

Summary and conclusions

Experiments were carried out to investigate the importance of the polymer type on the self-organizing formation of nanostructures on a plastic surface. This nano-texture should be generated by plasma etching and act as an effective and highly transparent adhesion promoter for subsequently applied wet-chemical laquers. It was found that a formation of up to 400 nm deep structures takes place on some polymers while on others no texture growth at all can be observed despite absolute identical etching conditions. Considering the ablation rates of the individual polymers no significant correlation to the nanostructure formation became obvious. So, the polymers chemistry and internal structure must have a crucial role in the formation of such nanostructures. This approach will be the subject of further investigations.

References

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