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Attrition-corrosion of human dental enamel: A review

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ABSTRACT

Attrition-corrosion is a dental wear process involving enamel-on-enamel sliding contact in an acidic environment. Since it involves both mechanical and chemical effects, attrition-corrosion is considered more representative of the dental wear processes that occur in the oral environment. This paper reviews previous studies on the attrition-corrosion process of human enamel and the underlying wear mechanisms, and also compares them to the associated individual wear processes, attrition and corrosion. Additionally, factors influencing the wear behavior of attrition-corrosion, modelling of this process and finally, areas for further research are discussed.

KEY WORDS

Human dental enamel, Tooth/Dental wear, Attrition-corrosion

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