

## List of Publications of Ashis Mallick

### (a) *Articles in internationally reviewed journals*

63. S.K. Sharma, **A. Mallick**, D.B. Singh, G.N. Tiwari, 2021, Experimental study of solar energy based water purifier of single slope type by incorporating a number of similar evacuated tubular collectors, *Environmental Science and Pollution Research*, (*Accepted*) (Q2)
62. Md. Alamgir, G.C.Nayak, **A. Mallick\***, S. Sahoo, 2021, Effects of TiO<sub>2</sub> and GO on the thermo-mechanical properties of bioactive poly-HEMA nanocomposites, *Iranian Polymer Journal* (*Accepted*).
61. M. Alamgir, **A. Mallick\***, G.C Nayak, 2021, Mechanical and thermal behavior of pHEMA and pHEMA nanocomposites targeting for dental materials, *Applied Nanoscience*, **11**, 1257 – 1265.
60. D.K. Das, **A. Mallick**, and S.K. Singh, **2021**, Estimating thermal properties of plumbene by multiscale modeling using Molecular dynamics simulation technique, *Mechanics of Advanced Materials and Structures* (*Online available*)
59. P. Kumar, K. Skotnicova, **A. Mallick**, M. Gupta, T. Cegan and J. Jurica, **2021**, Mechanical Characterization of Graphene Nanoplatelets-Reinforced Mg-3Sn Alloy Synthesized by Powder Metallurgy, *Metals*, **11**, 62 (<https://doi.org/10.3390/met11010062>), (Q2).
58. S. Deka, **A. Mallick\***, P.P. Behera and P. Thamburaja, **2021**, Thermal stresses in a functionally graded rotating disk: an approximate closed-form solution, *J. of Thermal Stresses*, **44** (1), 20-50. (Q2)
57. M.S. Kujur, V. Manakari, G. Parande, S. Prasad, R. Wong, **A. Mallick** and M. Gupta, **2021** “Effect of Samarium Oxide Nanoparticles on The Degradation And In Vitro Biocompatibility of Magnesium for Biomedical Applications”, *Materials Today Communications*, (*Online available*)
56. M.S. Kujur, V. Manakari, G. Parande, S. Prasad, R. Wong, **A. Mallick\*** and M. Gupta, **2021** “Development of Rare-earth Oxide Reinforced Magnesium Nanocomposites for Orthopedic Applications: A Mechanical/Immersion/Biocompatibility Perspective”, *J. of the Mechanical Behaviour of Biomedical Materials*, **114**, 104162, (Q2)
55. V. Venkitesh and **A.Mallick\***, **2020**, Thermal analysis of a convective-conductive-radiative annular porous fin with variable thermal parameters and internal heat generation, *J. of Thermal Analysis and Calorimetry* (<https://doi.org/10.1007/s10973-020-10384-9>) (Q1)
54. P. K. Roy, H. Mondal, **A. Mallick**, and D. K. Prasad, **2020**, Inverse and efficiency of heat transfer convex fin with multiple nonlinearities, *Heat Transfer, Heat Transfer*. **50** (1), 158–178.
53. S. K. Sharma, **A. Mallick**, S. K. Gupta, N. Kumar, D. B. Singh, G.N. Tiwari, **2020**, Characteristic equation development for double slope solar distiller unit augmented with  $N$  identical parabolic concentrator integrated evacuated tubular collectors, *Desalination and Water Treatment*, **187**, 178–194.
52. P. Kumar, **A. Mallick\***, M. S. Kujur, K. S. Tun and Manoj Gupta, **2020**, Synthesis and analysis of Mg–3%Al alloy nanocomposites reinforced by RGO", *Materials and Manufacturing Processes*, **35**, 1650-1660 (Q2).

