 2.4 mSv year<sup>-1</sup> and the estimated worldwide average activity of <sup>226</sup>Ra, <sup>232</sup>Th, and <sup>40</sup>K in the earth's crust to be 32, 45, and 412 Bq kg<sup>-1</sup>, respectively (UNSCEAR 2008). It should be mentioned that human beings have poor radiation resistant behavior (lethal dose = 4 Sv) as compared to other mammals. Therefore, additional exposures have to be measured and compared with respect to the

✉ G. Sankaran Pillai  
sankaranp@ai521@gmail.com

<sup>1</sup> Radiological Safety Division, Indira Gandhi Centre for Atomic Research, Kalpakkam 605 102, Tamil Nadu, India

<sup>2</sup> Department of Civil Engineering, Sivaram Engineering College, Tiruchirappalli, 620 009, Tamil Nadu, India

<sup>3</sup> Environmental Research Centre, J.J. College of Engineering and Technology, Tiruchirappalli 620 009, Tamil Nadu, India

## Experimental Investigation on Strengthening of RCC beams by Wrapping Glass Fiber Reinforced polymer Sheet

Praveen Kumar.A<sup>1</sup>, Sekar.B<sup>2</sup>, Belin Jude.A<sup>3</sup>

<sup>1</sup>M.E Structural Engineering, M.I.E.T Engineering College, Trichy 620007, Tamilnadu, India

<sup>2,3</sup>Assistant Professor, M.I.E.T Engineering College, Trichy 620007, Tamilnadu, India

**Abstract:** Use of Glass fiber reinforced polymer sheets (GFRP) as externally bonded reinforcement, is a technically sound and practically efficient method of strengthen and upgrade concrete members. Externally bonded GFRP sheets help in improving the structure performance by increasing its strength. The capacity of the strengthen beams is controlled by either compression crushing of concrete, rupture of GFRP and flexural shear cracking induced debonding at concrete GFRP interface. For phase 1 deals with the use of externally bonded GFRP wraps in PCC beams with or without glass fiber carried out. The glass fiber were arranged externally in wrapping manner here. Epoxy resin is used to wind the glass fiber with concrete beams. GFRP wrapped at bottom side gives better strength as compared to GFRP wrapped at two parallel sides but gives less strength as compared to GFRP wrapped at three sides. It is noted that the flexural strength value where increased with respect to the curing days of 7, 28 days. And for phase 2 deals with the use of externally bonded GFRP wraps in three sides of RCC beams in all a total of 3 beams were tested and the respective reading were recorded. The beams were three sides wrapped and strip-wrapped and tested for flexural behavior analysis. Cracking and deflection of GFRP reinforced concrete beams analyzed experimentally. It was concluded, the wrapping of GFRP sheets increases the ultimate load carrying capacity of RCC beams. Also a cost analysis was done in order to get a cost effective solution for the issue of retrofitting structures.

**Key Words:** Strength, Flexure, GFRP Sheets, PCC beams RCC beams, epoxy resin

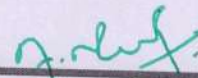
### 1. Introduction:

Deterioration of concrete structures is one of the major problems of construction industry now a days. Furthermore, a large number of structure constructed in past using older design codes in different parts of the world are structurally unsafe according to latest design codes and replacement of such deficient structure needs a huge amount of public money and time. Hence, strengthening become the acceptable capacity and extending their useful service life. Fiber reinforced polymer have emerged as promising material for rehabilitation of existing RC structures and strengthening of new civil engineering structures and strength of new civil engineering structures because of their several advantage such as high strength to weight ratio high fatigue residence, flexible nature, ease of handling and excellent durability. There are different types of FRP material are used for strengthening like glass fibers(GFRP),

carbon fiber (CFRP), aramid fiber (AFRP) etc. but in terms of cost effectiveness and strength comparison many authors had recommended GFRP sheets among all. The use of external FRP strengthening to beam may be classified as flexural and shear strengthening. The shear failure of an RC beams is completely different from the flexure one as in that the flexural is ductile in nature, where the shear one is brittle and catastrophic, so, in flexural strengthening, FRP sheets are applied on bottom side of PCC beams whereas in shear strengthen, FRP sheets are applied on side face of PCC and RCC beams and three sides of PCC beams using proper epoxy adhesives. A fiber reinforced polymer (FRP) composite is defined as a polymer matrix, either thermo set or thermoplastic that is reinforced with a fiber or other reinforcing material with a sufficient aspect ratio to provide a discernible reinforcing function in one or more direction. FRP composites are different from traditional construction material such as steel or aluminium. FRP composites are anisotropic, therefore FRP composite properties are directional meaning that the best mechanical properties are in the direction of the fiber replacement. Reinforced concrete building may be vulnerable to progressive collapse due to a lack of continuous reinforcement. Glass fiber reinforced

