Next generation NIL materials – an evolution from lab to fab

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With more than 25 years of experience in development and manufacture of resists for nanoimprint lithography (NIL) we are determined to drive NIL as an advanced nanofabrication process. On the one hand, we consolidated our material developments to meet industrial expectations after NIL's transition to initial manufacturing industries. On the other hand, we continuously advance our material offer to pave the way for novel NIL concepts currently intensively explored in academia and hence extending the applicability of NIL. Therefore, we will report on our innovative NIL materials that ultimately attempt to bridge the gap between their use in early stage academic research and their application in industrial manufacturing processes. The focus will be on NIL resists for pattern transfer to complete lithography process, e.g. on non-traditional substrates, that are needed for rising application fields, such as AR/VR or meta lenses. Here, also multi-layer imprint materials are discussed as further example where concepts already developed in academics can be implemented in industry processes with a set of innovative NIL material system.