

#### Prof. Shankar Krishnapillai

Indian Institute of Technology Madras
Vibrations
Dynamics
Optimization
Machine design

	All	Since 2015
Citations	1349	922
h-index	18	15
i10-index	40	27

TITLE	CITED BY	YEAR
Substructural identification method without interface measurement CG Koh, K Shankar Journal of engineering mechanics 129 (7), 769-776	109	2003
Energy flow predictions in a structure of rigidly joined beams using receptance theory K Shankar, AJ Keane Journal of Sound and Vibration 185 (5), 867-890	78	1995
Effect of high strain rate on glass/carbon/hybrid fiber reinforced epoxy laminated composites K Naresh, K Shankar, BS Rao, R Velmurugan Composites Part B: Engineering 100, 125-135	69	2016
Heat extraction from non-convective and lower convective zones of the solar pond: a transient study A Date, Y Yaakob, A Date, S Krishnapillai, A Akbarzadeh Solar Energy 97, 517-528	66	2013
Application of a hybrid of particle swarm and genetic algorithm for structural damage detection S Sandesh, K Shankar Inverse Problems in Science and Engineering; Formerly Inverse Problems in	49	2010
Vibrational energy flow analysis using a substructure approach: The application of receptance theory to FEA a SEA K Shankar, AJ Keane Journal of Sound and Vibration 201 (4), 491-513	and 48	1997
Vibration of simply supported beams under a single moving load: a detailed study of cancellation phenomenon CPS Kumar, C Sujatha, K Shankar International Journal of Mechanical Sciences 99, 40-47	1 40	2015
Behaviour of magneto-electro-elastic sensors under transient mechanical loading A Daga, N Ganesan, K Shankar Sensors and Actuators A: Physical 150 (1), 46-55	39	2009

TITLE	CITED BY	YEAR
Transient dynamic response of cantilever magneto-electro-elastic beam using finite elements A Daga, N Ganesan, K Shankar International Journal for Computational Methods in Engineering Science and	35	2009
A study of the vibrational energies of two coupled beams by finite element and green function (receptance) methods K Shankar, AJ Keane Journal of Sound and Vibration 181 (5), 801-838	34	1995
Pyroelectric and pyromagnetic effects on behavior of magneto-electro-elastic plate P Kondaiah, K Shankar, N Ganesan Coupled systems mechanics 2 (1), 1-22	33	2013
Time domain identification of structural parameters and input time history using a substructural approach S Sandesh, K Shankar International Journal of Structural Stability and Dynamics 9 (02), 243-265	32	2009
Reliability analysis of tensile strengths using Weibull distribution in glass/epoxy and carbon/epoxy composites K Naresh, K Shankar, R Velmurugan Composites Part B: Engineering 133, 129-144	31	2018
Modeling and optimization of passive and semi-active suspension systems for passenger cars to improve ride comfort and isolate engine vibration R Jayachandran, S Krishnapillai Journal of Vibration and Control 19 (10), 1471-1479	29	2013
Statistical analysis of the tensile strength of GFRP, CFRP and hybrid composites K Naresh, K Shankar, R Velmurugan, NK Gupta Thin-Walled Structures 126, 150-161	28	2018
Studies on magneto-electro-elastic cantilever beam under thermal environment P Kondaiah, K Shankar, N Ganesan Coupled systems mechanics 1 (2), 205	27	2012
A hybrid neural network strategy for identification of structural parameters P Pillai, S Krishnapillai Structures & Infrastructure Engineering 6 (3), 379-391	20	2010

