

Complete list of publications of Tanish Dey

Book Chapter:

1. Ramachandra, L. S.*, **Dey, T.**, Kumar, R. (2022): Stability of plates and shell panels under non-uniform in-plane loadings. *Stability and failure of high-performance composite structures*, 143-165.

Further publications:

A) Publications with peer review process

1. Chakraborty, S., Amabili*, M., Moghaddasi, H. R., Yadav, A., **Dey, T.**, Kumar, R. (2025): Nonlinear Dynamics of Axially Functionally Graded, Porous Sandwich Panel Subjected to Periodic Non-uniform In-plane Excitation. *Thin-Walled Structures*, 211, 113076.
2. Dash, S., **Dey, T.***, Haldar, A., Kumar, R. (2025): A Semi-Analytical Method for Non-Linear Instability Analysis of Variable Stiffness Laminated Composite Beams Under Thermo-Mechanical Loading. *Composite Structures*, 357, 118966.
3. Dash, S., **Dey, T.***, Kumar, R. (2025): Instability Characteristics of Variable Stiffness Composite Panels Under Thermomechanical Loadings. *Acta Mechanica*, 236(2), 631-654.
4. Chakraborty, S., Dash, S., **Dey, T.*** (2024): Non-Linear Stability Characteristics of Randomly Distributed CNT-Reinforced Fiber Composite Beams Under Thermo-Mechanical Loadings. *Mechanics Based Design of Structures and Machines*, 52(9), 7021-7044.
5. Chakraborty, S., Yadav, A., **Dey, T.***, Kumar, R., Singh, A. (2024): Semi-Analytical Framework for Modelling of Surface Heating and Its Impact on Nonlinear Stability of Nanotube Reinforced Doubly Curved Porous Fiber Composite Panels. *Mechanics of Materials*, 198, 105126.
6. Jain, V., Kumar, R.*, **Dey, T.**, Patel, S. N., Watts, G. (2024): A Meshfree Formulation for Size-Dependent Thermal Buckling and Post-Buckling Behaviour of Porous Microplates on Elastic Foundation Subjected to Localized Heating. *Thin-Walled Structures*, 205, 112451.
7. Yimer, M. A., **Dey, T.*** (2024): Dynamic Behavior of Full-Scale GFRP Bar-Reinforced Ultra-High-Performance Concrete-Encased Concrete-Filled Double-Skin Steel Tubular Bridge Columns Under Lateral Impact Loading. *Structures*, 70, 107674.
8. Chakraborty, S.*, Naskar, S., **Dey, T.**, Kumar, R., Mukhopadhyay, T. (2024): Nonlinear Stability of Curved Multiphase Composite Panels: Influence of Agglomeration in Randomly Distributed Carbon Nanotubes with Nonuniform In-Plane Loads. *Journal of Aerospace Engineering (ASCE)*, 37 (3), 04024015.
9. Dash, S., **Dey, T.***, Hati, D. (2024): Influence of Thermo-Mechanical Loads on Variable Stiffness Composite Beams: A Comprehensive Study Using Semi-Analytical and Finite Element Approaches. *Mechanics Based Design of Structures and Machines*, 52 (12), 10555-10582.
10. Yimer, M. A., **Dey, T.*** (2024): Dynamic Response of Concrete Beams Reinforced with GFRP And Steel Bars Under Impact Loading. *Engineering Failure Analysis*, 161, 108329.

