

Curriculum Vitae

Dr. Janakarajan Ramkumar

Chairman, Kanpur local center, Institute of Engineers (India),
FIE(I), Chartered Engineer (India)
Fellow, Institution of Electronics and Telecommunication Engineers (India)
Ram Tiwari Chair Professor
Professor in Charge, Innovation and Incubation
Professor, Mechanical Engineering Department,
Indian Institute of Technology Kanpur, India.

Area of Specialization:

Micro-Nano manufacturing, Novel product/process development

Date of Birth:

January 30, 1976

Contact Address:

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Educational Qualifications (from Bachelor degree onwards):

S.No.	Degree	University	Year	Subjects	Percentage/GPA
1.	Ph.D	Indian Institute of Technology, Madras	2002	Mechanical Engineering	9.5/10
2.	M.Tech.	Indian Institute of Technology, Madras	1999	Mechanical Engineering	10/10
3.	B.Tech.	National Institute of Technology, Trichy	1996	Production Engineering	89 %

Details of professional training and research experience:

S.No.	Place of Training	Position	Period	Country
1	Osaka University		May-July, 2015	Japan
2.	Fraunhofer Institute		May-July, 2012	Germany
3.	Tokyo Institute of Technology, Tokyo	Visiting Faculty	May-July, 2009	Japan
4.	University of Illinois, Urbana Champaign	Research Fellow	May-Dec, 2008	USA
5.	School of Mechanical Engineering, NUS, Singapore	Visiting Faculty	May-July, 2007	Singapore

Details of employment:

S.No.	Place of Training	Position	Period	Country
1.	Mechanical Engineering, Indian Institute of Technology Kanpur	Professor	2015 - till date	India
2.	Mechanical Engineering, Indian Institute of Technology Kanpur	Associate Professor	2010 - 2015	India
3.	Mechanical Engineering, Indian Institute of Technology Kanpur	Assistant Professor	2003 - 2010	India

Professional awards/recognition/fellowship (e.g. Swarnjayanti/Bhatnagar Prize, Fellow of INAE, INSA etc.):

S.No.	Name	Year	Donor organization
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1.	Gandhian Young Technological Innovation (GYTI) award	2020	
2.	Eminent Engineer Award 2019	2019	Indian Institute of Production Engineering
3.	Outstanding Scientist for the contribution and achievement in the field of mechanical engineering.	2017	International Foundation, India
4.	Bharat Vikas Award for the contribution in the field of developing new products for inclusive society,	2017	Institute of self reliance, India
5.	Ram Tiwari chair of I.I.T. Kanpur, from 2017-2020	2017	IIT Kanpur
6.	Invitation for Young Alumni Achiever Award – 2016,	2016	NIT Trichy
7.	Eminent Mechanical Engineer Award	2015	IIT Kanpur
8.	Gopal Das Bhandari Memorial Distinguished Teacher Award	2015	IIT Kanpur
9.	Eminent Production Engineer Award	2015	Indian Institute of Production Engineering
10.	National Design Award in Mechanical Engineering – 2015	2015	
11.	“Prashamana: A smart hospital bed” Gandhian Young Technological Innovation (GYTI) appreciation certificate at the RashtrapatiBhavan.	2015	
12.	Best paper award in Production Engineering Division prize – 2015	2015	The institution of Engineers (India)
13.	Class of 1984 fellowship award from 2012-2015	2011	
14.	IEI Young Engineers Award 2011	2011	
15.	RajkumarVarshney Awards – System Society of India		
16.	Young Scientist Award		Dept. of Atomic Energy, India
17.	Young Scientist Award – Engineering Science Division		Indian Science Congress Association
18.	Fast Track DST Young Scientist Award –		Dept. of Science & Technology
19.	J SP S short term research fellow	2014	
20.	J SP S short term research fellow	2013	
21.	DAAD short term research fellow	2012	
22.	DAAD short term research fellow	2011	
23.	J SP S short term research fellow	2009	
24.	Boyscast Fellowship – Dpt. of Science & Technology, India	2008	
25.	National University of Singapore – Short-Term fellowship	2007	
26.	J S P S Short-Term Fellow	2005	
27.	Monbusho Japanese Fellow	2001	
28.	Innovation Potential of Student Projects Awards – Indian National Academy of Engineering (INAE)		
29.	Dr. S. Vaidyanathan Memorial Award for best out going Master student	2000	IIT Madras
30.	Best outing B.E. (Prod) student	1996	NIT Trichy

List of sponsored research projects (awards total worth Rs. 4,52,42,301):

S.No.	Project Title	Year	Sanctioned amount	Funding Agency
1.	Designing And Developing A Desktop Micro Wire Ecm Machine	2018 – till date	4035744	Department of Science and Technology

2.	Indigenization & Improvisation Of Puncher Gun For Manual Tissue Micro-Array Construction	2017 – till date	468500	Ministry of Human Resource Development
3.	Design And Development Of Dual Wavelength Led Based Phototherapy Unit	2017 – till date	1490000	Ministry of Human Resource Development
4.	Experimental And Theoretical Investigation In Nano-Finishing Of Freeform/Sculptured Surfaces	2017 – till date	2752300	Aeronautics Research and Development Board
5.	Development Of Magnetic Abrasive Finishing (MAF) Technology For CNC Machined Diaphragms	2017	984000	Defence Research and Development Organization
6.	Surface Texturing On Biocompatible Titanium Alloy To Enhance Adhesion Interface Between Dissimilar Materials Using ECMM	2016 – 2018	3632000	Science and Technology Centers
7.	Modification Of Conventional Artillery Rocket To A Guided Rocket With Freely Spinning Tail	2016 – 2018	3602835	Armament Research Board
8.	Ru-Tag:Development Of A Manually Operated Seed Drill	2016	152000	Office of the Principal Scientific Adviser
9.	Rutag Sub Project(Design And Development Of Amla Pricking Machine)	2015 – till date	210000	Office of the Principal Scientific Adviser
10.	Dic-Pd Lab	2015 – 2018	2700000	Ministry of Human Resource Development
11.	Surface Texturing On Biocompatible Titanium Alloy For Inducing Hydrophobicity Using Ecmm	2015 – 2016	600000	Science and Technology Centers
12.	An Independent Stair Climbing Wheel Chair (Manual) For Up/Down Climbing	2013 – 2015	4923312	Department of Science and Technology
13.	Fabrication Of Microchannels With Nanofinish On Ss304	2012 – 2015	4376350	Bhabha Atomic Research Centre
14.	Utilization Of Wasted Groundnut Shell For The Development Of Natural Polymeric Composites And Their Mechanical Properties, Drilling And Tribological Studies	2012 – 2014	412000	Department of Science and Technology
15.	Excimer Laser Micromachining For Mhmic	2012 – 2014	3453600	Science and Technology Centers
16.	Design And Fabrication Of Micro Ecm Setup For Micro Chennels	2011 – 2013	1930750	Aeronautics Research and Development Board
17.	3-D Nanofabrication Using Electric Discharge Machining	2010 – 2013	3490000	Department of Science and Technology
18.	Fabrication Of U Channel On Aerospace Materials	2009 – 2011	2542500	Science and Technology Centers

19.	Boyscast	2008 – 2009	757000	Department of Science and Technology
20.	Nano Finishing Of Ultra High Speed Bearing	2008 – 2010	1169410	Bhabha Atomic Research Centre
21.	Development And Characterization Of Thin Sandwiched Structures Using Polymer Foam	2007 – 2010	786000	Aeronautics Research and Development Board
22.	Online Monitoring Of Abrasive Flow Machining	2005 - 2008	774000	Department of Science and Technology

List of consultancy research projects (awards total worth Rs. 43,92,816):

S.No.	Project Title	Year	Sanctioned amount	Funding Agency
1.	Design Feasibility Study And Fea Analysis Of Tether Aerostat Application Against Cars No. Even Dated 18/7/2013	2014 – 2015	997195	Aerial Delivery Research and Development Establishment
2.	Design, Development And Primary Testing Of A Technology Demonstration Unit Of A Wheel Speed Transducer For Military Aircraft Applications Based On Hall Effect Sensor	2014 – 2017	997195	Hindustan Aeronautics Limited
3.	The Development Of Prototype Of Magnetic Abrasive Finishing & Deburring Machine For Nano Finishing And Micro Deburring	2013 – 2017	500000	Central Manufacturing Technology Institute
4.	Approval Of Pole & Tower Drawing	2013	82932	J P Constructions
Others	Consultancy In 4i-Lab	2019 – till date	1815494	

List of peer reviewed journal publications:

S.No.	Author(s)	Year	Title	Complete Reference of Journal
1.	S. Aravindan, J. Ramkumar and R. Krishnamurthy	2000	Microwave Joining of Al ₂ O ₃ and SiC with Glass Inter layer	Microwave and Radio Frequency Processing Ceramic Transactions Vol 3, 287-294
2.	J. Ramkumar, SK Malhotra, R Krishnamurthy	2000	Online monitoring of oscillatory drilling of polymeric composites through acoustic emission	Indo-German Workshop on High Temperature Fibre Composite Materials, 231-242
3.	J. Ramkumar, R. Krishnamurthy and S. K. Mal	2001	Influence of tool status on flexural strength of machined CFRP components	Journal of Advanced composites letters, 10(4), 178-187
4.	J. Ramkumar, S. K. Malhotra and R. Krishnamurthy	2002	Studies on drilling of glass/epoxy laminates using coated high-speed steel drills	Journal of Materials and Manufacturing Processes, 17(2), 313-322

5.	J. Ramkumar, S. Aravindan, S. K. Malhotra, and R. Krishnamurthy	2002	Enhancing the metallurgical properties of WC insert (K-20) cutting tool through microwave treatment	Journal of materials letters, 53(3), 200-204.
6.	A. Kakitsuji, J. Ramkumar, J. Kinose, H. Mabuchi, H. Tsuda and K. Morii	2002	Synthesis of TiAl(Cr)/Ti ₂ AlC composites by reactive arc-melting	Journal of Materials Transactions, 43(10), 2589-2592
7.	Morikawa, D. J. Ramkumar, H. Mabuchi, H. Tsuda, T. Matsui, and K. Morii,	2002	Microstructure and mechanical properties of Ti-B-N cast alloys prepared by reactive arc-melting	Journal of Material Transactions, 43(8), 2193-2196
8.	S. Aravindan, J. Ramkumar, S. K. Malhotra and R. Krishnamurthy	2003	Enhancement of cutting performance of cemented carbide cuttings tools by microwave treatment	Microwave and Radio Frequency Processing Ceramic Transactions, 199-206, 2003.
9.	J. Ramkumar, S. K. Malhotra, R. Krishnamurthy, Mabuchi, H. K. Demizu, K. Kakitsuji, H. Tsuda, T. Matsui and K. Morii	2003	Microstructure and dry sliding wear of Ti-50Al alloy and Ti-47Al-3W/Ti ₂ AlC composites produced by reactive arc-melting	Journal of Material Transactions, 44(9), 1861-1865
10.	J. Ramkumar, A. Kaakitsuji, S.K. Malhotra, R. Krishnamurthy, H. Mabuchi, H. Tsuda, T. Matsui, and K. Morii	2003	Mechanical and erosion behavior of Ti-47Al-3W/Ti ₂ AlC composites by reactive arc melting	Journal of Advanced composites letters, 12(4), 141-148
11.	J. Ramkumar, Aravindan, S. S. K. Malhotra and R. Krishnamurthy	2004	An enhancement of machining performance of GFRP by oscillatory assisted drilling	International Journal of Advanced manufacturing technology, 23(3-4): 240-244
12.	J. Ramkumar, S. K. Malhotra and R. Krishnamurthy,	2004	Effect of workpiece vibration on drilling of GFRP laminates	Journal of Materials Processing Technology, 152(3), 329-332
13.	J. Ramkumar, Malhotra S.K., and R. Krishnamurthy	2005	Effect of microwave treatment of WC inserts for drilling of GFRP composites	Machining Science and Technology 9(2): 263-269
14.	B.V. Manojkumar, Bikramjit Basu, S. Kang and J. Ramkumar	2006	Erosion Wear behavior of TiCN/NiCermets containing secondary carbide (WC/NbC/TaC)	Journal of American Ceramic Society, Vol. 89(12), pp. 3827-3831
15.	Prasanth Kumar, Axay Kumar, Kamal. K. Kar and J. Ramkumar	2006	Experimental Characterization of thin Sandwich Panel of Polymer Composite	Journal of Advanced Composite letters, Vol. 15(3), pp. 89-98
16.	K. K. Kar, S.D. Sharma, P. Kumar, J. Ramkumar, R.K. Appaji and K. R. N. Reddy	2006	Analysis of Rubber Pressure Molding Technique to Fabricate Fiber Reinforced Plastic components	Polymer Composites, Vol. 28, (5) pp. 637-649
17.	Deep, K. S., Reddy, N. V., Agrawal, A., J. Ramkumar.	2006	A Mathematical Model for Determination of Limiting Blank Holding Force and	Journal of Engineering Manufacture, Vol. 221 (2), pp. 155-162.

