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Dynamic measurement of surface strain distribution on the foot during walking

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ABSTRACT

To clarify the mechanism underlying the development of foot disorders such as diabetic ulcers and deformities, it is important to understand how the foot surface elongates and contracts during gait. Such information is also helpful for improving the prevention and treatment of foot disorders. We therefore measured temporal changes in the strain distribution on the foot surface during human walking. Five adult male participants walked across a glass platform placed over an angled mirror set in a wooden walkway at a self-selected speed and the dorsolateral and plantar

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