11. Jain, V., Kumar, R.*, Patel, S. N., **Dey, T.** (2024): Geometrically Nonlinear Dynamic Analysis of a Damped Porous Microplate Resting on Elastic Foundations Under In-Plane Nonuniform Excitation. *Mechanics Based Design of Structures and Machines*, 52 (7), 4553-4598.
12. Chakraborty, S., Singh, V., **Dey, T.***, Kumar, R. (2024): Influence of Carbon Nanotubes on Stability and Vibration Characteristics of Plates and Panels in Thermal Environment: A Review. *Archives of Computational Methods in Engineering*, 31 (1), 147-178.
13. Yadav, A., Amabili, M., Panda, S. K.*, **Dey, T.** (2023): Instability Analysis of Fluid-Filled Angle-Ply Laminated Circular Cylindrical Shells Subjected to Harmonic Axial Loading. *European Journal of Mechanics-A/Solids*, 97, 104810.
14. Chakraborty, S., **Dey, T.*** (2023): Thermomechanical Buckling and Wrinkling Characteristics of Softcore Sandwich Panels with CNT Reinforced Composite Face Sheets. *European Journal of Mechanics-A/Solids*, 98, 104894.
15. Chakraborty, S., **Dey, T.***, Mahesh, V., Harursampath, D. K. (2022): Post-Buckling and Vibration Analysis of Randomly Distributed CNT Reinforced Fibre Composite Plates Under Localised Heating. *Mechanics of Advanced Materials and Structures*, 30 (21), 4430-4449.
16. Dash, S., Chakraborty, S., **Dey, T.*** (2022): Buckling and Free Vibration Analysis of Randomly Distributed CNT Reinforced Composite Beam. *European Journal of Mechanics-A/Solids*, 96, 104749.
17. Chakraborty, S., **Dey, T.**, Singh, V., Kumar, R.* (2022): Thermal Stability Analysis of Three-Phase CNTRFC Cylindrical Shell Panels. *Journal of Aerospace Engineering (ASCE)*, 35, 04022074.
18. Yadav, A., Amabili, M., Panda, S. K.*, **Dey, T.**, Kumar, R. (2022): A Semi-Analytical Approach for Instability Analysis of Composite Cylindrical Shells Subjected to Harmonic Axial Loading. *Composite Structures*, 296, 115882.
19. Kumar, R.*, Singh, V., **Dey, T.**, Bhunia, D., Patel, S. N., Jain, V. (2022): Nonlinear Analysis of Sandwich Plate with FG Porous Core And RD-CNTCFRC Face Sheets Under Transverse Patch Loading. *Acta Mechanica*, 233 (11), 4589-4614.
20. **Dey, T.***, Jansen, E., Kumar, R., Rolfes, R. (2022): Instability Characteristics of Variable Stiffness Laminated Composite Curved Panels Under Non-Uniform Periodic Excitation. *Thin-Walled Structures*, 171, 108735.
21. Sahu, A.*, **Dey, T.**, Chakraborty, S. (2021): Performance Evaluation of Sustainable Recycled Aggregate Concrete with Colloidal Nano Silica. *European Journal of Environmental and Civil Engineering*, 26, 7878-7898.
22. Jadav, A., Amabili, M., Panda, S. K.*, **Dey, T.** (2021): Nonlinear Analysis of Cylindrical Sandwich Shells with Porous Core and CNT Reinforced Face-Sheets by Higher-Order Thickness and Shear Deformation Theory. *European Journal of Mechanics / A Solids*, 90, 104366.
23. Chakraborty, S., **Dey, T.***, Kumar, R. (2021): Instability Characteristics of Damped CNT Reinforced Laminated Shell Panels Subjected to In-Plane Excitations and Thermal Loading. *Structures*, 34, 2936-2949.
24. Jadav, A., Amabili, M., Panda, S. K.*, **Dey, T.**, Kumar, R. (2021): Forced Nonlinear Vibrations of Circular Cylindrical Sandwich Shells with Cellular Core Using Higher-Order Shear and Thickness Deformation Theory. *Journal of Sound and Vibration*, 510, 116283.