TITLE	CITED BY	YEAR
Dynamic response of multiphase magnetoelectroelastic sensors using 3D magnetic vector potential approach B Biju, N Ganesan, K Shankar IEEE Sensors Journal 11 (9), 2169-2176	18	2011
Vibration suppression of printed circuit boards using an external particle damper P Veeramuthuvel, KK Sairajan, K Shankar Journal of Sound and Vibration 366, 98-116	17	2016
Pyroelectric and pyromagnetic effects on multiphase magneto-electro-elastic cylindrical shells for axisymmetric temperature P Kondaiah, K Shankar, N Ganesan Smart materials and structures 22 (2), 025007	17	2012
Transient response of magneto-electro-elastic simply supported cylinder using finite element A Daga, N Ganesan, K Shankar Journal of Mechanics of Materials and Structures 3 (2), 375-389	17	2008
Joint damage identification using Improved Radial Basis Function (IRBF) networks in frequency and time domain R Machavaram, K Shankar Applied Soft Computing 13 (7), 3366-3379	າ 16	2013
Identification of structural parameters using combined power flow and acceleration approach in a substructure CK Varghese, K Shankar International Journal of Engineering and Technology Innovation 1 (1), 65	16	2011
Damage identification using combined transient power flow balance and acceleration matching technique CK Varghese, KK Shankar Structural Control and Health Monitoring 21 (2), 135-155	15	2014
Harmonic response of three-phase magneto-electro-elastic beam under mechanical, electrical and magnetic environment A Daga, N Ganesan, K Shankar Journal of intelligent material systems and structures 20 (10), 1203-1220	14	2009
Comparative studies of the transient response for PECP, MSCP, Barium Titanate, magneto-electro-elastic finite cylindrical shell under constant internal pressure using finite A Daga, N Ganesan, K Shankar Finite elements in analysis and design 44 (3), 89-104	14	2008

TITLE	CITED BY	YEAR
parametric identification of nonlinear dynamic systems using combined Levenberg–Marquardt and genetic algorithm R Kishore Kumar, S Sandesh, K Shankar International Journal of Structural Stability and Dynamics 7 (04), 715-725	14	2007
Application of the energy flow method to vibration control of buildings with multiple tuned liquid dampers K Shankar, T Balendra Journal of Wind Engineering and Industrial Aerodynamics 90 (12-15), 1893-1906	14	2002
Soft soil track interaction modeling in single rigid body tracked vehicle models P Edwin, K Shankar, K Kannan Journal of Terramechanics 77, 1-14	13	2018
Improved Complex-valued Radial Basis Function (ICRBF) neural networks on multiple crack identification M Rajendra, K Shankar Applied Soft Computing 28, 285-300	13	2015
Identification of structural parameters using consistent mass transfer matrix P Nandakumar, K Shankar Inverse Problems in Science and Engineering 22 (3), 436-457	13	2014
Damage identification of a thin plate in the timedomain with substructuring-an application of inverse problem S Sandesh, K Shankar International Journal of Applied Science and Engineering 7 (1), 79-93	12	2009
Multi-objective optimization of the two-stage helical gearbox with tribological constraints M Patil, P Ramkumar, K Shankar Mechanism and Machine Theory 138, 38-57	11	2019
System identification of a composite plate using hybrid response surface methodology and particle swarm optimization in time domain PA Sankar, R Machavaram, K Shankar Measurement 55, 499-511	11	2014
Multiple crack damage detection of structures using the two crack transfer matrix P Nandakumar, K Shankar Structural Health Monitoring 13 (5), 548-561	11	2014

