

## List of Journal Publications from the Department 2015-2022

<i>S.no</i>	<i>Authors Names</i>	<i>Title of Paper</i>	<i>Name of the Journal</i>	<i>Volume</i>	<i>Page nos</i>	<i>Year</i>
<b>2022</b>						
1.	Gilbert Chandra D., Vinoth B., Srinivasulu Reddy U., Uma G., <b>Umapathy M</b>	Recurrent Neural Network based Soft Sensor for flow estimation in Liquid Rocket Engine Injector calibration	Flow Measurement and Instrumentation	83	0955- 5986	2022
2.	Arikapalli V.S.N.M.;Bhowmick S.;Rao P.V.R.R.B.;Ayyagari R.	Investigative design of missile longitudinal dynamics using LQR-LQG controller in presence of measurement noise and inaccurate model	Sadhana - Academy Proceedings in Engineering Sciences	47		2022
3.	Then Mozhi G., Dhanalakshmi Kaliaperumal, Banu Sundareswari M., S B Choi	Duo features of Shape Memory Wire for Resonant Force Sensing	Smart Materials and Structures	July 2022. 31 (9) July 2022		2022
4.	Josephine Selvarani Ruth D., Sohn, Dhanalakshmi Kaliaperumal, S B Choi	Control Aspects of Shape Memory Alloys in Robotics Applications: A Review over the Last Decade	Sensors	22(13), 4860 June 2022		2022
5.	Then Mozhi G., Dhanalakshmi Kaliaperumal, Banu Sundareswari M.	Design aspects of shape memory wire-based resonant force measurement system	Measurement	198, June 2022. 111313		2022
6.	Geetha M., Dhanalakshmi K. V Vetrivelvi	A shape memory alloy bimorph-actuated switch for antenna reconfiguration	Journal of Materials Science: Materials in Electronics	29 Jan 2022 33 4426- 4437		2022
7.	B B Sul, Dhanalakshmi K.	Machine learning-based self-sensing of the stiffness of shape memory alloy coil actuator	Soft Computing	9 Mar. 2022 26 3743- 3755		2022
8.	K Nimmi, B Janet, A Kalai Selvan, N Sivakumaran	Pre-trained ensemble model for identification of emotion during COVID-19 based on emergency response support system dataset	Applied Soft Computing	122	1088 42	2022
9.	R. M. Ohol and B. Vasuki	Design and implementation of a mixer for different physical and chemical properties liquid-liquid	Materials Today Proceedings	57	1677- 1681	2022

		mixing and mixing performance evaluation with a UV-Visible spectrophotometer				
10	R. M. Ohol and B. Vasuki	Design and implementation of combined liquid pump and active-passive mixer for a drug delivery system utilizing two 1-DOF piezoelectric actuated cantilever beams	Materials Today Proceedings	58	823-829	2022
11	R. M. Ohol and B. Vasuki	Macroscopic mixer for disparate property liquid-liquid mixing in aqueous sanitizer preparation	Chemical Papers	76	701-714	2022
12	Ram Kumar, D. Ezhilarasi	A state-of-the-art survey of model order reduction techniques for large-scale coupled dynamical systems	International Journal of Dynamics and Control			2022
13	Prabakar V, Srinivasan K.	Design and Development of Smart Wireless Sensor Network Based DAS for Aero Gas Turbine Engines	International Journal on Engineering Science and Technology			2022
14	Avinash Kumar Roy and K. Srinivasan	Event based optimal filter for a networked system with multiplicative and auto/cross correlated process and measurement noise	International Journal of Adaptive control and signal processing	(Accepted)	13	2022
15	Setti Suresh, Geetha Chakaravarthi	RFID technology and its diverse applications: A brief exposition with a proposed Machine Learning approach	Measurement	195	31 May 2022, 1111 97	2022
16	M Roshni, G Pugazhenthii, R Periyasamy, D Vasanth	Synthesis of ceramic tubular membrane from low-cost clay precursors for blood purification application as substitution to commercial dialysis membrane	Journal of Chemical Technology & Biotechnology	-	-	2022
17	Shib Banarjee, Divya B, P.A.Karthick, and S.Ramakrishnan	Influence of Viscoelasticity on Dynamic Fatiguing Behavior of Muscle Using Myotometry and Surface Electromyography Measurements	IEEE Transactions on Instrumentation and Measurement	Accepted	-	2022

**2021**

1.	Ramya Anandanatarajan, <b>Umaphy Mangalanathan</b> , Uma Gandhi	Performance enhancement and fault identification using Kalman filter in a resistive temperature sensor interface	Measurement,	183	0263-2241	2021
2.	Kumaravel S.D.;Ayyagari R.	A graph-theoretic approach for optimizing signalized intersections under connected vehicle environment	Sadhana - Academy Proceedings in Engineering Sciences	46		2021
3.	Kumaravel S.D.;Malikopoulos A.;Ayyagari R.	Optimal Coordination of Platoons of Connected and Automated Vehicles at Signal-Free Intersections	IEEE Transactions on Intelligent Vehicles			2021
4.	Arikapalli V.S.N.M.;Bhowmick S.;Rao P.V.R.R.B.;Ayyagari R.	Missile longitudinal dynamics control design using pole placement and LQR methods – A critical analysis	Defense Science Journal,	Volume7 1	699-708	2021
5.	M Banu Sundareswari, G Then Mozhi, Dhanalakshmi Kaliaperumal	Angular control of differential shape-memory alloy spring actuator for an under-actuated dynamic system.	Journal of Vibration and Control	Sep. 2021, 0 (0) 1 – 15		2021
6.	Mohan Appikonda, Dhanalakshmi Kaliaperumal	Small-signal model and control approach for a dual input boost converter with VMC, International.	Journal of Electronics	Sep. 2021, 1 - 24		2021
7.	T. Devashena, Dhanalakshmi Kaliaperumal	Simultaneous measurements for the interlink of electro-thermo-mechano-electro characteristics in shape memory springs.	ISA Transactions	Jun-21		2021
8.	Josephine Selvarani Ruth D., K Dhanalakshmi, S B Choi	A Sensaptic ADAS Device using Shape Memory Alloy Wires.	Design and Control, Materials	23 June 2021, 14 (13) 3494		2021
9.	Then Mozhi G., Banu Sundareswari M., Dhanalakshmi Kaliaperumal	Fine resolution smart force sensor based on lever arm mechanism using shape memory alloy spring.	International Journal of Circuit Theory and Applications	June 2021 49 (12) 4330 – 4342		2021
10.	Nalini D., Dhanalakshmi Kaliaperumal	Active stiffness control of a synergistically operated variable stiffness compliant actuator	Journal of the Brazilian Society of Mechanical Sciences and Engineering	1 February 2021 43(2) 105 (2021)		2021