51. D. B. Singh, S. K. Sharma, **A. Mallick**, S.K. Gupta, **2020**, Energy metrics and efficiency analyses of double slope solar distiller unit augmented with N identical parabolic concentrator integrated evacuated tubular collectors: A comparative study, *Desalination and Water Treatment*, **195**, 40 - 56.
50. D. B. Singh, G. Bansal, H. Prasad, **A. Mallick**, N. Kumar, S. K. Sharma, **2020**, Sensitivity Analysis of N Undistinguishable PVT Compound-Parabolic-Concentrator-Collectors (Partly Covered, 50%) Integrated Single Slope Solar Distiller Unit submitted to the *Journal of Solar Energy Engineering: Including Wind Energy and Building Energy Conservation* (**R1 Submitted**)
49. S. K. Sharma, D. B. Singh, N. Kumar, **A. Mallick**, S.K. Gupta, **2020**, Energy, exergy and cost analyses of double slope solar distiller unit augmented with N identical parabolic concentrator integrated evacuated tubular collectors: A comparative study, *Journal of Solar Energy Engineering: Including Wind Energy and Building Energy Conservation*, (**In press**)
48. H. Prasad, P. Kumar, R.K. Yadav, **A. Mallick**, N. Kumar, D.B. Singh, **2019**, Sensitivity analysis of N identical partially covered (50%) PVT compound parabolic concentrator collectors integrated double slope solar distiller unit, *Desalination and Water Treatment*, **153**, 54–64.
47. M. Alamgir, **A. Mallick**, G.C Nayak, S.K Tiwari, **2019**, Development of PMMA/TiO<sub>2</sub> nanocomposites as excellent dental materials, *J. of Mech. Sci. and Tech.* **33** (10), 4755-4760
46. P. Kumar, A. Mallick\*, M. S. Kujur, K. S. Tun and Manoj Gupta, **2019**, Effects of graphene nanoplatelets on the tribological, mechanical, and thermal properties of Mg-3Al alloy nanocomposites, *Int. J. of Materials Research*, **110**, 534-542.
45. A. Dewangan, A. K. Yadav, and **A. Mallick**, A. Pal, S. Singh, **2019**, Comparative study of *Manilkara zapota* and Karanja based biodiesel properties and its effect on diesel engine characteristics, *Energy Source, Part A: Recovery, Utilization, and Effects* (**On line available**).
44. D. B. Singh, N. Kumar, Harenderc, S. Kumar, S. K. Sharmae, **A. Mallick**, **2019**, Effect of depth of water on various efficiencies and productivity of *N* identical partially covered PVT collectors incorporated single slope solar distiller unit, *Desalination and Water Treatment*, **138**, 99–112.
43. A.K. Singh, D.B. Singh, **A. Mallick**, Harenderd, S.K. Sharma, N. Kumar, V.K. Dwived, **2019**, Performance analysis of specially designed single basin passive solar distillers incorporated with novel solar desalting stills: A review, *Solar Energy*, **185**, 146-164. (Q1)
42. R. Ranjan, **A.Mallick** , P Jana, 2019, **2019**, Thermoelastic study of a functionally graded annular fin with variable thermal parameters, *J of Thermal Stresses*, **42**, 1272-1297. (Q2: Material Science / Condensed Matter Physics).
41. **A. Mallick**, R. Ranjan and Dilip K. Prasad, **2019**, Inverse estimation of variable thermal parameters in a functionally graded annular fin using dragon-fly optimization, *Inverse problem in Sci. & Engg.*, **27**, 969 - 986, (Taylor & Francis) (Q2: in comp. Sci & Tech.)
40. **A. Mallick**, Dilip K. Prasad and P. P. Behera, **2019**, Stresses in radiative annular fin under thermal loading and its inverse modeling using Sine Cosine Algorithm (SCA), *J. of Thermal Stresses*, **42**, 401–415 (Taylor & Francis) (Q2: Material Science / Condensed Matter Physics)