TITLE	CITED BY	YEAR
Structural damage identification using improved RBF neural networks in frequency domain R Machavaram, K Shankar Advances in Structural Engineering 15 (10), 1689-1703	11	2012
High velocity impact damage investigation of carbon/epoxy/clay nanocomposites using 3D Computed Tomography P Murugan, K Naresh, K Shankar, R Velmurugan, G Balaganesan Materials Today: Proceedings 5 (9), 16946-16955	10	2018
Prediction of particle damping parameters using RBF neural network P Veeramuthuvel, K Shankar, KK Sairajan, R Machavaram Procedia Materials Science 5, 335-344	10	2014
Crack identification using combined power flow and acceleration matching technique CK Varghese, K Shankar Inverse Problems in Science and Engineering 20 (8), 1239-1257	10	2012
Parametric identification of structures with nonlinearities using global and substructure approaches in the time domain RK Kumar, K Shankar Advances in Structural Engineering 12 (2), 195-210	10	2009
Quadratic serendipity finite elements over convex polyhedra A Sinu, S Natarajan, K Shankar International Journal for Numerical Methods in Engineering 113 (1), 109-129	9	2018
Vibration of nonuniform beams under moving point loads: An approximate analytical solution in time domain CP Sudheesh Kumar, C Sujatha, K Shankar International Journal of Structural Stability and Dynamics 17 (03), 1750035	9	2017
Application of particle damper on electronic packages for spacecraft P Veeramuthuvel, K Shankar, KK Sairajan Acta Astronautica 127, 260-270	9	2016
TRANSIENT DYNAMIC BEHAVIOR OF TWO PHASE MAGNETO-ELECTRO-ELASTIC SENSORS BONDED TELASTIC RECTANGULAR PLATES. B Biju, N Ganesan, K Shankar International Journal on Smart Sensing & Intelligent Systems 5 (3)	O 9	2012

TITLE	CITED BY	YEAR
Studies on Magnetoelectric Effect for Magneto-Electro-Elastic Cylinder using Finite Element Method A Daga, N Ganesan, K Shankar Multidiscipline Modeling in Materials and Structures	9	2009
Digital image processing and thermo-mechanical response of neat epoxy and different laminate orientations of fiber reinforced polymer composites for vibration isolation K Naresh, K Shankar, R Velmurugan International Journal of Polymer Analysis and Characterization 23 (8), 684-709	8	2018
PYROEFFECTS ON MULTIPHASE MAGNETO-ELECTROELASTIC SENSOR PATCH BONDED ON MILD STEEL PLATE. P Kondaiah, K Shankar, N Ganesan International Journal on Smart Sensing & Intelligent Systems 7 (3)	8	2014
Structural parameter identification using damped transfer matrix and state vectors P Nandakumar, K Shankar International Journal of Structural Stability and Dynamics 13 (04), 1250076	8	2013
Vibrational energies of members in structural networks fitted with tuned vibration absorbers SK George, K Shankar International Journal of Structural Stability and Dynamics 6 (02), 269-284	8	2006
Stiffness identification by a substructural approach in frequency domain CG Koh, K Shankar International Journal of Structural Stability and Dynamics 3 (02), 267-281	8	2003
A study of the dynamic stress concentration factors of a flat plate for SEA applications K Shankar Journal of sound and vibration 217 (1), 97-111	8	1998
Effect of fiber orientation on carbon/epoxy and glass/epoxy composites subjected to shear and bending K Naresh, S Krishnapillai, R Velmurugan Solid State Phenomena 267, 103-108	7	2017
Pyroeffects on Magneto-Electro-Elastic Sensor patch subjected to thermal load P Kondaiah, K Shankar Smart Structures and Systems 19 (3), 299-307	7	2017

TITLE	CITED BY	YEAR
A hybrid neural network strategy for the identification of structural damage using time domain responses P Pillai, K Shankar The IES Journal Part A: Civil & Structural Engineering 2 (1), 17-34	7	2009
Identification of structural parameters including crack using one dimensional PZT patch model N Jinesh, K Shankar Inverse Problems in Science and Engineering 25 (8), 1216-1241	6	2017
Non-uniform Euler-Bernoulli beams under a single moving oscillator: An approximate analytical solution in time domain CPS Kumar, C Sujatha, S Krishnapillai Journal of Mechanical Science and Technology 30 (10), 4479-4487	6	2016
Structural crack damage detection using transfer matrix and state vector P Nandakumar, K Shankar Measurement 68, 310-327	6	2015
Pyroeffects on magneto-electro-elastic sensor bonded on mild steel cylindrical shell P Kondaiah, K Shankar, N Ganesan Smart Structures and Systems 16 (3), 537-554	6	2015
Response of multiphase magneto-electro-elastic sensors under harmonic mechanical loading B Biju, N Ganesan, K Shankar International Journal of Engineering, Science and Technology 1 (1), 216-227	6	2009
Advanced 3D and 2D damage assessment of low velocity impact response of glass and Kevlar fiber reinforced epoxy hybrid composites A Vasudevan, S Senthil Kumaran, K Naresh, R Velmurugan, K Shankar Advances in Materials and Processing Technologies 4 (3), 493-510	5	2018
Multi-objective optimization of two stage spur gearbox using NSGA-II M Patil, P Ramkumar, S Krishnapillai SAE Technical Paper	5	2017
Optimum frequency variations with coil geometry and defects in tone burst eddy current thermography (TBET) N Biju, N Ganesan, CV Krishnamurthy, K Balasubramaniam Insight-Non-Destructive Testing and Condition Monitoring 55 (9), 504-509	5	2013