			Cavity Pressure in Hydromechanical Deep Drawing	
18.	K. K. Kar, S.D. Sharma, P. Kumar, J. Ramkumar, R. K. Appaji and K. R. N. Reddy	2007	Pressure Distribution Analysis of Fiber Reinforced Plastic Components made by Rubber Pressure Molding Technique	Journal of Applied Polymer Science, Vol. 105(6) ,pp. 3333 -3354
19.	B. V. Manoj Kumar, J. Ramkumar, B. Basu and S. Kang	2007	Electro-discharge machining performance of TiCN-based cermets	International Journal of Refractory Metals and Hard Materials, 25 392-399.
20.	B.V. Manoj Kumar, J. Ram Kumar and Bikramjit Basu,	2007	Crater Wear Mechanism of TiCN-Ni-WC Cermets during Dry Machining	International Journal of Refractory Metals & Hard Materials 25 (2007) 293-299.
21.	J. Ramkumar, A. K. Singhal, Ritesh Kumar Singh and Prashant kumar	2007	Butt joining of similar & Dissimilar pipe material by cold joining process	Journal of Advanced Composite letters, Vol.16,(5), pp. 173-179.
22.	P. B. Tailor, J. Ramkumar and K. K. Kar	2007	Experimental investigation on effect of alumina filler in butyl through mechanical properties	Journal of Engineering and technology, Vol. 20, 35-39
23.	J. Ramkumar and T. Machida	2008	Defect controlled Water Jet Piercing of Continuous Fiber Reinforced Plastics	Journal of Advance Composite letters, Vol. 17(2), pp. 55-63.
24.	Giribaskar, S., Gouthama, Prasad, R., Ramkumar, J	2008	TEM studies on recovery and recrystallisation in equal channel angular extrusion processed Al-3%Mg Alloy	Transactions of the Indian Institute of Metals 61 (2-3), pp. 171-176
25.	I. A. Palani, S. Kanmani Subbu, N. J. Vasa, J. Ramkumar and M. Singaperumal	2008	Laser based Surface Processing of Engineering Materials- State of the Art	International Journal on Design and Manufacturing Technologies, Vol. 2, No. 1, pp. 1-9, 2008
26.	Mamilla Ravi Sankar, V. K. Jain and J. Ramkumar	2009	Experimental investigations into rotating workpiece Abrasive flow finishing	Wear, Vol. 267 (1-4), pp. 43-51
27.	Kamal K. Kar, N. L. Ravikumar, Piyushkumar B. Tailor, J. Ramkumar, D. Sathiyamoorthy	2009	Preferential Media for Abrasive Flow Machining	J. Manuf. Sci. Eng. 131(1), p 011009 (pp 11)
28.	Kamal K. Kar, N. L. Ravikumar, Piyushkumar B. Tailor, J. Ramkumar, D. Sathiyamoorthy,	2009	Performance Evaluation and Rheological Characterization of Newly Developed Butyl Rubber Based Media for Abrasive Flow Machining Process	Journal of Materials Processing Technology, Vol. 209, (4)pp. 2212-2221
29.	Mamilla Ravi Sankar, J. Ramkumar and V. K. Jain,	2009	Experimental investigation and mechanism of material removal in nano finishing of MMCs using abrasive flow finishing (AFF) process	Wear, Vol. 266, (7-8), pp 688-698.

30.	Mamilla Ravi Shankar, S. Mondal, J. Ramkumar, V. K. Jain	2009	Experimental Investigations and Modeling of Drill Bit Guided Abrasive Flow Finishing (DBG-AFF) Process	International journal of Advanced Manufacturing Technology, Vol. 42, (7-8) pp. 678-688
31.	Amit Banerjee, TrunMankad, S. Dhamodaran, J. Ramkumar, V. N. Kulkarni	2009	The Measurement Of attogram mass Accumulation On nanostructures During e- Beam Scanning Using Carbon Nano Pillars in Resonant Mode	Journal of Nano Technology, 20,(34) p 345501 (pp7).
32.	Vivek Kumar , J. RamKumar , S. Aravindan , S. K. Malhotra, K. Vijai, Mukhul Shukla	2009	Fabrication and Characterization of ABS Nano composite reinforced by Nano sized alumina particulates	International Journal of Plastic Technology, Vol. 13,(2), pp.. 133- 149
33.	Nagahanumaiaha, JanakarajanRamkum arb, Nick Glumacc, Shiv G. Kapoorc and Richard E. DeVor	2009	Characterization of plasma in micro-EDM discharge using optical spectroscopy	Journalof Manufacturing Technology, Vol. 11, PP 82-87
34.	M. Ravi Sankar, V. K. Jain, J. Ramkumar, Kamal K. Kar	2010	Rheological characterization and performance evaluation of a new medium developed for abrasive flow finishing	International Journal of Precision Technology, Vol. 1, No. 3-4, PP 302- 313
35.	G. Karthikeyan, J. Ramkumar, S. Dhamodaran and S. Aravindan	2010	Micro ED-milling Process Performance: An Experimental Investigation	International Journal of Machine tools and Manufacture, Vol. 50, PP 718-727
36.	K. Ponappa, S. Aravindan, P. V. Rao, J. Ramkumar, M. Gupta	2010	The Effect of Process Parameters on Machining of Magnesium Nano Alumina Composite Through EDM	The International Journal of Advanced Manufacturing Technology ,Vol 46 (9-12) , pp 1035-1042
37.	A. K. Singhal, Rashmi R. Devi, Vivek Kumar, J. Ramkumar, R. K. Singh	2010	XNBR Toughened Epoxy- Glass Fabric Composites: An Evaluation of their Static and Dynamic Mechanical Properties	International Journal of Polymer Materials, Vol.27, (2),pp. 97-112
38.	A.K. Singhal, Vivek Kumar, J. Ramkumar, R. K. Singh and S. K. Malhotra	2010	Experimental investigation of mechanical and tribological performance of XNBR rubber modified epoxy under dry sliding condition	International Journal of Plastic Technology, Volume 14, (1) ,pp 93- 103.
39.	V. Kumar, J. Ramkumar, P Kumar, S. K. Malhotra	2010	Mechanical and Tribological Properties of Jute Sandwich Structures	Journal of Polymer Materials 27 (3), 267-281
40.	M. Ravi Sankar, V. K. Jain, J. Ramkumar	2010	Rotational abrasive flow finishing (R-AFF) process and its effects on finished surface topography	International Journal of Machine tools and Manufacture, Vol. 50, pp 637-650

41.	S. Dhamodaran, J. Ramkumar	2010	Controlling the nano-dot formation on GaAs surface during focused gallium ion beam processing	Radiation effects and defects in solids, Volume 165, (12), pp.889-893.
42.	M. Ravi Sankar, J. Ramkumar, S. Aravindan	2011	Machining of metal matrix composites with minimum quantity cutting fluid and flood cooling	Advanced Materials Research, Materials and manufacturing, vol 299-300, pp. 1052-1055
43.	Sumedah Kulkarni, Syed Nadeem Akther, J. Ramkumar	2011	Experimental investigation of formability enhancement using hydraulic counter pressure assisted warm deep drawing	Advanced Materials Research, Materials and Manufacturing, vol 299-300, pp. 364-367,.
44.	A. Dhabal, D. S. Chander, J. Ramkumar, S. Dhamodaran	2011	Negative differential resistance in isolated GaN nano wires with focused electron beam deposited platinum contacts	Micro & Nano Letters 6 (4), 280-283
45.	D. Sathish Chander, J. Ramkumar, S. Dhamodaran	2011	Controlled 1-D to 3-D growth mode transition of GaN nano structures and their optical properties	Physica E: Low-dimensional Systems and Nanostructures 43 (9), 1683-1687
46.	S. Kanmani Subbu, J. Ramkumar, and S. Dhamodaran	2011	Plasma Temperature and Electron Density of Dry micro-EDM on Stainless Steel and Silicon: A Comparison	<i>International Journal of Automation Technology</i> , Vol. 5, No. 1, pp. 45-51, 2011
47.	S. Dhamodaran, D. S. Chander, J. Ramkumar	2011	Anti-reflective and hydrophobic surface of self-organized GaN nano-flowers	Applied Surface Science 257 (22), 9612-9615
48.	M. Ravi Sankar, V. K. Jain, J. Ramkumar, and Y. M. Joshi	2011	Rheological characterization of Styrene-Butadiene based medium and its finishing performance using rotational abrasive flow finishing processes	International Journal of Machine tool and Manufacture, vol 51,(12), pp. 947-957
49.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran	2011	Elemental identification of materials using optical emission spectra during electric discharge machining	Advanced Materials Research 299, 1330-1333
50.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran	2011	Single Discharge of Dry micro-EDM on Silicon: Crater and Plasma Temperature Measurement	Advanced Materials Research 299, 1334-1337
51.	S. Kanmani Subbu, G. Karthikeyan, J. Ramkumar, and S. Dhamodaran	2011	Plasma Characterization of Dry micro-EDM	The International Journal of Advanced Manufacturing Technology, Vol. 56, pp. 187-195
52.	Omprakash Rawat, S. Kanmani Subbu, J. Ramkumar, and S. Dhamodaran	2011	Magnetic Field Assisted micro EDM-Simulation of Field Distribution and Experimental Investigation	International Journal of Applied Engineering Research, Vol. 6, No. 5, pp. 987-992, 2011.

