SIRAMMi

European Commission

H2020-WIDESPREAD-2018

Structural Integrity and Reliability of Advanced Materials obtained through additive Manufacturing

1st Winter School on

Trends on Additive Manufacturing for Engineering Applications

Marco Maurizi

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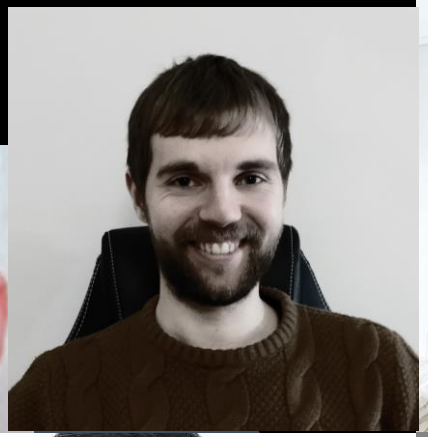
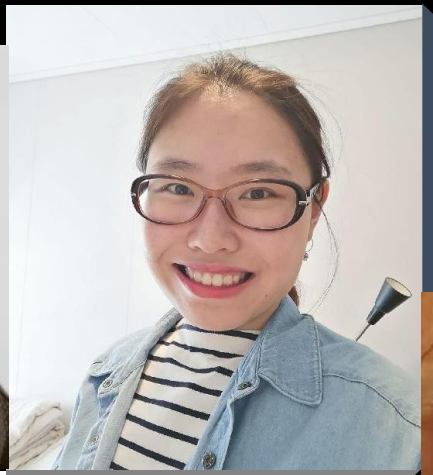
NTNU