39. A. Dewangan, A. K. Yadav, and **A. Mallick**, **2018**, Current scenario of biodiesel development in India: prospects and challenges, *Energy Source, Part A: Recovery, Utilization, and Effects*, **40**, 2494-2501 (Taylor & Francis) (Q4).
38. A.K. Singh, D.B. Singh, **A. Mallick**, N Kumar, **2018**, Energy matrices and efficiency analyses of solar distiller units: A review, *Solar Energy*, **173**, 53–75 (Elsevier) (Q1)
37. K. B. Mardi, A.R. Dixit, **A. Mallick**, A.R. Reddy, **2018**, Effect of  $\text{Al}_2\text{O}_3$  nanoparticles on tribological behaviour of Mg-6Al alloy-based nanocomposites, *Int. J. of Surface Science and Engineering*, **12**, 402-418 (Elsevier) (Q4).
36. A. K. Yadav, A. Dewangana, **A. Mallick**, **2018**, Effect of Additives (n-Butanol and Diethyl Ether) on Performance and Emission Characteristics of a Diesel Engine Fuelled with Diesel-Pongamia Biodiesel, Blend, *Journal of Energy Engineering*, **144**, 04018062, (ASCE) (Q3).
35. M. S. Kujur, V. Manakari, G. Parande, K. S. Tun, **A. Mallick** and M. Gupta, **2018**, Enhancement of Thermal, Mechanical, Ignition and Damping Response of Magnesium using Nano-Ceria Particles, *Ceramics International*, **44**, 15035–15043, (Elsevier) (Q1).
34. K. Bimla Mardi, **A. Mallick**, **2018**, A. R. Dixit; M. Gupta, 2018, Enhancing Compressive Response of Mg-6Al Alloy using  $\text{Al}_2\text{O}_3$  Nanoparticles, *Kovove Materialy-Metallic Materials* **56**, 183–190 (Q4).
33. R. Ranjan and **A. Mallick**, **2018**, An efficient unified approach for performance analysis of functionally graded annular fin with multiple variable parameters, *Thermal Engineering*, **65**, 614–626 (Springer).
32. A. K. Yadav, A. Dewangana, **A. Mallick**, **2018**, Synthesis and Stability Study of Biodiesel from Kachnar Seed Oil, *Journal of Energy Engineering*, **144**, 04018053 (ASCE) (Q3).
31. P. K. Roy, **A. Mallick**, H. Mondal, P. Sibanda, **2018**, A Modified Decomposition Solution of Triangular Moving Fin with Multiple Variable Thermal Properties, *Arabian Journal for Sci. and Engg.*, **43**, 1485–1497 (Springer) (Q3).
30. P. Kumar, **A. Mallick**, M.S. Kujur, K.S. Tun, R. Shabadi, M Gupta, **2018**, Strength of Mg/3%Al alloy in presence of graphene nano-platelets as reinforcement, *Materials Science and Technology* **34**, 1086 - 1095 (Taylor & Francis) (Q2).
29. Md. Alamgir, G.C.Nayak, **A. Mallick**, S. K. Tiwari, S. Mandol and M. Gupta, **2018**, Processing of PMMA nanocomposites reinforcing with biocompatible nanoparticles of GO and  $\text{TiO}_2$ , *Materials and manufacturing processes*. **33**, 1291 - 1298 (Taylor & Francis) (Q2).
28. M. S. Kujur, **A. Mallick**, V. Manakari, G. Parande, K. S. Tun, and M. Gupta, **2017**, Significantly Enhancing the Ignition/Compression/Damping Response of Monolithic Magnesium by Addition of  $\text{Sm}_2\text{O}_3$  Nanoparticles, *Metals* **2017**, **7**, 357 (Appeared as a cover page article) (Q2).
27. P. K. Roy, **A. Mallick**, H. Mondal, S. Goqo, P. Sibanda, **2017**, Numerical study on rectangular-convex-triangular profiles with all variable thermal properties, *Int. J. of Mechanical Sciences*, **133**, 251-259 (Elsevier) (Q1).

