The fashion label MOON Berlin is specialized in handmade luxury outfits and accessories with a focus on integrating light-emitting components into fabrics to create beautiful and dynamic light/shadow effects. They have presented their first 23-pieces collection “I’m not a robot” at the Berlin Fashion Week in January 2011.

For this event the designers have used an interactive stretchable electronic system that was developed at Fraunhofer IZM and Stretchable Circuits for some key pieces from their collection.

The interactive system consists of a microcontroller, an accelerometer and 32 warm-white LEDs placed over a large-area Stretchable Circuit Board. When the wearer is moving a sparkling light effect will appear on the fabric surface depending on strength and length of the movement. The system is powered by a lightweight credit-card size battery and last at least for 8 hours operating time.

When the outfits have to been cleaned the user can easily detach the electronics from the fabric by the integrated tiny plastic buttons.

Besides the ongoing creation of high-end clothing, the companies Stretchable Circuits and MOON Berlin are further collaborating in the development of low-cost wearable LED stripes for a coming soon ready-to-wear collection with Fraunhofer IZM.

Handmade Tech-Couture
In cooperation with MOON Berlin