25. Singh, V., Kumar, R.*, Patel, S. N., **Dey, T.**, Panda, S. K. (2021): Instability and Vibration Analyses of Functionally Graded Carbon Nanotube-Reinforced Laminated Composite (FG-CNTRLC) Plate Subjected to Localized In-Plane Periodic Loading. **Journal of Aerospace Engineering (ASCE)**, 34(6), 04021072.
26. Singh, V., Kumar, R.*, Patel, S. N., **Dey, T.** (2021): Non-Linear Response and Buckling of Imperfect Laminated Composite Plates Under In-Plane Pulse Forces. **Part C: Journal of Mechanical Engineering Science**, 1-17.
27. Sahu, A.*, **Dey, T.**, Chakraborty, S. (2021): Influence of Nano Silica on Mechanical and Durability Characteristic of Mortar Made by Partial Replacement of Natural Fine Aggregate with Recycled Fine Aggregate. **Silicon**, 13, 4391-4405.
28. Chakraborty, S., **Dey, T.*** (2021): Non-Linear Stability Analysis of CNT Reinforced Composite Cylindrical Shell Panel Subjected to Thermomechanical Loading. **Composite Structures**, 255, 112995.
29. Jadav, A., Amabili, M., Panda, S. K.*, **Dey, T.**, Kumar, R. (2021): Nonlinear Damped Vibrations of Three-Phase CNT-FRC Circular Cylindrical Shell. **Composite Structures**, 255, 112939.
30. **Dey, T.***, Das, C. S., Mishra, N. (2020): Behaviour of Confined Recycled Aggregate Concrete Under Compressive Loading: An Experimental Investigation. **Journal of Building Engineering**, 32, 101825.
31. Jadav, A., Amabili, M., Panda, S. K.*, **Dey, T.** (2019): Non-Linear Vibration Response of Functionally Graded Circular Cylindrical Shells Subjected to Thermo-Mechanical Loading. **Composite Structures**, 229, 111430.
32. **Dey, T.***, Ramachandra, L. S. (2019): Computation of Worst Geometric Imperfection Profiles of Composite Cylindrical Shell Panels by Minimizing the Non-Linear Buckling Load. **Applied Mathematical Modelling**, 74, 483-495.
33. Kumar, R.*, **Dey, T.**, Panda, S. K. (2019): Instability and Vibration Analyses of FG Cylindrical Panels Under Parabolic Axial Compressions. **Steel and Composite Structures**, 31, 187-199.
34. Chakraborty, S., **Dey, T.***, Kumar, R. (2019): Stability and Vibration Analysis of CNT-Reinforced Functionally Graded Laminated Composite Cylindrical Shell Panels Using Semi-Analytical Approach. **Composites Part B: Engineering**, 168, 1-14.
35. Das, C. S., **Dey, T.***, Dandapat, R., Mukharjee, B. B., Kumar, J. (2018): Performance Evaluation of Polypropylene Fibre Reinforced Recycled Aggregate Concrete. **Construction and Building Materials**, 189, 649-659.
36. Jadav, A., Panda, S. K.*, **Dey, T.** (2018): Coupled Dynamic Instability Analysis of Thin-Walled Columns Subjected to Harmonic Axial Loading. **International Journal of Applied Mechanics**, 10, 1850051-1-22.
37. Padhi, R. S., Patra, R. K., Mukherjee, B. B.*, **Dey, T.** (2018): Influence of Incorporation of Rice Husk Ash and Coarse Recycled Concrete Aggregates on Properties of Concrete. **Construction and Building Materials**, 173, 289-297.
38. Jadav, A., Panda, S. K.*, **Dey, T.** (2017): Non-Linear Dynamic Instability Analysis of Thin-Walled Stiffener Beam Subjected to Uniform Harmonic In-Plane Loading. **Journal of Sound and Vibration**, 408, 383-399.

