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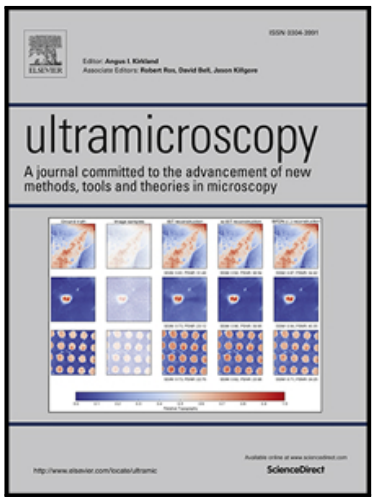

Application of the pattern matching approach for EBSD calibration and orientation mapping, utilising dynamical EBSP simulations

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Highlights

- Angular resolution for EBSD orientation determination of 0.06° was reached using pattern matching approach with dynamical simulated patterns
- Increased calibration accuracy of large EBSD maps realized by calculating calibration models based on pattern matching results
- Cross-correlation values between EBSD patterns and dynamical simulated patterns were mapped to depict the specimen surface, grain boundaries and lattice distortions
- Local drops of cross-correlation values were linked to orientation gradients

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