Research group

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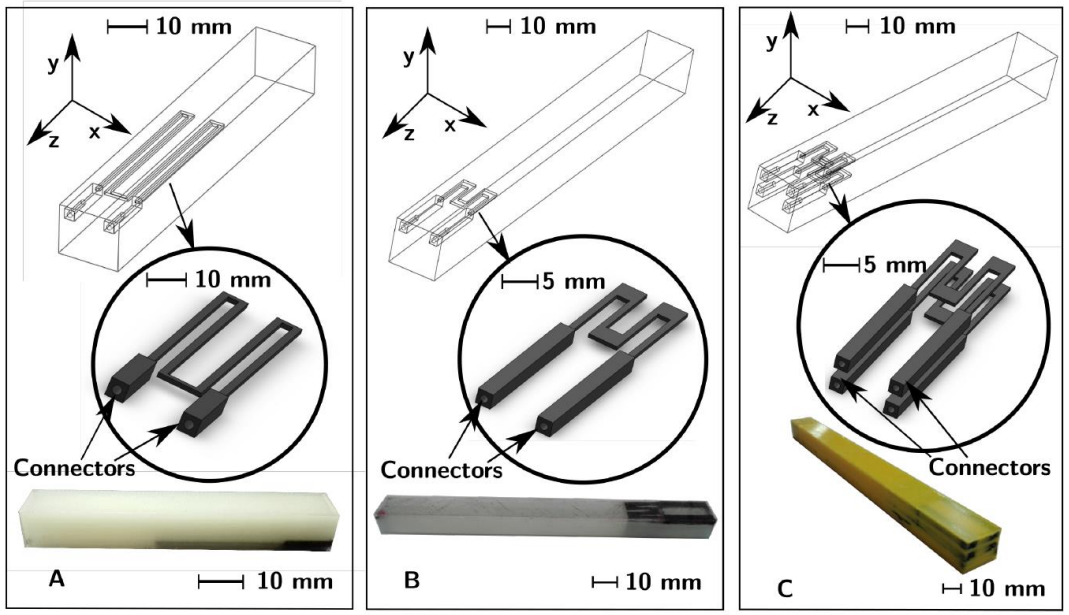
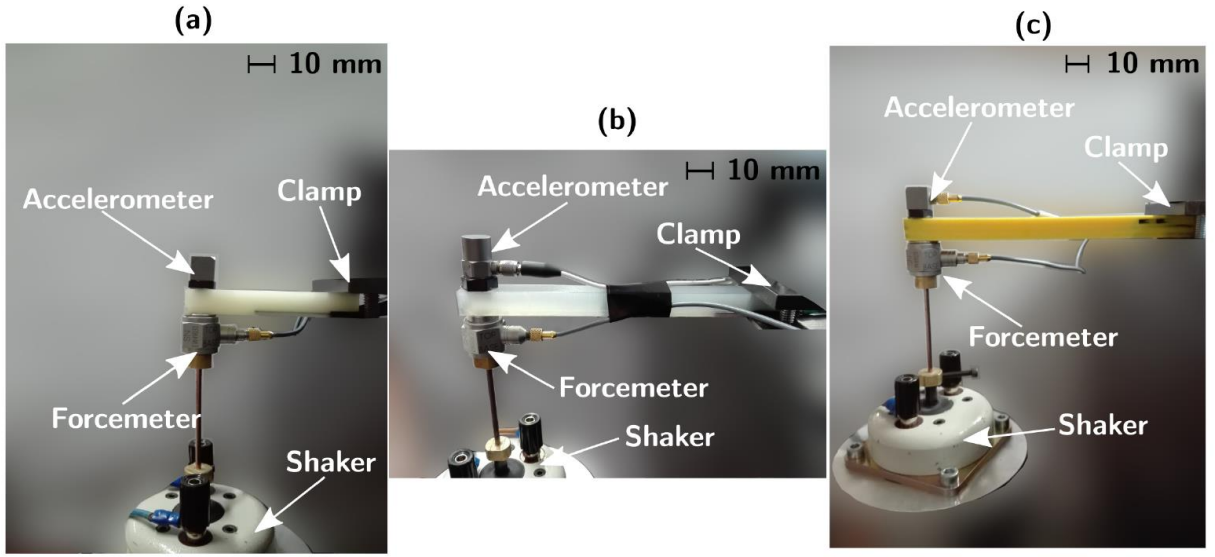
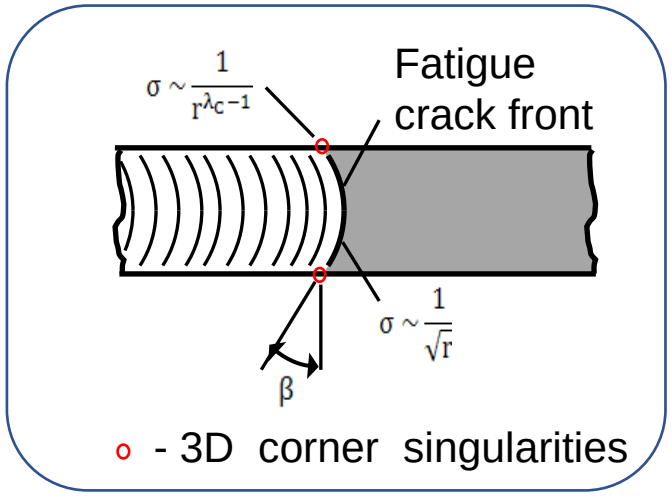
Some previous works…

