

# National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

## Curriculum Vitae



Dr. N. Siva Shanmugam is presently working as an Associate Professor in the Department of Mechanical Engineering, NIT Tiruchirappalli. He has 18 years of teaching and research experience. He received his doctoral degree in 2012 from NIT Tiruchirappalli and published 90+ research papers in reputed national and international peer-reviewed journals (SCIE). He is actively associated with different national and international societies and academies. He has delivered several invited talks at various academic & research institutions and industries in different parts of India. He has completed several research and consultancy projects. Further, he is handling multiple sponsored and consultancy projects for Bharat Heavy Electrical Limited (BHEL) and ISRO, Government of India. His research interests include FE simulation of welding processes, wire arc additive manufacturing, fatigue, fracture mechanics, ergonomics study, and biomechanics.

1. Name : **Dr. N. Siva Shanmugam**
2. Designation: Associate Professor
3. Office Address: Room No: M28, Mechanical Engineering Dept., NIT Trichy-620015.
4. Telephone (Direct) (Optional): 0431 2503425  
Telephone : Extn (Optional):  
Mobile (Optional): 9443649278
5. Email (Primary): nsiva@nitt.edu Email (Secondary) :
6. Field(s) of Specialization: Welding, Finite Element Simulation, WAAM, Fatigue
7. Employment Profile

Job Title	Employer	From	To
Associate Professor of Mechanical Engineering	National Institute of Technology, Tiruchirappalli.	03/18	Till date
Assistant Professor of Mechanical Engineering,	National Institute of Technology, Tiruchirappalli.	11/08	02/18
Research Associate under DST-funded project	National Institute of Technology, Tiruchirappalli	05/07	10/08

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Full-Time Ph.D. Research Scholar in the Department of Mechanical Engineering	National Institute of Technology, Tiruchirappalli.	08/06	04/07
Lecturer in Department of M.E. CAD/CAM,	J.J. College of Engineering & Technology, Tiruchirappalli.	07/04	07/06

### 8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	National Institute of Technology, Tiruchirappalli	2012		Mechanical Engineering
M.E.	Anna University of Technology, Chennai	2004	First class with Distinction	CAD/CAM
B.E.	Anna University of Technology, Chennai	2002	First class with Distinction	Mechanical Engineering

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
MOOCs Sub Committee - Committee Member	National Institute of Technology, Tiruchirappalli	09.08.2020	22.09.2021
NRDC-NITT-Innovation Facility Centre - Committee Member	National Institute of Technology, Tiruchirappalli	15.10.2020	22.09.2021
Conducting Skill Test for Recruiting TA, Sr. Technician and Technician	National Institute of Technology, Tiruchirappalli	16.07.2021	22.07.2021

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Coordinating the M.Tech. Construction Technology and Management Students	National Institute of Technology, Tiruchirappalli	01.01.2018	Till now
Coordinating the SIF Related Activities in the Mechanical Engineering Department - SIF Coordinator - Mech Engg	National Institute of Technology, Tiruchirappalli	07.12.2020	Till now
Coordinating the Activities of the Students Batch 2019-2023	National Institute of Technology, Tiruchirappalli	12.08.2019	24.09.2021
Looking After the Facilities in Strength of Materials and Welding Research Laboratories – Laboratory In-charge	National Institute of Technology, Tiruchirappalli	01.01.2018	Till now
Member in Works Committee - 14th Convocation - Seating Arrangement of Graduands	National Institute of Technology, Tiruchirappalli	09.07.2018	27.07.2018

**10. Academic/Administrative Responsibilities outside the University**

Position	Institution	From	To
Ph.D. Thesis Evaluation Examiner	NIT, Surathkal	2021	2021
Ph.D. Doctoral Committee - External Member	VIT University	2021	Till now
Mechanical Stream Item Creation - Expert Member	TCS India	2021	2022

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Ph.D. Thesis Evaluation Examiner	Anna University, Chennai		
STTP on ME8692 Finite Element Analysis- Guest Speaker	Anna University, Chennai	2021	2021

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2021	Teachers Associateship for Research Excellence Role: Mentor Mentee: Dr. V. Rajkumar, PSGiTech, Coimbatore.	Science and Engineering Research Board, Department of Science & Technology, Government of India
2021	Best Performer Award - Institute level	National Institute of Technology, Tiruchirappalli
2020	Best Performer Award - Institute level	National Institute of Technology, Tiruchirappalli
2020	Best Paper Award	International Conference on Industrial and Manufacturing Systems CIMS - 2020 At Dr. B. R. Ambedkar National Institute of Technology Jalandhar Punjab
2020	Best Paper Award	International Journal of Modelling and Simulation
2020	BIS Best Project Award	L and T Construction BIS Project Awards
2018	Best Performer Award - Institute level	National Institute of Technology, Tiruchirappalli
2017	Best Performer Award - Institute level	National Institute of Technology, Tiruchirappalli

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work

- (i) Curriculum Development: M. Tech. Engineering Design – NITT
- (ii) Courses taught at Postgraduate and Undergraduate levels

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### Undergraduate level

- Strength of Materials
- Finite Element Method
- Engineering Graphics
- Basic Mechanical Engineering
- Machine Drawing
  
- Computer aided design
- Total Quality Management
- Welding Technology
- Machine Design
- Theory of Machines
- Industrial Safety

### Postgraduate level

- Mechanical Vibrations
- Product Design and Development Strategies
- Finite Element Analysis
- Computer Integrated Design
  
- Finite Element Analysis in Heat Transfer Analysis
- Safety in Engineering Industry
- Safety in Material Handling
- Human factors Engineering

(iii) Projects guided at Postgraduate level

Student Name	Title of Thesis	Year
Prashik Bandu Nimgade	Study of Thermo-Mechanical Analysis on austenitic stainless steel of grade 321 in Tungsten inert gas welding process	2022
Gunaganti Akhil	Prediction of weld pool geometry of AA 6061-T6 using cold metal transfer welding	2022
Baban Kumar	Quantitative Risk Analysis for HCI Bridge Projects Using Probability Distribution Functions	2021
Bonda Sivateja	Study on factors affecting productivity and finding the empirical method to estimate Productivity in a given site conditions	2021
Natarajan K	Postural analysis of musculoskeletal disorder Risk in steel column erection	2021
Vegi Durga Prasad	Bleve projectile trajectory analysis of a propane cylindrical tank the Herring brothers Farm accident	2021
Natarajan K	Ergonomic Assessment of Work-Related Musculoskeletal Disorder Risks in Steel Column Erection	2020
Vegi Durga Prasad	Fragment Analysis of Bleve of a Propane Cylindrical Tank the Herring Brothers Farm Accident	2020
M Arun Kumar	Numerical Prediction of Temperature Distribution and Residual Stresses on Arc Welded AISI 304l and Ti6Al4V Alloys	2020
M Ramanatha Reddy	Experimental Analysis of GAIT Disorder with Reference to Impact Load Frequency of Work and Carrying Technique	2020
Mimanshu Sharma	Risk Identification and Mitigation Methods in Procurement of Specialized Packages Phase II	2020
Sameer Dongre	Numerical Simulation of Double-Sided Gas Tungsten Arc Welding of Austenitic Stainless-Steel Grade 321 Material	2020