53.	Sandeep Nair, Trilok Singh, Ramkumar J., Sunil Jha	2011	Development and Experimental Investigation of MAF Setup for Finishing of Ultra High Speed Shafts	International Journal of Abrasive Technology, Vol 4 (4), pp.. 325-345
54.	S. Dhamodaran, D Sathish Chander, J. Ramkumar	2011	GaN nanowires grown on silicon substrates engraved using stainless-steel micro-tip	Materials Letters 65, 2398-2400
55.	S. Dhamodaran, D. Sathish Chander, J. Ramkumar	2011	Anti-reflective and hydrophobic surface of self organized GaN nanoflowers	Applied Surface Science, 257, 9612
56.	G. Karthikeyan, K. Sambhav, J. Ramkumar, S. Dhamodaran	2011	Simulation and experimental realization of micro-channels using a micro ED-milling process ..	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, Vol.225, (12)pp.2206-2219.
57.	S. Karthikeyan, Anuj K. Garg, J. Ramkumar, S. Dhamodaran	2012	A microscopic investigation of machining behavior in micro ED-milling Process	Journal of Manufacturing Processes, Vol 4, issue 3, pp 297-306
58.	G. Karthikeyan, K. Sambhav, D. Santhosh and J. Ramkumar	2012	CAD based modeling and prediction of tool wear in micro ED-milling	International journal of manufacturing technology research, vol 4, issue 1/2, pp 21-34
59.	M. R. Sankar, V. K. Jain, J. Ramkumar, and Y. M. Joshi	2012	Dependence of R-AFF process on rheological characteristics of soft styrene based organic polymer abrasive medium	International Journal of manufacturing technology research, vol 4, issue 1/2, pp 89-104
60.	M. Ravisankar, J. Ramkumar, V. K. Jain	2012	Abrasive Flow Finishing (AFF) for Micro manufacturing	Micromanufacturing Processes, 183
61.	M.R. Sankar, V.K. Jain, J. Ramkumar	2012	Effect of Abrasive Medium Ingredients on Finishing of Al Alloy and Al Alloy/SiC Metal Matrix Composites Using Rotational Abrasive Flow Finishing	Applied Mechanics and Materials 110, 1328-1335
62.	I. Sen, G. Karthikeyan, J. Ramkumar, R. Balasubramaniam	2012	A Study on Machinability of B-Modified Ti-6Al-4V Alloys by EDM	Materials and Manufacturing Processes 27 (3), 348-354
63.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran	2012	Investigation of Single Pulse Discharge on Silicon: Crater and Plasma Characteristics	International Journal of Mechatronics and Manufacturing Systems, Vol 5, (5-6), pp 455-469
64.	S. Kanmani Subbu, J. Ramkumar, and S. Dhamodaran	2012	Micro-Electric Discharge Plasma: Characterization and Applications	Journal of Materials and Manufacturing processes, Vol. 27, No. 11, pp. 1208-1212, 2012.
65.	Satish Chander D., J. Ramkumar, Dhamodaran S.	2012	A comparison between Raman scattering from GaN nano wires and polyhedrons	Nanoscience Methods, Vol 1, pp 129-136

66.	Rajesh kumar porwal, Vinod Yadava, J. Ramkumar	2012	Artificial neural network modeling and multi objective optimization of hole drilling electro discharge micro machining of invar	International Journal of Mechatronics and Manufacturing Systems, Vol. 5, No 5/6,pp 470-494
67.	Banerjee, A., Mankad, T., Dhamodaran, S., Ramkumar, J., Kulkarni	2012	Dynamic characterization and mechanical properties of FIB grown nano pillars	International Journal of Nanotechnology 9 (10-12) , pp. 972-981
68.	G. Karthikeyan, J. Ramkumar, S. Aravindan	2012	Performance analysis of micro ED-milling process using various statistical techniques	International Journal of Machining and Machinability of Materials VO. 11 (2) pp. 183-203
69.	C. Samanta, D. S. Chander, J. Ramkumar, S. Dhamodaran	2012	Catalyst and its diameter dependent growth kinetics of CVD grown GaN nanowires	Materials Research Bulletin 47 (4), 952-956
70.	Rajesh Kumar Porwal, Vinod Yadava and J. Ramkumar	2013	Optimization of process parameters in the hole drilling electrical discharge micro machining of titanium based super alloy thin sheet.	Journal of Machining and Forming Technology, Vol. 5, pp. 175-188
71.	Rajesh Kumar Porwal, Vinod Yadava and J. Ramkumar	2013	Modeling and Optimization of Hole Drilling Electrical Discharge Micromachining Process of Ti-6Al-4V Thin Sheet	International Journal of Precision Technology, Vol. 3, No.2, pp. 183-205
72.	Chandra Sekhar Sathua, V. K. Jain, J. Ramkumar, Ajay Sidpara	2013	Analysis of Forces and Surface Roughness in Magnetic Abrasive Finishing with a ball end tool	Int.J. Precision Technology, Vol 3, No 2,pp 131-142
73.	Avinash Kumar, Ankur Gupta, Rishi Kant, Syed Nadeem Akhtar, Nachiketa Tiwari, J. Ramkumar, Shantau Bhattachary	2013	Optimization of laser machining process for the preparation of photo masks and its application to micro systems fabrication	Journal of Micro/Nanolithography, MEMS and MOEMS.Vo. 12. No.4 p041203 (9 pp)
74.	Kumar Pallav, Peidog Han, J. Ramkumar, NagHanumaiah, KornelEhman	2013	Comparative Assessment of the laser induced plasma Micro-Machining (LIP-MM) and the Micro-EDM processes	J.Manuf.Sci.Eng, DOI 10.1115/1.4025391.
75.	T. V. K. Gupta, J. Ramkumar, Puneet Tandon, N. S. Vyas	2013	A study on the deviations of the jet with traverse speeds of different materials in pocket milling using Abrasive water Jet Machining Processes	Applied Mechanics & Materials, Vol.372,pp 402-405, Trans Tech Publications,
76.	Govind Dayal, Syed Nadeem Akhtar, S. Anatha Ramkrishnan and J. Ramkumar	2013	Excimer laser micromachining using binary mask protection for large are patterning with single micrometer feature	J.Micro Nano-Manuf.1.031002 1(3) (7pages); DOI: 10.1115/1.4024880.

77.	Rajesh Kumar Porwal, Vinod Yadava, J. Ramkumar	2013	Modeling and Multi-Response Optimization of hole sinking electrical discharge micromachining of titanium alloy thin sheet	Journal of Mechanical science and Technology, Paper number: MEST-D-1300358R1, 3(2), pp 183-205
78.	Rajesh Kr. Porwal, Vinod Yadava, J. Ramkumar	2013	Optimization of process parameters in the hole sinking electro discharge micromachining using GRA-PCA	Journal of Manufacturing Engineering, Vol. 8, (2), pp. 96-104
79.	Rajesh Kumar Porwal, Vinod Yadava, J. Ramkumar	2013	Multi-Objective Optimization of Hole Drilling Electrical Discharge Micromachining Process using Grey Relational Analysis coupled with Principal Component Analysis	Journal of The Institution of Engineers (India): Series C, Volume 94, (4), pp 317-325
80.	T. V. K. Gupta, J. Ramkumar, Puneet Tandon, N. S. Vyas	2013	Role of process parameters on pocket milling with Abrasive Water Jet Machining technique	International Journal of Mechanical Science and Engineering, 2013, Vol. 7, No. 10, pp. 627-632
81.	Gupta T. V. K., Ramkumar J., Tandon P., and Vyas N. S.,	2013	A study on deviations of the jet with traverse speeds on different materials in pocket milling using Abrasive Water Jet Machining Process,	International Journal of Applied Mechanics and Materials, 372, 402-405.
82.	Rajesh Kumar Porwal, Vinod Yadava, J. Ramkumar	2014	Neural Network based Modeling and GRA coupled PCA Optimization of Hole Sinking Electro Discharge Micro machining	International Journal of Manufacturing, Materials, and Mechanical Engineering. 4(1), pp. 1-21.
83.	Syed Nadeem Akhtar, Hirendra Choudhary, S. Anantha Ramakrishna and J. Ramkumar	2014	Simulation and experiments on excimer laser micromachining of metal and polymer	Journal of Micro / Nanolithography, MEMS, and MOEMS 13(1), 013008-013008
84.	G. Karthikeyan, J. Ramkumar, S. Dhamodaran	2014	Block EDG: issues and applicability in multiple pass micro ED-milling	Machining Science and Technology 18 (1), 120-136
85.	K. Pallav, P. Han, J. Ramkumar, K. F. Ehmann	2014	Comparative Assessment of the Laser Induced Plasma Micro machining and the Micro-EDM Processes	Journal of Manufacturing Science and Engineering 136 (1), 011001
86.	R.K. Porwal, V. Yadava, J. Ramkumar	2014	Modelling and multi-response optimization of hole sinking electrical discharge micro machining of titanium alloy thin sheet	Journal of Mechanical Science and Technology 28 (2), 653-661
87.	D. Jhodkar, M. Amaranth,	2014	Experimental Investigations on the Effect of Vegetable	Applied Mechanics and Materials 541, 368-373

	H. Chelladurai, J. Ramkumar		Based Cutting Fluid in Turning AISI 1040 Steel	
88.	Jefferson, Hari and J. Ramkumar	2014	Micro machining performance and surface quality comparison of using cryogenically treated copper-tungsten tool/AISI 304 work piece in micro EDM milling	Recent Patents on Mechanical Engineering. Reference#: BSP-MENG-2014-56 Machining Science and Technology, (accepted)
89.	B. Muralidharan, H. Chelladurai, J. Ramkumar	2015	Experimental Investigation on Electro- Discharge Deposition Process	International Mechanical Engineering Congress and Exposition .Volume 76, Issue 1-4, pp. 69-82.
90.	Dharmesh Kumar ; Syed N. Akhtar ; Anup K. Patel; J. Ramkumar ; Dr. Kantesh Balani	2015	Tribological Performance of Laser Peened Ti-6Al-4V	Journal of Wear, 322, 203-217
91.	Syed Nadeem Akhtar, Shashank Sharma, S. Anantha Ramakrishna, and J. Ramkumar	2015	Excimer laser micromachining of oblique microchannels on thin metal films using square laser spot	Sadhana Academy Proceedings in Engineering Science, (accepted)
92.	Divyansh Patel, V. K. Jain, J. Ramkuma	2015	Surface Texturing for Inducing Hydrophobicity	Directions IIT Kanpur Publications, Vol. 15-1, pp. 46-53
93.	Divyansh Patel, V. K. Jain, J. Ramkumar	2015	Micro texturing on metallic surfaces: State- of-the-art	Proceedings of the Institution of Mechanical Engineers, Part B. (Accepted)
94.	Ajay Vardhaman B. S, M. Amarnath, Durwesh Jhodkar, J. Ramkumar, H. Chelladurai, M. K. Roy	2015	Influence of coconut oil on tribological behavior of carbide cutting tool insert during turning operation	Journal of Cleaner Production (Under Review)
95.	Ajay Vardhaman B. S, M. Amarnath, Durwesh Jhodkar, J. Ramkumar and H. Chelladurai	2015	Examining the Role of Cutting Fluids in Machining AISI 1040 Steel Using Tungsten Carbide Insert under Minimal Quantity Lubrication Condition	International Institute of Engineers
96.	Amandeep Singha, Deepu Philip , J. Ramkumar	2015	Quantifying green manufacturability of a unit production process using simulation	Procedia CIRP 29 (2015) 257-262
97.	Durwesh Jhodkar, H. chelladurai, M. Amarnath and J. Ramkumar	2015	Performance evaluation of Microwave Treated Cemented Carbide insert on AISI 1040 steel during turning process	Accepted in ASME 2015, Applied mechanics and materials conference. McMat2015-6318
98.	Nishith Verma, Prateek Khare, Janakaranjan Ramkumar,	2015	Control of Bacterial Growth in Water using Novel Laser-Ablated Metal-Carbon-Polymer Nanocomposite-based Microchannels	Chemical Engineering Journal 276 (2015) 65-74.
99.	Bhargava, Neelima; Shanmugaiah, Vellasamy; Balakrishnan, Karuppiah; Ramkumar	2015	Comparing the Adhesion and Survival of Adult Rod and Cone Photoreceptor Neurons on Poly-D-Lysine and Concanavalin-A Substrate	Journal of Biomaterials and Tissue Engineering, Volume 5, Number 6, June 2015, pp. 431-438(8).