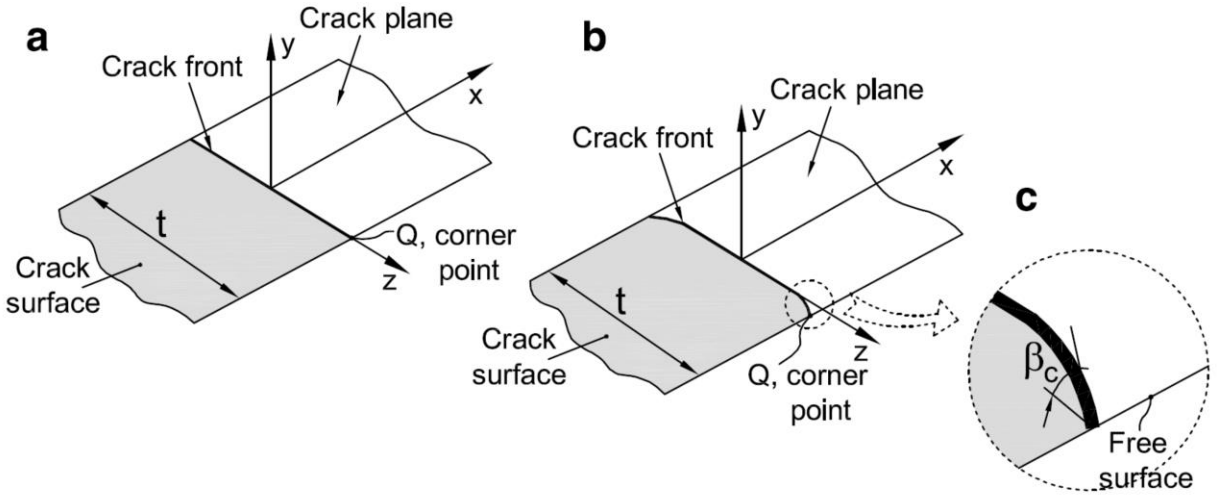


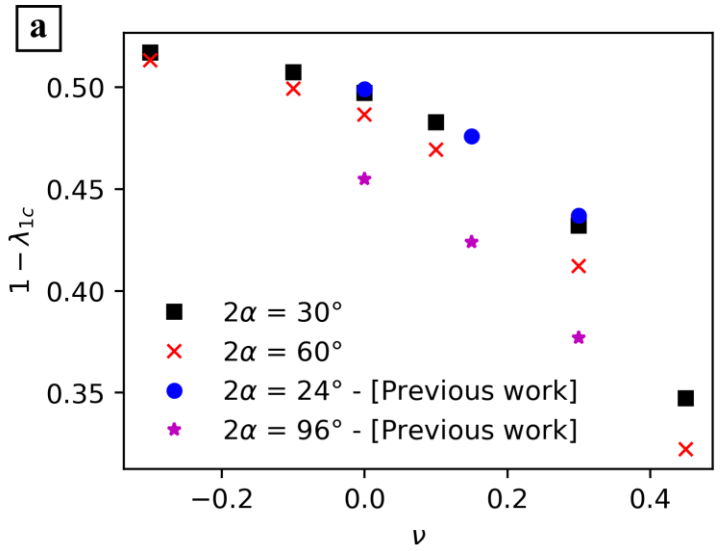


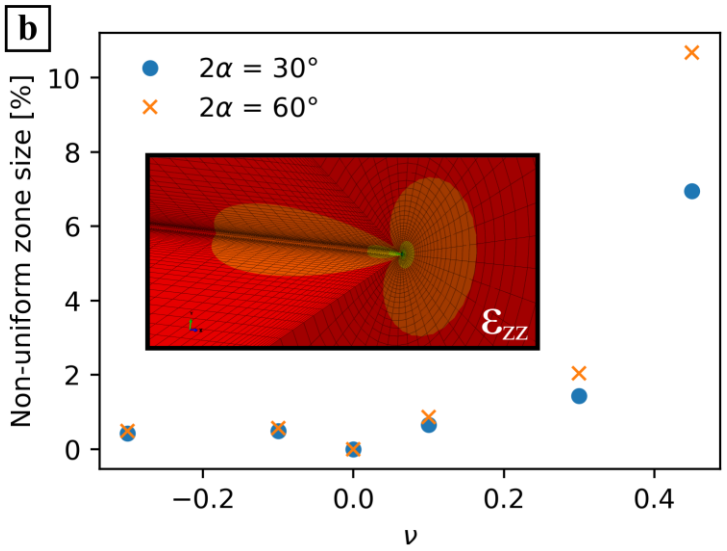
Dynamic Measurements Using FDM 3D-Printed Embedded Strain Sensors. M. Maurizi et al. *Sensors* (2019)

