Publication
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Mechanical Engineering
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Sl	Title of the paper	Author	Publication Details/Vol.No./ISSN No./Page No.
1	Effect of two-level pedicle-screw fixation with different rod materials on lumbar spine: A finite element study	Dr. Jayanta Kumar Biswas	Journal of Orthopaedic Science. Mar;23(2):258-265. DOI:10.1016/j.jos.2017.10.009
2	Artificial inter-vertebral disc replacement to provide dynamic stability in the lumbar spine: A finite element study.	Dr. Jayanta Kumar Biswas	Journal of long term effects of medical implants,28(2):101-109. DOI: 10.1615/JLongTermEffMedImplants.2018025397
3	Optimal selection of dental implant for different bone conditions based on the mechanical response	Dr. Jayanta Kumar Biswas	Acta of Bioengineering and Biomechanics, Vol. 19, No. 2, 11-20. DOI: 10.5277/ABB-00530-2015-03
4	Design factors of lumbar pedicle screws under bending load: A finite element analysis	Dr. Jayanta Kumar Biswas	*Biocybernetics and Biomedical Engineering*.*39*(1),pp.52-62. DOI: 10.1016/j.bbe.2018.10.003
5	Design of Patient Specific Spinal Implant (Pedicle Screw Fixation) using FE Analysis and Soft Computing Techniques	Dr. Jayanta Kumar Biswas	*Current Medical Imaging*, Vol. 16, No. 4, 371-382.DOI: 10.2174/1573405614666181018122538
6	Biomechanical performance of a modified design of dynamic cervical implant compared to conventional ball and socket design of an artificial intervertebral disc implant: A finite element study	Dr. Jayanta Kumar Biswas	Journal of Mechanics in Medicine and Biology. Vol. 19No.(04),1950017.DOI:10.1142/S0219519419500179
7	Effect of range of motion (ROM) for pedicle-screw fixation on lumbar spine with rigid and semi-rigid rod materials: A finite element study	Dr. Jayanta Kumar Biswas	Materials Science and Engineering 402 (2018) 012146 doi:10.1088/1757-899X/402/1/012146
8	Stress distribution of overdenture using odd number implants–A Finite Element Study	Dr. Jayanta Kumar Biswas	Journal of the mechanical behavior of biomedical materials, 98, pp.369-382. DOI:10.1016/j.jmbbm.2019.06.030
9	EFFECT OF PEDICLE-SCREW FIXATION IN LUMBAR SPINE AT L3-L5 LEVEL: A FINITE ELEMENT STUDY	Dr. Jayanta Kumar Biswas	Journal of the Mississippi Academy of Sciences, 63(S1), pp.266-275.
10	Optimization of spinal implant screw for lower vertebra through finite element studies	Dr. Jayanta Kumar Biswas	Journal of long term effects of medical implants,24(2-3):99-108.DOI:10.1615/JLongTermEffMedImplants.2014006264
11	Effects of cervical disc replacement and anterior fusion for different bone conditions: A finite element study	Dr. Jayanta Kumar Biswas	International Journal for Multiscale Computational Engineering. 17(4), 411-427. DOI: 10.1615/IntJMultCompEng.2019030212.
12	A comparison of rigid, semi-rigid and flexible spinal stabilization devices: A Finite Element Study	Dr. Jayanta Kumar Biswas	Journal of Engineering in Medicine,233(12):1292-1298. DOI: 10.1177/0954411919880694
13	Motion analysis of lumbar vertebrae for different rod materials and flexible rod device – An experimental and finite element study	Dr. Jayanta Kumar	Biocybernetics and Biomedical Engineering. 40(1):415-425. DOI: 10.1016/j.bbe.2020.01.005