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100.	F. Islam, J. Ramkumar & A.S. Milani	2015	A simplified damage prediction framework for milling of unidirectional carbon fiber-reinforced plastics	Polymer & Composites Science, 1:4, 175-184, DOI: 10.1080/20550340.2015.1117747.
101.	T. V. K. Gupta, J. Ramkumar, Puneet Tandon, N. S. Vyas	2015	Application of Artificial Neural Networks in Abrasive Water Jet Milling	Procedia CIRP 37 (2015) 225-229.
102.	Akhtar, S. N., Sharma, S., Dayal, G., Ramakrishna, S. A., & Ramkumar, J.	2015	Micro feature edge quality enhancement in excimer laser micromachining of metal films by coating with a sacrificial polymer layer	Journal of Micromechanics and Microengineering, 25(6), 065001.
103.	Akhtar, S. N., Sharma, S., Dayal, G., Ramakrishna, S. A., & Ramkumar, J.	2015	Excimer laser micromachining of oblique micro channels on thin metal films using square laser spot	Ref no:- Ms. No.SADH-D- 15-00069R3 (Accepted-Sadhana).
104.	Rita Maurya, Binit Kumar, S. Ariharan, J. Ramkumar, Kantesh Balani	2016	Effect of carbonaceous reinforcements on the mechanical and tribological properties of friction stir processed Al6061 alloy	Materials and Design 98 (2016) 155-166.
105.	M. Ravi Sankar, V. K. Jain, J. Ramkumar	2016	Nano-finishing of cylindrical hard steel tubes using rotational abrasive flow finishing (R-AFF) process	Int J Adv Manuf Technol DOI 10.1007/s00170-015-8189-5
106.	Leeladhar Nagdeve, V. K. Jain, J. Ramkumar	2016	Experimental Investigations into nano-finishing of freeform surfaces using negative replica of the knee joint	Procedia CIRP 42 (2016) 793-798
107.	Prateek Khare, Ashish Yadav, Janakranjan Ramkumar, Nishith Verma	2016	Microchannel-embedded metal-carbon-polymer nanocomposite as a novel support for chitosan for efficient removal of hexavalent chromium from water under dynamic conditions	Chemical Engineering Journal 293 (2016) 44-54
108.	F. Islam, B. Crawford, P. Pal, J. Ramkumar, A.S. Milani	2016	Influence of disbonds on flexural strength and defect detection sensitivity of fiber composites	Pending for submission.
109.	Amandeep Singh, Deepu Philip, J. Ramkumar	2016	Green Index quantification of a unit manufacturing process through simulation experiments	Procedia CIRP 41 1131-1136
110.	P Murkute, J Ramkumar, S	2016	Effect of alternate corrosion and wear on the overall degradation of	Wear 368, 368-378

	Choudhary, K Mondal`		a dual phase and a mild steel	
111.	P Murkute, S Choudhary, J Ramkumar, K Mondal	2016	Effect of Exposure Face Orientation and Tilt Angle on Immersion Corrosion Behavior of Dual-Phase and Mild Steels	Journal of Materials Engineering and Performance, 1-10
112.	P Murkute, J Ramkumar, K Mondal	2016	Stress Corrosion Cracking Behavior of Interstitial Free Steel Via Slow Strain Rate Technique	Journal of Materials Engineering and Performance 25 (7), 2878-2888
113.	F. Islam, B. Crawford, P. Pal, J. Ramkumar, A.S. Milani	2016	Modelling of nano-finishing forces and surface roughness in abrasive flow finishing process using rheological properties	International Journal of Precision Technology 6 (2), 123-141
114.	Rao R.V., Rai D.P., Ramkumar J., Balic J.	2016	A new multi-objective Jaya algorithm for optimization of modern machining processes	Advances in Production Engineering & Management, Volume 11, Number 4, pp 271-286
115.	Yaswanth K. Penke , Ganapathi Anantharaman, Janakarajan Ramkumar, and Kamal K. Kar	2017	Aluminum Substituted Cobalt Ferrite (Co-Al-Fe) Nano Adsorbent for Arsenic Adsorption in Aqueous Systems and Detailed Redox Behavior Study with XPS	ACS Appl. Mater. Interfaces,9 (13), 11587-11598
116.	Leeladhar Nagdeve, Ajay Sidpara, V. K. Jain & J. Ramkumar	2017	On the effect of relative size of magnetic particles and abrasive particles in MR fluid-based finishing process	Machining Science and Technology, 22(3), 493-506
117.	Aakash Tyagi, Vyom Sharma, V. K. Jain & J. Ramkumar	2017	Investigations into side gap in Wire Electrochemical Micromachining (Wire-ECMM)	International Journal of Advanced Manufacturing Technology, 94(9-12), 4469-4478
118.	G.V.L. Parameswari, V. K. Jain & J. Ramkumar, Leeladhar Nagdeve	2017	Experimental investigations into nano finishing of Ti6Al4V flat disc using Magnetorheological finishing process	International Journal of Advanced Manufacturing Technology, 1-11, 2017
119.	Sahil Kajal, Leeladhar Nagdeve, V. K. Jain & J. Ramkumar	2017	Experimental and theoretical investigations into internal Magnetic Abrasive Finishing of a Revolver Barrel	International Journal of Advanced Manufacturing Technology(2017):1-18
120.	Harsh Sheokand, Saptarshi Ghosh, Gaganpreet Singh, Mondeep Saikia, Kumar Vaibhav Srivastava, J. Ramkumar, and S. Anantha Ramakrishna	2017	Transparent broadband metamaterial absorber based on resistive films	Journal of Applied Physics, 122(10), 105105
121.	Abhilasha Singh, Divyansh Singh Patel,	2017	Single step laser surface texturing for enhancing	Int J Adv Manuf Technology, (2017):1-15

	J. Ramkumar & Kantesh Balani		contact angle and tribological properties	
122.	Leeladhar Nagdeve, V. K. Jain and J. Ramkumar	2017	Preliminary investigations into nano-finishing of freeform surface (femoral) using inverse replica fixture	The International Journal of Advanced Manufacturing Technology, (2017): 1-12
123.	Divyansh Singh Patel, Abhilasha Singh, V. K. Jain, J. Ramkumar & A. Shrivastava	2017	Investigations into insertion force of electrochemically micro-textured hypodermic needles	The International Journal of Advanced Manufacturing Technology , (2017): 1-16
124.	B.S. Ajay Vardhaman, M. Amarnath, J. Ramkumar, and Prabhat K. Rai	2018	Experimental Investigations to Enhance the Tribological Performance of Engine Oil by Using Nano-Boric Acid and Functionalized Multiwalled Carbon Nanotubes: A Comparative Study to Assess Wear in Bronze Alloy	Journal of Materials Engineering and Performance, (2018): 1-14
125.	Kiran Kumar Surthi , Bibekananda De, J. Ramkumar , Kamal K. Kar	2018	Enhancement of the surface reactivity of zigzag boron nitride nanoribbons by chlorine gas decoration: A computational study	Journal of Physics and Chemistry of Solids, 120, 34-43
126.	Ambuj Shah, Arvind Kumar , J. Ramkumar	2018	Analysis of transient thermo-fluidic behavior of melt pool during spot laser welding of 304 stainless-steel	Journal of Materials Processing Technology, 256, 109-120
127.	Durwesh Jhodkar, M. Amarnath, H. Chelladurai, J. Ramkumar	2018	Experimental investigations to enhance the machining performance of tungsten carbide tool insert using microwave treatment process	Journal of the Brazilian Society of Mechanical Sciences and Engineering, 40(4), 200
128.	Koshal Kishor, Alhad Parashtekar, Sulay Saha, Sri Sivakumar, Janakarajan Ramkumar and Raj Ganesh S. Pala	2018	Rational Design Strategy for Optimization of Clamping Pressure to Minimize Contact Resistance between Electrode and Current Collector while Preserving Porosity of Electrodes in Water Electrolyzers	Canadian Journal of Chemical Engineering, 96(4), 881-885
129.	Durwesh Jhodkar, H. Chelladurai, Akhilesh Kumar Choudhary & J. Ramkumar	2018	Comparison of machining performance of microwave post-heated WC insert with dry, wet and MQL cutting in turning operation	Journal of Microwave Power and Electromagnetic Energy, 52(2), 109-127
130.	Amandeep Singh , Deepu Philip , J. Ramkumar , Mainak Das	2018	A simulation based approach to realize green factory from unit green manufacturing processes	Journal of Cleaner Production , 182, 67-81

131.	Durwesh Jhodkar, M. Amarnath, H. Chelladurai, and J. Ramkumar	2018	Performance assessment of microwave treated WC insert while turning AISI 1040 steel	Journal of Mechanical Science and Technology, 32(6), 2551-2558
132.	L. Nagdeve, V. K. Jain, J. Ramkumar	2018	Nanofinishing of freeform/sculptured surfaces: state-of-the-art	Manufacturing Review,5, 6
133.	V Sharma, D.S. Patel, V.K. Jain, J. Ramkumar, A Tyagi	2018	Wire Electrochemical Threading: A Technique for Fabricating Macro/Micro Thread Profiles	Journal of The Electrochemical Society, 165(9), E397-E405
134.	M. R. Sankar, V. K. Jain, J. Ramkumar, S. K. Sareen, S. Singh	2018	Medium rheological characterization and performance study during rotational abrasive flow finishing (R-AFF) of Al alloy and Al alloy/SiC MMCs	The International Journal of Advanced Manufacturing Technology , 1-15
135.	Divyansh Singh Patel, Abhilasha Singh, K. Balani, J. Ramkumar	2018	Topographical effects of laser surface texturing on various time-dependent wetting regimes in Ti6Al4V	Surface and Coatings Technology, 2018
136.	Pragya Shukla, Shikha Awasthi, Janakarajan Ramkumar, Kantesh Balani	2018	Protective trivalent Cr-based electrochemical coatings for gun barrels	Journal of Alloys and Compounds, 768, 1039-1048
137.	A. K. Yadav, S. Banerjee, R Kumar, K. K. Kar, J. Ramkumar, K. Dasgupta	2018	Mechanical Analysis of Nickel Particle-Coated Carbon Fiber-Reinforced Epoxy Composites for Advanced Structural Applications	ACS Applied Nano Materials,1(8), 4332-4339
138.	Hitendra Kumar, J. Ramkumar, K.S. Venkatesh	2018	Surface texture evaluation using 3D reconstruction from images by parametric anisotropic BRDF	Measurement,125, 612-633
139.	S. Sharma, V. Mandal, S.A. Ramakrishna, J. Ramkumar	2018	Numerical simulation of melt hydrodynamics induced hole blockage in Quasi-CW fiber laser micro-drilling of TiAl6V4	Journal of Materials Processing Technology, 262, 131-148
140.	Yaswanth K. Penke, Ganapathi Anantharaman, Janakarajan Ramkumar, Kamal K. Kar	2018	Redox Synergistic Mn-Al-Fe and Cu-Al-Fe Ternary Metal Oxide Nano Adsorbents for Arsenic Remediation with Environmentally Stable As(O) Formation	Journal of Hazardous Materials,364, 519-530
141.	Durwesh Jhodkar, M. Amarnath, H. Chelladurai, J. Ramkumar	2018	Experimental Investigations to Study the Effects of Microwave Treatment Strategy on Tool Performance in Turning Operation	Journal of Materials Engineering and Performance,27(12), 6374-6388
142.	Sharma, V., Srivastava, I., Tyagi,	2018	Theoretical and Experimental	Journal of The Electrochemical Society, 165(14), E773-E783

