

Profile Page



Name : Dr Manoj Kumar
Designation : Assistant Professor
Department : Mechanical Engineering
Qualification : Ph.D. Solid Mechanics and Design (I.I.T Kanpur)
M.Tech. Design Engineering (M.N.N.I.T Allahabad)
B.Tech. Mechanical Engineering (Visvesvaraya Technological University/R.V. College of Engineering (RVCE), Bangalore)
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Research Interests :

Solid Mechanics, Ductile Fracture: Continuum Damage Mechanics Model; Dynamic Fracture Mechanics; High Strain Rate Behavior; Large Deformation Elasto-Plastic Impact/Contact Problems; Finite Element Method; Computer-Aided Design.

Other Profile Links :

Google Scholar Link :

Manoj Kumar [Click Here](#)

Personal Web Link :

ResearchGate [Click Here](#)

Journal Publications :

Year	Journal	Publication
2019	Journal of the Indian Academy of Sciences, SADHANA	ManojKumar; Sachin S.Gautam; P M Dixit, A Non-Linear Ductile Damage Growth Law at Elevated Temperature
2019	Procedia Structural Integrity, Volume 14, Pages 537-543	Dipankar Bora, Manoj Kumar, Sachin S. Gautam,. Ductile fracture in tube impact problem using a Lode angle dependent failure criterion,
2018	Materials Today; Volume 5, Issue 9, Part 3, 2018, Pages 18983-18991	Dipankar Bora; Manoj Kumar; Sachin S. Gautam "Ductile fracture at high velocity impact of cylindrical tubes"
2017	Procedia Engineering, Volume 173, pp190-197, 2017	Manoj Kumar, Utkarsh Deep and P M Dixit, Simulation and Analysis of Ballistic Impact using Continuum Damage Mechanics (CDM) Model
2017	Procedia Engineering, Volume 173, pp 1215-1222, 2017	Manoj Kumar and P M Dixit, Simulation of Fracture in The Taylor Test Using Continuum Damage Mechanics Model.

2015	International Journal of Damage Mechanics (IJDM). vol. 24 (7) pp. 1070-1085, Sep. 2015	Manoj Kumar and P M Dixit, A Non-linear Ductile Damage Growth Law.
2015	Applied Mechanics and Materials, vol. 784, pp. 369-376, Aug. 2015	Manoj Kumar and P M Dixit, Effect of Crack Closure Parameter and Negative Triaxiality on Damage Growth in Upsetting.

Conference Publications :

Year	Conference	Publication
2018	The Second International Conference on Structural Integrity and Exhibition (SICE 2018); HYDERABAD, INDIA JULY 25-27, 2018	Dipankar Bora, , Sachin S. Gautam and Manoj Kumar ; "Ductile Fracture in Tube Impact Problem Using A Lode Angle Dependent Failure Criterion "
2018	Second Quadrennial International Conference on Structural Integrity (ICONS 2018), IIT Madras, Chennai, India, December 14th - 17th, 2018	Kumar M., and Gautam S. S., Parametric study of ballistic impact using continuum damage mechanics (CDM) model, Second Quadrennial International Conference on Structural Integrity
2018	8th International Conference on Meterials Processing and Characterization, 16th-18th March 2018, Bachupally, Hyderabad, Telangana, India.	Dipankar Bora, Manoj Kumar, Sachin S. Gautam, Ductile fracture at high velocity impact of cylindrical tubes
2018	Second Quadrennial International Conference on Structural Integrity (ICONS 2018), IIT Madras, Chennai, India, December 14th - 17th, 2018	Kumar M., and Gautam S. S., Parametric study of ballistic impact using continuum damage mechanics (CDM) model
2018	1st International Conference on Future Learning Aspects of Mechanical Engineering (FLAME - 2018), Amity University, Noida, October 3rd - 5th , 2018, (submitted) .	Bora D., Kumar M., and Gautam S. S., Simulation of ductile fracture at high velocity impact of cylindrical tubes
2018	19th ISME conference on advances in mechanical engineering, Dec 20-22, 2018, NIT Jalandhar, Punjab	Manoj Kumar, Janmeet Singh Manku, and Pramod Kumar, Simulation of effect of velocity at the tool interface in Orthogonal Metal Cutting using Continuum Damage Mechanics (CDM) Model
2018	19th ISME conference on advances in mechanical engineering, Dec 20-22, 2018, NIT Jalandhar, Punjab	Jitendra basrani, Pramod kumar and Manoj Kumar, Energy recovered from bicycle with the help of flywheel
2017	3rd Indian Conference on Applied Mechanics (INCAM 2017), MNNIT Allahabad	Manoj Kumar, Utkarsh Deep and P M Dixit, Effect of Projectile shape of Ballistic Impact using Continuum Damage Mechanics (CDM) Model
2017	3rd Indian Conference on Applied Mechanics (INCAM 2017), MNNIT Allahabad	Manoj Kumar, Janmeet Singh Manku and P M Dixit, Simulation of effect of friction at the tool interface in Orthogonal Metal Cutting using Continuum Damage Mechanics (CDM) Model
2016	11th International Symposium on Plasticity and Impact Mechanics (IMPLAST 2016), Dec. 2016, IIT Delhi	Manoj Kumar and P M Dixit, Simulation of Fracture in The Taylor Test Using Continuum Damage Mechanics Model.
2016	11th International Symposium on Plasticity and Impact Mechanics (IMPLAST 2016), Dec. 2016, IIT Delhi	Manoj Kumar, Utkarsh Deep and P M Dixit, Simulation and Analysis of Ballistic Impact using Continuum Damage Mechanics (CDM) Model.
2015	XIII International Conference on Computational Plasticity. Fundamentals and Applications (COMPLAS XIII), 1-3 Sep. 2015, Barcelona - Spain	Manoj Kumar and P M Dixit, Simulation of Damage Growth in Pre-Notched Cylindrical Test Specimens Using Continuum Damage Mechanics Model
2015	Second International Conference on Damage Mechanics (ICDM2 2015), July 8-11, 2015, Troyes, France.	Manoj Kumar and P M Dixit, Effect of Crack Closure Parameter and Negative Triaxiality on Damage Growth in Upsetting

2014	5th International Congress On Computational Mechanics And Simulation (ICCMS), 10th – 13th December 2014, Chennai, India.	Manoj Kumar and P M Dixit, Analysis of Damage in Steel Cylindrical Test Specimen
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Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Mechanical Engineering	Advances in Engineering Design	Springer Nature Singapore Pte Ltd.	Manoj Kumar, Dipankar Bora and Sachin Singh Gautam	978-981-13-6468-6	2019

Admin. Responsibilities :

Position Held	Organization	From	To
Warden, Hostel-7 and &E	NIT Jalandhar	13-02-2018	17-10-2018
Member, Institute library committee	NIT Jalandhar	13-02-18	Present

Award and Honours :

Title	Activity	Given by	Year
Gold Medal	Academic excellence in M. Tech.	MNNIT, Allahabad.	2010
Ratan Prakash Memorial Gold Medal	Academic excellence in M. Tech.	MNNIT, Allahabad.	2010
Best Student	B. Tech.	RVCE, Bangalore	2007