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Thakare Parasram Rameshwar	Thermomechanical Analysis of Friction Stir Welding of Aluminium Alloy 6061 Phase II	2020
Bonda Sivateja	Study on factors affecting productivity and finding the empirical method to estimate Productivity in a given site conditions	2020
Baban Kumar	Quantitative Risk Analysis Framework for HCI Projects	2020
Aravind P	Experimental Validation of Thermal Stresses Developed During Deposition of Inconel 625 Using GMAW Based WAAM Process Over Mild Steel	2019
Rajkumar K S	Investigation of Temperature Distribution During Deposition of ER321 Wires Using GMAW Based WAAM Process Over Mild Steel Substrate	2019
Monish Kaushik	Experimental Analysis of Gait Disorder and Reduced Fall Risk in Water Purification Industry	2019
Sameer Dongre	Numerical Simulation of Gas Tungsten Arc Welding of Austenitic Stainless-Steel Grade 321 Material	2019
M Ramanatha Reddy	Experimental Analysis of GAIT With Reference to BMI Impact of Load Frequency of Work	2019
Mimanshu Sharma	Risk Identification and Mitigation Methods in Procurement of Specialized Packages Phase I	2019
Thakare Parasram Rameshwar	Thermomechanical Analysis of Friction Stir Welding of Aluminium Alloy 6061 Phase I	2019
Rajkumar K S	Numerical Simulation of Heat Transfer and Inter Pass Temperature During Wire Arc Additive Manufacturing WAAM of Stainless Steel 347 Plate	2018
Aravind P	FEM Simulation of Wire Arc Additive Manufacturing of Inconel 625 Based Components and Determination of the Associated Thermal Stresses	2018

**Post Graduate thesis guided (before 2018)**

<b>Student Name</b>	<b>Title of Thesis</b>
Heins Lawrence	Friction measurement between sole material with grooves and floor material under contamination conditions
Anil Alappat	Prediction of seat pressure distribution on human buttock
Hari Pattath	Discomfort study on displacement of the finger while operating computer keyboard
A.V. Dileep	Risk assessment in seamless steel tube process using fuzzy and grey techniques
D. Prakash	Stress analysis of the human foot and ankle for insole design: finite element approach
M.Venugopal	Experimental study of convective heat transfer from air
A.Ranadeer	Numerical investigation of heat transfer in dimple interrupted fin configuration
Anil Alappat	Hazard identification risk assessment and risk control in cement industry with application of M.C.D.M. method

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Heins Lawrence	Effect of groove and temperature on measured coefficient of friction of footwear pads
Hari Pattath	Risk assessment with FMEA in LPG bullet and LPG fired continuous discharge furnace using fuzzy logic integrated grey method
Ranadeer	Experimental study and simulation of enhanced heat transfer in novel structure under forced convection
D. Prakash	Study of discomfort in knee during motorcycle riding and numerical simulation
Sachin Y Yadhav	A study and analysis of safety barrier under Indian road condition
N. Raja	Friction measurement on five commonly used floors in industries under wet and sand covered conditions
S. Mohanraj	Assessment of surface slipperiness on commercial floor materials at dry condition
J. Jaise	Evaluation of working posture and workplace design in computer and mouse operators
Nelson Davies Pallipuram	Probabilistic studies on projectile effects of an explosion of the pressure vessels to minimize the domino effects
Georgekutty S. Mangalathu	Decision making in risk assessment of producer gas plant& furnaces: an integrated approach with AHP/PROMETHEE & AHP/WEIGHT sum model
Ajay Kumar NB	Coupled Foot Shoe Analysis for Landing Impact in Occupational Shoes
Anoop Vellacheri	Seat cushion and soft tissue material modeling and a finite element investigation of pressure distribution between human buttock thigh and seat cushion
Amit Kumar Shukla	Analysis of muscle force of thumb and finger with commonly used hand tools
Raju Nimmala	Studies on industrial floor safety under variable sole and floor materials under spillage conditions

**(iv) Other contribution(s)**

Laboratory Development at NITT

- Materials Characterization Laboratory to teach and conduct research in the Characterization of various materials. The facility includes Universal Testing Machine, Fatigue Testing Machine, TIG welding, Micro Hardness tester, Plasma Cutting Machine, Resistance Spot welding, Micro Plasma welding, Metallurgical Microscope, Polishing, and Mounting Machines. In collaboration with Dr. T. Ramesh and Dr. K. Sankaranarayananasamy.
- CAD & Simulation Laboratory to teach and conduct research in Stress and Flow analysis. The facility includes ANSYS Research Version, ABAQUS Research Version, COMSOL Research Version, Solid Works, and SYSWELD software. In collaboration with Dr. T. Ramesh.

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14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Design, Analysis and Development of Metallic liners for Spherical Gas Bottle for Aerospace Applications	RESPOND, ISRO-VSSC, Trivandrum	2017	2019	Ongoing
Experimental Investigations and Finite Element Simulation of Laser welding of Titanium sheets for Airframe structures	SERB, DST, New Delhi	2014	2015	Completed
Comparative study and analysis of FBHE coil support arrangement for NLC and Becl 250MW CFBC boiler	BHEL, Trichy	2012	2013	Completed
Failure analysis of High-pressure feed water heaters of TPS I Expansion	NLC, Neyveli	2012	2012	Completed
Stress analysis of the existing pipe loop including test section, design and suggest improved long lasting pipe joint options for Supercritical Boiler Test Facility	BHEL, Trichy	2012	2012	Completed
Study of Operational issues of drag link feeder in existing CFBC	BHEL, Trichy	2010	2011	Completed



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boilers and issuing guidelines for improvement				
Distribution of Load Transfer Pattern and Stress Distribution with Large openings in the furnace walls of CFBC boilers	BHEL, Trichy	2010	2011	Completed
Support System for CFBC FBHE Coils and Back Pass Surfaces on CFBC boilers	BHEL, Trichy	2009	2011	Completed
Design of Bipod, Quadrapod and Retort Repairing Stand	ATS CHEM Equipments Pvt. Ltd., Namakkal	2009	2009	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
A. Karpagaraj	Experimental investigations on effects of process parameters on weld quality of automated GTAW in thin titanium sheets	Supervisor	2017
V. Dhinakaran	Heat source modeling and Some Investigations on Plasma Arc Welding of thin Ti-6Al-4V sheets	Supervisor	2017
J. Anthuvan Stephen Edberk	Experimental Analysis of laser welds for Commercially Pure titanium and Ti-6Al-4V Alloy Sheets	Supervisor	2020
B. Girinath	Modelling and Experimental Analysis of Cold Metal transfer welding of AA5052 sheet metal (QIP)	Supervisor	2020
S. Mohan Kumar	Activated Flux TIG Welding of AISI 321 Austenitic stainless Steel and Feasibility Analysis of Double-sided TIG weldments for Nuclear Applications	Supervisor	2020
K. Parthiban	Microstructural impact on mechanical properties and finite element simulation for Charpy	Co-Supervisor	2021