	A., Jain, V. K., & Ramkumar, J.		Investigations into Wire Electrochemical Turning (Wire-ECTrg) Process Using Finite Element Method	
143.	Leeladhar Nagdeve, V. K. Jain & J. Ramkumar	2018	Differential finishing of freeform surfaces (Knee Joint) using R-MRAFF process and negative replica of workpiece as a fixture	Machining Science and Technology, 22(4), 671-695
144.	Sheokand, H., Singh, G., Ghosh, S., Ramkumar, J., Ramakrishna, S. A., & Srivastava, K. V.	2019	An Optically Transparent Broadband Microwave Absorber Using Interdigital Capacitance	IEEE Antennas and Wireless Propagation Letters, 18(1), 113-117
145.	Singh, G., Sheokand, H., Ghosh, S., Srivastava, K. V., Ramkumar, J., & Ramakrishna, S. A.	2019	Excimer laser micromachining of indium tin oxide for fabrication of optically transparent metamaterial absorbers	Applied Physics A, 125(1), 23
146.	Penke, Y. K., Tiwari, N., Jha, S., Bhattacharyya, D., Ramkumar, J., & Kar, K. K	2019	Arsenic surface complexation behaviour in aqueous systems onto Al substituted Ni, Co, Mn, and Cu based ferrite nano adsorbents	Journal of hazardous materials, 361, 383-393
147.	D.S. Patel, V.K. Jain, A Shrivastava, J. Ramkumar	2019	Electrochemical micro texturing on flat and curved surfaces: simulation and experiments	The International Journal of Advanced Manufacturing Technology, 100, 1269-1286
148.	S. Sharma, V. Mandal, S.A. Ramakrishna, J. Ramkumar	2019	Numerical simulation of melt pool oscillations and protuberance in pulsed laser micro melting of SS304 for surface texturing applications	Journal of Manufacturing Processes, 39, 282-294
149.	G. Singh, H. Sheokand, K. Chaudhary, K.V. Srivastava, J. Ramkumar,	2019	Fabrication of non-wettable wearable textile based metamaterial microwave absorber	Journal of Physics D: Applied Physics
150.	V. Sharma, I. Srivastava, V.K. Jain, J. Ramkumar	2019	Modelling of Wire Electrochemical Micromachining (Wire-ECMM) process for anode shape prediction using finite element method	Electrochimica Acta
151.	Mahavir Singh, J. Ramkumar, R. V. Rao, J. Balic	2019	Experimental investigation and multi-objective optimization of micro-wire electrical discharge machining of a titanium alloy using Jaya algorithm	Advances in Production Engineering & Management, 14(2), https://doi.org/10.14743/apem2019.2.326

152.	Mahavir Singh, Amandeep Singh, J. Ramkumar	2019	Thin-wall micromachining of Ti-6Al-4V using micro-wire electrical discharge machining process	Journal of the Brazilian Society of Mechanical Sciences and Engineering, 41:338, https://doi.org/10.1007/s40430-019-1827-3
153.	Pragya Tripathi, J. Ramkumar, Kantesh Balani	2019	Laser peening enhances tribological resistance of electrodeposited Cr coatings reinforced with yttria stabilized zirconia and carbon nano tubes	Surface & Coatings Technology, Volume 378, 124919, https://doi.org/10.1016/j.surfcoat.2019.124919
154.	H.S. Maharana, Ravi Kumar, S.V.S. Narayana Murty, J. Ramkumar, K. Mondal	2019	Surface micro-texturing of dual phase steel and copper by combining laser machining and electrochemical dissolution	Journal of Materials Processing Technology, 116:260. doi:10.1016/j.jmatprotec.2019.116260
155.	Ganesh B. Shirsatha, K. Muralidhara, Raj Ganesh S. Pal, J. Ramkumar	2019	Condensation of water vapor underneath an inclined hydrophobic textured surface machined by laser and electric discharge	Applied Surface Science. doi:10.1016/j.apsusc.2019.04.076
156.	Leeladhar Nagdev, V.K Jain and J. Ramkumar	2019	Development of inverse replica fixture for Nano-finishing of knee joint using R-MRAFF process	Journal of micromanufacturing (JMF)
157.	Yaswanth K. Penke, Amit Yadav, Purna Sinha, Iram Malik, Janakarajan Ramkumar and Kamal K Kar	2020	Arsenic Remediation onto Redox and Photocatalytic/electrocatalytic Mn-Al-Fe Impregnated rGO: Sustainable Aspects of Sludge as Supercapacitor	Chemical Engineering Journal, doi.org/10.1016/j.cej.2019.124000
158.	V Mandal, S Sharma, J Ramkumar	2020	Numerical Simulation of Heat Transfer and Fluid Flow in Co-axial Laser Cladding of Ti6Al4V Alloys	Advances in Simulation, Product Design and Development, 241-254
159.	V Sharma, VK Jain, J Ramkumar	2020	Investigations into Wire Electrochemical Machining of Stainless Steel 304	Advances in Unconventional Machining and Composites, 41-52
160.	V Mandal, A Singh, GS Yadav, J Ramkumar, S Agrawal	2020	Experimental Investigation on Surface Topography of the Natural Ceramics in Abrasive Water Jet Cutting and Its Optimization Validation by Formulated Model	Advances in Unconventional Machining and Composites, 347-360
161.	RK Thakur, KK Singh, J Ramkumar	2020	Experimental investigation of abrasive waterjet hole cutting on hybrid carbon/glass composite	Materials Today: Proceedings 21, 1551-1558
162.	RN Yadav, RK Porwal, J Ramkumar	2020	Experimental Modeling of EDMed Aluminum Metal	Emerging Trends in Mechanical Engineering, 511-518

			Metrix Composite: A Review	
163.	K Chaudhary, G Singh, J Ramkumar, SA Ramakrishna, KV Srivastava,	2020	Optically transparent protective coating for ITO-coated PET-based microwave metamaterial absorbers	IEEE Transactions on Components, Packaging and Manufacturing Technology 10
164.	JM Jafferson, P Hariharan, J Ramkumar	2020	Correlation of Three-Dimensional Roughness Parameters With the Crater Dimensions in μ ED-Milling of Cryogenic-Treated Tool and Workpiece	Journal of Micro and Nano-Manufacturing 8 (1)
165.	HS Maharana, SVSN Murty, J Ramkumar, K Mondal	2020	Continuous and ordered surface microtexturing on Cu and Ni-based alloys by novel electrochemical dissolution	Journal of Alloys and Compounds 817, 153263
166.	P Tripathi, PK Katiyar, J Ramkumar, K Balani	2020	Synergistic role of carbon nanotube and yttria stabilised zirconia reinforcement on wear and corrosion resistance of Cr-based nano-composite coatings	Surface and Coatings Technology 385, 125381
167.	DS Patel, V Sharma, VK Jain, J Ramkuma	2020	Reducing overcut in electrochemical micromachining process by altering the energy of voltage pulse using sinusoidal and triangular waveform	International Journal of Machine Tools and Manufacture 151, 103526
168.	L Nagdeve, VK Jain, J Ramkumar	2020	Optimization of process parameters in nano-finishing of Co-Cr-Mo alloy knee joint	Materials and Manufacturing Processes, 1-8
169.	RK Thakur, KK Singh, J Ramkumar	2020	Delamination analysis and hole quality of hybrid FRP composite using abrasive water jet machining	Materials Today: Proceedings
170.	Y Tayde, K Chaudhary, G Singh, A Dhumal, M Saikia, KV Srivastava,	2020	An optically transparent and flexible microwave absorber for X and Ku bands application	Microwave and Optical Technology Letters 62 (5), 1850-1859
171.	E Saraswat, HS Maharana, SVSN Murty, S Shekhar, KK Kar, J Ramkumar	2020	Fabrication of Al-Si controlled expansion alloys by unique combination of pressureless sintering and hot forging	Advanced Powder Technology
172.	M Singh, P Saxena, J Ramkumar, RV Rao	2020	Multi-spark numerical simulation of the micro-EDM process: an extension of a single-spark numerical study	The International Journal of Advanced Manufacturing Technology, 1-15

173.	YK Penke, AK Yadav, P Sinha, I Malik, J Ramkumar, KK Kar	2020	Arsenic remediation onto redox and photo-catalytic/electrocatalytic Mn-Al-Fe impregnated rGO: Sustainable aspects of sludge as supercapacitor	Chemical Engineering Journal 390, 124000
174.	BSA Vardhaman, M Amarnath, J Ramkumar, K Mondal	2020	Enhanced tribological performances of zinc Oxide/MWCNTs hybrid nanomaterials as the effective lubricant additive in engine oil	Materials Chemistry and Physics, 123447
175.	DS Patel, V Agrawal, J Ramkumar, VK Jain, G Singh	2020	Micro-texturing on free-form surfaces using flexible-electrode through-mask electrochemical micromachining	Journal of Materials Processing Technology, 282, 116644

List of peer reviewed conference publications:

S.No.	Author(s)	Year	Title	Name and Place of Conference
1.	J. Ramkumar, S. Aravindan and R. Krishnamurthy	2000	Response of High Frequency, low amplitude impact and Low frequency, High amplitude impact test on joining of SiC by microwave hybrid heating techniques	International Seminar on Manufacturing technology beyond 2000, India.
2.	J. Ramkumar, S. Arul, S. K. Malhotra and R. Krishnamurthy	2000	Online monitoring of oscillatory drilling of polymeric composites through acoustic emission	High temperature Fiber composite materials-2000, India.
3.	J. Ramkumar, S. Aravindhnan, S.K. Malhotra and R. Krishnamurthy	2000	Drilling of Fiber reinforced composites using microwave treated cutting WC inserts	RAMP-2001, 358-365, India
4.	J. Ramkumar, R. Krishnamurthy and S. K. Malhotra	2000	Defect Evaluation through online monitoring on Drilling of Carbon reinforced composites using brazed WC Inserted Drill	Manufacturing Engineering in twenty first century-2001, 25-28, India.
5.	J. Ramkumar, R. Krishnamurthy and S. K. Malhotra	2001	Ultrasonic drilling of polymeric composites	CANCOM 2001, Canada.
6.	J. Ramkumar, R. Krishnamurthy and S. K. Malhotra	2001	On-line monitoring of material response of GFRP composites during ultrasonic machining through Acoustic Emission	CAR & FOF 2001, South Africa.
7.	J. Ramkumar, S. K. Malhotra and R. Krishnamurthy	2003	Effect of workpiece vibration on drilling of GFRP laminates	ISAMPE, India.