11	T Devashena, K Dhanalakshmi	Simultaneous Measurements in Shape Memory Alloy Springs to Enable Structural Health Monitoring by Self-Sensing Actuation.	Arabian Journal for Science and Engineering	Jan. 2021 46, 6015-6025		2021
12	M Banu Sundareswari, G Then Mozhi, Dhanalakshmi Kaliaperumal	Angular control of differential shape-memory alloy spring actuator for an underactuated dynamic system.	Journal of Vibration and Control	21 Sep. 2021, 0 (0) 1 - 15		2021
13	Mohan Appikonda, Dhanalakshmi Kaliaperumal	Small-signal model and control approach for a dual input boost converter with VMC.	International Journal of Electronics	5 Sep. 2021 109 (6) 1 - 24.		2021
14	G.Ganapathy, N. Sivakumaran, Murugesan Punniyamoorthy, Tryambak Chatterjee and Monisha Ravi	Improving the Prediction Accuracy of Low Back Pain using Machine Learning through Data Pre-Processing techniques	Int. J. of Medical Engineering and Informatics			2021
15	Joseph Mathew, N Sivakumaran, PA Karthick	Detection of Seizure Types from the Wavelet Energy of Scalp EEG	Biomedical Sciences Instrumentation	57(2)		2021
16	I Camarillo, JS Thulasidas, G Kalavathy, N Sivakumaran, et. al	Male Breast Cancer: Another look.	G Med Sci. 2021.	2(2)	015-029	2021
17	C.Sudalaimani, N Sivakumaran, P Devanand, G Alexander and S. Rominus Valsalam	SVM Classifier for Epileptic Seizure Prediction using Sub-Banding of EEG Signals	Biomedical Engineering: Applications, Basis and Communications			2021
18	S.Revathi, N.Sivakumaran, T.K. Radhakrishnan	Design of solar-powered forced ventilation system and energy-efficient thermal comfort operation of greenhouse	Materials Today: Proceedings, 2021			2021
19	G. Ganapathy; N. Sivakumaran; M. Punniyamoorthy; Tryambak Chatterjee; Monisha Ravi	Improving the prediction accuracy of low back pain using machine learning through data pre-processing techniques	International Journal of Medical Engineering and Informatics (IJMEI)			2021
20	R. Kondareddy, N. Sivakumaran, K. Radha krishnan	Performance evaluation of modified forced convection solar dryer with energy	Journal of Food Processing Engineering	45	e13974	2021

	et.al.	storage unit for drying of Elephant apple (Dillenia Indica)				
21	R. Kondareddy, N. Sivakumaran, K. Radha Krishnan et.al.	Performance evaluation and economic analysis of modified solar dryer with thermal energy storage for drying of blood fruit (Haematocarpus Validus)	Journal of Food Processing and Preservation	46	e156-53	2021
22	Ezhilarasi D, Anjali S Nair	Modeling and Evaluation of Adaptive Super Twisting Sliding Mode Control in Lower Extremity Exoskeleton	International Journal of Precision Engineering and Manufacturing – Green Technology	8	901-915	2021
23	B. A. Haseena, K.Srinivasa n	Scalable multiple linear model RTDA controller formulation for constrained nonlinear processes	Optimal Control applications and methods			2021
24	K. Senthilkuma r, Avinash Kumar Roy and K. Srinivasan	Event triggered estimator-based controller design for networked control system	ISA Transactions	126	80 - 93	2021
25	S M A K Azad & Srinivasan Kannan	Anomaly Detection in Estimation of Load and Prediction of Load in Networked Control System Using Correlation and Regression Data Analysis	IETE Journal of Research, Taylor and Francis			2021
26	S M A K Azad & Srinivasan Kannan	Bandwidth assessment of scheduled and unscheduled communication in hybrid networked control system	Cyber- Physical Systems, Taylor and Francis			2021
27	Haseena B. A. and Srinivasan K.	Design and development of constrained next generation controller with and without event triggered mechanism for single link robot arm	Automatic Control & Computer Sciences	55	407-418	2021
28	S.M. Abdul Kalam Azad and K. Srinivasan	Dynamic Network Scheduler for customized Aperiodic communication in Networked Control System	Automatic Control and Computer Sciences	55 (3)	263-276	2021
29	M Brindha, NP Seshadri, R Periyasamy	Non-invasive assessment of tissue oxygenation parameters in diabetic patients foot sole using near infrared spectroscopy	Journal of Biomedical Spectroscopy and Imaging	10	27-36	2021
30	R Periyasamy, VS	Machine Learning	Journal of Neurol	69	1518-	2021

	Vibashan,George Tom Varghese, MA Aleem	Techniques for the Diagnosis of Attention- Deficit/Hyperactivity Disorder from Magnetic Resonance Imaging: A Concise Review	India 2021		23	
31	Navaneethakrishna ,M., PA.Karthick, and S.Ramakrishnan	Analysis of Dynamics of EMG Signal Variations in Fatiguing Contractions of Muscles using Transition Network Approach	IEEE Transactions on Instrumentation and Measurement	70	01- Aug	2021
32	K. Divya Bharathi, P. A. Karthick, S. Ramakrishnan	'Automated muscle fatigue detection using cyclostationarity based geometric features from surface electromyography signals'	Computer Methods in Biomechanics and Biomedical Engineering	25	Jan- 13	2021
33	S. Edward Jero, K. Divya Bharathi, P. A. Karthick, S. Ramakrishnan.	'Muscle Fatigue Analysis in Isometric Contractions using Geometric Features of Surface Electromyography signals'	Biomedical Signal Processing and Control	68	1026 03	2021
34	Vinothini S, Punitha N, Karthick P.A., and Ramakrishnan S,	Automated detection of Preterm Condition using Uterine Electromyography based Topological Features	Biocybernetics and Biomedical Engineering	41	293- 305	2021
35	Divya Bharathi K, Karthick P.A., Ramakrishnan S.,	Variational Mode Decomposition based Differentiation of Fatigue Conditions in Muscles using Surface Electromyography Signals	IET Signal Processing	14	745- 753	2021
<b>2020</b>						
1.	TN Satish, A Vivek, SN Anagha, ANV Rao, G Uma, <b>M Umamathy</b> , U Chandrasekhar, G Kiran	Novel resistor-capacitor (RC) network-based capacitance signal conditioning circuit for tip clearance measurement on gas turbine engine	Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering	234,2	342- 360	2020
2.	S. Raghavendran, <b>M. Umamathy</b> , G. Uma & L.R. Karlmarx	Piezoelectric energy harvesting from DC-DC converters	Ferroelectrics	558,1	207- 213	2020
3.	V. Raja, M. Umamathy, G. Uma , Praveen kumar B and S. Premkumar	Design, analysis and experimental investigation of a rotational piezoelectric energy harvester with	Journal of Mechanical Science and Technology 34	pp 4475- 4487, 2020		