TITLE	CITED BY	YEAR
Identification of crack in a structural member using improved radial basis function (IRBF) neural networks R Machavaram, S Krishnapillai International Journal of Intelligent Computing and Cybernetics	5	2013
The transient dynamic response of multiphase magneto-electroelastic sensors bonded to a shell structure B Biju, N Ganesan, K Shankar, TH Hyde Proceedings of the Institution of Mechanical Engineers, Part L: Journal of	5	2010
Finite element formulation using magnetic vector potential approach: effects of displacement current in magneto electro-elastic cylindrical shells B Biju, N Ganesan, K Shankar Smart materials and structures 19 (1), 015009	- 5	2009
Improved hybrid Strength Pareto Evolutionary Algorithms for multi-objective optimization K Shankar, AS Baviskar International Journal of Intelligent Computing and Cybernetics	4	2018
Application of RBF neural network in prediction of particle damping parameters from experimental data P Veeramuthuvel, K Shankar, KK Sairajan Journal of Vibration and Control 23 (6), 909-929	4	2017
Multi-objective optimisation of support characteristics of rotor bearing systems MJ Babu, AS Sekhar, K Shankar International Journal of Structural Engineering 4 (4), 361-386	4	2013
Effect of displacement current in magneto-electro-elastic plates subjected to dynamic loading B Biju, N Ganesan, K Shankar International Journal of Mechanics and Materials in Design 8 (4), 349-358	4	2012
Estimation of structural parameters using transfer matrices and state vectors P Nandakumar, K Shankar International Journal of Applied Science and Engineering 10 (3), 181-207	4	2012
Identification of structural parameters using transfer matrix and state vectors in time domain P Nandakumar, K Shankar Proceedings 5th International Conference of Advances in Mechanical	4	2011

TITLE	CITED BY	YEAR
Propulsion shaft alignment measurements on warships afloat and alignment solution using multi-objective optimisation A Batra, K Shankar, S Swarnamani Proceedings of IMarEST-Part A-Journal of Marine Engineering and Technology	4	2007
Multiobjective optimization of rotor-bearing systems with an investigation of goal programming approach S Soorajkrishna, AS Sekhar, K Shankar Proceedings of the Institution of Mechanical Engineers, Part C: Journal of	3	2019
An improved multi-objective particle swarm optimization based on utopia point guided search SP Kapse, S Krishnapillai International Journal of Applied Metaheuristic Computing (IJAMC) 9 (4), 71-96	3	2018
Effect of nanoclay and different impactor shapes on glass/epoxy composites subjected to quasi-static punch shear loading K Naresh, K Rajalakshmi, A Vasudevan, S Senthil Kumaran, Advances in Materials and Processing Technologies 4 (3), 345-357	3	2018
Enhanced mobility of non aqueous phase liquid (NAPL) during drying of wet sand D Govindarajan, AP Deshpande, R Raghunathan Journal of contaminant hydrology 209, 1-13	3	2018
Experimental and theoretical investigation of a unidirectional glass/epoxy composites under tensile and impact loading K Naresh, K Shankar, R Velmurugan Materials Today: Proceedings 5 (11), 25174-25184	3	2018
Multi objective optimisation of an aero engine rotor system using nondominated sorting genetic algorithm (NSG/ J Shibu Kalloor, C Babu, G K Degaonkar, K Shankar ASME 2017 gas turbine India conference	A) 3	2018
Multi-Objective Optimization of Spur Gearbox with Inclusion of Tribological Aspects M Patil, P Ramkumar, K Shankar Journal of Friction and Wear 38 (6), 430-436	3	2017
Comparative study of a neat epoxy and unidirectional carbon/epoxy composites under tensile and impact loadin K Naresh, S Krishnapillai, V Ramachandran Solid State Phenomena 267, 87-92	g 3	2017

