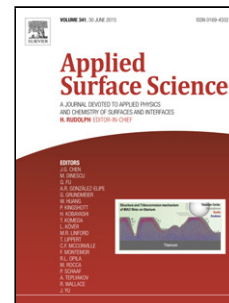


## Accepted Manuscript

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PII: S0169-4332(17)31928-1  
DOI: <http://dx.doi.org/doi:10.1016/j.apsusc.2017.06.273>  
Reference: APSUSC 36473

To appear in: *APSUSC*

Received date: 29-3-2017  
Revised date: 22-6-2017  
Accepted date: 26-6-2017

Please cite this article as: Zhefeng Lei, Qingqing Zhang, Xiaodong Zhu, Dayan Ma, Fei Ma, Zhongxiao Song, Yong Qing Fu, Corrosion performance of ZrN/ZrO<sub>2</sub> multilayer coatings deposited on 304 stainless steel using multi-arc ion plating, *Applied Surface Science* <http://dx.doi.org/10.1016/j.apsusc.2017.06.273>

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# **Corrosion performance of ZrN/ZrO<sub>2</sub> multilayer coatings deposited on 304 stainless steel using multi-arc ion plating**

Zhefeng Lei<sup>1,2</sup>, Qingqing Zhang<sup>1</sup>, Xiaodong Zhu<sup>1</sup>, Dayan Ma<sup>1</sup>, Fei Ma<sup>1</sup>, Zhongxiao Song<sup>1\*</sup>, Yong Qing Fu<sup>2,\*</sup>

1. State Key Laboratory for Mechanical Behavior of Materials, School of Materials Science and Engineering, Xi'an Jiaotong University, Xi'an, Shaanxi 710049, China

2. Faculty of Engineering and Environment, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK

## **Highlights:**

- A optimized process parameters for depositing the zirconia coating were being developed by using multi arc ion plating technique.
- A ZrN/ZrO<sub>2</sub> multilayer specimen that possesses symmetrical structure (thickness of each sublayers: 345 nm) and a suitable modulation ratio (1:1) showing excellent toughness and corrosion resistance properties.
- Multilayer structure has integrated the advantages of the sub-layers in toughness and corrosion resistance, and the interfaces should blocked the diffusion path of the cracks during serviced in a

\*Corresponding author. Zhongxiao Song, E-mail: ZhongxiaoSong@mail.xjtu.edu.cn; Yong Qing Fu, richard.fu@northumbria.ac.uk

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