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14	Design and development of a novel expanding flexible rod device (FRD) for stability in the lumbar spine: A finite element study	Dr. Jayanta Kumar Biswas	The International Journal of Articial Organs. P0391398820917390. DOI: 10.1177/0391398820917390
15	Biomechanics of Spinal Implants – A Review	Dr. Jayanta Kumar Biswas	BiomedicalPhysics&Engineering Express. Acceptedon26-april-2020. DOI:https://doi.org/10.1088/2057-1976/ab9dd2
16	Symbollic Regression Metamodel based Optimal Design of Patient Specific Spinal Implant (Pedicle Screw Fixation)	Dr. Jayanta Kumar Biswas	EngineeringwithComputers. Acceptedon09-June-2020.https://doi.org/10.1007/s00366-020-01090-z
17	Renewability Assessment of a Production System	Dr. Sandip Ghosh	Encyclopedia of Renewable and Sustainable Materials, Volume 3, 2020, Pages 702-714 https://doi.org/10.1016/B978-0-12-803581-8.11017-3
18	Experimental validation of RELAP5 predictions for subcooled leak flow through narrow circumferential slits	Dr. Sandip Ghosh	Annals of Nuclear Energy 75:507-515 DOI: 10.1016/j.anucene.2014.09.004
19	An experimental analysis of subcooled leakage flow through slits from high pressure high temperature pipelines	Dr. Sandip Ghosh	International Journal of Pressure Vessels and Piping 88(8-9):281-289 DOI: 10.1016/j.ijpvp.2011.05.008
20	Modeling and Simulation of subcooled coolant loss through circumferential pipe leakage	Dr. Sandip Ghosh	ASME J. of Nuclear Rad Sci., Accepted June 2020.
21	Thermal-hydraulic Code prediction of primary loop leakage in NPP	Dr. Sandip Ghosh	Journal of Emerging Technologies and Innovative Research 6 (5), 162-167
22	An Experimental Leak Test Facility for Subcooled Water leakages	Dr. Sandip Ghosh	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), ISSN(E): 2249-8001, Vol.4,Issue5,Oct2014,1-12
23	Estimation of leak flow through slits with code RELAP5	Dr. Sandip Ghosh	Fourth national conference on nuclear reactor technology: emerging trends in nuclear safety, Mumbai (India); 4-6 Mar 2011
24	Saha, S.K., Ghosh S., Mukhopadhyay D., Mondal S. Experimental Investigation of Subcooled Critical FlowThrough Slits	Dr. Sandip Ghosh	Proceedings of the ISHMT -ASME Heat and Mass Transfer Conference, January 4-6,2010, Mumbai.
25	Measurement and analysis of critical leak flow rates through slit using high-pressure high temperature leak flow measurement facility at Jadavpur University and Code Validation	Dr. Sandip Ghosh	19th National & 8th International ISHMT-ASME Heat and Mass transfer Conference, NHT 26, JNTU Hyderabad,2008
26	A Computational Study of Various Cast Iron Fin Performance	Dr. Sandip Ghosh	International Journal of Innovative Science and Research Technology 3(5), 5
27	An experimental investigation on hardness and microstructure of heat treated EN 9 stee	Palash Biswas	IOP Conference Series: Materials Science and Engineering, Volume 225, conference 1. DOI: 10.1088/1757-899X/225/1/012055
28	Effect of heat treatment on microstructure behavior and hardness of EN 8 steel	Palash Biswas	IOP Conf. Series: Materials Science and Engineering 377 (2018) 012065 doi:10.1088/1757-