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	impact test of Spin Arc welded C1018 low carbon steel plate		
R. Duraisamy	Microstructure administered tensile, fatigue and wear behaviour on wire arc additive manufactured SS 347 plate	Co-Supervisor	2021
C.K. Krishnadasan	Studies on Interfaces of Carbon Fiber Reinforced laminates in Hybridized Pressure Vessel	Supervisor	2022

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant / Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
17.12.2021	PLMSS 2021	International	Session Chair	Vikram Sarabhai Space Centre (VSSC) and Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram	VSSC, Thiruvananthapuram (Virtual mode)
11.06.2022	ICAMAT-2022	International	Session Chair	NIT Tiruchirappalli, India in association with Norwegian University of Science and Technology, Norway, Tallinn University of Technology, Estonia	NIT Tiruchirappalli, India (Virtual mode)

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17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Workshop on Design and Analysis of Mechanical Systems DAMS	National	10.06.2019 - 15.06.2019	Coordinator	National Institute of Technology, Tiruchirappalli
INNOVATION, START-UP, AND TECHNOLOGY TRANSFER	National	24.01.2022 - 29.01.2022	Coordinator	National Institute of Technology, Tiruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Advances in Finite element methods		PGP College of Engineering and Technology, Namakkal.
Finite Element Analysis of Human Buttock-Thigh Interaction model		J.P. College of Engineering, Tenkasi.
Numerical Simulation of Laser welding process in SDP on Joining Techniques for Micro and Nano Material Fabrication		PSNA College of Engineering & Technology, Dindigul.
Non-Linear Finite Element Modeling of Anatomically Detailed 3D Foot Model in DST Sponsored National Level Seminar on ADVANCES IN FINITE ELEMENT ANALYSIS		Sethu Institute of Technology, Madurai.
Finite Element Simulation of Laser Keyhole Welding in thin Austenitic Stainless Steel Sheet in One day workshop on Laser beam welding & processing		SSN College of Engineering, Chennai.
Hands on training using ANSYS in the AICTE-MHRD sponsored Staff Development Programme on “Quantitative Research Techniques for Engineers and Researchers”		NIT, Trichy.
FEM applications in various welding Process in the AICTE-MHRD sponsored Staff		NIT, Trichy.

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Development Programme on “Quantitative Research Techniques for Engineers and Researchers”		
FEM – Applications in the AICTE-QIP sponsored short term course on Weldability of Advanced Materials & Newer Joining Techniques		NIT, Trichy.

**19. Membership of Learned Societies**

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Life Member	Indian Welding Society (IWS)	
Life Member	Indian Society for Technical Education (ISTE)	
Life Member	Society of Automotive Engineers India	2009

**20. Academic Foreign Visits**

Country	Duration of Visit	Programme

**21. Publications**

**(A) Referred Research Journals:**

Author(s)	Title of Paper	Journal	Volume (No)	Page numbers	Year	Impact Factor of the Journal (Optional )
Dhinakaran Veeman, Mansoor Alruqi, Mohan	Fabrication of Functionally Graded Material	Materials Letters		132786	2022	3.574

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Kumar Subramaniyan, <b>Siva Shanmugam Nallathambhi</b> , Micheal Agnelo Browne, Ashok Kamaraj	via Gas Tungsten Arc Welding Based Wire Feeding Additive Manufacturing: Mechanical and Microstructural Characterization					
R. Sasikumar, A. Rajesh Kannan, S. Mohan Kumar, R. Pramod, N. Pravin Kumar, <b>N. Siva Shanmugam</b> , Yasam Palguna, and Sakthivel Sivankalai	Wire arc additive manufacturing of functionally graded material with SS 316L and IN625: Microstructural and mechanical perspectives	CIRP Journal of Manufacturing Science and Technology	38	230-242	2022	3.602
Y. Palguna, A. Rajesh Kannan, Kotla Sairam, <b>N. Siva Shanmugam</b> , and Rajesh Korla	Microstructure and mechanical properties of wrought Al0.2CoCrFeNiMo0.5 high entropy alloy using gas tungsten arc welding process	Materials Letters	317	132109	2022	3.574
S. Mohan Kumar, A. Rajesh Kannan, R. Pramod, <b>N. Siva Shanmugam</b> , and V. Dhinakaran	Testing characterization and numerical prediction (uni-axial tension and bend test) of Double-side TIG welded SS321 plate for pressure vessel application	International Journal of Pressure Vessels and Piping	197	104648	2022	2.56
S. Mohan Kumar, A. Rajesh Kannan, R. Pramod, <b>N. Siva Shanmugam</b> , S. M. Muthu, and V. Dhinakaran,	Microstructure and high temperature performance of 321 SS wall manufactured through wire+ arc additive manufacturing	Materials Letters	314	131913	2022	3.574

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R. Pramod, Vikram Kumar S. Jain, S. Mohan Kumar, B. Girinath, A. Rajesh Kannan, and <b>N. Siva Shanmugam</b>	Experimental studies on friction stir welding of aluminium alloy 5083 and prediction of temperature distribution using arbitrary Lagrangian–Eulerian-based finite element method	Proceedings of the Institution of Mechanical Engineers Part L: Journal of Materials: Design and Applications	236	1067-1076	2022	2.014
R. Pramod, <b>N. Siva Shanmugam</b> , C. K. Krishnadasan, G. Radhakrishnan, and Manu Thomas	Design and development of aluminum alloy 6061-T6 pressure vessel liner for aerospace applications: A technical brief	Proceedings of the Institution of Mechanical Engineers Part L: Journal of Materials: Design and Applications	236	1130-1148	2022	2.014
Yoganathan, R., <b>N. Siva Shanmugam</b> , and Anand Ramanathan	Effects of Thickness Offset on the Tube-to-Tube Sheet Expansion Joint Strength: An Experimental Evaluation	Journal of Materials Engineering and Performance	31	2770-2782	2022	1.819
S. Mohan Kumar, A. Rajesh Kannan, R. Pramod, N. Pravin Kumar, <b>N. Siva Shanmugam</b> , and Sharath Rajendran	Evaluation of the High Cycle Fatigue Properties of Double-Side-Welded AISI 321 Plates Using GTAW Process for Pressure Vessels	Journal of Pressure Vessel Technology	144		2022	1.14
Gudala, Suresh, M. R. Ramesh,	Influence of Solid Lubricants on	Metallography	11	1-12	2022	1.26