		storage system	(11)			
4.	Geerthy Thambiraj, <b>G. Uma</b> , Umapathy Mangalanathan, J M Jose, Anand M	Investigation on effect of the womerseley number, ECG and PPG features on cuffless BP monitoring using machine learning	Biomedical signal processing and Control	60, 101942	1-11	2020
5.	Shereen Selvaraj, <b>Uma Gandhi</b> , L. John Berchmans, Umapathy Mangalanathan	Effect of magnetic ion substitution on the structure and temperature- dependent magnetic properties of strontium hexaferrite.	Materials Technology,	DOI: 10.1080/ 1066785 7.2020.17 23832	1-10	2020
6.	Shereen Selvaraj, <b>Uma Gandhi</b> , U. Mehana Usmaniya, L. John Berchmans, Umapathy Mangalanathan	Effect of high energy ball milling on molten salt synthesized barium hexaferrite powder,	IEEE Transactions on Magnetics,	VOL. 56, NO. 5	2100 508	2020
7.	Shereen Selvaraj, <b>Uma Gandhi</b> , Umapathy Mangalanathan, and L. John Berchmans	Enhancement of Saturation Magnetization and Remanence of BaFe <sub>12</sub> O <sub>19</sub> Materials Prepared by NaCl-KCl and Hexamine as Flux	IEEE Magnetics Letters	VOL. 11	7500 605	2020
8.	Ramya Anandanatarajan, Umapathy Mangalanathan, <b>Uma Gandhi</b>	Enhanced Microcontroller Interface of resistive sensors through resistance to time converter	IEEE Transactions on Instrumentation and Measurement	VOL. 69, NO. 6	2698- 2706	2020
9.	Srinivasulu Raju, S., M. Umapathy and <b>G. Uma</b>	Design and analysis of high output piezoelectric energy harvester using non- uniform beam	Journal of Mechanics of Advanced Materials and Structures	VOL. 27, NO. 3,	218- 227	2020
10	S.Raghavendran M. <b>Umapathy</b> , <b>G. Uma</b> L.R. Karl Marx	Piezoelectric energy harvesting from DC-DC converters	Ferroelectrics	VOL. 558	207- 213	2020
11	Sharmila Devi, K, & Ramakalyan Ayyagari	A Decentralized Signal Control for Non-lane-based Heterogeneous Traffic under V2I Communication	IEEE Tr. Intelligent Transportation Systems	21(4)	1741 - 1750	2020
12	Dhevendra Alagan P, Sivakumaran N, Sainarayanan G, Rachid J	Multifractal-based lacunarity analysis of trabecular bone in radiography	Computers in Biology and Medicine	116	1-7	2020
13	L Maheswari, N	A unique control strategy to	Journal of		1-13	2020

	Sivakumaran, KR Balasubramanian, G Saravana Ilango	improve the life cycle of the battery and to reduce the thermal runaway for electric vehicle applications	Thermal Analysis and Calorimetry			
14	L Maheswari, N Sivakumaran	An isolated single-switch high step-up DC/DC converter with three-winding transformer for solar photovoltaic applications	Electrical Engineering		1-10	2020
15	S Sankaranarayanan, N Sivakumaran, TK Radhakrishnan, G Swaminathan	Dynamic soft sensor based parameters and demand curve estimation for Water Distribution System: Theoretical and Experimental cross validation.	Control Engineering Practice 102,2020			2020
16	Dhevendra Alagan, P., Sivakumaran, N. and Sainarayanan G.	Retinal vessel segmentation using multifractal characterization	Applied Soft Computing (Elsevier)	94	1064 39	2020
17	T. Devashena and K. Dhanalakshmi	Electromagnetic Characteristics of Shape Memory Spring	Materials Science Forum	ISSN: 1662- 9752, Vol. 978, 421- 427, Jan. 2020		2020
18	D. Josephine Selvarani Ruth, Dhanalakshmi K.	Role of Shape Memory Alloy Wires as a Sensaptic HMI Device	<i>IEEE Sensors Journal</i>	20(2)	6422 - 6431	2020
19	Mohan Appikonda and Dhanalakshmi K.	Signal flow graph model and control of dual input boost converter with voltage multiplier cell	International Journal of Electronics and Communications	Aug./Oct. 2020 125, 153345 1-13	SCIE 2.853	2020
20	BanuSundareswari M., Then Mozhi G. and Dhanalakshmi K.	Design of Genetic Algorithm based PID controller for a joule heated shape memory spring driven ball and beam system	International Journal of Mechatronics and Automation	Dec. 2020 7 (6) 107 - 116	Scopus SJR 0.137	2020
21	R. M., Ohol and B. Vasuki	Experimental Evaluation of Liquid Mixing Using Piezo Actuated Pump System	Instrum Exp Tech	63, 758- 766 (2020). <a href="https://doi.org/10.1134/S0020441220050206">https://doi.org/10.1134/S0020441220050206</a>		
22	V. Sivakami, Amit	Realization of Constant	Exp Tech	(2020).		



	Pal and B. Vasuki	Voltage Anemometer Using an Alternative Signal Conditioning Circuit		<a href="https://doi.org/10.1007/s40799-020-00379-4">https://doi.org/10.1007/s40799-020-00379-4</a>		
23	Amit Pal, B. Vasuki	A Concave Electrode Based Capacitive Sensor for Cavitation Monitoring - Experimental Evaluation	IEEE Sensors Journal	20	2094-2105	2020
24	V.Sivakami, B.Vasuki	Experimental Investigation and Uncertainty Analysis of Constant Voltage Anemometer using Low-cost Sensor	Iranian Journal of Science and Technology, Transactions of Electrical Engineering	Published online		2020
25	Srinivasan. K and Prashant D. Sarawade	An Included Angle Based Multilinear Model Technique for Thermocouple Linearization.	IEEE Transactions on Instrumentation and Measurement	69 (7)	4412-4424	2020
26	Avinash Kumar Roy, Srinivasan Kannan	State estimation for a networked control system with packet delay, packet dropouts and uncertain observation in S-E and C-A channel	Optimal control applications and methods (Publisher: Willey online library)	DOI: 10.1002/oca.2614	online	2020
27	S. M. A. K. Azad, K. Srinivasan	Analysis of time delays in scheduled and unscheduled communication used in process automation	Automatika (Publisher: KOREMA, UNSKA)	61(1)	109-116	2020
28	Anjali S. Nair, D Ezhilarasi	Performance Analysis of Super Twisting Sliding Mode Controller by ADAMS-MATLAB Co-simulation in Lower Extremity Exoskeleton	International Journal of Precision Engineering and Manufacturing-Green Technology	7	743-754	2020
29	Minu A. Pillai, D. D. Ebenezer, and Ezhilarasi Deenadayalan	Transfer matrix analysis of a duct with gradually varying arbitrary cross-sectional area	The Journal of the Acoustical Society of America	146	4435-4445	2020
30	NeelamshobhaNirala R.Periyasamy, Awanish Kumar	Study of Skin flow motion pattern using photoplethysmogram	International Journal of Advanced Intelligence Paradigms	16(3-4)	1-6	Jan 2020
31	Ashwin Kumar Narasimhan, Geetha Chakaravarthi, M.	Study of absorption of radio frequency field by gold nanoparticles and nanoclusters in biological	Electromagnetic Biology and Medicine			2020

