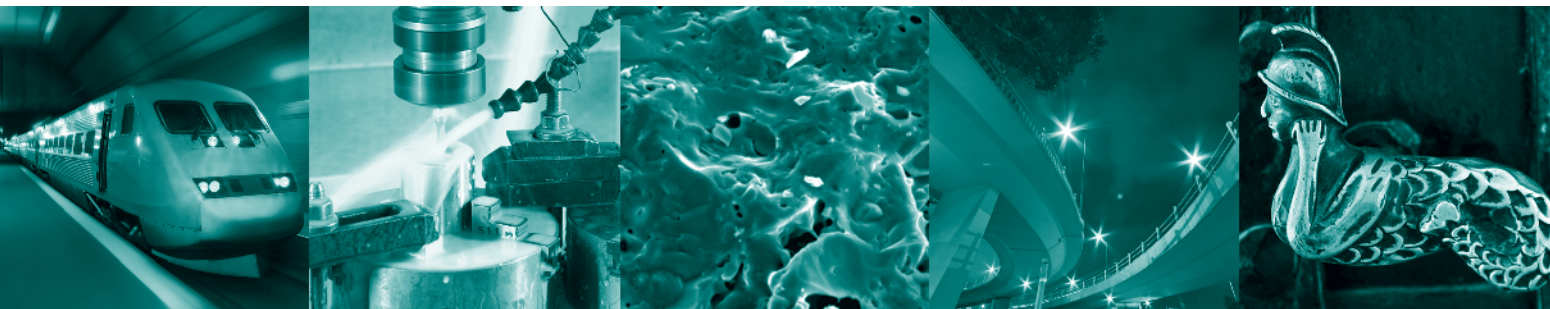




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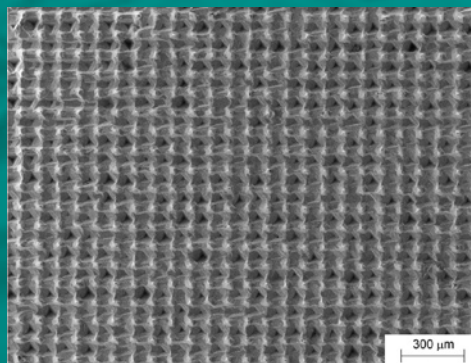
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Professor

Leszek A. Dobrzański M Dr hc
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Handing over to P.T. Readers the next volume of Archives of Materials Science and Engineering at the same time I would like to inform that among many works published in the journal, monographs on the issues determined in the scope of the journal are more frequently published. Encouraging P.T. Authors to submit these papers for the publication, today I recommend reading the next monograph and research papers that we print after the general reviews made in reference to each work by several world-known reviewers. I hope that the reading of this issue will bring you satisfaction.



The Research Monograph entitled "Strategic development perspectives of laser processing on polycrystalline silicon surface" by A.D. Dobrzańska-Danikiewicz and A. Drygała on a page 5 evaluates the strategic perspectives of polycrystalline silicon texturisation according to custom foresight methodology. The texturing type was the technology division criterion. Thus, in the paper the following three technologies: polycrystalline silicon texturisation by alkaline etching, laser treatment and laser treatment with chemical etching were compared. The presented results of experimental materials science research proved the significant positive impact of texturisation on the structure and mechanical properties of polycrystalline silicon surface layers, which leads to the justification of their including into the set of priority innovative technologies recommended for application in industrial practice. In the framework of the foresight-materials science research, a foresight matrices set was prepared, the strategic development tracks were determined, as well as materials science experiments using a Nd:YAG laser, a scanning electron microscope, a confocal laser scanning microscope and a spectrophotometer were conducted. Finally, on the basis of the obtained results the technology roadmaps were prepared. The novelty of this paper is to evaluate the value of polycrystalline silicon texturisation in the background environment with their future development perspectives determination. The carried out research pointed out the industrial importance of polycrystalline silicon texturisation and good perspectives for these technology groups.