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## [802] Chemically selective reorganization of molecular Bi-layers films driven by molecule-substrate interactions

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Reliable organic spintronic devices depend on spin-injecting interfaces with precisely architectured multilayers to avoid premature failure e.g. due to current filaments building up at defects. Using X-ray Magnetic Circular Dichroism (XMCD) we present unambiguous evidence that in the sequential fabrication of organic bilayer interfaces by physical vapor deposition (sublimation), molecules re-organize perpendicular to the interface plane. On the basis of systematic experiments we analyse the mechanisms in this unexpected behaviour. Our results provide an analogon to the earlier established case of atomic inter-layer mixing of interfaces built with delta-doped layers in semiconductor devices as well as layered oxide films.

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