			899X/377/1/012065
29	Motion analysis of lumbar vertebrae for different rod materials and flexible rod device – An experimental and finite element study	Palash Biswas	Biocybernetics and Biomedical Engineering. 40(1):415-425. DOI: 10.1016/j.bbe.2020.01.005
30	Design and development of a novel expanding flexible rod device (FRD) for stability in the lumbar spine: A finite element study	Palash Biswas	The Internanonal Journal of Articial Organs. P0391398820917390. DOI: 10.1177/0391398820917390
31	An Experimental Investigation on Development of Miniature Spur GearbyWEDMofInconel718	Thia Paul	AIMTDR-2016, ISBN-978-93-86256-27-0pp.1523-1527,16-18/12/2016at College of Engineering, Pune.
32	Modeling and Analysis of various errors of Miniature Spur Gear in Wire cut EDM of Inconel-718	Thia Paul	COPEN-2017, ISBN-978-93-80689-28-9,pp.619-622,7-9 thDec,2017atIITMadras
33	An Experimental Investigation on Surface Topography of Miniature Spur Gear by WEDM of Inconel 718	Thia Paul	Int. Conf. on Prec., Meso, Micro & Nano Engg. DOI:10.1504/IJPTECH.2020.10027449
34	Optimization of Process Parameters on Abrasive Jet Machining of Ceramic	Thia Paul	In *Advances in Materials and Manufacturing Engineering*, pp. 477-483. Springer, Singapore, 2020.
35	Development and Parametric Optimization of Abrasive Jet Machining Setup	Thia Paul	*Materials Today: Proceedings*, *22*, 2306-2315. https://doi.org/10.1016/j.matpr.2020.03.352
36	Design and development of a novel expanding flexible rod device (FRD) for stability in the lumbar spine: A finite element study	Shishir Biswas	The International Journal of Articial Organs. P0391398820917390. DOI: 10.1177/0391398820917390
37	Effect of Depth of Cut on Grindability of Inconel 600	Shishir Biswas	Proceedings of the 1st International Conference on Mechanical and Materials Science Engineering AIP Conf. Proc. 2018, 020008-1–020008-6; https://doi.org/10.1063/1.5058245
38	Comparison of low wind speed aerodynamics of unsymmetrical blade H-Darrieus rotors-blade camber and curvature signatures for performance improvement	Dr. Anal RanjanSengupta	Renewable Energy, Vol.139,pp.1412-1427,2019,DOI:10.1016/j.renene.2019.03.054
39	Investigations of H-Darrieus rotors for different blade parameters at low wind speeds	Dr. Anal RanjanSengupta	*Wind and Structures, An International Journal*, Vol. 25, No. 6, pp. 551-567, 2017,DOI: 10.12989/was.2017.25.6.551
40	The aerodynamics of high solidity unsymmetrical and symmetrical blade H-Darrieus rotors in low wind speed conditions	Dr. Anal RanjanSengupta	*Journal of Renewable and Sustainable Energy*, Vol. 9, Issue 4, pp. 043307 (1-11), 2017,DOI: 10.1063/1.4999965
41	Studies of some high solidity symmetrical and unsymmetrical blade H-Darrieus rotors with respect to starting characteristics, dynamic performances and flow physics in low wind streams	Dr. Anal RanjanSengupta	*Renewable Energy*, Vol. 93, pp. 536-547, 2016, DOI:10.1016/j.renene.2016.03.029
42	A statistical analysis of Wind energy potential of Agartala (Tripura, India) based on different models- a case study	Dr. Anal RanjanSengupta	*International Journal of Advanced Information Science and Technology*, Vol. 4, No. 12, pp. 94-101, 2015
43	An analysis of Wind energy potential of Silchar (Assam, India) by using different models	Dr. Anal RanjanSengupta	*International Journal of Engineering and Management Sciences*, Vol. 7(2), pp. 100-107, 2016
44	Vertical Axis Wind Turbines in the Built Environment – A Review	Dr. Anal RanjanSengupta	*ISESCO Journal of Science and Technology*, Vol. 12, No. 22, pp. 11-16, 2016
45	Computational Fluid Dynamics Analysis of a	Dr. Anal	*All India Seminar on Scope and Opportunity of*