polymer may be used for retro fix existing concrete beams and provide the missing continuity needed to resist progressive collapse. a fiber reinforced polymer matrix, either thermo set or thermos plastic that is reinforced with a fiber or other reinforcing material with a sufficient aspect ratio to provide a discernible function in one or more direction.

The increased applications of these materials to strengthening the reinforced concrete structures are due to their advantageous properties such as; excellent corrosion resistance, non-magnetic, non-conductive, generally resistant to chemicals, good fatigue resistance, low coefficient of thermal expansion, and high strength to weight ratio as well as being lightweight. Although the fibres and resins used in FRP systems are relatively expensive, compared with traditional strengthening materials like concrete and steel, the labour and equipment costs for installing FRP systems are often lower and these systems can be utilized in areas with limited access and where traditional strengthening techniques are impractical.



## Design Optimization, Sensitivity Analysis and Optimal System Types of Hybrid Renewable Energy Systems: A Case of Health Care Clinic Building in India

<sup>1</sup>Dr.U.Suresh kumar, <sup>2</sup>Mr.P. Yoganathan.

Department of Electrical and Electronics Engineering, MIET, Trichy-7, Tamilnada, India

Department of Electrical and Electronics Engineering, MIET, Trichy-7, Tamilnada, India

Corresponding Author: Dr.U.Suresh Kumar

**ABSTRACT:** This paper presents the design optimization, sensitivity analysis and optimal system types of the hybrid renewable energy system (HRES) for health care clinic building. Sensitivity variables are evaluated on these parameters to verify how variances in this load would change standalone wind/PV/diesel/battery hybrid system costs and optimal system configurations, and also was found to have very huge significant impact on O&M configurations, although slightly less fuel was consumed on a yearly basis. The result eventually shows that benchmark system has almost 75% times higher COE where the COE came out of all sensitivity value. Important proof exists in increase of the COE by sensitivity analyses in diesel price. Final conclusion from this section is that COE has significant decrease by sensitivity analyses.

**KEYWORDS:** HOMER, Cost of Energy (COE), Net Present Cost (NPC), Saint Martin Island, Optimization, sensitivity analysis

Date of Submission: 16-01-2019

Date of acceptance: 24-01-2019

### I INTRODUCTION

Around the world, many researchers have been carried out to investigate the viability, feasibility, risk factors and financing indicators in the implementation of photovoltaic electrification systems. The famous research scope is to build the Standalone Photovoltaic System (SAPVS) integrating to the power system plant in the building that not only assist in electricity generation but also help in profits income to the building owner. Several works study on development of standalone PV system are including (1), (2). The discussion in these cited papers are various including the sizing, economic operation of SAPVS and the reliability function of the developed system. Therefore, this presented article focus on the development of the sensitivity analysis method multiple optimizations are performed, each using a dissimilar set of input assumptions. A sensitivity analysis reveals how sensitive the outputs are to changes in the inputs (3). In a sensitivity analysis, a range of values for a single input variable are fed to optimization tool. A variable for which the user has entered multiple values is called a sensitivity value. Almost every numerical input variable that is not a decision variable can be a sensitivity variable. Examples include wind speed, solar irradiation, diesel price and rate of interest.



## CONVERSION OF PETROLEUM-BASED FUEL FROM WASTE PLASTICS

S. Sarojini Mary<sup>1</sup>, A.JENNY<sup>2</sup>

<sup>1</sup>Assistant Professor (Sr.gr), Department of Electrical and Electronics Engineering, SRM TRP Engineering College, Tiruchirappalli, Tamilnadu, India.

<sup>2</sup>UG STUDENT, SRM TRP Engineering College, Tiruchirappalli, Tamilnadu, India.

