Professor Mostapha Tarfaoui


See:
https://www.researchgate.net/profile/Mostapha_Tarfaoui
https://scholar.google.fr/citations?user=di181JIAAAAJ&hl=fr
http://ensta-bretagne.academia.edu/MostaphaTarfaoui
https://www.intechopen.com/profiles/16937/mostapha-tarfaoui
https://www.thinkable.org/users/mostapha-tarfaoui

Mechanics and Materials
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Research Interests (from https://www.thinkable.org/users/mostapha-tarfaoui):

My research activities articulate around the development of experimental, theoretical and numerical approaches for a better description of the elastic behaviour of damaged composite material under dynamic loading in terms of dynamic response and damage kinetic. The hot line of this work is the comprehension of the appearance and the evolution of damage. This comprehension aims to better describing, simulating and optimizing the macroscopic behaviour of composite materials by multi scales approaches and by integrating certain aspects of their microstructure. For this objective, my research tasks are undertaken by developing two complementary approaches jointly: the experimental investigation and multi scales modelling of the mechanical behaviour. These two approaches were enriched by a third orientation. This one relates to the numerical developments of algorithms aiming at implementing the behaviour laws in structures computer codes by using finite elements method. These laws are developed for the modelling of the dynamic response, the produced damage and residual strength and/or are identified directly through experimental and numerical procedures.

Selected Publications:
Mostapha Tarfaoui, Khalid Lafi, Imane Beloufa, Debora Daloia and Ali Muhsan, “Effect of graphene nanoadditives on the local mechanical behavior of derived polymer nanocomposites”, Polymers, Vol. 10, 667, 2018