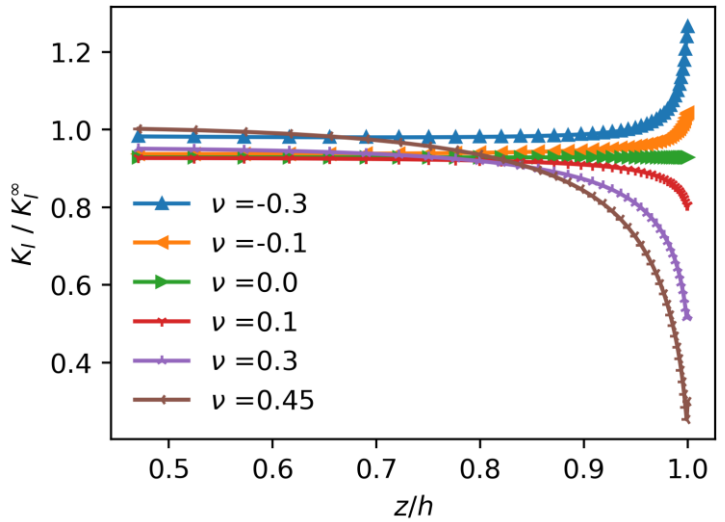
Some recent works…











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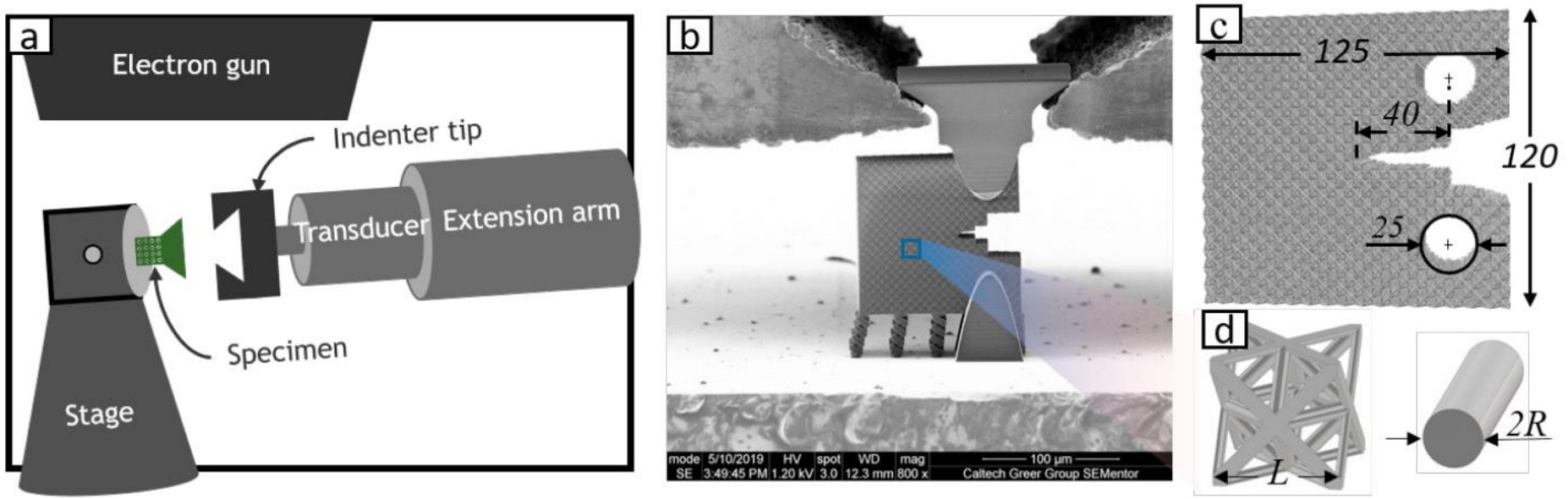
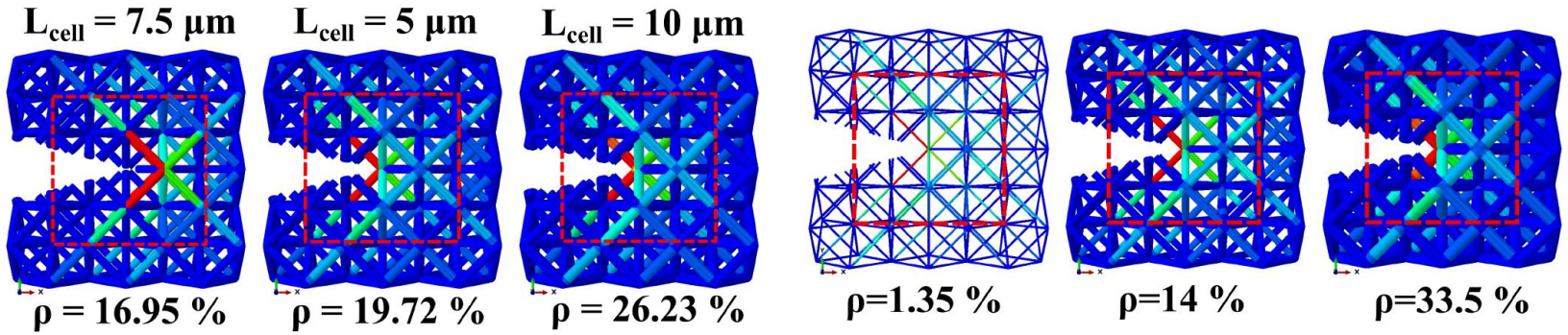