	Coaxial H-Savonius Vertical Axis Wind Rotor	RanjanSengupta	*small Hydro & Wind Power in NER of India,*02-03 August 2019, NIT Mizoram, Mizoram, India.
46	Computational Fluid Dynamics Analysis of Stove Systems for Cooking and Drying of Muga Silk	Dr. Anal RanjanSengupta	Emerging Science Journal, .Vol.3,Issue5,pp.285-292,2019. DOI: 10.28991/esj-2019-01191
47	CFD analysis of the performance of an H-Darrieus wind turbine having cavity blades	Dr. Anal RanjanSengupta	International Conference on Recent Advancements in Mechanical Engineering, 07-09February,2020,NITSilchar,Assam (Scopus)
48	Review of the hybrid H-Savonius rotor's design and performance	Dr. Anal RanjanSengupta	International Conference on Recent Advancements in Mechanical Engineering (ICRAME 2020), 07-09 February, 2020, NIT Silchar, Assam (Scopus).
49	Experimental Analysis of a High Solidity Cambered Blade H-Rotor in Low Wind Streams	Dr. Anal RanjanSengupta	*6th International and 43rd National Conference on Fluid Mechanics and Fluid Power*, December 15-17, 2016, MNNITA, Allahabad, U.P., India, ISBN 978-93-5267-408-4.
50	Comparative study of the performances of symmetrical and unsymmetrical blade H-Darrieus rotors in low wind speed conditions	Dr. Anal RanjanSengupta	*National Research Scholars' Conclave onInnovation and Recent Trends in Science and Technology (IRTST)*, April 2-3, 2016, NIT Srinagar
51	Review of experimental and computational analysis of coaxial H-Savonius vertical axis wind rotor	Dr. Anal RanjanSengupta	*2nd International conference on non-conventional energy (ICNNEE 2019)*, 18-19 October 2019, JIS College of Engineering, Kalyani, West Bengal, India, DOI: 10.2139/ssrn.3495796.
52	An experimental investigation on hardness and microstructure of heat treated EN 9 stee	DhirajMondal	IOP Conference Series: Materials Science and Engineering, Volume 225, conference 1. DOI: 10.1088/1757-899X/225/1/012055
53	Effect of heat treatment on microstructure behavior and hardness of EN 8 steel	DhirajMondal	IOP Conf. Series: Materials Science and Engineering 377 (2018) 012065 doi:10.1088/1757-899X/377/1/012065
58	Improving Grindability of Inconel-600 using alumina wheel through pneumatic barrier assisted fluid application	Anirban Sarkar	In *Advanced Materials Research*, vol. 622, pp. 394-398. Trans Tech Publications Ltd, 2013 DOI: 10.22485/jaei/2015/v85/i3-4/119859
59	AN EFFECTIVE GRINDING FLUID DELIVERY TECHNIQUE TO IMPROVE GRINDABILITY OF INCONEL-600	Anirban Sarkar	5 th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) December 12th–14th, 2014, IIT Guwahati, Assam, India DOI: 10.13140/RG.2.1.2874.5768
60	Improving Grindability of Titanium Grade 1 Using a Pneumatic Barrier	Anirban Sarkar	Reason - A Technical Journal ISSN 2277–1654 Vol - XII ● 2013 DOI: 10.21843/reas/2013/37-45/108159
61	Grinding Performance Using a Compound Nozzle Characterized by Small Discharge of Fluid	Anirban Sarkar	*Journal of the Association of Engineers, India, 83*(1), pp.28-35. DOI: 10.22485/jaei/2013/v83/i1/119916
62	Exploring Grindability of Titanium Grade 1 Using Silicon Carbide Wheel	Anirban Sarkar	*Reason-A Technical Magazine, 11, pp.39-46 DOI: 10.21843/reas/2012/29-38/108197*

LIST OF PAPERS PUBLISHED in 2017

Sl	Author (Including Co- author)	Title of the Paper	Detail of Paper (including Vol., Issue, Pg. No. Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/ISBN No/ISSN No.
1.	Kundu, A., Banerjee, A., Mukhopadhyay, M., Mahata, S., Mandal, B., Das, S.	An experimental investigation on grindability of Inconel using alumina wheel under dry condition	(ISSN (Print): 2395-1001), Vol. 2, Issue 1, pp. 149-153, 2016.	Global Journal on Advancement in Engineering and Science	National	(ISSN (Print): 2395-1001), Vol. 2,
2.	Banerjee, A., Mukhopadhyay, M., Kundu, A., Mahata, S., Mandal, B., Das, S	On the performance of dry grinding of titanium grade 1 using alumina wheel	(ISSN (Print): 2395-1001), Vol. 2, Issue 1, pp. 134-148, 2016	Global Journal on Advancement in Engineering and Science	National	(ISSN (Print): 2395-1001), Vol. 2, Issue 1
3	Mukhopadhyay, M., Banerjee, A., Kundu, A., Mahata, S., Mandal, B., Das, S	Experimental investigation on grindability of titanium grade 1 using silicon carbide wheel under dry condition	(ISSN (Print): 2395-1001), Vol. 2, Issue 1, pp. 129-133, 2016.	Global Journal on Advancement in Engineering and Science	National	(ISSN (Print): 2395-1001), Vol. 2, Issue 1,
4.	Kundu, A., Mahata S., Mukhopadhyay, M., Banerjee, A., Mandal, B., Das, S	Investigating the use of soap water in SQL mode during grinding titanium alloy"	ISBN:978-93-86256-40-9, CMERI Durgapur, pp. 7-10.	Proceedings of National Conference on Advanced Functional Materials Processing & Manufacturing,	National Conference	ISBN: 978-93-86256-40-9, pp. 7-10.