TITLE	CITED BY	YEAR
Dynamic-thermal analyses of a structurally reconfigured electronics package onboard mini satellite P Veeramuthuvel, S Jayaraman, S Krishnapillai, M Annadurai, Applied Mechanics and Materials 592, 2117-2121	3	2014
Structural damage detection using a hybrid particle swarm algorithm S Sandesh, S Krishnapillai World Journal of Modelling and Simulation 7 (4), 290-298	3	2011
Time Domain Parametric Identification of Plate Bending Rigidity Coefficients using Substructural Approach S Sandesh, K Shankar 2nd International Congress on Computational Mechanics and Simulation (ICCMS-06)	3	2006
Study of pilot's comfortness in the cockpit seat of a flight simulator V Kumar, RK Mishra, S Krishnapillai International Journal of Industrial Ergonomics 71, 1-7	2	2019
State Estimation for Landing Maneuver on High Performance Aircraft PS Suresh, NK Sura, K Shankar Journal of The Institution of Engineers (India): Series C 100 (1), 187-202	2	2019
Influence of fibre orientation and thickness on the response of CFRP composites subjected to high velocity impact loading R Velmurugan, K Naresh, K Shankar Advances in Materials and Processing Technologies 4 (1), 120-131	2	2018
An Improved Multi-Objective Particle Swarm Optimization Algorithm Based on Adaptive Local Search SP Kapse, S Krishnapillai International Journal of Applied Evolutionary Computation (IJAEC) 8 (2), 1-29	2	2017
Probability-based Studies on the tensile strength of GFRP, CFRP and Hybrid composites K Naresh, K Shankar, R Velmurugan, NK Gupta Procedia engineering 173, 763-770	2	2017
Progressive-Stepping-Based Non-Dominated Sorting Genetic Algorithm for Multi-Objective Optimization A Baviskar, S Krishnapillai International Journal of Applied Evolutionary Computation (IJAEC) 7 (3), 17-49	2	2016

TITLE	CITED BY	YEAR
Experimental investigation of particle damper-based vibration suppression in printed circuit board for spacecraft applications P Veeramuthuvel, K Shankar, KK Sairajan Proceedings of the Institution of Mechanical Engineers, Part G: Journal of	2	2016
Structural damage identification using transfer matrix with lumped crack properties P Nandakumar, K Shankar Inverse Problems in Science and Engineering 24 (3), 422-447	2	2016
Dynamic analysis of magneto-electro-elastic cylindrical shells by quasi-static and fully dynamic electromagnetic theories B Biju, N Ganesan, K Shankar Multidiscipline Modeling in Materials and Structures	2	2012
Particle swarm based structural identification using consistent mass transfer matrix method P Nandakumar, K Shankar Proc. International Conference on Advances in control and Optimization of	2	2012
Variation of spatial and temporal characteristics of reactive flow in a periodically driven cavity: Gelation of sodium acrylate M Harini, S Sriram, AP Deshpande, S Pushpavanam Physical Review E 78 (3), 031407	1 2	2008
Multi-objective Goal Programming for Low Altitude Seat Ejections with Fuzzy Logic–Based Decision-making RN Raj, K Shankar Human Factors and Mechanical Engineering for Defense and Safety 4 (1), 6	1	2020
Prediction of nonlinear viscoelastic behaviour of simulative soil for deep-sea sediment using a thermodynamicall compatible model S Sumith, K Sangam, K Kannan, K Shankar Inverse Problems in Science and Engineering 28 (6), 777-795	y 1	2020
An improved spinal injury parameter model for underbody impulsive loading scenarios. R NR, S Krishnapillai International Journal for Numerical Methods in Biomedical Engineering, e3307	1	2020
Identification of Nonlinear Structural Parameters Using Combined Power Flow and Acceleration Matching Approaches R Anish, K Shankar Advances in Mechanical Engineering, 1139-1149	1	2020