### ABSTRACT:

There has been an ever increasing global demand for energy in recent years. The demand especially from liquid fuels is very high and the limited resources of fuel production has created bottleneck leading to an energy crisis. This has led to exploring other resources for fuel production, one of which is plastic. Being a non-degradable source, plastics disposed off in the open environment as wastes pose a threat to the environment. Most of the waste plastics end up as landfills. It can instead be used as a source for making fuel. The work describes an attempt to use the waste plastic to synthesize potential fuel called 'Pyrolysis Oil' since the process used in order to obtain the oil is Pyrolysis. The obtained oil from different grades of waste plastics is analysed so as to validate its use as fuel. The refined oil can then be used as fuel to internal combustion engine to provide electricity or simply heat.

**KEYWORDS:** Waste plastics, pyrolysis, pyrolysis oil, Alternative Fuel.

### 1. INTRODUCTION

Majority of plastics that are used day by day and the disposal of waste produced from plastics has been a major concern. Plastics are processed from crude oil. The objective is to reverse the process and from flammable fuel from plastic waste. Besides helping in removal of tons of waste plastic, which makes a tidy environment, the pyrolysis of waste plastics also helps in generating an alternate fuel, a convenient form of fuel to replace diesel or gasoline. With the alarming levels of increase in consumption of Petrol, Diesel which are not only non-replenish able but also are the source for major hazardous pollutants that damage the environment, Innovation and search for alternative fuels falls in its natural order and this liquid hydrocarbon obtained from waste plastics might as well save the day and meets the growing demand for alternative fuels. Plastics have become common materials of our everyday lives, and many of their properties, such as durability, versatility and light-weight, can be a



## Disease prediction based on micro array classification using deep learning techniques



V. Chandrasekar<sup>a,\*</sup>, V. Sureshkumar<sup>b</sup>, T. Satish Kumar<sup>c</sup>, S. Shanmugapriya<sup>a</sup>

<sup>a</sup>Computer Science and Engineering, MIE Engineering College, Trichy -7, Tamil Nadu, India

<sup>b</sup>Computer Science and Engineering, Adi Shankara Institute of Engineering & Technology, Kolady, Kerala, India

<sup>c</sup>Computer Science and Engineering, B M S Institute of Technology and Management, Bangalore, India

### ARTICLE INFO

#### Article history:

Received 27 January 2020

Revised 21 March 2020

Accepted 27 June 2020

Available online 5 July 2020

#### Keywords:

Bio-Medical research

DNA microarray

Gene sequence

Deep learning

Classification

### ABSTRACT

Nowadays deep learning is treat as a human brain because it's based on the neural networks, and the neural network is always treated as a human brain. Deep learning is a part of machine learning and which it is based on neural networks. From the huge raw data knowledge has been extracted that is it discriminating the information and convert it in a structure which was understood by the human easily. The major role of Deep learning is disease prediction. Medical domain has data sets and hidden patterns; to obtain the medical data for learning it requires the extraction of the above medical domain. The fever diseases were predicted with the help of deep learning. The possibilities of the disease had been discovered by the experts with the help of huge quantity of gene expression data that has been found through DNA microarray technique. Optimistic results were discussed with the help of various methods during past years. But still there are certain problems which need to be address and understood. It is mandatory to get a deep look at this issue, the empirical results and the related issues all together, with the intension of attaining the perception towards the sickness classifications. In this paper the work represents to compare the assessment period, categorization correctness and potentiality to identify the sickness and besides to determine the stringency positions of illness, the empirical outputs represents the deep neural network categorization execution can be better than existing classification methods.

© 2020 Elsevier B.V. All rights reserved.

### 1. Introduction

Microarrays give a unique view into the biology of DNA, and thus it provides a right path to evaluate the living systems. To monitor expression level which is genome wide of genes in an organism many biologists use the microarray technology. DNA is an actual molecule that provides to scramble information in a linear structure. Gene expression is a central concept in molecular biology: its control, frequently exquisite in terms of cell specificity and timing, forms part of our explanation of most biological processes. The importance of the control of gene expression for developmental biologists is made obvious by just considering the nature of their discipline. Development is the term we use to describe the coordination in time and space of numerous cellular activities such as mitosis, migration, differentiation and apoptosis. Co-expressed genes or the gene expression patterns existing mutually with mobile features are grouped showing strong correlation. In microarray