	S. Ramachandra Rao & Kavitha Arunachalam	medium				
32	Makaram N, Karthick P.A., Gopinath V, Swaminathan R.	Electromyography-Based Muscle Fatigue Analysis Using Binary and Weighted Visibility Graph Features.	Fluctuation and Noise Letters	20	2150-016	2020
33	Karthick, P.A., Kai Rui Wan, Angela See An Qi, Justin Dauwels, and Nicolas Kon Kam King.	Automated detection of subthalamic nucleus in deep brain stimulation surgery for Parkinson's disease using microelectrode recordings and wavelet packet features.	Journal of Neuroscience Methods	343	1088-26	2020
34	Karthick P.A, Hideaki Tanaka, Hui Ming Khoo, Jean Gotman	Could we have missed out the seizure onset: A study based on intracranial EEG	Clinical Neurophysiology	131 (1)	114-126	2020
35	Shufali Ashraf Wani, Md. Manzar Nezami, Shakeb A. Khan, and S. Sohail	A Capacitive Sensor for Detecting Insulation Degradation by Sensing 2-FAL in Transformer Oil	IEEE Transactions on Dielectric and Electrical Insulation	Vol. 27(6), pp.2179-2187.2020		2020
36	Uzma Salmaz, Tarikul Islam, and S. Sohail	A novel capacitive temperature sensor based on polydimethylsiloxane (PDMS)	IEEE Transactions on Instrumentation and Measurement	vol. 69, no. 10, pp. 7887-7894, Oct. 2020.		2020
37	MD. Manzar Nezami, Shufali Ashraf Wani, Shakeb A. Khan, Neeraj Khera, and S. Sohail	,A Comb Type Capacitive 2-FAL Sensor for Transformer Oil with Improved Sensitivity	IEEE Transactions on Instrumentation and Measurement	vol. 69 (7), pp. 4524-32, 2020.		2020
<b>2019</b>						
1.	Raghavendran Srinivasan, Mangalanathan <b>Umapathy</b> , <b>Uma G</b> , Karl Marx	Bridgeless active rectifier for piezoelectric energy harvesting",	IET Circuits, Devices & Systems	Volume number 13, Issue 7,	1078-1085	2019
2.	Raghavendran Srinivasan, <b>Umapathy Mangalanathan</b> , <b>Uma Gandhi</b>	Dual input buck-boost converter for hybrid Piezoelectric Energy Harvester- Supercapacitor sources",	AEU - International Journal of Electronics and Communications	Volume 111	1-13 1529 26	2019
3.	Geerthy	Noninvasive cuffless blood	Institute of	Vol		2019

	Thambiraj, <b>UmaGandhi</b> , Viji Devanand and <b>Umapathy Mangalanathan</b>	pressure estimation using pulse transit time, Womersley number, and photoplethysmogram intensity ratio	Physics and Engineering in Medicine Physiological Measurement	40, No. 7		
4.	S. Revathi, N. Sivakumaran, D. Ramajayam, M.S. Saraswathi, S. Backiyarani, S.Uma	Growth estimation during hardening phase of tissue cultured banana plantlets under greenhouse environment using Bootstrapped Artificial Neural Network	Journal of Environmental Biology	40 (4)	719- 724	2019
5.	S Sankaranarayanan, N Sivakumaran, TK Radhakrishnan, G Swaminathan	Water hammer vibrations in pressurized water distribution system: Conceptual development of dynamic model and validation	Asia-Pacific Journal of Chemical Engineering	14	1-15	2019
6.	S Sankaranarayanan, G Swaminathan, TK Radhakrishnan, N Sivakumaran	Missing data estimation and IoT based flyby monitoring of a water distribution system: Conceptual and experimental validation	International Journal of Communication Systems		1-10	2019
7.	C Sudalaimani, N Sivakumaran, Thomas T Elizabeth, Valsalam S Rominus	Automated detection of the preseizure state in EEG signal using neural networks	Biocybernetics and Biomedical Engineering	39	160- 175	2019
8.	Hemalatha Karnan, N Sivakumaran, Rajajeyakumar Manivel	An Efficient Cardiac Arrhythmia Onset Detection Technique Using a Novel Feature Rank Score Algorithm	Journal of medical systems	43	1-8	2019
9.	Dhevendra Alagan Palanivel, <b>Sivakumaran N</b> , Sainarayanan Gopalakrishnan,	Multifractals based multimodal 3D image registration	Biomedical Signal Processing and Control,	47	126- 136	2019
10	BanuSundareswari M., Thenmozhi G. and Dhanalakshmi K.	Intelligent tuning of PID controller to balance the shape memory wire actuated bidirectional ball and beam system	Fizicheskaya Mezomekhanika	22 (6)	107 – 116	2019
11	Geetha M. and Dhanalakshmi K.	Structural design and realization of electromechanical logic elements using shape	Fizicheskaya Mezomekhanika	22 (5)	92 – 101	2019

		memory alloy actuator				
12	Mohan Appikonda and Dhanalakshmi K.	Modeling and Control of a high voltage gain dual input boost DC - DC converter with voltage multiplier	IET Circuits, Devices and Systems	13 (8)	1267 - 1276	2019
13	Bhagoji Bapurao Sul and Dhanalakshmi K.	Modified sigmoid based model and experimental analysis of SMA spring as variable stiffness actuator	Smart Structures and Systems	24 (3)	361 - 377	2019
14	Nalini D., D. Josephine Selvarani Ruth and Dhanalakshmi K.	Investigation of the synergistic compliant actuation of parallel-type variable stiffness shape memory alloy actuator	Journal of Intelligent Material Systems and Structures	30 (12)	1772 - 1788	2019
15	Nalini D and <b>Dhanalakshmi K</b>	Synergistically configured shape memory alloy for variable stiffness translational actuation	Journal of Intelligent Material Systems and Structures	Vol. 30(6)	844-854	2019
16	Siddharth Bardiya, <b>B. Vasuki</b>	Performance Enhancement of Capacitance-Type Level Measurement System using CCII-Based Interface	IETE Technical Review		1-12	2019
17	<b>Sridevi V</b> , Ramasubba Reddy M, Srinivasan K, Radhakrishnan K Rathore C, Nayak DS	Improved Patient-Independent System for Detection of Electrical Onset of Seizures	Journal of Clinical Neurophysiology( SCI)	36(1)	14-24	2019
18	Avinash Kumar Roy, <b>Srinivasan Kannan</b>	Development of event-triggered-based minimum variance recursive estimator for the NLNS using multi-model approach	IET Signal Processing (Publisher: IET digital library)	13 (9)	766-777	2019
19	<b>Srinivasan. K</b> and P. D. Sarawade	An Included Angle Based Multilinear Model Technique for Thermocouple Linearization	IEEE Transactions on Instrumentation and Measurement	DOI: 10.1109/TIM.2019.2947951	On Line	2019
20	Ganesan Muniandi, <b>Ezhilarasi Deenadayalan</b>	Composite model reference adaptive sliding mode controller for automatic train operation	IET Control Theory and Applications	13(15)	2425-2435	2019
21	Ganesan Muniandi, <b>Ezhilarasi Deenadayalan</b>	Train distance and speed estimation using multi sensor data fusion	IET Radar, Sonar & Navigation	13(4)	664 - 671	2019
22	NS Haider, BK	Respiratory Sound Based	Journal of medical	43	255	2019

