

## Patented processing of improved ohmic contacts to SiC

Based on extensive TEM and SEM research, an original (patented) process sequence was invented to obtain improved ohmic contacts to SiC, utilizing amorphous layer of Ni-Zr during the first annealing step. The application resulted in significantly improved microstructure of contacts (resulting in better reliability), very good contact resistivity (even below  $2 \times 10^{-6} \Omega \text{cm}^2$ ) and thermal stability.

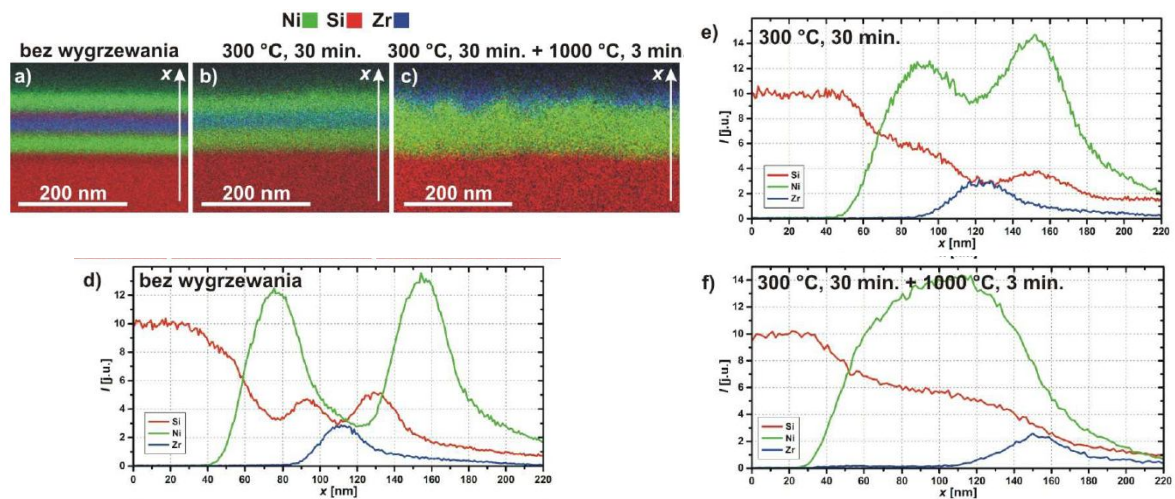


Fig. Results of XEDS analyses for Ni/Si/Zr/Si/Ni/Si/4H-SiC structures after successive stages of thermal operations: maps and charts of Ni, Si and Zr concentrations in-depth of the structure