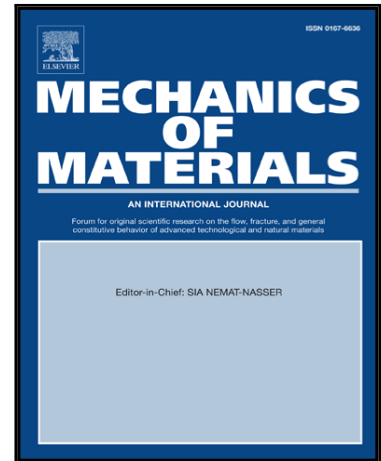


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A method to calculate the bulk hardness of metal matrix composite using Hadfield steel reinforced with niobium carbide particles as an example

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Highlights

- A conceptual model is proposed to calculate the bulk hardness of metal matrix composites.
- Hadfield steel reinforced with 15% vol niobium carbide particles is studied as an example.
- Hardness testing is simulated based on the calculated equivalent stress-strain curves.
- The effect of bonding between Hadfield steel and niobium carbide particles is investigated.

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