TITLE	CITED BY	YEAR
A novel passive mechanism to improve power output in 2DOF piezoelectric vibration energy harvester K Suresh, K Shankar, C Sujatha Smart Materials and Structures 28 (11), 115016	1	2019
Multi-objective optimum design of an aero engine rotor system using hybrid genetic algorithm KJ Shibu, K Shankar, CK Babu, GK Degaonkar IOP Conference Series: Materials Science and Engineering 624 (1), 012025	1	2019
Multi-objective optimisation of a small aircraft turbine engine rotor system with self-updating Rayleigh damping model and frequency-dependent bearing-pedestal model JK Shibu, K Shankar, CK Babu, GK Degaonkar PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF	1	2019
A Lumped Electromechanical Model for Output Power from Partially Covered Piezoelectric Energy Harvester K Suresh, K Shankar, C Sujatha 2019 IEEE 2nd International Conference on Power and Energy Applications	1	2019
A multi-objective optimization study of parameters for low-altitude seat ejections RN Raj, K Shankar Soft Computing for Problem Solving, 311-325	1	2019
Damage Detection on Structures using Transfer Matrix with Lumped Crack Properties P Nandakumar, K Shankar Proceedings of the 1st International and 16thNational Conference on Machines	1	2013
Effect of displacement current in magneto-electro-elastic 3D beam subjected to dynamic loading B Biju, N Ganesan, K Shankar Mechanics of Advanced Materials and Structures 20 (3), 189-198	1	2013
Optimal trends in Manoeuvre Load Control at subsonic and supersonic flight points for tailless delta wing aircraf PS Suresh, G Radhakrishnan, K Shankar Aerospace Science and Technology 24 (1), 128-135	t 1	2013
Structural Identification Based on Transient Power Flows using Particle Swarm Optimization CK Varghese, K Shankar International Journal of Swarm Intelligence Research (IJSIR) 3 (4), 61-82	1	2012
Magnetic scalar and vector potential approaches in dynamic response studies of magneto-electro-elastic plates B Biju, N Ganesan, K Shankar Ferroelectrics 413 (1), 381-398	1	2011

TITLE	CITED BY	YEAR
Multi-Objective Optimization Methods Applied for Manoeuvre Load Control on Combat Aircraft wing. PS Suresh, G Radhakrishnan, K Shankar International Journal of Aerospace Innovations 2 (3)	1	2010
Manoeuvre load alleviation using multi-objective optimisation for combat aircraft wing PS Suresh, G Radhakrishnan, K Shankar International Journal of Design Engineering 3 (2), 195-214	1	2010
Structural System Identification in the Time Domain using Evolutionary and Behaviorally Inspired Algorithms and their Hybrids S Sandesh, AK Sahu, K Shankar The Journal of Engineering Research [TJER] 6 (2), 64-77	<b>1</b>	2009
Building (Vibration control) K Shankar, T Balendra, M VJ, A Akinturk, W Tse, M Gu, JC Wu, PC Pan, Wind Engineers, JAWE 2001 (89), 429-456	1	2001
Macro geometry multi-objective optimization of planetary gearbox considering scuffing constraint A Parmar, P Ramkumar, K Shankar Mechanism and Machine Theory 154, 104045		2020
Clustering in Pareto Front: Application on an Aero Engine Rotor-Bearing System for Improved Design KJ Shibu, K Shankar, CK Babu, GK Degaonkar Proceedings of the 6th National Symposium on Rotor Dynamics, 141-153		2020
High strain rate studies for different laminate configurations of bi-directional glass/epoxy and carbon/epoxy composites using DIC K Naresh, K Shankar, R Velmurugan, NK Gupta Structures 27, 2451-2465		2020
Design and Optimization of Laminated Composite Plate for Maximum Fundamental Frequency J Krishnan, S Krishnapillai, R Elsen, S Chandrasekaran, T Rao SAE Technical Paper		2020
Electromechanical modelling of piezoelectric vibration energy harvester with a novel dynamic magnifier S Kote, S Krishnapillai, S Chandramohan tm-Technisches Messen 87 (9), 575-585		2020

