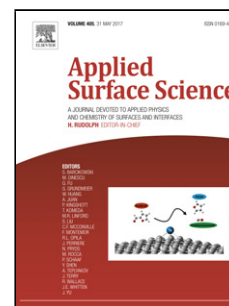


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Phosphonic acid functionalization of nanostructured Ni-W coatings on steel

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Highlights

- Robust and stable octadecylphosphonic acid self-assembled layers on nanostructured Ni-W coatings on steel were obtained by thermal annealing.
- XPS, Raman, contact angle and electrochemical measurements confirm the functionalization and characteristics of the phosphonic layer.
- The functionalized Ni-W samples exhibit high hydrophobicity and corrosion resistance in chloride containing solutions

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