technique [8], the DNA is fragmented and are fixed on the glass slide in a sequential manner at definite location is called spots. Single microarray consists of large number of spots and every spot is having some minimum million mimics of homogeneous deoxyribonucleic acid particles have distinctively correlate to a genetic factor. The Deoxyribonucleic acid inside the spot consists of either hereditary deoxyribonucleic acid or tiny expansion of oligopolies elements conforms to gene. A robot is utilized here to display the spots over the reflector glide or the spots are harmonized by the action of optical lithography. Microarrays might be used to measure gene expression in lots of methods, however one of the most famous packages is to take a look at expression of a set of genes since a cellular maintained in a particular condition (condition A) to the similar set of genes from a reference cellular maintained below ordinary situations (condition B). The best prominent uses of microarray is to identify the expression from a protozoan sustained in a specific state from a group of genetic factor (condition X) from an intimation of protozoan sustained down to usual states (condition B) compared with the identical set of genes. Gene operation, gene directive, cellular functions and subdivision of cells are excellent to understand with the support of clustering techniques [7].

\* Corresponding author.

E-mail addresses: [vchandrasekar@gmail.com](mailto:vchandrasekar@gmail.com), [vchandrasekarmie@gmail.com](mailto:vchandrasekarmie@gmail.com) (V. Chandrasekar).

<https://doi.org/10.1016/j.micpro.2020.103189>

0141-9331/© 2020 Elsevier B.V. All rights reserved.

*(Handwritten signature)*

# Brain Tumor Detection and Disease Prediction using CNN Algorithm

S. Shanmuga Priya<sup>1</sup>, L. Mary Gladance<sup>2</sup>, A. Valarmathi<sup>3</sup>  
J. Maria Snowlin Joy<sup>4</sup>

<sup>1</sup> Asst. Prof., Dept of CSE, MIET Engg College, Trichy  
Asst Prof., School of Computing, Sathyabama Institute of Science and Technology  
<sup>3</sup> Asst. Prof., Dept of MCA, Anna University BIT Campus, Trichy  
<sup>4</sup> PG Scholar, Dept of CSE, MIET Engg College, Trichy

*Article Info*  
Volume 82  
Page Number: 13376 - 13381  
Publication Issue:  
January-February 2020

## Abstract

Magnetic resonance imaging (MRI) is a medical imaging technique used for neuro-imaging system utilizing MRI innovation that identifies the brain tumors and brain injury. Current outcomes from neuroscience recommend a particular association of the mind. To comprehend the intricate communication designs among cerebrum areas. In proposed framework utilizes contingent arbitrary field calculation, a productive calculation for parceling division. A mind locale is characterized as an arrangement of subjects sharing a comparable association design among their cerebrum districts. A broad test assessment on benchmark information shows the viability and productivity of our methodology. The outcomes on two genuine MRI ponders show the capability of CRF to add to a superior comprehension of typical cerebrum work and the shifts trademark for mental duties it implies that Mental disarranges are commonly characterized by a blend of how a man feels, acts, considers or sees. This might be related with specific locales or elements of the cerebrum or rest of the sensory system, regularly in a social setting. This isn't appropriate for various districts of the time arrangement. So the propose factual district combining calculation, utilized for picture division. The calculation is utilized to assess the qualities inside a local range and assembled together dependent on the combining criteria coming about a littler markdown. Then gathering more number of data from that data look at the outcome and as of now present in database result. Examination individual is ordinary or strange if the individual influenced by any ailment or not.

*Article History*  
Article Received: 18 May 2019  
Revised: 14 July 2019  
Accepted: 22 December 2019  
Publication: 24 February 2020

*Keywords:* MRI, segmentation, cluster

## I. INTRODUCTION

Therapeutic imaging is the methodology of preparing a visual exhibition of within a body to wellbeing intercession, test investigation. Restorative imaging searches[2,3]out to find the uncover inward covered by structures of the skin and bones, and is used to analyze the problems and treat ailment. Restorative imaging creates a database of typical life structures and it make conceivable to distinguish the images. In spite of it expel the image of the organs and tissues to perform restorative reasons, system is the component of pathology can also viewed as same the medicinal image. The radiology fuses with the imaging utilizes the X-Beam, attractive echo imaging. Attractive reverberation imaging, therapeutic ultra sonography ultra sound, endoscopy, restorative photography and medication utilitarian techniques as positron outflow tomography. "Vague light" is fixed for the clinical purpose therapeutic image is

commonly partner with the radiology. "restorative image" and the medicinal professional in accuse of understanding the pictures are a radiologist. "Noticeable light" medicinal imaging includes advanced video or still pictures that can be seen without unique gear.