	Singh, <b>R Periyasamy</b> , AK Behera	Classification of Chronic Obstructive Pulmonary Disease: a Risk Stratification Approach in Machine Learning Paradigm	systems			
23	Justin Joseph, <b>R Periyasamy</b>	Nonlinear sharpening of MR images using a locally adaptive sharpness gain and a noise reduction parameter	Pattern Analysis and Applications	22	273-283	2019
24	NeelamshobhaNirala, <b>R.Periyasamy</b> , Bikesh KumarSingh, AwanishKumar	Detection of type-2 diabetes using characteristics of toe photoplethysmogram by applying support vector machine	Biocybernetics and Biomedical Engineering	39	38-51	2019
<b>2018</b>						
1.	S. Raghavendran, <b>M. Umamathy</b> , L.R. Karlmarx	Super capacitor charging from piezoelectric energy harvesters using multi-input buck-boost converter	IET Circuits Devices & Systems	Vol. 12 Issue. 6	746-752	2018
2.	T.N. Satish, A.N.V. Rao, A.S. Nambiar, <b>G. Uma</b> M. Umamathy, U. Chandrashekhar, V.U. Petley	Investigation into the Development and Testing of a Simplex Capacitance Sensor for Rotor Tip Clearance Measurement in Turbo Machinery	Experimental Techniques	Vol 42, Issue 6, pp	575-592,	2018
3.	M. S. Manjunath, N. Nagarjuna, <b>G Uma</b> , M. Umamathy, M. M. Nayak, K. Rajanna	Design, fabrication and testing of reduced graphene oxide strain gauge based pressure sensor with increased sensitivity	Microsystems Technologies	Vol 24, Issue 7	2969 - 2981	2018
4.	R Usharani, <b>G Uma</b> , M Umamathy, Seung-Bok Choi	A Novel Piezoelectric Energy Harvester Using Multi-Stepped Beam with Rectangular Cavities	Applied Sciences	8(11):2091	1-19	2018
5.	V. ParthaSarathi, <b>G. Uma</b> , M. Umamathy	Realization of Fractional order Inductive Transducer	IEEE Sensors Journal	vol .18, issue no. 21,	8803-8811	2018
6.	G. PalaniKumar, <b>G. Uma</b> , M.Umamathy and J. Arunshankar	Higher order sliding mode controller for urea-SCR system	Turkish Journal of Electrical Engineering and computer sciences	vol. 26, issue. 3,	1505-1514	2018
7.	Pandiyan, P., <b>G. Uma</b> ,	Design and simulation of electro-thermal compliant	COMPEL: International	37(2), pp. 868-889	868-889	2018

	M. Umapathy	MEMS logic gates	journal for computation and mathematics in electrical and electronic engineering			
8.	Pandiyan, P., <b>G. Uma</b> , and M. Umapathy	Design and Simulation of MEMS Electrothermal Compliant Actuator-Based Analog-to-Digital Converter	Arabian Journal for Science and Engineering	Vol 44	1-9	2018
9.	V. Parthasarathi, <b>G. Uma</b> M. Umapathy	Analysis of Fractional order Inductive Transducers	The European Physical Journal Special Topics	Vol 18, Issue no 21	8803- 8811.	2018
10	G. PalaniKumar, <b>G. Uma</b> , M. Umapathy L.R. Karlmarx	Electrical conductivity based quality measurement of diesel exhaust fluid	Journal of Analytical Chemistry	Vol 73, Issue no. 11		2018
11	V. Parthasarathi, <b>G. Uma</b> M. Umapathy	Design and Analysis of Fractional order Seismic Transducer for Displacement and Acceleration Measurements	Journal of Sound and Vibration	Vol.419	123- 139	2018
12	MS Manjunath, <b>G Uma</b> , M Umapathy, MM Nayak	Design, fabrication and testing of fiber bragg grating based fixed guided beam pressure sensor	Optik-International Journal for Light and Electron Optics	Vol 158	1063- 1072	2018
13	G. PalaniKumar, <b>G. Uma</b> , M. Umapathy	A study on optical characteristics and quality monitoring of diesel exhaust fluid	Optik-International Journal for Light and Electron Optics	Vol.155	31-35	2018
14	T.N. Satish, A.N.V. Rao, A.S. Nambiar, , <b>M. Umapathy</b> , U. Chandrashekhar, V.U. Petley,	Investigation into the Development and Testing of a Simplex Capacitance Sensor for Rotor Tip Clearance Measurement in Turbo Machinery	Experimental Techniques	Volume 42 Issue 6, pp	575- 592	2018
15	M. S. Manjunath, N. Nagarjuna, <b>G Uma</b> , M. Umapathy, M. M. Nayak, K. Rajanna	Design, fabrication and testing of reduced graphene oxide strain gauge based pressure sensor with increased sensitivity	Microsystems Technologies,	Vol 24, Issue 7, pp	2969 - 2981	2018
16	R Usharani, <b>G Uma</b> , M Umapathy, Seung-Bok Choi,	A Novel Piezoelectric Energy Harvester Using Multi-Stepped Beam with Rectangular Cavities	Applied Sciences	[Accepted]		2018

17	V. Partha Sarathi, <b>G. Uma</b> , M. Umapathy	Realization of Fractional order Inductive Transducer	IEEE SENSORS JOURNAL	vol. 18, issue no. 21, pp.	8803-8811	2018
18	Srinivasulu Raju, S., M. Umapathy and <b>G. Uma</b>	Design and analysis of high output piezoelectric energy harvester using non-uniform beam.	Journal of Mechanics of Advanced Materials and Structures		1-10	2018
19	PalaniKumar Gurusamy, <b>Uma Gandhi</b> , Umapathy Mangalanathan and Arunshankar Jayabalan	Higher order sliding mode controller for urea-SCR system	Turkish Journal of Electrical Engineering and computer sciences	vol. 26, issue. 3, pp	1505-1514	2018
20	Pandiyan, P., <b>G. Uma</b> , and M. Umapathy	Design and simulation of electro-thermal compliant MEMS logic gates	COMPEL: International journal for computation and mathematics in electrical and electronic engineering	37(2), pp	868-889	2018
21	Pandiyan P, <b>Uma G</b> , Umapathy M	Design and Simulation of MEMS Electro-thermal complaint Actuator based Logic Gates	COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronics	Engineering pp.	1-9	2018
22	Revathi Soundiran, T. K. Radhakrishnan, <b>Sivakumaran N</b>	Modeling of greenhouse agro-ecosystem using optimally designed bootstrapping artificial neural network	Neural Computing and Applications		1-16	2018
23	Sankaranarayanan S, <b>Sivakumaran N</b> , Radhakrishnan TK, Swaminathan G.	Metaheuristic-based approach for state and process parameter prediction using hybrid grey wolf optimization.	Asia-Pac. J. Chem. Eng.	13(4)	1-27	2018
24	Prateek Vishal, <b>Dhanalakshmi K.</b> and Radhakant Padhi	Active vibration suppression of nonlinear cantilever beam using shape memory alloy actuators	IFAC Proceedings Volumes (IFAC-Papers Online)	<b>51</b> (1)	130 – 135	Feb. 2018
25	Amit Pal <b>B Vasuki</b>	Analytical Evaluation - Void Fraction Measurement Using Concave Capacitor Based Sensor	Measurement	Vol 124	81-90	2018