8.	J. Ramkumar, S. K. Malhotra and R. Krishnamurthy	2003	Effect of Lay-up on drilling of GFRP composites	ICCST- 2003, South Africa.
9.	S. Aravindan, J. Ramkumar and A. K. Sharma	2004	Role of microwave in manufacturing	CAMMT, India
10.	J. Ramkumar, S. K. Malhotra and R. Krishnamurthy	2004	Damage Tolerancing of Drilling of GFRP composites	CAMMT, India
11.	S. K. Malhotra, R. Krishnamurthy and J. Ramkumar	2004	Modelling of Left over strength in Drilling of Composites Laminates	COMPTEST, Bristol.
12.	J. Ramkumar, "Microwave towards Nanomanufacturing	2004	Indo-Japan Workshop on Nanotechnology	Tokyo, Japan.
13.	Prabhat Agnihotri, Ariful Rahaman, Niranjan patra, J. Ramkumar, S. Basu and Kamal. K. Kar	2006	Influence of process parameters of electroless Ni-P coating on carbon fibers	APMC, Chennai, India
14.	S. Srivastava, J. Ramkumar and Kamal. K. Kar	2006	Fabrication of ABS-Alumina Nanocomposites", Indo-Japan Workshop on Nanotechnology composites	IIT Kanpur.
15.	Piyush B Tailor, Ahankari S. Suresh Rao, Ramkumar J. and Kamal K. Kar	2006	Abrasive Flow Machining of Carbon-Carbon Composites using Styrene Butadiene Rubber	Nano Finishing, IRIkerala 2006, India
16.	Sivaswamy Giribaskar, Gouthama, J. Ramkumar and Rajesh Prasad	2006	Ultra-fine grained Metallic Materials by Severe Plastic Deformation	International Conference on Recent Advances in Materials and Processing), PSG College of Technology, Coimbatore
17.	Prasanth Kumar, Rajeev Kumar and J. Ramkumar	2007	High Strength joints using GRPF: An experimental Study	Engineering Design IN-2007, Bangalore, India.
18.	Piyushkumar B. Tailor, J. Ramkumar and Kamal K. Kar	2007	"Rheological Characterization of Uncured Alumina Filled Butyl Composite	ICADM, Madurai, India.
19.	Piyushkumar B. Tailor, J. ramkumar and Kamal. K. Kar	2007	Composite: A Deformable Nano finishing tool	International and INCCOM-6 conference on future trends in composite materials and processing, India.
20.	R. S. Pawade, S.S. Joshi, P.K. Bramankar and J. Ramkumar	2007	Effect of electrode shape and rotation on EDM performance of Inconel 718	International and INCCOM-6 conference on future trends in composite materials and processing, India.
21.	S. Giribaskar, Gouthama, J. Ramkumar and R. Prasad	2007.	TEM Studies on Recovery and Recrystallisation in SPD Processed Al-3%Mg Alloy	International Conference on Metals And Alloys: Past, Present And Future (METALLO-2007), Indian Institute of Technology, Kanpur,
22.	S. Giribaskar, Gouthama and J. Ramkumar	2007	Role of SiCP on the Microstructural	MMC International and INCCOM-6 Conference on Future Trends in Composite

			Evolution of ECAE Processed Al-10%SiCP	Materials and Processing (IINCCOM- 6), Indian Institute of Technology, Kanpur
23.	Sandeep Nair and J. Ramkumar	2008	State of the art Magnetic Abrasive Finishing	14th International Conference on Frontiers in Design and Manufacturing Engineering (ICDM), India.
24.	S. Aravindan and J. Ramkumar	2008	Tribological Performance of Nano Alumina Composites	International Conference on Sintering 2008, California, USA.
25.	Piyushkumar B Tailor, J. Ramkumar, Kamal K. Kar	2008	Rubber Composite: a Deformable Nano Finishing Tool for Viscoelastic Flow Finishing Process	ICCE, KUNMING CHINA.
26.	Nagahanumaiah, J. Ramkumar, Nick Glumac, S. G. Kapoor, R. E. De vor	2008	Characterization of plasma in Micro-EDM discharge using Optical Spectroscopy	ICOMM – 08, September 2008 Carnegie Mellon, US
27.	Anuj Kumar Garg, Nagahanumaiah, J. Ramkumar, Nick Glumac, S. G. Kapoor, R.E. De vor	2008	Understanding Gap Phenomena in Micro EDM process using underwater acoustics	IWMF, Chicago, US
28.	M. Ravi Sankar, V. K. Jain, J. Ramkumar, Kamal K. Kar	2008	Rheological characterization and performance evaluation of a new medium developed for abrasive flow finishing	2nd International and 23rd All India Manufacturing Technology, Design and Research conference, IIT Madras (India)
29.	R. Sandeep Nair, G. Karthikeyan, J. Ramkumar, Sunil Jha, Anil Varghese	2008	Development of MAF setup for finishing of ultra high speed shafts	2nd International and 23rd All India Manufacturing Technology, Design and Research Conference WHERE?
30.	S. Kanmani Subbu, J. Ramkumar, N. J. Vasa	2009	Investigation on Laser Shot Peening (LSP) of Ti alloys	International Conference on Emerging Research and Advances in Mechanical Engineering, Chennai, India
31.	G. Karthikeyan, J. Ramkumar	2009	Micro Fabrication through micro EDM	International Conference on Advanced Manufacturing And Automation Incama WHERE?
32.	S. Kanmani Subbu, J. Ramkumar, N. J. Vasa	2009	Parametric investigation on Laser shock processing (LSP) parameters using Dimensional Analysis, Design and Manufacturing Issues Relevant to Automotive and Allied Industries	IPRoMM-2009, Chennai, India
33.	G. Karthikeyan, J. Ramkumar, Shalabh	2009	Estimation of diameter during machining of Tungsten electrode by micro Block EDG process, Design and Manufacturing Issues Relevant to Automotive and Allied Industries	IPRoMM-2009, Chennai, India
34.	Tarun Mankad, Amit Banerjee, S. Dhamodaran, J. Ramkumar and V. N. Kulkarni	2009.	Dynamic Characterization of Nano Composite Pillars	ME Department Poster Presentation, IIT Kanpur,

35.	Mamilla Ravi Sankar, V. K. Jain and J. Ramkumar	2009	Experimental investigations into rotating workpiece abrasive flow finishing	International conference on Wear of Materials (WOM-09), Las Vegas, 2009.
36.	Amit Banerjee, Trun Mankad, S. Dhamodaran, J. Ramkumar, V. N. Kulkarni	2009	Exploring vibration aptitude and atto-gram mass sensing ability of FIB fabricated nano-pillars	International coferece cum workshop on nanosciece and nanotechnology, Ansal institute of technolgy, Gurgaon
37.	S. Dhamodaran, J. Ramkumar, V. N. Kulkarni	2009	Focused ion beam fabricated nano structures: Mass sensor to opto-electronics	Theme meeting on quantum structures, BARC, Mumbai,
38.	G. Karthikeyan, J. Ramkumar and S. Aravindan	2009	Dimensional Analysis of Tool Wear Rate in u-EDM Milling Process	COPEN 6, International Conference on Precision, Meso, Micro and Nano Engineering, Coimbatore
39.	Mamilla Ravi Sankar, J. Ramkumar and V. K. Jain	2009	Nano-finishing of metal matrix composites using polymer rheological abrasive medium	Processing and fabrication of advanced materials (PFAM18), Tohoku University, Sendai, Japan
40.	Vivek Kumar , A. K. Singhal, J. RamKumar , S. Aravindan, S. K. Malhotra	2009	Mechanical and Tribological behavior of Glass-Epoxy Composites Modified using XNBR Elastomer	TRIBO-INDIA Conference on Tribology of Automotive Systems, IIT Delhi
41.	T. V. K. Gupta, J. Ramkumar, N. S. Vyas	2009	A study on the effect of process parameters in blind pocket milling using Abrasive Water Jet Machining	6 th International Conference on Precision, Meso, Micro and Nano Manufacturing (COPEN6), 11-12 Dec. 2009, PSG College of Engineering, Coimbatore, pp. B28-32
42.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran	2010	Plasma characteristics of dry EDM	RAMTM-2010, National conference on Recent Advances in Manufacturing Technology and Management, Jadavpur University, Kolkata,19-20 Feb 10.
43.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran	2010	Plasma and Crater characteristics of dry EDM	RDMT-2010, National convension on Recent Developments in Manufacturing Technology and Management, NIT, Agartala,8-9 May 10.
44.	Vivek Kumar and J. Ramkumar	2010	Effect of Humidity on Impact Behavior of Glass Fiber/Epoxy Sandwich Structures	RDMT-2010, National convension on Recent Developments in Manufacturing Technology and Management, NIT, Agartala,8-9 May 10.
45.	M. Ravi Sankar, and J. Ramkumar	2010	High Speed Hard Turning With Minimum Quantity Lubrication	RDMT-2010, National convension on Recent Developments in Manufacturing Technology and Management, NIT, Agartala,8-9 May 10
46.	G. Karthikeyan, J. Ramkumar and S. Aravindan	2010	A Study on Tool Wear in Micro Electric Discharge Milling (Micro ED-milling) Process	RDMT-2010, National convension on Recent Developments in Manufacturing Technology and Management, NIT, Agartala,8-9 May 10.
47.	Kumar pallav and J. Ramkumar	2010	Micro -manufacturing processes: A Brief Overview	RDMT-2010, National convension on Recent Developments in Manufacturing Technology and Management, NIT, Agartala,8-9 May 10.
48.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran	2010	Invesigation of dry micro-EDM: single	International Forum on Micro Manufacturing (IFMM) 2010, Gifu, Japan, 20-23 October '10

			pulse discharge on silicon	
49.	S. Kanmani Subbu, Jitendra Kumar Kateiyar, J. Ramkumar,	2010	Dry Micro-Electric Discharge Deposition of Copper on Die steel: Effect of Pulse on-time	International Workshop on Micro Factories (IWFm) 2010, 7th International Workshop on Microfactories, Daejeon Convention Centre, Korea, 24-27 October '10
50.	S. Kanmani Subbu, J. Ramkumar, S. Dhamodaran, and Sujith Sagar	2010	Investigating Non Conventional Machining of Silicon	3rd International & 24 th AIMTDR-2010, Andra Pradesh, India,13-15 December '10
51.	Kumar Pallv, J. Ramkumar, Nagahanumaiah, and Kornel F. Ehmman	2010	Numerical Simulation of the Laser Induced Plasma Micro-machining Process (LIP-MM)	(IWFm) 2010, 7th International Workshop on Microfactories, Daejeon Convention Centre, Korea, 24-27 October '10
52.	Kumar Pallv, J. Ramkumar, Nagahanumaiah, and Kornel F. Ehmman	2010	Comparative Assessment of the Laser Induced Plasma Micro-machining (LIP-MM) and the Micro-EDM Process	International Forum on Micro Manufacturing (IFMM) 2010, Gifu, Japan, 20-23 October '10
53.	M. Ravi Sankar, V. K. Jain and J. Ramkumar	2010	Dependence of AFF process on Rheological Characteristics of Soft styrene based organic polymer abrasive medium	3rd International and 24th All India Manufacturing Technology Design and Research Conference, Andhra University, Visakhapatnam, December13-15, 2010.
54.	G. Karthikeyan, K. Sambhav, D. Santhosh and J. Ramkumar	2010	CAD Based Modeling and Prediction of Tool Wear in μ ED-milling	3rd International and 24th All India Manufacturing Technology Design and Research Conference, Andhra University, Visakhapatnam, December13-15, 2010.
55.	Rajesh Kr. Porwal, Vinod Yadava, J. Ramkumar	2011	Multi-Objective Optimization of Hole Drilling Electro Discharge Micromachining Process	Proceedings of the International conference on precision, Meso, Micro and Nano engineering (COPEN-2011)
56.	Omprakash Rawat , S. Kanmani Subbu, J. Ramkumar, and S.Aravindan	2011	Crater Diameter of Single Discharge Micro EDM: Modeling and Experimental Comparison	International conference on Advanced Materials and Processing (ICAMP-2011), R M K Engineering College, Chennai, India
57.	Omprakash Rawat, S. Kanmani Subbu. J. Ramkumar, and S. Dhamodaran	2011	Magnetic Field Assisted micro EDM– Simulation of Field Distribution and Experimental Investigation	<i>National Conference on Design and Manufacturing (NaConDM-2011)</i> , IIITD&M (Kancheepuram) 27-28, May 2011, pp. 997-992
58.	S. Kanmani Subbu, J. Ramkumar, and S. Dhamodaran	2011	Micro EDM on Silicon	26 th National Convention of Production Engineers and National Seminar on New Vistas Production Technologies, Jaipur, Rajasthan, India , pp.79
59.	S. Kanmani Subbu, Jitendra Kumar Kateiyar, A. Chalvane, J. Ramkumar, and S. Dhamodaran	2011	Fe-Cu Alloy Nano-particles Generation by Electric Discharge Machining	6 th International Conference on Micro Manufacturing (ICOMM-2011), Tokyo Denki University, Japan, March 7-10, 2011, pp. 213-218
60.	T. V. K. Gupta, J. Ramkumar, S.	2012	A Preliminary Investigation on the	International Conference on Innovations in Design and Manufacturing (InnDeM 2012),