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and <b>N. Siva Shanmugam</b> ,	Microstructure and Tribological Performance of Nickel-Based Composite Coatings	Microstructure and Analysis				
A. Rajesh Kannan, S. Mohan Kumar, R. Pramod, <b>N. Siva Shanmugam</b> , M. Vishnukumar, and S. G. Channabasavanna	Microstructure and corrosion resistance of Ni-Cu alloy fabricated through wire arc additive manufacturing	Materials Letters	308	131262	2022	3.574
R. Pramod, S. Mohan Kumar, A. Rajesh Kannan, and <b>N. Siva Shanmugam</b>	Resistance Spot-Welded Dissimilar Sheets— Parametric Behavioral Analysis using Experimentation and Simulation	Transactions of the Indian Institute of Metals	75	1-20	2022	1.40
R. Pramod, S. Mohan Kumar, A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , and Reza Tangestani,	Fabrication of Gas Metal Arc Welding Based Wire Plus Arc Additive Manufactured 347 Stainless Steel Structure: Behavioral Analysis Through Experimentation and Finite Element Method	Metals and Materials International	28	307-321	2022	3.642
S. Mohan Kumar, R. Sasikumar, A. Rajesh Kannan, R. Pramod, N. Pravin Kumar, <b>N. Siva Shanmugam</b> , and M. Vishnukumar	Microstructural administered mechanical properties and corrosion behaviour of wire plus arc additive manufactured SS 321 plate	Proceedings of the Institution of Mechanical Engineers Part C: Journal of Mechanical	235	7627-7633	2021	1.758

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		Engineeri ng Science				
C. K. Krishnadasan, <b>N. Siva Shanmugam</b> , B. Nageswara Rao, and B. Sivasubramonian	Experimental Investigation and Numerical Simulation on the Strength of Carbon-Fiber-Reinforced Polymer–Metal Bolted and Bonded Interfaces	Journal of Materials Engineering and Performance	3012	9440-9454	2021	1.819
K. Parthiban, S. Mohan Kumar, A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , and K. Sankaranarayanan	Microstructure and fatigue behaviour of spin-arc welded AISI C1018 low carbon steel	Proceedings of the Institution of Mechanical Engineers Part E: Journal of Process Mechanical Engineering	235	2035-2044	2021	1.606
G. Suresh, M. R. Ramesh, and <b>N. Siva Shanmugam</b>	Evolution of Microstructure and High-Temperature Tribological Performance of Self-Lubricating Nickel-Based Composite Tungsten Inert Gas Coatings	Journal of Materials Engineering and Performance	30	8080-8094	2021	1.819
R. Duraisamy, S. Mohan Kumar, A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , and K. Sankaranarayanan	Fatigue Behavior of Austenitic Stainless Steel 347 Fabricated via Wire Arc Additive Manufacturing	Journal of Materials Engineering and Performance	30	6844-6850	2021	1.819



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S. Mohan Kumar, A. Rajesh Kannan, N. Pravin Kumar, R. Pramod, <b>N. Siva Shanmugam</b> , A. S. Vishnu, and S. G. Channabasavanna	Microstructural features and mechanical integrity of wire arc additive manufactured SS321/Inconel 625 functionally gradient material	Journal of Materials Engineering and Performance	30	5692-5703	2021	1.819
S. Mohan Kumar, and <b>N. Siva Shanmugam</b>	Double-sided GTAW of nuclear grade steel: Mechanical and microstructure perspectives	Proceedings of the Institution of Mechanical Engineers Part E: Journal of Process Mechanical Engineering	235	1132-1139	2021	1.606
B. Girinath, and <b>N. Siva Shanmugam</b>	A modified version of MATLAB application window for predicting the weld bead profile and stress-strain plot of AA5052 CMT weldment using ER4043	Simulation	98	221-234	2021	1.377
M. Sathish Kumar, S. Gopi, <b>N. Siva Shanmugam</b> , and A. Sasikumar	A study on corrosion behavior of stainless-steel dissimilar alloy weld joints (321 & 347)	Materials Today: Proceedings	46	9229-9231	2021	1.46
A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , K. D. Ramkumar and V. Rajkumar	Studies on super duplex stainless steel manufactured by wire arc additive manufacturing	Transactions of the Indian Institute of Metals	74	pp:1673-1681	2021	1.40

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N. Pravin Kumar, <b>N. Siva Shanmugam</b> , and G. Sreedhar	High cycle fatigue behaviour of Inconel 625 weld overlay on AISI 316L plate	Surface and Coatings Technology	415	127138	2021	4.158
A. Rajesh Kannan, S. Mohan Kumar, R. Pramod, <b>N. Siva Shanmugam</b> , M. Vishnukumar, and S. Naveenkumar	Microstructural characterization and mechanical integrity of stainless steel 316L clad layers deposited via wire arc additive manufacturing for nuclear applications	Materialwissenschaft und Werkstofftechnik	52	617-623	2021	1.04
R. Duraisamy, S. Mohan Kumar, A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , and K. Sankaranarayanan	Reliability and sustainability of wire arc additive manufactured plates using ER 347 wire-mechanical and metallurgical perspectives	Proceedings of the Institution of Mechanical Engineers Part C: Journal of Mechanical Engineering Science	235	1860-1871	2021	1.015
A. Rajesh Kannan, S. Sankarapandian, R. Pramod, and <b>N. Siva Shanmugam</b>	Experimental and numerical studies on the influence of formability of AISI 316L tailor-welded blanks at different weld line orientations	Journal of the Brazilian Society of Mechanical Sciences and Engineering	43	1-26	2021	2.220
A. Rajesh Kannan, S. Mohan Kumar, R. Pramod, N. Pravin Kumar, <b>N. Siva</b>	Microstructure and mechanical properties of wire arc additive manufactured bi-metallic structure	Science and Technology of Welding and Joining	26	47-57	2021	4.564

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<b>Shanmugam, and Yasam Palguna</b>						
C. K. Krishnadasan, <b>N. Siva Shanmugam, B. Sivasubramonian, B. Nageswara Rao, and R. Suresh</b>	Analytical studies and numerical predictions of stresses in shear joints of layered composite panels for aerospace applications	Composite Structures	255	112927	2021	5.407
A. Rajesh Kannan, <b>N. Siva Shanmugam, and G. Sreedhar</b>	Studies on corrosion behavior of AISI 316L cold metal transfer weldments in physiological solutions	Proceedings of the Institution of Mechanical Engineers Part E: Journal of Process Mechanical Engineering	234	644-656	2020	1.606
Rajesh Kannan, A., and <b>N. Siva Shanmugam</b>	Some studies on mechanical properties of AISI 316L austenitic stainless-steel weldments by cold metal transfer process	Advances in additive manufacturing and joining	-	359-371	2020	
P.N. Praveen, D. Arun, K. Devendranath Ramkumar, and <b>N. Siva Shanmugam</b>	Microstructure characterization and tensile properties of CMT-based wire plus arc additive manufactured ER2594	Materials Characterization	169	110671	2020	4.342
B. Girinath, <b>N. Siva Shanmugam, and C. Sathiyarayanan</b>	Studies on influence of torch orientation on microstructure mechanical properties and formability of	Archives of Civil and Mechanical Engineering	20	1-22	2020	