26. A. Dewangan and A. Mallick, **2017**, Ultrasonic-assisted production of biodiesel from Manilkara Zapota (L.) seed oil, *Energy Source, Part A: Recovery, Utilization, and Effects*, **39**, 1594-1601 (Taylor & Francis) (Q4).
25. K. B. Mardi, A. R. Dixit, A. Mallick, A. Pramanik, B. Balloková, P. Hvízdová, J. Foldyna, J. Scucka, P. Hlaváček, and M. Zelenák, **2017**, Surface integrity of Mg-based nanocomposite produced by Abrasive Water Jet Machining (AWJM), *Materials and Manuf. Process*, **32**, 1707 - 1714 (Taylor & Francis) (Q2).
24. R. Ranjan, A. Mallick, D. Kumar, **2017**, Closed form solution for a conductive-convective-radiative annular *fin* with multiple nonlinearities and its inverse analysis, *Heat and Mass Transfer*, **53**, 1037 – 1049. (Springer) (Q3).
23. A. Mallick, R. Ranjan, D. Kumar, R. Das, **2016**, Inverse prediction and application of homotopy perturbation method for efficient design of an annular fin with variable thermal conductivity and heat generation, *Mathematical Modelling and Analysis*, **21**, 699-717 (Taylor & Francis) (Q2).
22. A. Mallick, **2016**, Improvement of mechanical properties in light weight Mg-based materials, *Procedia Engineering*, **149**, 283 – 287 (Elsevier).
21. P.K. Roy, **A. Mallick**, **2016**, Thermal analysis of straight rectangular fin using homotopy perturbation method, *Alexandria Engineering Journal*, **55**, 2269 – 2277 (Elsevier)
20. A. Mallick, R. Ranjan, P.K. Sarkar, **2016**, Effect of Heat Transfer on Thermal Stresses in an Annular Hyperbolic Fin : An Approximate Analytical Solution, *J. of Theo. and App. Mechanics*, **54**, 437 – 448 (pmts, Poland).
19. A. Mallick, R. Ranjan, R. Das, **2016**, Application of homotopy perturbation method and inverse prediction of thermal parameters for an annular fin subjected to thermal Load, *J. Thermal Stresses*, **39**, 298 - 313 (Taylor & Francis).
18. P. K. Roy, A. Das, H. Mondal, A. Mallick, **2015**, Application of homotopy perturbation method for a conductive–radiative fin with temperature dependent thermal conductivity and surface emissivity, *Ain Shams Engg. Journal*, **6**, 1001 - 1008 (Elsevier).
17. P. K. Roy, H. Mondal, A. Mallick, **2015**, A decomposition method for convective–radiative fin with heat generation, *Ain Shams Engg. Journal*, **6**, 307 - 313 (Elsevier).
16. A. Mallick, S. Ghosal, P. K. Sarkar, R. Ranjan, **2015**, Homotopy Perturbation Method (HPM) for Thermal Stresses in an Annular Fin with Variable Thermal Conductivity, *J. Thermal Stresses*, **38**, 110 - 132 (Taylor & Francis).
15. A. Bhowmik, R. K. Singla, R. Das, A. Mallick and R. Repaka, **2014**, Inverse modelling of a solar collector involving Fourier and non-Fourier heat conduction, *App. Mathematical Modelling*, **38**, 5126 - 5148 (Elsevier).
14. A. Mallick and R. Das, **2014**, Application of Simplex search method for predicting unknown parameters in an annular *fin* subjected to thermal stresses, *J. of Thermal Stresses* **37**, 236 - 251 (Taylor & Francis).

13. R. Das, **A. Mallick**, K .T. Ooi, **2013**, 'Inverse estimation of heat transfer coefficient and thermal conductivity in a conductive-convective and radiative fin'. *J. Heat & Mass Transfer*, **49**, 1029 - 1038 (Springer).
12. **A. Mallick**, **2013** 'Effect of second phase mobile and immobile particles on polycrystalline grain growth: A Phase field approach', *Computational Materials Science*, **67**: 27 – 34 (Elsevier).
11. **A. Mallick**, K.S. Tun and M. Gupta, **2012**, 'Deformation behaviour of Mg/Y<sub>2</sub>O<sub>3</sub> nanocomposite at elevated temperatures', *Material Science and Engineering - A*, **551**, 222 - 230 (Elsevier).
10. **A. Mallick**, **2011**, 'Tensile properties of Ultrafine Mg-3%Al alloy at elevated temperatures', *Int. J. Mat. Research*, **102**, 48 -53 (Carl Hanser, Germany).
9. **A. Mallick**, K.S. Tun, S. Vedantam, and M. Gupta, **2010** 'Mechanical Characteristics of Pure Mg and Mg/Y<sub>2</sub>O<sub>3</sub> Nanocomposite in 25 – 250°C Temperature Range', *J. of Material Science*, **45**, 3058 – 3066 (Springer).
8. S. Vedantam, and **A. Mallick**, **2010**, 'Phase field theory of grain growth in the presence of mobile second phase particles', *Acta Materialia*, **58**, 272-281 (Elsevier).
7. **A. Mallick**, and S. Vedantam, **2009**, 'Phase field study of the effect of grain boundary energy anisotropy on grain growth', *Computational Materials Science* **46**, 21-25 (Elsevier).
6. **A. Mallick**, S. Vedantam, and L. Lu, **2009**, 'Grain size dependent tensile behavior of Mg-3% Al alloy at elevated temperatures, *Material Science and Engineering A*, **515**, 14-18 (Elsevier).
5. **A. Mallick**, **2009**, 'Nanocrystalline Mg-3%Al alloy: its synthesis and investigation of its tensile behavior', *Int. J. of Engg. & App. Sci.*, **5** (6), 411 - 414.
4. P.C. Dumir, G.P. Dubey, and **A. Mallick**, **2005**, 'Axisymmetric buckling of Laminated Thick Annular Spherical Cap' *Communication in Nonlinear Science and Numerical Simulation*, **10**, 191 – 204 (Elsevier).
3. P.C. Dumir, G.P. Dubey, and **A. Mallick**, **2003**, 'Axisymmetric Static and Dynamic Buckling of Laminated Thick Truncated Conical Cap', *Int. Journal of Nonlinear Mechanics*, **38**, 903 – 910 (Elsevier).
2. P.C. Dumir, G.P. Dubey, and **A. Mallick**, **2001**, 'Axisymmetric Postbuckling of Moderately Thick Laminated Annular Plate', *Composite Structure*, **51**, 311 – 318 (Elsevier).
1. G.P. Dubey, P.C. Dumir, and **A. Mallick**, **2000**, 'Dynamic Buckling of Laminated Thick Shallow Spherical Cap Based On a Static Analysis', *Mechanics Research Communication*, **27**, 561 – 566 (Elsevier)