TITLE	CITED BY	YEAR
Non-linear structural parameter identification using instantaneous power flow balance approach R Anish, K Shankar Inverse Problems in Science and Engineering, 1-27		2020
Three-objective optimization of aircraft secondary power system rotor dynamics J Shibu K, K Shankar, CK Babu, GK Degaonkar Mechanics Based Design of Structures and Machines, 1-17		2020
A constitutive model for bentonite—water mixture and the effect of wall slip boundary conditions on its mechanical response S Sumith, K Kannan, K Shankar International Journal of Non-Linear Mechanics 119, 103318	al	2020
An Improved Spinal Injury Parameter Model for Under Body Impulsive Loading Scenarios R Naveen Raj, K Shankar International Journal for Numerical Methods in Biomedical Engineering, e3307		2020
State Estimation Using Filtering Methods Applied for Aircraft Landing Maneuver PS Suresh, NK Sura, K Shankar Recent Advances in Theoretical, Applied, Computational and Experimental		2020
A Novel Passive Mechanism to Improve Induced Strain in Two-DOF Piezoelectric Energy Harvester K Suresh, K Shankar, C Sujatha Advances in Mechanical Engineering, 1109-1116		2020
Investigation of nonlinear landing gear behavior and dynamic responses on high performance aircraft PS Suresh, NK Sura, K Shankar Proceedings of the Institution of Mechanical Engineers, Part G: Journal of		2019
Landing Response Analysis on High-Performance Aircraft Using Estimated Touchdown States PS Suresh, NK Sura, K Shankar SAE International Journal of Aerospace 12 (1), 23-40		2019
Sub-Structural Parameter Identification Including Cracks of Beam Structure Using PZT Patch N Jinesh, K Shankar International Journal for Computational Methods in Engineering Science and		2019

TITLE	CITED BY	YEAR
Using a Coupled MDOF Biodynamic Model to Study the Effect of Curvature of Spine on Lumbar Spine Compression Under Axial Loads RN Raj, K Shankar The World Thematic Conference-Biomedical Engineering and Computational		2018
Multiple crack damage detection of structures using simplified PZT model N Jinesh, K Shankar Journal of Mechanics of Materials and Structures 13 (2), 225-246		2018
Damage identification using combined acceleration and voltage matching with one-dimensional PZT patch mode K Shankar, N Jinesh Multidiscipline Modeling in Materials and Structures	el	2018
Modelling of a Biomechanical Vertebral System for Seat Ejection in Aircrafts Using Lumped Mass Approach R Unnikrishnan, K Shankar International Journal of Mechanical and Mechatronics Engineering 11 (1), 186-192		2017
Estimation of Structural Parameters in Time Domain Using One Dimensional Piezo Zirconium Titanium Patch Model N Jinesh, K Shankar International Journal of Aerospace and Mechanical Engineering 11 (1), 126-131		2017
Improved Multi-Objective Particle Swarm Optimization Applied to Design Problem K Swapnil, K Shankar International Journal of Mechanical and Mechatronics Engineering 11 (2), 363-367		2017
Effect of change in bulk density of a material on the dynamic performance of belt conveyor SR Naik, S Krishnapillai, AR Kumar International Journal of Design Engineering 7 (2), 123-141		2017
Investigation on Multiple Algorithms for Multi-Objective Optimization of Gear Box R Ananthapadmanabhan, SA Babu, KR Hareendranath, C Krishnamohan, Materials Science and Engineering Conference Series 149 (1), 012049		2016
Vector evaluated particle swarm optimisation for multi-objective structural system identification CK Varghese, SK George, K Shankar International Journal of Mathematical Modelling and Numerical Optimisation 6		2015