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	AA5052 CMT welded blanks					
A. Karpagaraj, N. Rajesh Kumar, K. Sankaranarayanan, <b>N. Siva Shanmugam</b> , and Muralimohan Cheepu	Simulation and Experimental Studies on Arc Efficiency and Mechanical Characterization for GTA-Welded Ti-6Al-4V Sheets	Arabian Journal for Science and Engineering	45	9639-9650	2020	2.334
R. Pramod, S. Mohan Kumar, B. Girinath, A. Rajesh Kannan, N. Pravin Kumar, and <b>N. Siva Shanmugam</b>	Fabrication characterization and finite element analysis of cold metal transfer-based wire and arc additive-manufactured aluminium alloy 4043 cylinder	Welding in the World	64	1905-1919	2020	2.216
A. Karpagaraj, N. Rajesh Kumar, N. Thiyaneshwaran, <b>N. Siva Shanmugam</b> , Murali Mohan Cheepu, and R. Sarala	Experimental and numerical studies on gas tungsten arc welding of Ti-6Al-4V tailor-welded blank	Journal of the Brazilian Society of Mechanical Sciences and Engineering	42	1-11	2020	2.220
N. Pravin Kumar, and <b>N. Siva Shanmugam</b>	Some studies on nickel-based Inconel 625 hard overlays on AISI 316L plate by gas metal arc welding based hardfacing process	Wear	456	203394	2020	3.892
A. Rajesh Kannan, S. Mohan Kumar, N. Pravin Kumar, <b>N. Siva Shanmugam</b> , A. S. Vishnu, and Yasam Palguna	Process-microstructural features for tailoring fatigue strength of wire arc additive manufactured functionally	Materials Letters	274	127968	2020	3.423

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	graded material of SS904L and Hastelloy C-276					
R. Duraisamy, S. Mohan Kumar, A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , K. Sankaranarayanan, and M. R. Ramesh	Tribological performance of wire arc additive manufactured 347 austenitic stainless steel under unlubricated conditions at elevated temperatures	Journal of Manufacturing Processes	56	306-321	2020	5.010
R. Pramod, <b>N. Siva Shanmugam</b> , C. K. Krishnadasan	Studies on cold metal transfer welding of aluminium alloy 6061-T6 using ER 4043	Proceedings of the Institution of Mechanical Engineers Part L: Journal of Materials: Design and Applications	234	924-37	2020	0.746
A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , V. Rajkumar, M. Vishnukumar	Insight into the microstructural features and corrosion properties of wire arc additive manufactured super duplex stainless steel (ER2594)	Materials Letters	270	127680	2020	3.423
S. Mohan Kumar, S. Sankarapandian, <b>N. Siva Shanmugam</b>	Investigations on mechanical properties and microstructural examination of activated TIG-welded nuclear grade stainless steel	Journal of the Brazilian Society of Mechanical Sciences and	42	1-21	2020	2.122

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		Engineeri ng				
S. Mohan Kumar, <b>N. Siva Shanmugam</b>	Effect of heat input and weld chemistry on mechanical and microstructural aspects of double side welded austenitic stainless steel 321 grade using tungsten inert gas arc welding process	Materialw issenschaf t und Werkstoff technik	51	349-67	2020	1.04
R Pramod, S. Mohan Kumar, <b>N. Siva Shanmugam</b> , S. A. Vendan	Formability studies on plasma arc welded duplex stainless steel 2205 sheet	Materialw issenschaf t und Werkstoff technik	51	163-73	2020	1.04
Arunkumar M, Dhinakaran V, <b>N. Siva Shanmugam</b> , Petley V	Effect of plasma arc welding on residual stress and distortion of thin titanium sheet	Materials Research	22		2020	1.41
M. Arunkumar, V. Dhinakaran, and <b>N. Siva Shanmugam</b>	Numerical prediction of temperature distribution and residual stresses on plasma arc welded thin titanium sheets	Internatio nal Journal of Modelling and Simulatio n	41	146- 162	2021	2.91
V. Dhinakaran, <b>N. Siva Shanmugam</b>	Experimental investigation of plasma arc welded Ti-6Al-4V sheets	Transactio ns of the Canadian Society for Mechanic al Engineeri ng	44	471- 480	2019	0.87
Girinath, B., <b>N. Siva Shanmugam</b> , and K.	Weld bead graphical prediction of cold metal transfer weldment using	Simulatio n	95	725- 736	2019	1.377

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Sankaranarayanan amy	ANFIS and MRA model on Matlab platform					
J. Anthuvan Stephen Edberk, and <b>N. Siva Shanmugam</b>	Studies on the weld integrity formability and microstructural evolution of grade 2 titanium sheets of laser beam welding process	Materials Research Express	64	04652 5	2019	1.99
S. Mohan Kumar, <b>N. Siva Shanmugam</b> , and K. Sankaranarayanan amy	Activated TIG Welding of AISI 321 Austenitic Stainless Steel for Predicting	Advances in Computati onal Methods in Manufact uring		179 - 192	2019	
Rajesh Kannan, A., and <b>N. Siva Shanmugam</b>	Some studies on mechanical properties of AISI 316L austenitic stainless-steel weldments by cold metal transfer process	Advances in additive manufactu ring and joining		359- 371	2020	
V. Dinakaran, R. Patil, G. Sriram, <b>N. Siva Shanmugam</b>	Studies on crack propagation in plasma arc welded Ti-6Al- 4V joint during erichsen cupping test	Internatio nal Journal of Recent Technolo gy and Engineeri ng	81	79-83	2019	
B. Suresha, S. G. Channabasavanna , and <b>N. Siva Shanmugam</b>	Microstructure and abrasive wear behaviour of nickel based hardfacing stainless steel deposited by gas metal arc welding	Applied Mechanic s and Materials	895	278 - 283	2019	3.88
A. Rajesh Kannan, <b>N. Siva Shanmugam</b> , and S. Naveenkumar	Effect of arc length correction on weld bead geometry and	Materials Today: Proceedin gs	18	3916- 3921	2019	1.46

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	mechanical properties of AISI 316L weldments by cold metal transfer (CMT) process					
R. Pramod, C.K. Krishnadasan and <b>N. Siva Shanmugam</b>	Design and finite element analysis of metal-elastomer lined composite over wrapped spherical pressure vessel	Composite Structures	224	111028	2019	4.101
Mohan Kumar, S., and <b>N. Siva Shanmugam</b>	Finite element simulation for tensile and impact test of activated TIG welding of AISI 321 austenitic stainless steel	Proceedings of the Institution of Mechanical Engineers Part L: Journal of Materials: Design and Applications	233	2323-2334	2019	1.281
A. Karpagaraj, <b>N. Siva Shanmugam</b> and K. Sankaranarayanan	Experimental investigations and numerical prediction on the effect of shielding area and post flow time in the GTAW of CP Ti sheets	The International Journal of Advanced Manufacturing Technology	101	pp 2933–2945	2019	2.601
K Parthiban, <b>N. Siva Shanmugam</b> , K Sankaranarayanan and S Arungalai Vendan	Studies on spin arc welding process on the behavior of C1018 plates-An insight into mechanical and metallurgical transformation	Materials Research Express	6	106540 (12)	2019	1.151
A. Rajesh Kannan, <b>N. Siva</b>	Effect of cold metal transfer	The Internatio	103	4265-4282	2019	2.601