	Nalinaksh, Vyas and Puneet Tandon		forces generated with process parameters during Abrasive Water Jet Milling on SS304	PDPM IITDM J,Dec.05-07, 2012 (paper No. 2032).
61.	T. V. K. Gupta, J. Ramkumar, S. Nalinaksh Vyas and Puneet Tandon	2012	Material removal rate prediction for blind pocket milling of SS304 using Abrasive Water Jet Machining Process	Hong Kong International Conference on Engineering and Applied Science (HKICEAS) Hong Kong, (Paper No. 411)
62.	S. Kanmani Subbu, S. Dhamodaran, and J. Ramkumar	2012	Investigating of Single Discharge Dry Micro EDM on Different Planes of Silicon	4 th International & 25 th (AIMTDR-2012), Jadhavpur university, Kolkata, India
63.	S. Kanmani Subbu, S. Dhamodaran, and J. Ramkumar	2012	Micro-electric Discharge Plasma: Characterization and Applications	International conference on Microactuators and Micromechanisms (MAMM-2012), CSIR-CMERI, Durgapur, India
64.	Rajesh Kr. Porwal, Vinod Yadava and J. Ramkumar	2013	Optimization of process parameters in the hole sinking electro discharge micromachining using GRA-PCA	Proceedings of the International conference on Recent Advances in Material Processing Technology, (RAMPT-13).
65.	T V K Gupta, J. Ramkumar, Puneet Tandon, N S Vyas	2013	Role of process parameters on pocket milling with Abrasive Water Jet Machining technique	International Conference on Aerospace, Mechanical, Automotive and Materials Engineering, ICAMAME 2013, Dubai, UAE. Published in Word Academy of Science, Engineering and Technology, Issue 82, October, 2013, pp.1374-1379.
66.	Gupta, T.V.K., Puneet Tandon, Ramkumar J. and N.S Vyas	2013	Influence of process parameters on the dimensions of the channels prepared using abrasive water jet machining	2013 ASME International Mechanical Engineering Congress and Exposition (IMECHE), November 15-21, 2013, San Diego, CA, USA, Ref No. IMECE-64063
67.	Vaibhav shukla, S. Nadeem, S. Kanmani Subbu and J. Ramkumar	2013	Fabrication of complex Micro-channels by micro EDM Milling	2013 ASME International Mechanical Engineering Congress and Exposition (IMECHE), November 15-21, 2013, San Diego, CA, USA, Ref No. IMECE-64031
68.	Syed Nadeem Aktar, J. Ramkumar and S. Antharama krishnan	2013	Microfeature edge quality optimization in excimer laser ablation of metallic film	2013 ASME International Mechanical Engineering Congress and Exposition (IMECHE), November 15-21, 2013, San Diego, CA, USA, Ref No. IMECE-64149
69.	Kanmani Subbu, J. Ramkumar & S. Damodharan	2013	Effect of magnetic field in single discharge dry micro EDM on Si and Stainless steel	2013 ASME International Mechanical Engineering Congress and Exposition (IMECHE), November 15-21, 2013, San Diego, CA, USA, Ref No. IMECE-67138
70.	S. Kanmani Subbu, S. Dhamodaran, and J.Ramkumar	2013	EDM and μ -EDM Plasma Parameters Measurement: Overview	A National Conference on Manufacturing: Vision for Future (MVF-2013), IIT Guwahati
71.	Ravi Kumar Dungroth J. Ramkumar, and S. Kanmani Subbu	2013	Multi Objective Optimization of EDM Parameters on Machining Carbon-Carbon Composites	<i>An International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-8)</i>

			using RSM-GRA Approach	
72.	Sachin Singh, M. Ravi Sankar, V. K. Jain and J. Ramkumar	2014	Modeling of Finishing Forces and Surface Roughness in Abrasive Flow Finishing (AFF) Process Using Rheological Properties	5th International and 26th All India Manufacturing Technology, Design and Research Conference, IIT Guwahati, Dec 2014
73.	T. V. K. Gupta, J. Ramkumar, Puneet Tandon and N. S. Vyas	2014	Application of Grey Relational Analysis for Geometrical Characteristics in Abrasive Water Jet Milled Channels	5th International and 26th All India Manufacturing Technology, Design and Research Conference, IIT Guwahati, Dec 2014
74.	J.M. Jafferson, P. Hariharan and J. Ram Kumar	2014	Effect of Layer Thickness in Micro Electric Discharge Milling: An Experimental Investigation	5th International and 26th All India Manufacturing Technology, Design and Research Conference, IIT Guwahati, Dec 2014
75.	Syed Nadeem Akhtar, Shashank Sharma and J. Ramkumar	2014	Fabrication of micro lens array by excimer laser micromachining	5th International and 26th All India Manufacturing Technology, Design and Research Conference, IIT Guwahati, Dec 2014
76.	Gupta, T.V.K., Ramkumar J., Puneet Tandon and Vyas, N.S.	2014	“State of the art on Abrasive Water Jet milling: Challenges ahead”	ICMMM 2014 International Colloquium on Materials, Manufacturing and Metrology, August 8-9, 2014, IIT Madras. Ref No. ICM2586
77.	Ajay Vardhaman B.S, DurweshJhodkar, J. Ramkumar, M. Amarnath, H. Chelladurai	2014	Tool wear assessment in turning AISI 1040 steel using cutting force signature analysis	International Colloquium on Materials, Manufacturing and Metrology (ICMMM-14), IIT Madras. 2014
78.	J. Ramkumar, Syed Nadeem Akhtar and S. A. Ramakrishna	2015	Large area texturing of metal surfaces	3rd International Conference on Laser and Plasma Applications in Materials Science, Jan 2015, Kolkata.
79.	Leeladhar Nagdeve, V. K. Jain and J. Ramkumar	2015	Nano-finishing of freeform/Sculptured surfaces: A review	International conference on Precision, Meso, Micro and Nano Engineering (COPEN ⁹)
80.	Vishal Kumar, J. Ramkumar, R. K. Gupta	2015	Experimental Investigations on Micro-hole EDM Drilling in γ -TiAl	International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-9)
81.	F. Islam, J. Ramkumar, A.S. Milani	2015	Prediction and quantification of damage during milling of unidirectional carbon fiber reinforced plastics (CFRPs)	International conf. on manufacturing of advanced composites (ICMAC 2015), June 24-25, Bristol, UK
82.	Sharma, S., Akhtar, S. N., & Ramkumar, J.	2015	A study on millisecond underwater laser ablation of thin titanium sheets	proceedings of COPEN15 IIT Bombay.
83.	Leeladhar Nagdeve, V. K. Jain and J. Ramkumar	2015	Nano-finishing of freeform/sculptured surfaces	International conference on precision , meso , micro and Nano Engineering (COPEN9 2015)
83.	Leeladhar Nagdeve, V. K. Jain and J. Ramkumar	2016	Experimental Investigations into nano-finishing of	joint18th CIRP International conference on Electro Physical and Chemical Machining (ISEM XVIII) (Accepted)

			freeform surfaces using negative replica of the knee joint	
84.	Divyansh Patel, V. K. Jain, J. Ramkumar, Ankit Shrivastava	2016	Preliminary study of effect of surface texturing on hypodermic needles	International conference on nanotechnology for better living (Accepted)
85.	Hitendra Kumar, J. Ramkumar, K. S. Venkatesh	2016	Micro/Nano Surface texture evaluation by reconstruction from images using approximated BRDF model	International conference on nanotechnology for better living (Accepted)
86.	Sahil Kajal , V.K Jain, J.Ramkumar, Leeladhar Nagdeve		Experimental investigation into international abrasive finishing of a helical grooves of a revolver barrel	6 th international & 27 th all india manufacturing technology, design and Research (AIMTDR 2016)
86.	Abhilasha Singh, Divyansh Patel, J. Ramkumar, K. Balani	2016	Micro-channels fabrication through pulsed Nd:YAG laser on Ti6Al4V	International conference on nanotechnology for better living (Accepted)
87.	Vishal Kumar, J. Ramkumar, R. K. Gupta	2016	Optimization Study of Electric Discharge Trepanning Process on CP70	International conference on nanotechnology for better living (Accepted)
88.	Prashnath K, Divyansh Patel, V. K. Jain, J. Ramkumar	2016	Finite element analysis for shape prediction of micro-dimples produced through ECMM	International conference on nanotechnology for better living (Accepted)
89.	G. Parameswari Guides: Dr.V. K . Jain, Dr. J Ramkumar	2016	Magneto rheological finishing of Ti-4Al-6V disc	International conference on nanotechnology for better living (Accepted)
90.	A.S. Milani, D. Frey, R. Seethaler, J. Ramkumar, B. Crawford, H. Teimouri, F. Islam, P. Pal	2016	A roadmap to account for potential uncertainties in non-destructive testing during structural health monitoring of composites	(2016) 31st ASC Technical Conference and ASTM D30 Meeting, September 19-22, Williamsburg, USA
91.	G.Parameswari, V.K.Jain, J. Ramkumar	2016	Development of nano finishing technique for flat and curved plates	Proc. of the Intl. Conf. on Nanotechnology for Better Living, 2016.
92.	G. Parameswari, V.K.Jain, J. Ramkumar	2016	Experimental investigations into nano finishing technique for flat ti-6al-4v disc	Conference AIMTDR 2016
93.	Sharma, S., Akhtar, S. N., Pachaury, Y., & Ramkumar, J. (2015)	2016	A study on hydrodynamics of melt expulsion in Nd:YAG laser drilling of titanium	Proceedings of COMSOL CONFERENCE 2015, Pune India
94.	Leeladhar Nagdeve, V. K. Jain, J. Ramkumar	2016	Experimental investigation into nano-finishing of freedom surfaces using	International conference on electro physical and chemical machining (ISEM XVIII)

			negative replica of the knee joint	
95.	Leeladhar Nagdeve, V. K. Jain, J. Ramkumar	2016	Experimental investigation into Nano finishing of micro-channels	3 rd international conference on Nanotechnology for better living
94.	Ajay Vardhaman B.S, DurweshJhodkar, J. Ramkumar, M. Amarnath, H. Chelladura	2015	Examining the Role of Cutting Fluids in Machining AISI 1040 Steel Using Tungsten Carbide Insert under Minimal Quantity Lubrication Condition	Institute of Engineers (IIE Conferences), London (UK),2015.
96.	Gaganpreet Singh, Shashank Sharma, Kartar Singh and J. Ramkumar	2016	Feasibility study of micromachining of silicon wafer with excimer Laser using COMSOL multiphysics	Proc. Of the Intl. Conf. on Nanotechnology for Better Living, 2016
97.	Abhilasha Singh, Divyansh Patel, J. Ramkumar, Kantesh Balani	2016	Viscosity Affecting Wettability of Laser Textured Surfaces	AIMTDR 2016,College of Engineering Pune
98.	Mahavir Singh, V.K. Jain and J. Ramkumar	2016	Experimental Investigations into Turbulated Holes using Shaped Tube Electrochemical Machining	AIMTDR 2016,College of Engineering Pune
99.	Leeladhar Nagdeve, V. K. Jain, J. Ramkumar	2016	Nano-finishing of freeform surfaces a review	Journal of institute of engineer,India (IEI), production Div 2016
100.	Leeladhar Nagdeve, V. K. Jain, J. Ramkumar	2016	Preliminary investigation into Nano-finishing of freeform surface (femoral component) using novel finishing fixture	6 th international & 24 th all India Manufacturing technology, design and research (AIMTDR 2016)
101.	Vyom Sharma, V.K. Jain and J. Ramkumar	2016	Experimental Analysis of Wire Electrochemical Machining Process	AIMTDR 2016,College of Engineering Pune
102.	Gaganpreet Singh,J. Ramkumar, S. Anantha Ramakrishnan	2017	Micromachining of Silicon using Excimer laser for MEMS applications	Proceedings of 10th international conference on Precision, Meso, Micro and Nano Engineering (COPEN 10)
103.	Y.K. Penke, G. Anantharaman, J. Ramkumar, K.K. Kar	2017	Redox active Mn-Al-Fe ternary metal oxide Nano adsorbent for Arsenic Remediation and Mitigation by Significant As (0) formation behavior	5th Nano Today Conference, December 6-10, 2017 (Hawaii, USA)
104.	B.S. Ajay Vardhaman, M. Amarnath, J. Ramkumar	2017	Experimental investigation on the tribological behaviour of nano boric acid and FMWCNTs as oil additives on bronze alloy surface	International Conference on Manufacturing Technology and Simulation (ICMTS), IIT Madras 2017