39. Jadav, A., Panda, S. K.*, **Dey, T.** (2017): Non-Linear Dynamic Instability Analysis of Mono-Symmetric Thin-Walled Columns with Various Boundary Conditions. *International Journal of Mechanical Sciences*, 126, 242-254.
40. **Dey, T.***, Ramachandra, L. S. (2017): Non-Linear Vibration Analysis of Laminated Composite Cylindrical Shells. *Composite Structures*, 163, 89-100.
41. **Dey, T.**, Kumar, R., Panda, S. K.* (2016): Postbuckling and Postbuckled Vibration Analysis of Sandwich Plates Under Non-Uniform Mechanical Edge Loadings. *International Journal of Mechanical Sciences*, 115-116, 226-237.
42. **Dey, T.**, Ramachandra, L. S.* (2016): Linear and Non-Linear Parametric Instability Behavior of Cylindrical Sandwich Panels Subjected to Various Mechanical Edge Loadings. *Mechanics of Advanced Materials and Structures*, 23 (1), 8-21.
43. **Dey, T.**, Ramachandra, L. S.* (2015): Dynamic Stability of Simply Supported Composite Cylindrical Shells Under Partial Axial Loading. *Journal of Sound and Vibration*, 353, 272-291.
44. **Dey, T.**, Ramachandra, L. S.* (2014): Static and Dynamic Instability Analysis of Composite Cylindrical Shell Panels Subjected to Partial Edge Loading. *International Journal of Non-Linear Mechanics*, 64, 46-56.
45. **Dey, T.**, Ramachandra, L. S.* (2014): Buckling and Postbuckling Response of Sandwich Panels Under Various Mechanical Edge Loadings. *Composites Part B: Engineering*, 60, 537-545.
46. **Dey, T.**, Ramachandra, L. S.* (2014): Non-Linear Stability Analysis of Laminated Composite Simply Supported Circular Cylindrical Shells Subjected to Partial Axial Loading. *Journal of Engineering Mechanics (ASCE)*, 140 (8), 04014058.

B) Submitted publications with peer review process

1. Yimer, M. A., **Dey, T.***: Lateral Impact Resistance of Full-Scale Hollow Concrete Columns Reinforced with GFRP Bars and Internal Steel Tube. (Publisher's Acknowledgement of Receipt Enclosed).
2. Yimer, M. A., **Dey, T.***: Dynamic Response of Full-Scale Hybrid GFRP-Steel Reinforced NSC-UHPC Beams Under High-Energy Impact Loading. (Publisher's Acknowledgement of Receipt Enclosed).

C) Publications without peer review process

1. Mukhopadhyay, K., **Dey, T.***, Haldar, A., Ramadas, C. (2024): Dynamic Stability Characteristics of Axially Functional Graded (AFG) Porous Damped Composite Plate: A Semi-Analytical Solution. *Proceedings of the Structural Engineering Convention 2024 at Tiruchirappalli, India*, December 2024, 286.
2. Chakraborty, S., **Dey, T.*** (2024): Dynamic Stability Characteristics of Axially Functional Graded (AFG) Porous Damped Composite Plate: A Semi-Analytical Solution. *Proceedings of the 26th International Congress of Theoretical and Applied Mechanics (ICTAM2024) at Daegu, Republic of Korea*, August 2024.

3. Chakraborty, S., **Dey, T.*** (2018): Non-Linear Stability Analysis of CNT-Reinforced Functionally Graded Laminated Composite Plates. ***Proceedings of the Asian Joint Symposium on Aerospace Engineering 2018 at Gyeongju, Republic of Korea***, October 2018.
4. Chakraborty*, S., Yadav, P., **Dey, T.** (2018): Free Vibration Analysis of Laminated Composite Plates: Experimental and Numerical Approach. ***Proceedings of the International Conference on Advances in Dynamics, Vibration and Control (ICADVC-2018) at Durgapur, India***, June 2018, 126-131.
5. Yadav*, A., Panda, S. K., **Dey, T.** (2017): Doubly Coupled Vibration and Dynamic Instability Analysis of Thin-Walled Columns. ***Proceedings of the International Conference on Theoretical, Applied, Computational and Experimental Mechanics at Kharagpur, India***, December 2017.
6. Ramachandra*, L. S., **Dey, T.** (2012): Nonlinear Static and Dynamic Stability of Cylindrical Shells. ***Proceedings of the Third Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2012) at New Delhi, India***, December 2012, 321-324.
7. Ramachandra*, L. S., **Dey, T.** (2012): Static Stability Analysis of Cylindrical Shells. ***Proceedings of the National Conference on Recent Advances in Mechanics and Materials at Burla, India***, June 2012, 11-21.
8. **Dey, T.***, Ramachandra, L. S. (2010): Dynamic Instability of Stiffened Composite Complete Cylindrical Shells. ***Proceedings of the Fifth International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM) at Kharagpur, India***, December 2010, 817-819.

* = Corresponding author

The following above mentioned publications have evolved from my doctoral dissertation: A40, A42, A43, A44, A45, A46, C6, C7, C8.