26	Haseena BA <b>Srinivasan K</b>	Development of mixed constrained RTDA controller for industrial applications	ISA Transactions (SCI)	81	197-209	July - 2018
27	Prashant Dattatraya Sarawade , <b>Kannan Srinivasan</b>	T-S fuzzy-based multi-LAE approach for sensor linearization	IET Science, Measurement & Technology(SCI)	8	1015-1022	Oct- 2018
28	Minu A. Pillai, D. D. Ebenezer and <b>Ezhilarasi Deenadayalan</b>	Design and optimization of piezoelectric unimorph beams with distributed excitation	The Journal of the Acoustical Society of America	143 (5) pp.	2685-2696	2018
29	Justin Joseph, <b>R Periyasamy</b>	A fully customized enhancement scheme for controlling brightness error and contrast in magnetic resonance images	Biomedical Signal Processing and Control	39	271-283	2018
30	Justin Joseph, <b>R Periyasamy</b>	A polynomial model for the adaptive computation of threshold of gradient modulus in 2D anisotropic diffusion filter	Optik-International Journal for Light and Electron Optics	157	841-853	2018
31	Justin Joseph, <b>R Periyasamy</b>	An image driven bilateral filter with adaptive range and spatial parameters for denoising Magnetic Resonance Images	Computers & Electrical Engineering	69	782-795	2018
32	NeelamshobhaNirala, <b>R Periyasamy,</b> AwanishKumar	Non-invasive Diagnostic Methods for Better Screening of Peripheral Arterial Disease	Annals of Vascular Surgery	52	263-272	2018
33	Nishi Shahnaj Haider, <b>R Periyasamy,</b> Deepak Joshi , B K Singh	Savitzky-Golay Filter for Denoising Lung Sound	Brazilian Archives of Biology and Technology	61		2018
34	Awanish Kumar ,Neelamshobha Nirala, R. Periyasamy	Potential of photoplethysmogram for the detection of calcification and stenosis in lower limb	International Journal of Bioinformatics Research and Applications	14(3)	283-304	2018
35	Awanish Kumar ,Neelamshobha Nirala, R. Periyasamy	Study of skin flow motion pattern using photoplethysmogram	Int. J. Advanced Intelligence Paradigms	16 (3/4)	241-264	2018
36	<b>G. Chakaravarthi,</b> K. P. Logakannan, J. Philip, J.	Reusable Passive Wireless RFID Sensor for Strain Measurement on Metals	IEEE Sensors Journal	vol. 18, no. 12, pp.	5143-5150,	2018



	Rengaswamy, V. Ramachandran and K. Arunachalam					
37	<b>P.A. Karthick</b> , Diptasree Maitra Ghosh and S. Ramakrishnan	Surface electromyography based automatic muscle fatigue detection using time-frequency methods and machine learning algorithms	Computer Methods and Programs in Biomedicine	154		2018
38	<b>Karthick P.A</b> , Hideaki Tanaka, Hui Ming Khoo, Jean Gotman	Prediction of Secondary Generalized Tonic Clonic Seizures from Intracerebral EEG Signals	Clinical Neurophysiology,	129(5)	1030- 1040	2018
<b>2017</b>						
1.	Pandiyan P, <b>Uma G</b> , Umapathy M	Design And Simulation Of Electrostatic NEMS Logic Gates	COMPEL-The International Journal for Computation and Mathematics in Electrical and Electronics Engineering	37 (1)	2-28	2017
2.	Ramalingam Usharani, <b>Gandhi Uma</b> , Mangalanath an Umapathy and Seung-Bok Choi	A new piezoelectric- patched cantilever beam with a step section for high performance of energy harvesting	Sensors and Actuators	Physical, Vol.265	47-61	2017.
3.	S Srinivasulu Raju, M Umapathy , <b>G Uma</b>	High-output piezoelectric energy harvester using tapered beam with cavity	Journal of Intelligent Material Systems and Structures	<b>29(5)</b>	800- 815	2017
4.	PalaniKumar Gurusamy , <b>Uma Gandhi</b> , Umapathy Mangalanathan, Karl Marx LR	Measurement of Diesel Exhaust Fluid Concentration in Urea-SCR after-Treatment System	International Journal of Precision Engineering and Manufacturing	, Vol.18, No.8	1085- 1092	2017
5.	Parthasarathi Veeraian, <b>Uma Gandhi</b> , Umapathy Mangalanathan	Fractional order Linear Variable Differential Transformer: Design and analysis	International Journal of Electronics and Communications	Vol.79, pp.	141- 150	2017
6.	Sujan Yenuganti, <b>Uma Ga ndhi</b> , Umapathy Mangalanathan,	Piezoelectric micro resonant pressure sensor using aluminium nitride	Journal of Micro/Nanolithog raphy MEMS, and MOEMS	Vol.16, No.2		2017
7.	P. Pandiyan, <b>G. Uma</b> & M. Umapathy	Design and Simulation of MEMS-Based Digital-to- Analog Converters for In- plane Actuation	Arabian Journal for Science and Engineering	42(12), pp.	4991- 5001	2017