TITLE	CITED BY	YEAR
Detection of Cracks in Structures Using Two Crack Transfer Matrix N Palanisamy, S Krishnapillai Advances in Control and Optimization of Dynamical Systems 3 (1), 1084-1091		2014
Detection of Cracks in Structures Using Two Crack Transfer Matrix P Nandakumar, K Shankar IFAC Proceedings Volumes 47 (1), 1084-1091		2014
3A25 Vibro-acoustic behaviour of a non-uniform beam traversed by a moving point load (The 12th International Conference on Motion and Vibration Control) CPS Kumar, C Sujatha, K Shankar 「運動と振動の制御」 シンポジウム講演論文集 2014, _3A25-13A25-10_		2014
Damage Identification of Multimember Structure using Improved Neural Networks M Rajendra, K Shankar International Journal of Manufacturing, Materials, and Mechanical		2013
A Simple Portable Cable Way for Agricultural Resource Collection S Krishnapillai, TN Sivasubramanian ICoRD'13, 1023-1030		2013
Identification of structural parameters using damped transfer matrix and state vector P Nandakumar, K Shankar Proceedings of 2012 UKACC International Conference on Control, 870-875		2012
Dynamic behavior of magnetostrictive/piezoelectric laminate cylindrical shells due to electromagnetic force B Biju, N Ganesan, K Shankar Journal of Mechanics of Materials and Structures 6 (6), 915-924		2011
Harmonic Response of Magneto-electro-elastic Sensors Bonded to Cylindrical Shells B Biju, N Ganesan, K Shankar Sensors & Transducers 116 (5), 89		2010
Friction and Wear Studies on the Aramid Fibre Based Non-Asbestos Brake Pads for Wind-Mill Application V Ranganathan, G Konchady, S Krishnapillai Advanced Materials Research 123, 101-104		2010
Parametric Estimation Of Nonlinear 3D Of System Using Genetic Algorithm In Time Domain RK Kumar, S Sandesh, K Shankar Vibration Problems ICOVP-2007, 223-229		2008

TITLE	CITED BY	YEAR
Propulsion shaft alignment measurements on warships afloat and alignment solution using multi-objective optimisation L Cdr Amit Batra, K Shankar, S Swarnamani Journal of Marine Engineering & Technology 6 (1), 39-49		2007
Application of the energy flow method to vibration control of buildings with multiple tuned liquid dampers K Shankar, T Balendra JWE: 日本風工学研究会誌 89, 429-432		2001
Application of finite element models to powerflow calculations: a receptance approach.  S Krishnapillai University of Oxford		1995
Structural Parameter Estimation Including Crack Using Combined Acceleration and Voltage matching with One Dimensional PZT Patch Model N Jinesh, K Shankar		
TIME DOMAIN IDENTIFICATION OF STRUCTURAL PARAMETERS WITHOUT INTERFACE MEASUREMENT	Γ	

#### TIME DOMAIN IDENTIFICATION OF STRUCTURAL PARAMETERS WITHOUT INTERFACE MEASUREMENT USING SUBSTRUCTURAL ANALYSIS

K Narayana Moorthy, K Shankar

# HEALTH MONITORING OF PLATE STRUCTURE USING PIEZO ELECTRIC PATCHES AND CURVATURE MODE SHAPE

N Jinesh, K Shankar, N Ganesan

# VIBRATION OF NON-PRISMATIC SIMPLY SUPPORTED BEAMS UNDER MOVING LOADS: CANCELLATION OF RESONANCES

C Sujatha, K Shankar

### EFFECT OF GEOMETRY ON THE VIBRO-ACOUSTIC RE-SPONSES OF BEAMS UNDER MOVING POINT LOADS

SK CP, C Sujatha, K Shankar