#### **(b) Articles in book chapter**

4. M.S. Kujur, Ved Prakash Dube, **A. Mallick\***, M. Gupta, **2021**, Tensile Characteristics of Metal Matrix Composites, Encyclopedia of Materials: Composites, Elsevier, (DOI: [10.1016/B978-0-12-819724-0.00100-2](https://doi.org/10.1016/B978-0-12-819724-0.00100-2))

3. P. Kumar, B.K. Roy, A. Mandal, **A. Mallick**, M. Gupta, **2021** Influence of Spindle Rotational Speeds on Pure Mg and 0.1GNP-3Al-Mg Alloy-Nanocomposite in Wire Electrical Discharge Turning Process, Sharma, B.P., Rao, G.S., Gupta, S., Gupta, P., Prasad, A. (Eds.), Advances in Engineering Materials, Lecture Notes in Mechanical Engineering, Springer Nature, Singapore
2. Kujur M.S., Manakari V., Parande G., Doddamani M., **Mallick A.**, Gupta M., **2019**, Role of Rare Earth Oxide Reinforcements in Enhancing the Mechanical, Damping and Ignition Resistance of Magnesium. In: Srivatsan T., Gupta M. (eds) Nanocomposites VI: Nanoscience and Nanotechnology in Advanced Composites. The Minerals, Metals & Materials Series. Springer, Cham ([https://doi.org/10.1007/978-3-030-35790-0\\_10](https://doi.org/10.1007/978-3-030-35790-0_10)).
1. **A. Mallick**, and S. Vedantam, **2009**, ‘Phase field simulation of polycrystalline grain growth in presence of mobile second phase particles’, *Modeling and simulation of new materials: Tenth Granada Lecturers*, Edited by Prof. Pedro. J. Gariodo et. al, American Institute of Physics (AIP), pp 240 – 242.

### (c) *Articles in International Conferences*

28. G.K. Sharma, N. Kumar, D. B. Singh, A. Mallick, 2000, Exergoeconomic analysis of single slope solar desalination unit coupled with PVT-COCs by incorporating the effect of similarity of the rate of flowing fluid mass, *Materials Today : Proceedings* (In press: Online available)
27. M.S. Kujur, A. Deshpande, A. Mallick, M. Gupta, 2000, Development of rare-earth oxide reinforced magnesium nanocomposites targeting biomedical applications, *Materials Today: Proceedings* (In press, online available)
26. **A Dewangan**, A Mallick, AK Yadav, A.K. Richhariya, 2020, Effect of metal oxide nanoparticles and engine parameters on the performance of a diesel engine: A review, *Materials Today: Proceedings* **21**, 1722–1727.
25. **A Dewangan**, A Mallick, AK Yadav, R Kumar, 2020, Combustion- generated pollutions and strategy for its control in CI engines: A review, *Materials Today: Proceedings* **21**, 1728–1733.
24. M. S. Kujur; V. Manakari ; G. Parande ; S. Prasadh ; R. Wong ; A. Mallick ; M. Gupta ; 2019, Effect of Rare Earth Oxide Nanoparticles on the Mechanical and Biological Properties of Magnesium, Ms&T-19 (Material Science and Technology) Conference, 29 Sep - 03 Oct, 2019, Portland, OREGON, USA.  
DOI: [10.7449/2019mst/2019/mst\\_2019\\_1121\\_1129](https://doi.org/10.7449/2019mst/2019/mst_2019_1121_1129)
23. **A. Mallick**, D. K. Prasad and P. P. Behera, **2018**, Thermo-mechanical Analysis of a Radiative Annular Fin, *Thermophysics 2018*, AIP Conf. Proc. 1988, 020029-1–020029-6.
22. **P. Kumar**, M. S. Kujur, A. Mallick, K. S. Tun and M. Gupta, **2018**, Effect of graphene nano-platelets on the mechanical properties of Mg/3wt% Al alloy-nanocomposite, IOP Conf. Series: Materials Science and Engineering **346** (2018) 012001.