Strain energy density distribution



Energy-based approach for failure assessment of 3D architectured material. M. Maurizi et al. (2020)

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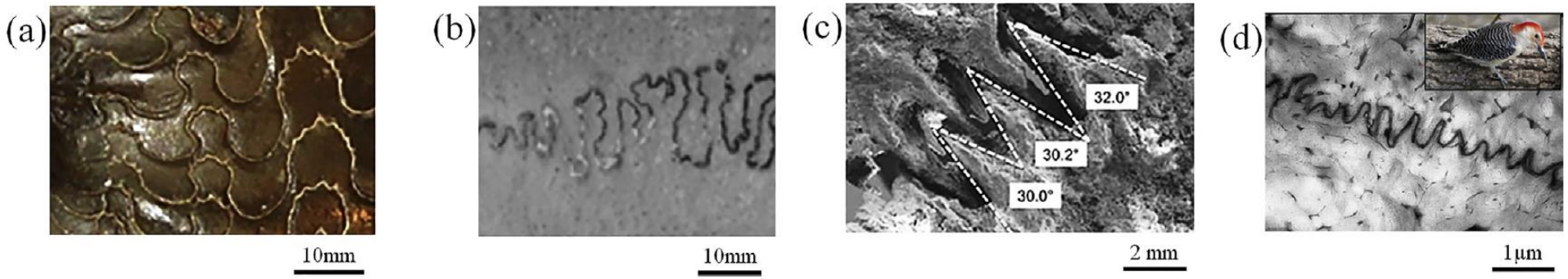
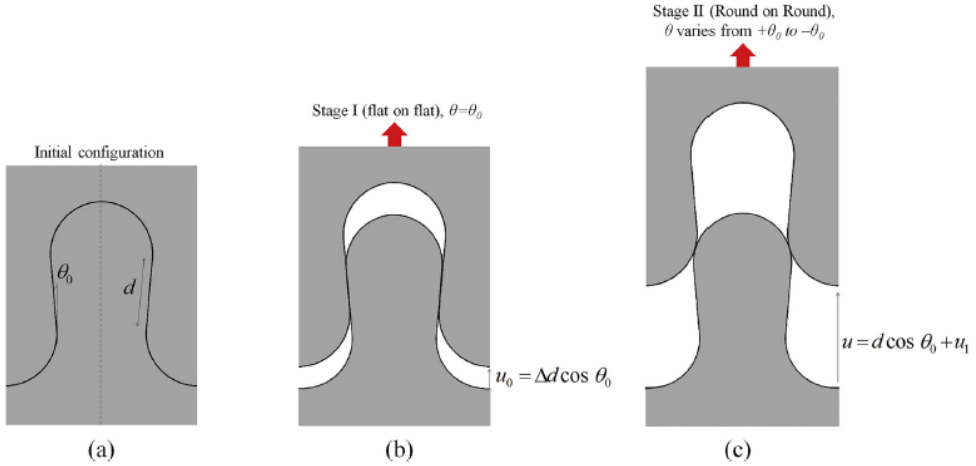
Architectured and bio-inspired materials