In the pasture of logical assessment, therapeutic imaging comprises the sub-control of structure, restorative or drug contingent upon the specific circumstance: Displaying and evaluation are used in research and improvement in the territory of instrumentation, image securing are typically the safeguard of biomedical imaging and software engineering. The application and translation of therapeutic pictures are applied in research field[7] which is to protect of radiology and the restorative the medicinal condition and also sub-discipline or zone of restorative science (cardiology, neuroscience, psychiatry and so on.) under scrutiny. Huge numbers

13376

Published by: The Mattingley Publishing Co., Inc.



**Job satisfaction after privatisation of higher education: A study with reference to selected Arts & Science Colleges Affiliated to Bharathidasan University, Trichy, Tamil Nadu , India**

Dr.D.Sugumar, Associate Professor, CARE Business School, CARE Group of Institutions, Trichy-620009, Tamil Nadu, India, Email: gdsugu@gmail.com

C R Surekha, Assistant Professor, Department of MBA, MIET Engineering College, Trichy-620007, Tamil Nadu ,India, Email: surekhasugumar13@gmail.com

**Abstract**

“There are many studies in India and abroad which examine the job satisfaction of teachers. These studies dealt with job satisfaction and the factors which affect job satisfaction in schools, Government Colleges.” However, virtually none of these studies were concerned with private college teaching faculty satisfaction. The present study deals with the job satisfaction among the teaching faculties of self-financing Arts and Science Colleges affiliated to Bharathidasan University, Tiruchirappalli. The results show that, 54% of the respondents have low satisfaction and 46% of the respondents have high job satisfaction. The gap between job satisfaction and dissatisfaction is only at a negligible among the teaching faculty in the study area.

**Key words:** Compensation, infrastructure, Job satisfaction, Self financing college and Workplace condition

**Authors**

Dr.D.Sugumar, Working as an associate professor and Head in the CARE School of Business Management, CARE Group of Institutions ,Trichy, Tamil nadu India having 15 years of academic experience both in the teaching and research. He has published 20 research papers in the various journals. His area of interested is Accounting, Finance and education. He is currently working more on studying and writing case studies about small native entrepreneurs. He is serving as a reviewer for both national and international journals

CR.Surekha, Assistant Professor, Department of Management Studies, MIET Engineering College, She is having 5years of experience in academic. Her Area of interested is Marketing and HR. She has published many papers in various conference and Journals.

## Detecting skill mapping through skill matrix - An analytical assessment

K Mohamed Jasim<sup>1\*</sup>, K Rahmath Nisha<sup>2</sup> and G Sathish Kumar<sup>2</sup>

<sup>1</sup>Department of Business Administration, M.R.Government College, Mannargudi - 620 024.

<sup>2</sup>M.I.E.T Engineering College, Trichy - 620 007.

\*Corresponding author:jazz.mailme@gmail.com

### ABSTRACT

The employee skill development is one of the major clauses that is covered under ISO 9001:2000 certification process. The preparation of skill matrix, Training need identification and Training plan are the major activities under the Human Resource Management as per the ISO 9000 standards. It is used to study the skill level of employees in their job level. Skill matrix is a tool to assess training needs. It is a table that shows skills of individuals in a team and any gaps between the skills of employee's and the job roles they have. Indian Pumps and Motors manufacturing industry which is one of the leading industries also has certain difficulties regarding improving employee's skills. This papers analyses employee's various skills and prioritizing which is more important, thereby that particular skill will pay way to improve employee's behaviour and attitude both in personal and professional life. The study was based on the descriptive research design. Primary data through questionnaires were collected from the 30 employees of Pumps and Motors manufacturing Industry. Secondary data was collected through magazines and websites. The researcher has done analysis on Production Department employee's for improving their productivity rate and to make them work in an ethical manner.

Key words: ISO 9000 standards, Skill matrix, Training need identification, Training plan and Pumps and Motors manufacturing industry.

### INTRODUCTION

"Training is an organization procedure by which one learns knowledge and/ or skill for a definite purpose"- Dale S Beach

Skill matrix is a tool to assess training needs. It is a table that shows skills of individuals in a team and any gaps between the skills of employees and the job roles they have. It is also known as a competency framework. If behind the maximum level, retrain and evaluate. Skill matrix is nothing but the competencies you want to rate your employees. They include like communication, leadership, job knowledge, organizational culture, self-development, critical