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Title: Nano-Ti<sub>5</sub>Si<sub>3</sub> leading to enhancement of oxidation

resistance

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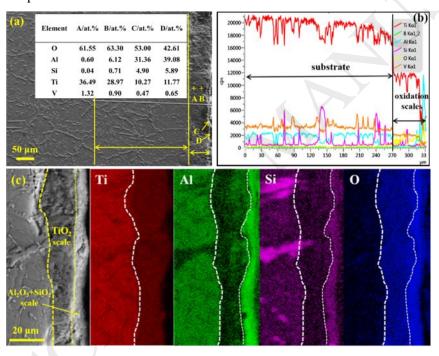


## ACCEPTED MANUSCRIPT

## Nano-Ti<sub>5</sub>Si<sub>3</sub> leading to enhancement of oxidation resistance

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#### Graphical abstract



## **Highlights**

- Nano-Ti<sub>5</sub>Si<sub>3</sub> led to remarkable enhancement of oxidation resistance of composites.
- The oxidation rate of composites decreased with increasing Ti<sub>5</sub>Si<sub>3</sub> fractions.
- Nano-Ti<sub>5</sub>Si<sub>3</sub> was beneficial to forming a scale of mixed Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>.

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