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<b>Shanmugam</b> , and S. Arungalai Vendan	process parameters on microstructural evolution and mechanical properties of AISI 316L tailor welded blanks	nal Journal of Advanced Manufacturing Technology				
Girinath, B., N. <b>Siva Shanmugam</b> , and K. Sankaranarayananamy	Investigation on the Effect of Torch Angle on the Formability of AA5052 CMT Weldments	Transactions of the Indian Institute of Metals	72	1551-1555	2019	0.910
J. Anthuvan Stephen Edberk and N. <b>Siva Shanmugam</b>	Studies on the weld integrity formability and microstructural evolution of grade 2 titanium sheets of laser beam welding process	Material research express	6	046525	2018	1.151
S. Mohan Kumar and N. <b>Siva Shanmugam</b>	Studies on the weldability mechanical properties and microstructural characterization of activated flux TIG welding of AISI 321 austenitic stainless steel	Material research express	5	106524	2018	1.151
Chaitanya Gandhi, Nikhil Dixit, Omkar Aranke, M Arivarasu, N. <b>Siva Shanmugam</b> , M Manikandan and N Arivazhagan	Characterization of AA7075 Weldment using CMT Process	Materials Today Proceedings	5	24024-24032	2018	1.46
N. <b>Siva Shanmugam</b> , J. Anthuvan Stephen Edberk and K.	Some Studies on mechanical characterization of laser welded	High Temperature materials	45	9639 – 9650	2020	0.433

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Sankaranarayanan amy	thin Ti-6Al-4V sheets	and processes				
B. Girinath, N. <b>Siva Shanmugam</b> , K. Sankaranarayanan amy	Weld bead graphical prediction of cold metal transfer weldment using ANFIS and MRA model on MATLAB platform <u>Simulation</u>	Transactio ns of the Society for Modeling and Simulatio n Internatio nal	95	725- 736	2018	0.940
K Devendranath Ramkumar, Vinayak Varma, Madhukar Prasad, N Deva Rajan, N. <b>Siva Shanmugam</b>	Effect of activated flux on penetration depth microstructure and mechanical properties of Ti- 6Al-4V TIG welds	Journal of Materials Processin g Technolo gy	261	233- 241	2018	3.647
P Subramani, Sanket Shetty, R Anirudhapandit, PR Hari, K Gokul Kumar, M Manikandan, N Arivazhagan, N. <b>Siva Shanmugam</b>	Investigations on the Microstructure Microsegregation and Hardness Properties of Bead on Plasma Arc Welded C- 276 Alloy	Materials Today: Proceedin gs	5	pp 13628- 13636	2018	1.46
V Dhinakaran, N. <b>Siva Shanmugam</b> , K Sankaranarayanan amy and R Rahul	Analytical and numerical investigations of weld bead shape in plasma arc welding of thin Ti-6Al-4V sheets	Simulatio n: Transactio ns of the Society for Modeling and Simulatio n Internatio nal	93	1123- 1138	2017	0.940
R. Selva Bharathi, N. <b>Siva Shanmugam</b> , R. Murali Kannan, and S. Arungalai Vendan	Studies on the Parametric Effects of Plasma Arc Welding of 2205 Duplex Stainless Steel	High Temperat ure Materials and Processes	37	219- 232	2018	0.433

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V. Dhinakaran, N. Siva Shanmugam and K Sankaranarayanan	Experimental investigation and numerical simulation of weld bead geometry and temperature distribution during plasma arc welding of thin Ti-6Al-4V sheets	The Journal of Strain Analysis for Engineering Design	52	30-44	2017	1.250
A. Karpagaraj, N. Siva Shanmugam and K. Sankaranarayanan	Studies on mechanical behavior and microstructural analysis of tailor welded blanks of Ti-6Al-4V titanium alloy sheet	Journal of Materials Research	34	2186-2196	2016	1.673
N. Pavan Kumar, S Arungalai Vendan and N. Siva Shanmugam	Investigations on the parametric effects of cold metal transfer process on the microstructural aspects in AA6061	Journal of Alloys and Compounds	658	255-264	2016	3.133
K. Devendranath Ramkumar, Debidutta Mishra, B. Ganesh Raj, M.K. Vignesh, G. Thiruvengatam, S.P. Sudharshan, N. Arivazhagan, N. Siva Shanmugam and Arul Maximus Rabel	Effect of optimal weld parameters in the microstructure and mechanical properties of autogeneous gas tungsten arc weldments of super-duplex stainless steel UNS S32750	Materials & Design	66	356-365	2015	4.364
K Devendranath Ramkumar, Jelli Lakshmi Narasimha Varma, Gangineni Chaitanya, S Logesh, Madhav	Experimental investigations on the SiO <sub>2</sub> flux-assisted GTA welding of super-austenitic stainless steels	The International Journal of Advanced Manufacturing	93	129-140	2017	2.209

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Krishnan, N Arivazhagan and <b>N. Siva Shanmugam</b>		Technolo gy				
V Dhinakaran, <b>N. Siva Shanmugam</b> and K Sankaranarayanan amy	Some studies on temperature field during plasma arc welding of thin titanium alloy sheets using parabolic Gaussian heat source model	Proceedin gs of the Institution of Mechanic al Engineers Part C: Journal of Mechanic al Engineeri ng Science	231	695- 711	2017	1.015
A. Karpagaraj, <b>N. Siva Shanmugam</b> and K. Sankaranarayanan amy	Some studies on mechanical properties and microstructural characterization of automated TIG welding of thin commercially pure titanium sheets	Materials Science and Engineeri ng: A	640	180- 189	2015	3.094
K, Devendranath Ramkumar, Jagat Sai, Sridhar Gundla, Santhosh Reddy, P. Prabaharan, N, Arivazhagan and <b>N. Siva Shanmugam</b>	Influence of filler metals in the control of deleterious phases during the multi-pass welding of Inconel 718 plates	Acta Metallurgi ca Sinica (English Letters)	28	196- 207	2015	1.292
Vijaikrishnan V, Ramakrishnan M and <b>N. Siva Shanmugam</b> ,	Steady state analysis of regular hollow pyramidal radiating fin with triangular cross-section	Thermal Science	19	59-68	2015	0.962
<b>N. Siva Shanmugam</b> , G. Buvanashakaran	Experimental Investigation and Finite Element	Internatio nal Journal of	7	120- 127	2013	

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and K. Sankaranarayanan amy	Simulation of laser lap welding of SS304 sheets	Mechanics				
<b>N. Siva Shanmugam, G.</b> Buvanashakaran and K. Sankaranarayanan amy	Some studies on weld bead geometries for laser spot welding process using finite element analysis	Materials & Design	34	412- 426	2012	4.364
J. Maniraj, V. Selladurai, N. <b>Siva Shanmugam, S.</b> Arungalai Vandan and J. Mathew	Experimental Investigation on Effect of Tool Crater Wear and Surface Roughness in TiN Coated WC Tool While Machining Martensitic Stainless Steel	High Temperat ure Materials and Processes	30	257- 265	2011	0.312
Jaganathan Maniraj, Velappan Selladurai, N. <b>Siva Shanmugam,</b> Subbiah Arungalai Vendan, Mayilswamy	Hard Finish Turning Parameters Optimization for Machining of High Temperature Stainless Steel	High Temperat ure Materials and Processes	31	1-12	2012	0.312
<b>N. Siva Shanmugam, G.</b> Buvanashakaran, K. Sankaranarayanan amy and S. Ramesh Kumar	A transient finite element simulation of the temperature and bead profiles of T-joint laser welds	Materials & Design	31	4528- 4542	2010	4.364
<b>N. Siva Shanmugam, G.</b> Buvanashakaran and K. Sankaranarayanan amy	Experimental Investigation and Finite Element Simulation of Laser Beam Welding of AISI 304 Stainless Steel sheet	Journal of Experime ntal Technique s	34	25-36	2010	0.545
<b>N. Siva Shanmugam, G.</b>	Some Studies on temperature	Internatio nal	43	78-94	2009	2.209

