

Information Regarding Research & Publications

Number of publications:

Sl. No.	Name of the faculty	International Journal	National Journal	Conference	Books	Books Chapter
1	Dr. Susmita Roy	14	03	International: 01 National: 01	01	00

Publication Details: Dr. Susmita Roy

2022

1. S. Sharma, A.K. Saha, S.Roy, S. Mirjalili, S. Nama, A mixed sine cosine butterfly optimization algorithm for global optimization and its application, Cluster Computing (Springer Nature), (SCI), pp. 1-28, August, 2022, DOI: 10.1007/s10586-022-03649-5
2. S. Roy, B. Das, An appliance of adaptive Neuro-Fuzzy inference system for predicting the surface roughness of Al-4.5%Cu-TiC MMC in turning operation of CNC milling, Materials Today: Proceedings (Elsevier), (Scopus) vol. 62, part 6, pp. 3749-3755, 27th April, 2022, doi.org/10.1016/j.matpr.2022.04.449

2018

3. B.Das, S. Roy, R.N.Rai, S.C. Saha, “Multi-objective optimization of in-situ process parameters in preparation of Al-4.5%Cu/TiC MMC using a grey relation based teaching learning based optimization algorithm”, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, SAGE Publication (SCI) (accepted on 18th April 2017, published on May 22, 2017), (IF: 1.448). DOI: 10.1177/0954408917710555. ISSN: 0954-4089

2016

4. B.Das, Susmita Roy,R.N.Rai,S.C. Saha, Priyanka Majumder, “Effect of in-situ processing parameters on microstructure and mechanical properties of TiC particulate reinforced Al-4.5Cu alloy MMC fabricated by Stir-Casting Technique - Optimization using grey based differential evolution algorithm”, Measurement (IF: 2.359), Elsevier (SCIE, Scopus indexed), vol. 93, pp. 397–408, 11th July, 2016, ISSN: 0263-2241.
5. B.Das, Susmita Roy,R.N.Rai,S.C. Saha, “Application of fuzzy technique for order preference by similarity to ideal solution in computer numerical control end milling of in-situ Al-4.5%Cu-TiC metal matrix composite”, Proceedings of the Institution of

Mechanical Engineers, Part B: Journal of Engineering Manufacture (IF: 1.366), SAGE publications (SCI), vol. 230(9), pp. 1600–1613, 2nd August, 2016. ISSN: 0954-4054.

6. B.Das, S. Roy, R.N. Rai, S.C. Saha, “Study on the machinability behaviour of in situ Al-4.5%Cu-TiC metal matrix composite-it’s surface finish and cutting force prediction using ANN”, CIRP: Journal of Manufacturing Science and Technology (Elsevier), vol.12, January 2016, p. 67–78(ISSN: 1755-5817). (SCI ,Scopus indexed).
7. B.Das, S. Roy, R.N. Rai, S.C. Saha, “Development of an in-situ synthesized multicomponent reinforced Al-4.5%Cu-TiC metal matrix composite by FAS technique – Optimization of process parameters”, Journal of Engineering Science and Technology: An International Journal (Elsevier), vol. 19 (Issue 1), March 2016, p. 279-291, ISSN: 2215-0986. (Scopus indexed, SCIE).
8. B.Das, S. Roy, R.N. Rai, S.C. Saha, “Application of grey fuzzy logic for the optimization of CNC milling parameters for Al–4.5%Cu–TiC MMCs with multiperformance characteristics”, Journal of Engineering Science and Technology: An International Journal (Elsevier), vol. 19(Issue 2), June 2016,p. 857-865, ISSN: 2215-0986. (Scopus indexed, SCIE).
9. S. Mandal, S. Roy, B. Das, “Numerical Solution of First Order Linear Differential Equations in Fuzzy Environment by Runge-Kutta-Fehlberg Method and its Application”, International Journal of Differential Equation, Vol. 2016, Article ID 8150497, 14 pages. ISSN: 1687-9651 (Scopus indexed), DOI: <http://dx.doi.org/10.1155/2016/8150497>,

2015

10. Susmita Roy & S. Bhattacharya, “Application of Fuzzy-Rough Oscillation on the field of Data-mining (Special attention to the Crime Against women at Tripura)”, Procedia Computer Science (Elsevier), vol. 45, March, 2015,p. 790-799, ISSN: 1877- 0509. (Scopus indexed).
11. B.Das, S. Roy, R.N. Rai, S.C. Saha, “Studies on effect of cutting parameters on surface roughness of Al-Cu-TiC MMCs: An Artificial Neural Network Approach”, Procedia Computer Science (Elsevier), vol. 45, March, 2015,p. 745-752, ISSN: 1877- 0509. (Scopus indexed).

2014

12. B.Das, S. Roy, R.N. Rai, S.C. Saha, “Surface Roughness of Al-5Cu Alloy using a Taguchi-Fuzzy Based Approach”, Journal of Engineering Science and Technology Review, Vol. 7 ,No.2 (2014), pp.217– 222(ISSN: 1791-2377), (Scopus indexed).
13. S. Bhattacharya and S. Roy, “On fuzzy mX*-oscillatory region and it’s application in image processing”, Annals of Fuzzy Mathematics and Informatics (Korea), Vol. 7, No. 2 , 2014, p. 319-326 (ISSN: 2093-9310).

2013

14. S. Bhattacharya and S. Roy, "On IF-rough oscillatory region and it's application in decision making", Annals of Fuzzy Mathematics and Informatics (Korea), Vol. 5, No. 1(January 2013), p. 241-267 (ISSN: 2093-9310)
15. S. Bhattacharya and S. Roy, "Application of fuzzy-rough oscillatory region on data collected for HIV/AIDS", Journal of the Kerala Mathematical Association, Vol. 10, No.1,June-2013, ISSN 0973- 2721,p. 19-26

2011

16. S. Bhattacharya and S. Roy, "On rough minimal structure", Journal of the Tripura Mathematical Society, ISSN- 0972-1320, Special Vol.13(2011), p.107-113.
17. S. Bhattacharya and S. Roy, "Some more results on fuzzy-rough oscillatory region, Proceedings of International conference On Rough Sets", Fuzzy Sets and Soft Computing, Serial Publication, ISBN 978-81-8387-417-5,(2011), p.206-216.

2008

18. S. Bhattacharya and S. Roy, "Basic probability assignment in HIV/AIDS", Acta Ciencia Indica, ISSN-0970-0455, Vol. XXXIV M, No.2 (2008), (Indexed by Zentralblatt MATH), p.717-722.
19. S. Bhattacharya and S. Roy, "Some properties of fuzzy-rough oscillatory region and its application in data mining", National Seminar On Recent Development of Mathematics and Its Applications, Nov 14-15,2008,organized by Tripura University, 2008,p.10-18.

Book Chapters:

2013

- a. Susmita Roy, "On fuzzy-rough oscillatory region and it's applications on data mining", LAP Lambert Academic Publishing (Book Form), ISBN-13: 978-3-659- 33536-5,ISBN-10: 3659335363,EAN: 9783659335365, no. of page-232,Feb- 2013.

