

## **Homogenization for nonlinear Winkler-Robin conditions on a strainer-type wall**

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We address a homogenization problem for the elasticity system in a bounded domain of the upper half-space, a part of its boundary being in contact with the plane. We assume that this surface is traction-free out of small regions where we consider nonlinear Winkler-Robin type boundary conditions containing large reaction parameters. Different homogenized boundary conditions are obtained depending on the relations between parameters such as period, size of the regions and reaction parameters. The results extend those for the Laplacian in [ D. Gómez and M.-E. Pérez-Martínez. Boundary homogenization with large reaction terms on a strainer-type wall. *Z. Angew. Math. Phys.* 73, 234, 2022.], among others.