105.	T. U. Siddiqui, J. Ramkumar	2017	Micro-wire electric discharge machining of Mg alloy used in biodegradable orthopaedic implants	ICEMS 2017
106.	Singh, A., Philip, D., Ramkumar, J.	2017	A review on work environment quality in shop floor: Impact of aerosols	IEEE Region 10 Humanitarian Technology Conference, R10-HTC 2017: Proceedings
107.	Singh, A., Singh, S., Philip, D., Ramkumar, J.	2017	A review on NIOSH lifting equation applicability	IEEE Region 10 Humanitarian Technology Conference, R10-HTC 2017: Proceedings
108.	H. Sheokand, G. Singh, S. Ghosh, M. Saikia, K.V. Srivastava, J. Ramkumar, S. Anantha Ramakrishna	2018	An Optically Transparent Microwave Broadband Absorber using Resistive Sheet	National Conference on Communication
109.	Mahavir Singh, Devesh Kumar Chaubey, J. Ramkumar	2018	Numerical Simulation of the Micro-EDM Process using Multi-Spark Approach	Annual Technical Volume of Production Engg. Division Board: The Institute of Engineers (India), Vol.III 2018

Details and status of patents filed/accepted and commercialized(International, National):

S.N	Details of Patent	Patent file no.	status	National/International
1	Butt Joint using Reinforced Adhesives	679/DEL/2007		National
2	Magnetic Float Levitative Finishing	883/DEL/2007	Accepted	National
3	Fabrication of Jute Fiber Sandwich Composites	1688/DEL/2008	Accepted	National
4	A Device for Magnetic Abrasive Finishing of Multiple Workpieces and Magnetic Abrasive Finishing Process	2309/DEL/2008	Accepted	National
5	Rotatory Abrasive Flow Finishing Process for Finishing and Texturing of Internal and External Surfaces of Hard and Composite Materials and an Apparatus Therefore	811/DEL/2009		National
6	A Multipurpose Transporter with Modular Configuration	232708	Accepted	National

7	A Multipurpose Transporter with Modular Configuration	3157/DEL/2010	Accepted	National
8	The Drift-battery Operated Campus Vehicle	234987	Accepted	National
9	A Self Propelled Stair Climbing Wheel Chair	2097/DEL/2011		National
10	Stair Climbing Wheel Chair	238758	Accepted	National
11	Systems and Methods for Dry Processing Fabrication of Binary Masks with Arbitrary Shapes for Ultra- violet Laser Micromachining	US- 14/408,721		National
12	Systems and Methods for Dry Processing Fabrication of Binary Masks with Arbitrary Shapes for Ultra- violet Laser Micromachining	1858/DEL/2012		National
13	A Versatile Tube-well Hand Pump with Energy Harvested Water Filtration	2727/Del/2012		National
14	Hand Pump	249921	Accepted	National
15	Interactive Board Game	249922	Accepted	National
16	A Green Process for Fabrication of Binary Masks with Isolated Features for Micromachining and Photolithography	79/DEL/2013		National
17	A Millimetre Level Measuring Ruler for Measuring by Touch	650/DEL/2013		National
18	A Medium for Nano-finishing of Complex Component's Internal/external Surfaces and a Method for Preparation Thereof	712/DEL/2013		National
19	Tool for Measuring and Drawing Quadrilateral	258028	Accepted	National
20	Angular Clock for Measuring Time and Angle	258030	Accepted	National

21	Angular Clock for Measuring Time and Angle	258030	Accepted	National
22	A Hanger to Hang a Plurality of Garments for Drying, Organizing and Exhibition/showcasing	3552/DEL/2013		National
23	A Green Process for Fabrication of Binary Masks with Isolated Features for Micromachining and Photolithography	US - 14/760,394		National
24	A Green Process for Fabrication of Binary Masks with Isolated Features for Micromachining and Photolithography	US - 14/760,394		National
25	A Phototherapy Unit for Treatment of Hyperbilirubinemia or Neo-natal Jaundice of Multiple Babies	873/DEL/2014		National
26	A Bronchotrainer Device	920/DEL/2014		National
27	Microfluidic Devices and Methods for Their Preparation Use	2232/DEL/2014		National
28	Polymeric Nanocomposite Films with Embedded Channels and Methods of Their Preparation and Use	US - 15/115,263		National
29	A Hydrogen/methanol Based Low Working Temperature Polymer Electrolyte Membrane Fuel Cell	1586/DEL/2015	Accepted	National
30	Microfluidic Devices and Methods for Their Preparation Use	US - 14/818,250		National
31	Automatic Mechanical Pricking Machine	2898/DEL/2015		National
32	Peltify Wearable Device for Thermoregulation	277649	Accepted	National

33	Business Purpose Utility Vehicle- vegetable Cart	277648	Accepted	National
34	Business Purpose Utility Vehicle- ironing Cart	277651	Accepted	National
35	Business Purpose Utility Vehicle- saloon	277652	Accepted	National
36	Packaging System for Large Caliber Am38munition	280638	Accepted	National
37	Multicolor Interchangable Flaps and Convertible Form of Bag	201611023368		National
38	A Wearable Device for Maintaining Body Temperature	201611031350		National
39	Samaritan (Phototherapy Unit)	287986	Accepted	National
40	Bicycle for Carrying Food Articles	289821	Accepted	National
41	Milkman Bicycle	289822	Accepted	National
42	Bicycle for Vegetable Transport	289823	Accepted	National
43	Parametric Anisotropic BRDF for 3D Surface Reconstruction and Micro Texture Evaluation	201711001182		National
44	A Novel Viscoelastic Media Used for a Nano-finishing of Materials Through Abrasive Flow Machining Process and a Method of Manufacture Thereof	591/DEL/2007		National
45	Irilla (Lamp)	292052	Accepted	National
46	A Packing Case for One or More Large-caliber Ammunition Shells	201711043201	Accepted	National
47	System, Method and Device for Responsive Advancement of Mandible	201811009344	Accepted	National
48	A Sample Extraction Device and Operator Thereof	201811009657	Accepted	National
49	Apparatus for Finishing of Ball using Abrasive Flow Finishing	201811016131	Accepted	National

50	Automated Subglottic Aspiration Device	201811016906	Accepted	National
51	Controlled Micro-texturing of Transparent Conducting Oxide Thin Films for Uniform Transparency	201811038031	Accepted	National
52	A Microwave Absorbing Metamaterial Based Wearable and a Preparation Method Thereof	201811038763	Accepted	National
53	Mn-Al-Fe Impregnated RGO Hybrid Composite for Arsenic Adsorption and its Sludge as Super-capacitor	201911002684	Accepted	National
54	Large Area Micro-Texturing on Free-Form Surfaces by Flexible-Electrode Through-Mask Electrochemical Machining	201911022950	Accepted	National
55	Surface Finishing Composition For AFM Process and AFM Process Using the Same	201911029291	Accepted	National
56	A Process for Synthesis of Nano Particles of $\text{LiNi}_{0.5}\text{Co}_{0.5}\text{PO}_4$ (LNCP) and Use Thereof	201911049732	Accepted	National
57	Protective Layer for Microwave Metamaterial Absorbers and Method Thereof	201911050380	Accepted	National
58	Multipurpose Proctoscope: Nested Type	325057-001	Accepted	National
59	Multipurpose Proctoscope: Hinge Type	325093-001	Accepted	National
60	Amla Grating Machine	325203-001	Accepted	National
61	Weight Training Device for Cramps, Medical Injury & Exercise in Leg	327146-001	Accepted	National
62	Apparatus for Performing an Electrochemical Micro-machining Process	202011012055	Accepted	National

63	Multipurpose Extension Key to 329190-001 reduce human contacts in public Places	Accepted	National
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Major events/workshops/courses organized:

Sr. No.	Events/Workshops/courses	Date
1	Hands on Training Program on Medical Devices Prototyping	Jan 13 - Jan 17, 2020
2	CCE course on Manufacturing Process Pedagogy	Aug 21 - Aug 25, 2019
3	IE seminar on Reverse Manufacturing	Aug 24 - Aug 25, 2019
4	Welding Technology training with Fronius International	Aug 10 - Aug 11, 2019
5	Smart India Hackathon (SIH 2019; hardware)	Jul 8 - Jul 13, 2019
6	Smart India Hackathon (SIH 2019; software)	Mar 2 - Mar 3, 2019
7	Smart India Hackathon (SIH 2018; hardware)	Jun 18 - Jun 19, 2018
8	MOOCs (NPTEL) course on Rapid Manufacturing	Jan 28 - Apr 28, 2019
9	MOOCs (NPTEL) course on Product Design and Manufacturing	Jan 28 - Apr 28, 2019
10	MOOCs (NPTEL) course on Engineering Metrology	Jul 22 - Oct 28, 2019
11	MOOCs (NPTEL) course on Manufacturing of Composites	Aug 19 - Oct 28, 2019
12	Workshop on Design Thinking	Feb 25- Feb 27, 2019
13	GIAN Course-Laser Materials Processing: Fundamentals and Applications	Feb 19- Feb 23, 2018
14	GIAN Course: Fundamentals of Micromachining	Aug 14- Aug 21, 2017
15	Short term QIP course on micromanufacturing	Jun 29 - Jul 03, 2015
16	Workshop on Statistical Analysis for Engineers	May 04 - May 08, 2015
17	Short term QIP course on CNC Machining	Apr 29 - May 03, 2015
18	Interactive Session for “ Chairmen & Honorary Secretaries state & Local Centers, IEI	Mar 16 - Mar 20, 2015
19	Workshop on Micro & Nano fabrication	Mar 16 - Mar 20, 2015
20	Short term QIP course on Power Generation Technologies: Present Status & Future Directions	Dec 01 - Dec 05, 2014
21	Short term QIP course on CNC Machining	Nov 12 - Nov 14, 2014
22	Short term QIP course on CNC Machining	Jul 19 - Jul 21, 2014
23	Short term QIP course on CNC Machining	Oct 05 - Oct 09, 2013
24	Workshop on Statistical Analysis for Engineers	Jul 02 - Jul 06, 2012
25	Workshop on Micro & Nano fabrication	Feb 27 - Mar 02, 2012
26	Workshop on Micro & Nano fabrication	Mar 22 - Mar 26, 2010
27	Workshop on Recent Trends in Advanced Nanocomposites	Nov 06 - Nov 10, 2006

28	Workshop on Recent Trends in Advanced Composites	Jul 18 - Jul 22, 2005
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29	Workshop on Advanced Machining Processes	Jun 18 - Jun 23, 2004
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