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Buvanashakaran, K. Sankaranarayanan amy and K. Manonmani	profiles in AISI 304 stainless steel sheet during laser beam welding using FE simulation	Journal of Advanced Manufacturing Technology				
G. Buvanashakaran, <b>N. Siva Shanmugam</b> , K. Sankaranarayanan amy and R. Sabarikanth, A	A Study on Laser Welding Modes with varying Beam Energy Levels	Proceedings of the Institution of Mechanical Engineers Part C Journal of Mechanical Engineering Science	223	1141-1156	2009	1.015
J. Jaise, N. B. Ajay Kumar, <b>N. Siva Shanmugam</b> , K. Sankaranarayanan amy and T. Ramesh	Power system: a reliability assessment using FTA	International Journal of System Assurance Engineering and Management	4	78-85	2013	2.02
Georgekutty S. Mangalathu, <b>N. Siva Shanmugam</b> , K. Sankaranarayanan amy, T. Ramesh and K. Muthukumar	System Safety in LPG Fired Furnace – A Multi Criteria Decision Making Technique	Advances in Production Engineering & Management Journal	7	123 – 134	2012	1.424
Georgekutty S Mangalathu, <b>N. Siva Shanmugam</b> , K. Sankaranarayanan amy and T. Ramesh	Decision Making in Risk Assessment of Producer Gas Furnaces: An Integrated Approach with AHP &	Journal Manufacturing Engineering	10	49-54	2011	

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	Promethee Techniques					
<b>N. Siva Shanmugam, G. Buvanashakaran, K. Sankaranarayanan and K. Manonmani</b>	Influence of Beam Incidence Angle in Laser Welding of Austenitic Stainless Steel Using Finite Element Analysis	Journal of Multidiscipline Modeling in Materials and Structures	5	257-262	2009	3.06
<b>K.R. Balasubramanian, N. Siva Shanmugam, G. Buvanashakaran and K. Sankaranarayanan</b>	Numerical and experimental investigation of laser beam welding of AISI 304 stainless steel sheet	Advances in Production Engineering & Management Journal	3	93 – 105	2008	1.424
<b>P. Sathiya, N. Siva Shanmugam, T. Ramesh, and R. Murugavel</b>	Temperature distribution modeling of Friction Stir Spot Welding of AA 6061-T6 using Finite Element Technique	Journal of Multidiscipline Modeling in Materials and Structures (MMMS)	4	1-14	2008	3.06
<b>P. Sathiya, N. Siva Shanmugam, S. Aravindan, and A. Noorul Haq</b>	Modeling and Simulation of Submerged Arc Welding in Pipe Manufacturing process using Finite Element Analysis	IWS Journal	3	17-25	2006	
<b>P. Sathiya, N. Siva Shanmugam and T. Ramesh</b>	Orthogonal Metal Cutting of SA105 Carbon Steel - A Feasibility Study	Journal of Manufacturing Technology & Management	1	61-68	2007	

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(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conferen ce Theme	Venue	Year
R Pramod, A Rajesh Kannan, N Pravin Kumar, K. Sanjeevi Prakash, N <b>Siva Shanmugam</b> and Krishnadasan C K	Design and manufacturing of a spherical AA6061- T6 pressure vessel liner for aerospace applications	Souvenir & book of abstracts – PLMSS 2021	80	Product Lifecycle -Space System Perspecti ve	VSSC, Thiruva nanthap uram	2021
K Sanjeevi Prakash, A Rajesh Kannan, R. Pramod, N Pravin Kumar, <b>N Siva Shanmugam</b>	Wire Arc Additive Manufacturing of SS 321 for Aerospace Applications to Bear Static and Cyclic Loads	Souvenir & book of abstracts – PLMSS 2021	161	Product Lifecycle -Space System Perspecti ve	VSSC, Thiruva nanthap uram	2021
N Pravin Kumar, A Rajesh Kannan, R Pramod, K Sanjeevi Prakash, N <b>Siva Shanmugam</b>	Tailoring the microstructural characteristics and mechanical properties of Austenitic Stainless Steel 308L overlays deposited using Gas Metal Arc Welding Process	Souvenir & book of abstracts – PLMSS 2021	162	Product Lifecycle -Space System Perspecti ve	VSSC, Thiruva nanthap uram	2021
R. Pramod, N <b>Siva Shanmugam</b> , C.K. Krishnadasan, and K. Sankaranaraya nasamy	Finite Element Analysis of Potential Liner Failures During Operation in Spherical Pressure Vessel	Advances in Computatio nal Methods in Manufacturi ng	1073 – 1087		IIT Guwaha ti	2019
S Mohan Kumar, N. <b>Siva Shanmugam</b>	Effect of Optimal Welding Parameters on Mechanical	Internationa l conference on Advanced			Thiruva nanthap uram, Kerala	2018



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and K Sankaranarayana nasamy	Properties and Microstructure Examination of Gas Tungsten Arc Welding (GTAW) on AISI 321 Austenitic Stainless Steel	Materials and Manufacturing Processes for Strategic Sectors (ICAMPS 2018)				
B Girinath, N. <b>Siva Shanmugam</b> and K Sankaranarayana nasamy	Investigation on the effect of torch angle on the formability of AA5052 CMT weldments	International conference on Advanced Materials and Manufacturing Processes for Strategic Sectors (ICAMPS 2018)			Thiruvananthapuram, Kerala	2018
Rajesh Kannan A and <b>N. Siva Shanmugam</b>	Some studies on mechanical properties of AISI 316L Austenitic Stainless Steels weldments by cold metal transfer (CMT) process	7th International & 28th All India Manufacturing Technology , Design and Research Conference (AIMTDR- 2016)			College of Engineering Guindy, Chennai	2018
Abhilash, A. Karapagaraj, <b>N. Siva Shanmugam</b> , B. Suresha and S. Arungalai Vendan	Studies on spring- back effect of TIG Welded Ti-6Al-4V Sheets	6th International & 27th All India Manufacturing Technology , Design and Research Conference			College of Engineering Guindy, Chennai	2018

