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Sintering characteristics of nano-ceramic coatings

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RIJKSUNIVERSITEIT GRONINGEN

SINTERING CHARACTERISTICS OF NANO-CERAMIC COATINGS

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ter verkrijging van het doctoraat in de
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aan de Rijksuniversiteit Groningen
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geboren op 13 november 1970
te Mount Kisco (NY), USA

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SINTERING CHARACTERISTICS OF NANO-CERAMIC COATINGS

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MERCK

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Cover front: Depicted is the stereostiction process. The RUG-logo is inkjet-printed with a zirconia sol-gel on a fused silica substrate and the FOM logo is being sintered by a scanning laser beam.

Cover back: Middle: Microscope picture of a laser sintered nano-ceramic zirconia FOM-logo
Top: Composition of 3 SEM pictures along a cross section of the edge of a laser track of a laser sintered silica coating.
Bottom: SEM cross section of a furnace treated zirconia coating.

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