21. Md Alamgir, S. K. Tiwari, A. Mallick, G.C.Nayak, **2018**, Graphene oxide and TiO<sub>2</sub> based PMMA nanocomposites for dental applications: A comprehensive study of the mechanical properties, IOP Conf. Series: Materials Science and Engineering **377**, 012082.
20. P. Kumar M. S. Kujur, A. Mallick, K. S. Tun and M. Gupta, **2017**, Processing and characterization of Mg-3%Al/Graphene nanocomposite, METAL 2017, 24th - 26th May, Brno, Czech Republic, EU.
19. Ashis Mallick and R. Ranjan, **2017**, Thermo-mechanical analysis of a functionally graded annular fin, 23rd Int. Conference on Engineering Mechanics, 15 – 18 May, Svatka, Czech Republic, 614-617.
18. R. Ranjan, A. Mallick, **2015**, Thermal stresses in an annular fin with temperature dependent thermal parameters : Use of HPM, *23<sup>rd</sup> National Heat and Mass Transfer and 1<sup>st</sup> International ISHMT-ASTFE Heat and Mass Transfer (An Int. Conf.) IHMTC-2015*, 17 - 20, December, 2015, ISRO-Trivandrum, Kerala.
17. S. Mundra, R. Ranjan, A. Mallick, **2014**, Application of Mean Value theorem for thermal stresses in an annular fin, 59th Cong. of ISTAM (*An Int. Conf.*), 17 - 20, December, 2014, Bangalore, India.
16. A. Mallick, P.K. Sarkar, S. Chakraborty, and A. Kumar, Mechanical Behaviour of Nanostructured Mg-3%Al alloy, PFAM – XXII (Int. conf.), 18 – 20, Decemebr, 2013, Singapore.
15. S. Gogoi, J. Saikia, N. Meena and A. Mallick, **2013**, Effect of Machining Parameters on the Surface Roughness of Mg/Y<sub>2</sub>O<sub>3</sub> Nano-composite, National Conf. on Recent Trade in Manufacturing Sci. & Tech. (RTMST-2013), NITTTR, India.
14. A. Mallick, S. Vedantam, and L. Lu, **2010**, Tensile behaviour of ultrafine-grained and nanocrystalline Mg-3%Al studied at elevated temperatures, Int. Conf. on Nanomaterials: Synthesis, Characterization and Application, India.
13. A. Mallick, K.S. Tun, S. Vedantam, and M. Gupta, **2009**, ‘High Temperature Tensile Characteristics of a Mg/Y<sub>2</sub>O<sub>3</sub> nanocomposite’, Int. Conference on Advanced High-Temperature and High-Strength Structural Materials, Hong-Kong.
12. A. Mallick, and S. Vedantam, **2009**, ‘Phase field simulation of polycrystalline grain growth in presence of mobile second phase particles’, *American Institute of Physics (AIP) proceedings*, **1091**, 240 – 242.
11. S. Vedantam, and A. Mallick, **2009**, ‘Phase field simulation of grain growth in the presence of mobile second phase particles’, *10th U.S. National Congress for Computational Mechanics*, 16-19, July, 2009, USA.
10. S. Vedantam, and A. Mallick, **2008**, ‘Phase field simulation of grain growth in presence of mobile second phase particles: A bi-crystal model’, *Appeared in 10<sup>th</sup> Granada Seminar on Computational and Statistical Physics: Modeling and Simulation of New Materials*, Spain.
9. A. Mallick, and S. Vedantam, **2008**, ‘Effect of Grain Boundary Energy Anisotropy and Presence of Mobile Particles on Grain Growth: A Phasefield Approach’, *Phase-field-Simulations: Materials Science meets Biology and Medicine*, *An International Focus Workshop*, Max-Planck Institute, Germany (Poster presentation).
8. A. Mallick, S. Vedantam, and L. Lu, **2008**, ‘Ultrafine Mg-3%Al alloy: Its synthesis and investigation of its tensile properties at elevated temperature’, *Appeared in the proceeding of PMP III*, Bangkok.