8.	Ramalingam Usharani, <b>Gandhi Uma</b> , Mangalanath an Umapathy and Seung-Bok Choi	A new broadband energy harvester using propped cantilever beam with variable overhang	Journal of Smart Structures and Systems	Vol.19, No.5, pp.	567-576	2017.
9.	Ramalingam Usharani, <b>Gandhi Uma</b> , Mangalanath an Umapathy and Seung-Bok Choi	Design of high output broadband piezoelectric energy harvester	Journal of Mechanical Science and Technology	Vol.31 No.7	3131-3142	2017
10	S Srinivasulu Raju, M Umapathy, <b>G Uma</b>	Piezoelectric energy harvesting with single and multiple condensed cavities	Journal of Ferroelectrics	Vol.507, No.1, pp	29-42	2017
11	L.Maheswari, R.Srinivas <b>N.Sivakumaran</b> , G.Saravanailango, C.Nagamani	A control Strategy to enhance the Life Time of the Battery in a Stand-alone PV System with DC Loads	IET Power Electronics	10 (9)	1087-1094	2017
12	E.Sathish, <b>N.Sivakumaran</b> , Sishaj P Simon, S.Raghavan	Genetic algorithm based feature selection for classification of focal and non-focal intracranial Electroencephalographic signals	Journal of Scientific and Industrial Research	79	614 - 619	2017
13	D. Josephine Selvarani Ruth <b>Dhanalakshmi K</b>	Shape memory alloy wire for force sensing	IEEE Sensors Journal	<b>17</b> (4)	967 – 975	2017
14	D. Josephine Selvarani Ruth <b>Dhanalakshmi K</b>	SMA wire for self-sensing servo actuation	Mechanical Systems and Signal Processing	<b>83</b>	36 – 52	2017
15	Minu A. Pillai, D. D. Ebenezer and <b>Ezhilarasi Deenadayalan</b>	Erratum: Analytical model of mechanically Excited Piezoelectric Unimorph Beams	The Journal of the Acoustical Society of America	142(4)	1871-1873	2017
16	Minu A. Pillai, D. D. Ebenezer and <b>Ezhilarasi Deenadayalan,</b>	Analytical model of mechanically excited piezoelectric unimorph beams	The Journal of the Acoustical Society of America	142 (2), pp	718-727	2017
17	Ganesan M <b>Ezhilarasi D</b> , Jijo Benni	Second-order sliding mode controller with model reference adaptation for automatic train operation	Vehicle System Dynamics, Taylor & Francis			2017
18	Ganesan M <b>Ezhilarasi D</b> , Jijo Benni	Hybrid model reference adaptive second order sliding mode controller for automatic train operation,	IET Control Theory and Applications	Vol. 11 Iss. 8, pp.	1222-1233,	May 2017
19	Sivaraman	Modified limb lead ECG	Anatolian journal	17(1)	46	2017

	Jayaraman, Venkatesan Sangareddi, <b>R Periyasamy</b> , Justin Joseph, Ravi Marimuthu Shanmugam	system effects on electrocardiographic wave amplitudes and frontal plane axis in sinus rhythm subjects	of cardiology			
20	Justin Joseph, <b>R Periyasamy</b>	An analytical method for the adaptive computation of threshold of gradient modulus in 2D anisotropic diffusion filter	Biocybernetics and Biomedical Engineering	37(1)	1-10	2017
21	Justin Joseph, J Sivaraman, <b>R Periyasamy</b> , VR Simi	An objective method to identify optimum clip-limit and histogram specification of contrast limited adaptive histogram equalization for MR images	Biocybernetics and Biomedical Engineering	37(3)	489-497	2017
22	Nishi Shahnaj Haider, Justin Joseph, <b>R Periyasamy</b>	An investigation on the statistical significance of spectral signatures of lung sounds	Biomedical Research	28(6)	2801-2810	2017
23	Justin Joseph, Sivaraman Jayaraman, <b>Rajadurai Periyasamy</b> , Simi V Renuka	An edge preservation index for evaluating nonlinear spatial restoration in MR images	Current Medical Imaging Reviews	13(1)	58-65	2017
<b>2016</b>						
1.	T. N. Satish, K. P. Rakesh, <b>G. Uma</b> , M. Umapathy, U. Chandrasekhar, A. N. V. Rao, V. Petley	Functional Validation of K-Type (NiCr-NiMn) Thin Film Thermocouple on Low-Pressure Turbine Nozzle Guide Vane (LPT NGV) of Gas Turbine Engine	Experimental Techniques	Vol. 41(2),	131-138	2016
2.	J.Sivaraman, <b>G. Uma</b> , P. Langley, M. Umapathy, S. Venkatesan, G. Palanikumar	A study on stability analysis of axial repolarization variability using ARX model in sinus rhythm and atrial tachycardia ECGs",	Computer Methods and Programs in Biomedicine	Vol.137	341-351	2016
3.	Ramalingam Usharani, <b>Gandhi Uma</b> , Mangalanath an Umapathy,	"Design of High Output Broadband Piezoelectric Energy Harvester with Double Tapered Cavity Beam	International Journal of Precision Engineering and Manufacturing-Green Technology	Vol.3, No.4, pp.	343-351	2016
4.	Y. Sujana, <b>G. Uma</b> M. Umapathy,	Design and testing of piezoelectric resonant	Sensors and Actuators	A: Physical, v	177-186	2016

		pressure sensor		ol.250		
5.	Y. Sujan, <b>G. Uma</b> M. Umopathy	Micro pressure sensor with three degrees of freedom resonator	Journal of Microsystem Technologies	Vol.23, pp.	3201-3214	2016
6.	Y. Sujan, <b>G. Uma</b> , M. Umopathy	Design and modelling of a resonant pressure sensor	Journal of Microsystem Technologies	Vol. 23, pp.	1285-1293	2016
7.	S. Sathiya, M. Umopathy, B. Vasuki, <b>G. Uma</b>	Simple liquid pumping system using piezoelectric actuated cantilever beam.	Journal of Instruments and Experimental Techniques	Vol. 59, No. 1, pp	142-148	2016
8.	D. Ganesha Perumal, S. Seshadhri, B. Subathra, G. Saravanakumar, & <b>R. Ayyagari</b>	MILP based autonomous vehicle path-planning controller for unknown environments with dynamic obstacles	Int. J. Heavy Vehicle Systems	, Vol. 23 No. 4	350-369	2016
9.	E.Sathish, <b>N.Sivakumar</b> , S.Sankaranarayana n	Grey wolf optimization based parameter selection for support vector machines	International Journal for Computation and Mathematics in Electrical and Electronic Engineering	35(5)	1513-1523	2016
10	E.Sathish, <b>N.Sivakumar</b> , K.Radhakrishnan, S.Raghavan, T.K.Radhakrishnan	Importance of classification algorithms in epileptic seizure detection	Journal of Bioengineering and Biomedical	6(3)	1-2	2016
11	<b>Dhanalakshmi K.</b> , M. Umopathy and D. Ezhilarasi	SMA actuated structural control with discrete time sliding mode using multirate output feedback	Journal of Vibration and Control	22(5)	1338 - 1357	2016
12	D. Josephine Selvarani Ruth and <b>Dhanalakshmi K.</b>	Shape memory alloy with bi-functionality in master system to control a slave	Sensors and Actuators	238	351 - 360	2016
13	S. Sathiya, M. Umopathy, <b>B. Vasuki</b> G.Uma,	Simple liquid pumping system using piezoelectric actuated cantilever beam	Experimental techniques	vol 59, No 1pp	142-148	2016
14	S. Sathiya , <b>B. Vasuki</b>	Higher resonant mode effect on the performance of piezo actuated 2-DOF rectangular cantilever shaped resonators (2-DOF RCR) for liquid viscosity and density sensing	Microsystem Technologies	Vol 22, No 7	DOI 10.1007/s00542-016-3061-6	2016
15	S. Sathiya , <b>B. Vasuki</b>	A structural tailored piezo actuated cantilever shaped	Sensors and Actuators	A 247	277-288	2016

