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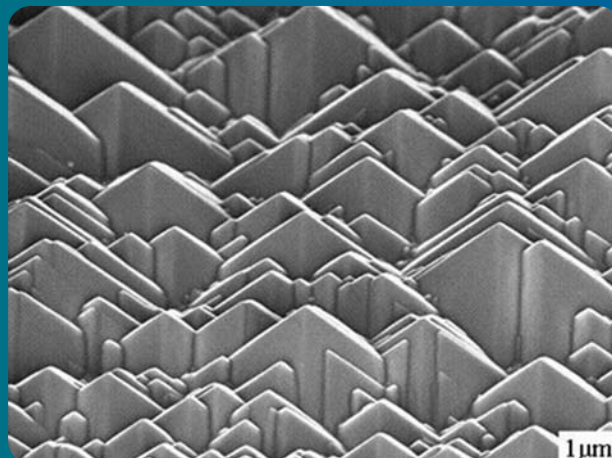


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The research paper made by L.A. Dobrzański and M. Muszyfaga on "Effect of the front electrode metallisation process on electrical parameters of a silicon solar cell" on a **page 115** shows that the laser micro-treatment of the silicon elements of solar cells with the different morphology of monocrystalline silicon, including the selective laser sintering of the front electrode to its surface using the CO₂ laser, improves the quality by minimising the resistance of a joint between the electrode and the substrate. The influence of the properties achieved for the front electrode on the electrical properties of solar cells was assessed. A front electrode of photovoltaic cells deposited by the traditional screen printing method and by co-firing in the infrared conveyor furnace was prepared for comparative purposes. The following technological recommendations for the laser micro-treatment technology such as optimal paste composition, the power and scanning speed of the laser beam, the morphology of the silicon substrate to produce the front electrode of silicon solar cells, were selected experimentally in order to produce a uniformly melted structure, well adhering to the substrate, with the low resistance of the front electrode-to-substrate joint zone. The contact resistance of front established metallisation depends on the paste composition, morphology of the silicon substrate as well as the co-firing and laser micro-treatment conditions.

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