LIST OF PAPERS PUBLISHED in 2016

Sl	Author (Including Co- author)	Title of the Paper	Detail of Paper (including Vol., Issue, Pg. No. Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/ISBN No/ISSN No.
1	Thia Paul, Sadananda Chakraborty, Dipankar Bose	An experimental investigation on development of miniature spur gear by WEDM of Inconel 718	AIMTDR -2016 ISBN: 978-93-56256-27-0,PP-1523-1527,16/12/2016	conference	International	ISBN: 978-93-56256-27-0

LIST OF PAPERS PUBLISHED in 2015

Sl	Author (Including Co- author)	Title of the Paper	Detail of Paper (including Vol., Issue, Pg. No. Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/ISBN No/ISSN No.
1.	B.Bhunia ,P.Das,and S,Das	Numerical Simulation of Flow Behaviour of Molten Al-Si Alloy during High Pressure Die Casting Mould Filling of Knuckle Housing.	NWIC-2015,February 14 2015,	Conference	National	
2.	S. Banerjee , P. Dutta , and N. Nandi	"Numerical Study on Turbulent Swirling Flow Characteristics in a Cylinder"	Proceedings of the ICAMEI-2015 Conference. (ISBN: 978-93-84869-03-8), Pp 160-166.	Conference	An international conference	(ISBN: 978-93-84869-03-8), Pp 160-166.
3.	P. Dutta, S. Banerjee, A. Santra and N. Nandi	“Numerical Study on Pressure Drop Characteristics of Turbulent Flow in Pipe Bend”	Proceedings of Aspects of Mechanical Engineering and Technology for Industry, NERIST, Arunachal Pradesh, December 2014, Excel India Publication (ISBN: 978-93-83842-95-7), Vol 1, pp 381-386.	Conference	An international conference	(ISBN: 978-93-83842-95-7), Vol 1, pp 381-386.

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Sl	Author (Including Co- author)	Title of the Paper	Detail of Paper (including Vol., Issue, Pg. No. Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/ISBN No/ISSN No.
1	A. Dey, **K. Banerjee** and A. K. Mukhopadhyay	"Microplasma Sprayed Hydroxyapatite Coating: an Emerging Technology for Biomedical Application"		Materials Technology	International	DOI: 10.1179/1753555713Y.0000000104).
2	A. Dey, A. Sinha, **K. Banerjee** and A. K. Mukhopadhyay	"Tribological Studies of Microplasma Sprayed Hydroxyapatite Coating at Low Load",	-	Materials Technology	International	10.1179/1753555713Y.0000000105
3	**K. Banerjee**, A. Sinha, A. K. Mukhopadhyay and A. Dey,	"Microplasma sprayed HAp coating: a futuristic bioactive materials"		Conference	National	
4	**K. Banerjee**, A. Sinha, A. Dey and A. K. Mukhopadhyay	"Development, nanomechanical and nanotribological characterization of microplasma sprayed hydroxyapatite coating on Ti6Al4V substrate",	-	Conference	International	

LIST OF PAPERS PUBLISHED in 2013

Sl	Author (Including Co- author)	Title of the Paper	Detail of Paper (including Vol., Issue, Pg. No. Year)	Nature of Paper (Journal/Conference/Book Chapter)	National/ International	Journal Impact No./SCI Index/ISBN No/ISSN No.
1	P.K. Bardhan, S. Patra, G. Sutradhar,	Experimental Analysis of Density of Sintered SiCp Reinforced AMMCS Using the Response Surface Method	International Journal of Innovative Technology and Exploring Engineering (IJITEE) Volume-3, Issue-6, November 2013 1	Journal	International	ISSN: 2278-3075
2	Mallick, B., Biswas, S., Sarkar, B. R., Doloi, B. and Bhattacharyya, B.	Investigations into Performance Characteristics of Electrochemical Discharge Micro Machining Process	-	Conference, COPEN8	International	
3	B. Mallick, B., Biswas, S., Sarkar, B. R., Doloi, B. and Bhattacharyya, B.	Experimental Investigation on ECDM during Micro Channel Cutting on Glass	-	Conference, COPEN8	International	
4	B. Mallick, B., Sarkar, B. R., Doloi, B. and Bhattacharyya	Parametric Analysis of Travelling Wire-Electrochemical Discharge Machining Process	Paper ID 9-2013 AM-SP	Journal	National	[ISSN 2277-1654]

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	B. Mallick, B.Doloi, B.Bhattacharya and B.R.Sarkar	Investigations into Travelling Wire Electrochemical Discharge Machining Process	Vol. 1, 480-486 Dec', 2012	Conference	International	