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		(AIMTDR-2016)				
V. Dhinakaran, Suraj Khope, <b>N. Siva Shanmugam</b> and K. Sankaranarayanan	Numerical Prediction of Weld Bead Geometry in Plasma Arc Welding of Titanium Sheets Using COMSOL	Proceedings of the 2014 COMSOL Conference			Bangalore	2014
<b>N. Siva Shanmugam</b> , G. Buvanashokan and K. Sankaranarayanan	Finite Element Simulation of Nd:YAG laser lap welding of AISI 304 Stainless steel sheets	Proc: European Conference of Mechanical Engineering (ECME'12)			Paris, France.	2012
<b>N. Siva Shanmugam</b> , G. Buvanashokan and K. Sankaranarayanan	Finite Element Simulation of the Temperature and Bead Profiles of T-Joint Laser Welds	, proc: Symposium on Joining of Materials (SOJOM) 2012			BHEL, Trichy	2012
Ajay Kumar NB, K. Sankaranarayanan, <b>N. Siva Shanmugam</b> and T. Ramesh	Coupled Foot Shoe Analysis for Landing Impact in Occupational Shoes	Proc: 6 <sup>th</sup> International Health, Safety, Security, Environmental and Loss Prevention Professional Development Conference			Kuwait.	2011
<b>N. Siva Shanmugam</b> , G. Buvanashokan and K. Sankaranarayanan	Finite Element Simulation of Laser Welding Process of T-joint Specimens	Proc: International Conference of Manufacturing Research (ICMR08)	665 – 674		Brunel University, London	2008
<b>N. Siva Shanmugam</b> , K.R.	Thermal analysis of laser welding	Proc: IISc Centenary - International	84		Bangalore	2008

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Balasubramanian, G. Buvanashakaran and K. Sankaranarasamy	process on T-joint specimens	1 Conference on advances in Mechanical Engineering				
<b>N. Siva Shanmugam</b> , G. Buvanashakaran, K. Sankaranarasamy and S. Arunachalam	Modeling of Temperature Distribution for high density heat source used in material joining process	Proc: International Conference on 24th International Manufacturing Conference IMC 24	1061-1070.		Waterford Institute of Technology, Waterford, Ireland	2007
Ashish Kumar Agrawal, Anand Kumar Singh, T. Ramesh and <b>N. Siva Shanmugam</b>	Synthesis and Analysis of a Complaint Gripper for MEMS Applications	Proc: IISc Centenary - International Conference on advances in Mechanical Engineering			Bangalore	2008
A.V. Dileep, <b>N. Siva Shanmugam</b> , K. Sankaranarasamy and T. Ramesh	Risk Assessment in Seamless Steel Tube Process Using Fuzzy TOPSIS Method	Proceedings of International Conference on Advances in Industrial Engineering Applications			Anna University, Chennai	2010
J. Jaise, <b>N. Siva Shanmugam</b> , K. Sankaranarasamy and T. Ramesh	Assessment of power system reliability using Fault Tree Analysis	Proceedings of International Conference on Advances in Industrial Engineering			Anna University, Chennai	2010

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		Applications				
Georgekutty S Mangalathu, <b>N. Siva Shanmugam</b> , K.Sankaranarayanan and T.Ramesh	System safety in LPG fired furnace- A multi criteria decision making technique	Proceedings of International Conference on Advances in Industrial Engineering Applications			Anna University, Chennai	2010
<b>N. Siva Shanmugam</b> , G. Buvanashakaran and K. Sankaranarayanan	Finite Element Simulation of Laser Welding for Lap joint using sysweld	proc: Symposium on Joining Of Materials (SOJOM 08),			Indian Welding Society (IWS), Welding Research Institute	2008
K.R. Balasubramanian, <b>N. Siva Shanmugam</b> , G. Buvanashakaran and K. Sankaranarayanan	Finite Element Simulation for Laser Beam Welding of Austenitic Stainless-Steel Sheet	Proc: International Welding Symposium	1 - 10		IWS, New Delhi	2008
Sathish babu, R. Bharani Dharan, T. Ramesh and <b>N. Siva Shanmugam</b>	Preparation of Prototypes by using Subtractive Rapid Prototyping Technique	National Conference on Emerging Trends in Advance Manufacturing (ETAM'05)	144 - 148		K.L.N. College of Engineering, Madurai	2005
K. Jaikanesh, <b>N. Siva Shanmugam</b> , P. Sathiya, and T. Ramesh	Prediction of Material Behaviour of Single Point Cutting tool using Finite Element Technique	National conference on Advances in Manufacturing Engineering (NCME)	232-237		Sona College of engineering, Salem	2006

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D. Saravanabavan, T. Ramesh, <b>N. Siva Shanmugam</b> and R. Narayanasamy	Experimental Investigation and Finite Element Simulation of Ductile Fracture prediction of P/M Composites	National conference on Advances in Manufacturing Engineering (NCME),	335 - 340		Sona College of engineering, Salem,	2006
<b>N. Siva Shanmugam</b> , R.C. Sujatha, G. Buvanashakaran, M. Anandhan and D. Davidson	Finite Element Modeling of Non-Moving Heat Source in Laser Beam Material Processing	National Conference on Mechanical Engineering (NATCON. ME			M.S. Ramaiah Institute of Technology, Bangalore	2004
<b>N. Siva Shanmugam</b> , G. Buvanashakaran and M. Anandhan	Modeling and Simulation of Laser Beam Welding Using Finite Element Method for AISI 304 Stainless Steel	First National Conference on Development and Challenges in Manufacturing Engineering 2004 (NCDCM 2004)			Manipal Institute of Technology, Manipal	2004

**(C) Books & Monographs**

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
A. Karpagaraj, Abhilash, <b>N. Siva Shanmugam</b> , B. Suresha & S. Arungalai Vendan	Simulations for Design and Manufacturing  Chapter title : Studies on Spring-back Effect of TIG Welded Ti-6Al-4V Sheets, pages : 147 - 171	Lecture Notes on Multidisciplinary Industrial Engineering, Springer	2018	978-981-10-8518-5
G Kumaresan and <b>N. Siva Shanmugam</b> and V Dhinakaran	Advances in Materials Research: Select	Springer Proceedings in	2021	978-981-15-8319-3

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	Proceedings of ICAMR 2019	Materials, Springer		
Somashekhar S. Hiremath, <b>N. Siva Shanmugam</b> , B. R. Ramesh Babu	Advances in Manufacturing Technology, Select Proceedings of ICAMT 2018	Springer	2018	978-981-13-6373-3
S. Mohan Kumar, <b>N. Siva Shanmugam</b> and K. Sankaranarayananasamy	Advances in Computational Methods in Manufacturing- Select Papers from ICCMM 2019, Chapter 16, Page No: 179	Springer	2019	978-981-32-9071-6
A. Rajesh Kannan, <b>N. Siva Shanmugam</b>	Advances in Additive Manufacturing and Joining- Proceedings of AIMTDR 2018, Page No: 359-371	Springer	2018	978-981-32-9433-2
Sharath Rajendran, A. Rajesh Kannan, B Suresha, <b>N. Siva Shanmugam</b>	Proceedings of the International Conference on Industrial and Manufacturing Systems (CIMS-2020): Optimization in Industrial and Manufacturing Systems and Applications  Chapter title: Studies on the Fatigue Performance of Wire and Arc Additive Manufactured SS 904L	Springer Nature	2021	978-3-030-73495-4