		2-DOF resonators for viscosity and density sensing in liquids				
16	Abhinav Srivastava and <b>K.Srinivasan</b>	Development of Mathematical Model for Signal Dependent Linear Adaptive Level Based Sampling	International journal of circuit theory and applications (Publisher: Willey online library)	44	1112-1126	2016
17	Minu A Pillai, Ezhilarasi D	Improved Acoustic Energy Harvester using Tapered neck Helmholtz Resonator and Piezoelectric Cantilever undergoing concurrent bending and twisting	Procedia Engineering	Vol 144, pp.,	674-681	2016
18	Justin Joseph, J Sivaraman, <b>R Periyasamy</b> , VR Simi	Noise based computation of decay control parameter in nonlocal means filter for MRI restoration	Journal of Medical Imaging and Health Informatics	6(4)	1027-1037	2016
19	<b>Geetha Chakaravathi</b> , Kavitha Arunachalam	Influence of dissolved gases in coupling water bolus on superficial hyperthermia and evaluation of water conditioning system with inline degassing	Biomed Physics & Engineering Express	2	1-11	2016
20	<b>P.A. Karthick</b> , and S. Ramakrishnan	Muscle Fatigue Analysis Using Surface EMG Signals and Time-Frequency Based Medium to Low Band Power Ratio	IET Electronics Letters	52		2016
21	<b>P.A. Karthick</b> ,G. Venugopal, and S. Ramakrishnan	Analysis of Muscle Fatigue Progression Using Cyclostationary Property of Surface Electromyography Signals	Journal of Medical Systems	40	1-11	2016
22	<b>P.A. Karthick</b> , and S. Ramakrishnan	Surface Electromyography Based Muscle Fatigue Progression Analysis Using Modified B Distribution Time-Frequency Features	Biomedical Signal Processing and Control	26	42-51	2016
<b>2015</b>						
1.	S. Srinivasulu Raju, M. Umamathy, <b>G. Uma</b>	Cantilever piezoelectric energy harvester with multiple cavities	Journal of Smart Materials and Structures	Vol.24,11	5023 (11p p)	2015
2.	A. Rami Reddy, M. Umamathy, D. Ezhilarasi, <b>G. Uma</b> .	Piezoelectric energy harvester with shape memory alloy actuator using solar energy	IEEE Transactions on Sustainable Energy	Vol.6(4), pp.	1409-1415	2015

3.	Pankaj Shivhare, <b>G. Uma</b> , M. Umapathy	Design enhancement of a chevron electrothermally actuated microgripper for improved gripping performance	Journal of Microsystem Technologies	Vol. 22(11),	2623 - 2631	2015
4.	A. Rami Reddy, M. Umapathy, D. Ezhilarasi, <b>G. Uma</b>	Cantilever Beam with Trapezoidal Cavity for Improved Energy Harvesting	Journal of International Journal of Precision Engineering and Manufacturing	Vol 16(8)	1875-1881	2015
5.	A. Rami Reddy, M. Umapathy, D. Ezhilarasi, <b>G. Uma</b>	Modelling and Experimental investigations on stepped beam with cavity for energy harvesting	Journal of Smart Structures and Systems	Vol. 16(4),		2015
6.	A. Rami Reddy, M. Umapathy, D. Ezhilarasi, <b>G. Uma</b>	Improved energy harvesting from vibration by introducing cavity in a cantilever beam	Journal of Vibration and Control	Vol.22 (13), pp.	3057-3066	2015
7.	J. Sivaraman, <b>G. Uma</b> , S. Venkatesan, M. Umapathy, M. S. Ravi	Unmasking of atrial repolarization waves using modified limb lead system	Anatolian Journal of Cardiology	In Press		2015
8.	J. Sivaraman, <b>G. Uma</b> , S. Venkatesan, M. Umapathy, V. E. Dhandapani	Normal limits of ECG measurements related to atrial activity using a modified limb lead system	Anatolian Journal of Cardiology	Vol. 15	2-6	2015
9.	Chinmay Sahu, V.Kirubhakaran, T.K.Radhakrishnan, <b>N.Sivakumaran</b> ,	Energy Efficient Model Predictive Control of Heating Ventilation and Air Conditioning System,	Ecotoxicology and Environmental Safety	121	236-243	2015
10.	Chinmay Sahu, V.Kirubhakaran, T.K.Radhakrishnan, <b>N.Sivakumaran</b> ,	Explicit Model Predictive Control of Split-type Air Conditioning System,	Transactions of the Institute of Measurement and Control	32(3)	1-9	2015
11.	C.Ahilan, S.Kumanan, <b>N.Sivakumaran</b> , J.Edwin Raja Dhas	Performance Assessment of Heat Exchanger using Intelligent Decision making tools	Journal on Applied Soft computing,	26	474-482	2015
12.	Chinmay Sahu, V.Kirubhakaran, T.K.Radhakrishnan, <b>N.Sivakumaran</b>	Closed loop building data based estimation and Energy Efficient Model Predictive Control of Heating Ventilation and Air Conditioning System”	Ecotoxicology and Environmental Safety	121	236-243	2015
13.	S. Sunjai	Dynamic stabilization and	Journal of	<b>21</b> (16)	3189	2015

	Nakshatharan, D. Josephine Selvarani Ruth and <b>Dhanalakshmi K</b>	rapid motion control system driven by antagonistic shape memory alloy actuators	Vibration and Control		- 3204	
14	S. Sunjai Nakshatharan, D. Josephine Selvarani Ruth and <b>Dhanalakshmi K</b>	Fuzzy based sliding surface for shape memory alloy wire actuated classical super-articulated control system	Applied Soft Computing	<b>32</b>	580 – 589	2015
15	D. Josephine Selvarani Ruth, <b>Dhanalakshmi K.</b> and S. Sunjai Nakshatharan	Bidirectional angular control of an integrated sensor/actuator shape memory alloy based system	Measurement	<b>69</b>	210 – 221	2015
16	D. Josephine Selvarani Ruth, <b>Dhanalakshmi K.</b> and S. Sunjai Nakshatharan	Interrogation of under sensing for an under actuated dynamical system	IEEE Sensors Journal	15(4),	2203 – 2211	2015
17	<b>Dhanalakshmi K.,</b> M. Umapathy and D. Ezhilarasi	Sliding mode control of SMA actuated structures for vibration control	International Journal of Modelling, Identification and Control	<b>23(2)</b>	121 – 130	2015
18	Sathiya, M. Umapathy, <b>B. Vasuki</b>	Performance enhanced piezo actuated resonant liquid pumping system with two degree of freedom (2-DOF) resonators	Sensors and Actuators	A 236	44– 56	2015
19	Anbarasan K. and <b>K. Srinivasan</b>	Design of RTDA controller for Industrial process using SOPDT model with minimum or non-minimum zero	ISA transactions	57	231- 244	2015
20	<b>Geetha Chakaravarthi,</b> Kavitha Arunachalam	Design and characterization of miniaturized cavity backed patch antenna for microwave hyperthermia	International Journal of Hyperthermia	31	737- 748	2015
21	<b>P.A. Karthick,G.</b> Venugopal, and S. Ramakrishnan	Analysis of Surface EMG signals under Fatigue and Non-Fatigue Conditions using B-Distribution based Quadratic Time Frequency Distribution	Journal of Mechanics in Medicine and Biology	15		2015