

Abstract Submitted
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Self Alignment of Wafer Stacks via Pattern Modification of Self Assembled Monolayer Surface Energies¹ ERNEST WALKER, North Carolina State University, HANS HALLEN, North Carolina State University — Self assembled monolayers (SAMs) are deposited on oxide layer, and characterized by ellipsometry and contact angle. Vinyl-terminated SAMs are oxidized to carboxyl-termination, which changes the wetting characteristics. Measurements of sliding friction between combinations of these layers is measured and discussed. The relative surface energies can also be obtained. From these data, the relative importance of friction and forces resulting from surface energy gradients can be determined, and wafer self-alignment masks evaluated.

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Hans Hallen
North Carolina State University

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