

Research publications

Papers published/accepted in refereed journals

1. **R. Udhayaraman**, Shantanu S. Mulay, Multi-scale approach based constitutive modelling of plain woven textile composites, *Mechanics of Materials*, 2017, 112, 172-192. *Impact factor*: 3.26, *Citations*: 27.
<https://doi.org/10.1016/j.mechmat.2017.06.007>.
2. Shantanu S. Mulay, **R. Udhayaraman**, On the constitutive modelling and damage behaviour of plain woven textile composite, *International Journal of Solids and Structures*, 2019, 156-157, 73-86. *Impact factor*: 3.9, *Citations*: 10.
<https://doi.org/10.1016/j.ijsolstr.2018.08.002>.
3. **R. Udhayaraman**, Shantanu S. Mulay, Multi-scale damage framework for textile composites: application to plain woven composite, *European Journal of Mechanics - A/Solids*, 2019, 77, 103289. *Impact factor*: 4.22, *Citations*: 5.
<https://doi.org/10.1016/j.euromechsol.2019.103809>.
4. Shantanu S. Mulay, **R. Udhayaraman**, M. Anas, Comparative study of algorithms to handle geometric and material nonlinearities, *International Journal of Materials and Structural Integrity*, 2019, Vol. 13, Nos. 1-3, pp.32–53. *Citations*: 1.
<https://doi.org/10.1504/IJMSI.2019.100427>.
5. **R. Udhayaraman**, Harini Subramanian, Shantanu S. Mulay, S. Venkatachalam, Multi-scale approach-based studies on the damage-healing and fracture behaviour of plain woven textile composite, *Mechanics of Advanced Materials and Structures*, 2020, 1-26. *Impact factor*: 4.03. *Citations*: 1.
<https://doi.org/10.1080/15376494.2020.1809037>.

Conference proceedings

1. **R. Udhayaraman**, Shantanu S. Mulay, Progressive failure analysis of plain woven composite, *Proceedings of International Conference on Composite Materials and Structures (ICCMS 2017)*, 2017, pp. 1577-1586, Hyderabad, India. *Citations*: 2.
2. **R. Udhayaraman**, Shantanu S. Mulay, Progressive failure analysis on plain woven textile composites, *Proceedings of 20th International Conference on Composite Structures (ICCS20 2017)*, 2017, pp. 186, Paris, France.
<https://doi.org/10.15651/978-88-938-5041-4>.

Conference presentations (oral)

1. **R. Udhayaraman**, Shantanu S. Mulay, Micromechanical constitutive modelling of plain woven textile composites, *Nineteenth National Seminar on Aerospace Structures (NASASXIX 2017)*, Full Paper Accepted, 2017, VIT Vellore, Tamil Nadu, India.
2. Shantanu S. Mulay (invited speaker), **R. Udhayaraman**, Multi-scale approach based constitutive modelling of plain woven textile composites, *9th International Conference on Materials for Advanced Technologies (ICMAT 2017)*, 2017, Singapore.