7. A. Mallick, **2007**, ‘Relations Among Axisymmetric Solutions of Annular Isotropic Plates With Linearly Varying Thickness For Levinson and Kirchhoff Theories’, *Appeared in the Proc. of Int. Conference on Theoretical, Applied, Computational, and Experimental Mechanics*, December, IIT Kgp.
6. A. Mallick, **2005**, ‘Exact bending relationship between higher order Levinson and thin plate solutions for an axisymmetric annular plate with linearly varying thickness’, *Appeared in the Proc. of Int. Conference on Mech. Engg.*, AM-48, 1-6 (Dhaka).
5. A. Mallick, R. Sharma, **2004**, ‘FE Analysis of Bending for an Axisymmetric Shear Deformable Circular Plate’, *Appeared in the Proc. of National Conference on Precision Manufacturing*, Dec., 2004.
4. A. Mallick, **2004**, ‘Solution Zone for a Lamina of Graphite/Epoxy (Gy-70/934) with Combined Loading’, *Appeared in the Proc. of National Conference on Fabrication and Processing of Composites and Light Materials (FPCL 2004)*, Jan, 2004
3. A. Mallick, and R. Kumar, **2003**, ‘Axisymmetric Levinson Annular Plates with Linearly Varying Thickness in Terms of Corresponding Kirchhoff Solutions’, *Appeared in the Proc. of 48<sup>th</sup> Congress of Indian Society for Theoretical Applied Mechanics (An Int. Meet)*, December.
2. G.P. Dubey, P.C. Dumir, and A. Mallick, **2001**, ‘Axisymmetric Buckling of Unsymmetrically Laminated Thick Truncated Conical Cap’, *Appeared in the Proc. of 12<sup>th</sup> Indian Society of Mechanical Engineers (ISME) Conference*.
1. P.C. Dumir, G.P. Dubey, and A. Mallick, **2000**, ‘Galerkin Solution For Geometrically Non-linear Response of Thick Symmetrically Laminated Annular Plate’, *Appeared in the Proc. of International Conference on Recent Advances in Mathematical Sciences (ICRAMS)*.

**(d) *Paper presented in Conferences:***

11. 23rd Int. Meeting THERMOPHYSICS 2018 (*An Int. Conf.*), 07 - 09, November, 2018, Slovakia.
9. PFAM – XXII (Int. conf.), 18 – 20, Decemebr, 2013, Singapore.
8. McMat - 2011, ASME 2011 - Applied Mechanics and Materials Conference, Chicago - Illinois, May 30 - June 1, 2011, USA.
8. International conference on Nanomaterials: Synthesis, charecterization and application, M.G University, Kottayam, April, 2010, India (*Invited lecture*).
7. ‘International conference on High-Temperature and High-Strength Structural Materials’ held in Hong-Kong Poly. University, Oct., 2009, Hong-Kong.
6. ‘Phase-field-Simulations: Materials Science meets Biology and Medicine’, An International Focus Workshop held in Max-Planck Institute, Dresden, November, 2008, Germany.
5. International Conference on Applied Physics (ICAP-08), Heidelberg, September 2008, Germany.
4. ‘10<sup>th</sup> Granada Seminar on Computational and Statistical Physics: Modeling and Simulation of New Materials’ held in the University of Granada, September, 2008, Spain.

3. ‘48<sup>th</sup> Congress of Indian Society for Theoretical Applied Mechanics (An Int. Meet)’ held in Birla Institute of Technology, Ranchi, Dec., 2003, India.
2. ‘12<sup>th</sup> Indian Society of Mechanical Engineers (ISME) Conference’ held in Cresent Engineering College, Chennai, Jan., 2001, India.
1. ‘International Conference on Recent Advances in Mathematical Sciences (ICRAMS)’ held in Indian Institute of Technology, Kharagpur, Dec., 2000, India.