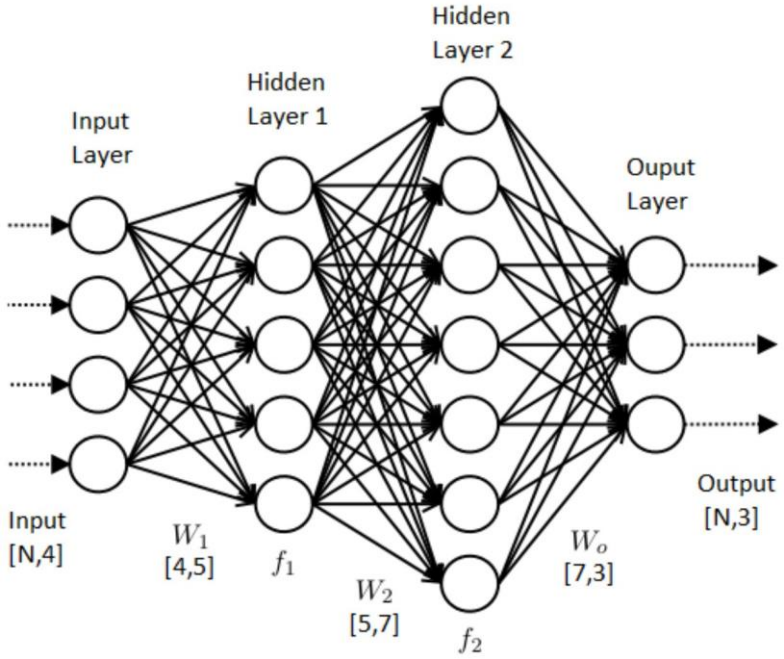
Sutures and interlocking materials



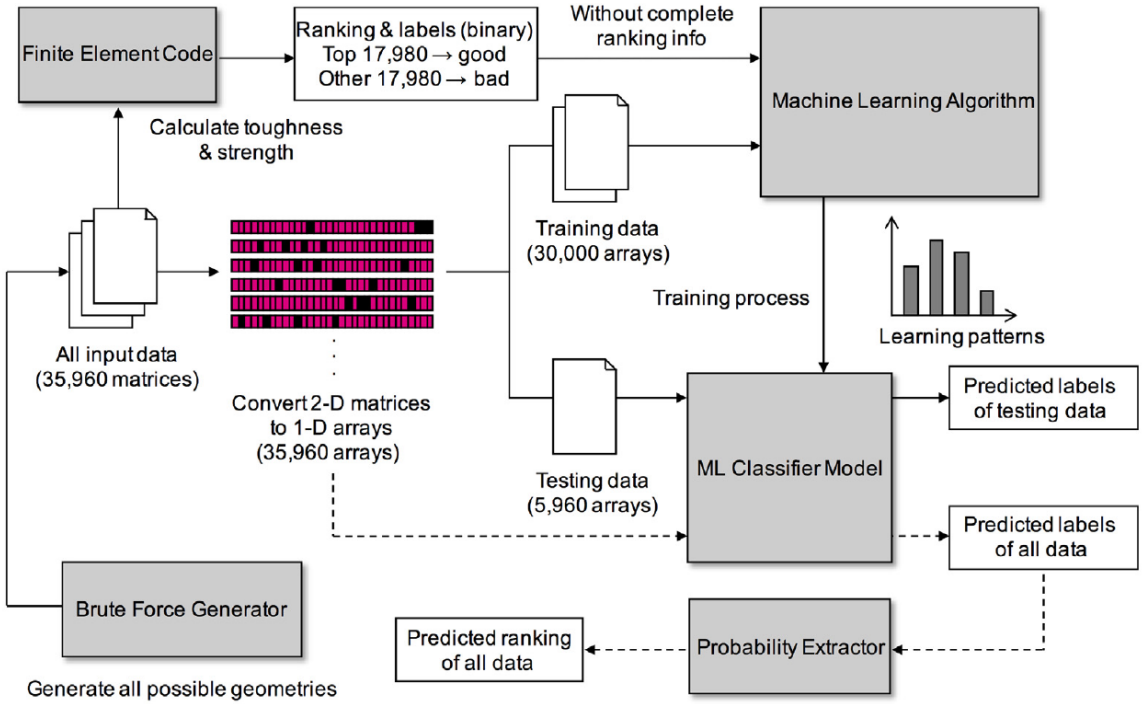


From work of Barthelat and co-workers

Machine learning in materials and mechanical engineering



Artificial neural network representation



From work of Grace Gu and co-workers

Will machine-learning methods become a tool as FE modeling for materials and solid mechanics research ?