

## Lect. Osman KOÇ

### Personal Information

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### International Researcher IDs

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### Research Areas

Biomedical Engineering, Computer Aided Design and Manufacturing, Finite Element Methods, Biomechanics, Engineering and Technology

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Comparison of the biomechanical effect of distal implants placed at different angles in the all-on-four technique: A nonlinear finite element analysis.**  
Unuvar Y., Calis A., Koc O.  
Journal of stomatology, oral and maxillofacial surgery, pp.102157, 2024 (SCI-Expanded)
- II. **Effects of different expansion appliances and surgical incisions on maxillary expansion: A finite element analysis**  
Ateş E. M., Pamukçu H., Koç O., Altıparmak N.  
Journal of Stomatology, Oral and Maxillofacial Surgery, vol.125, no.5, 2024 (SCI-Expanded)
- III. **Effects of different distractor positions on the formation of expansion, stress and displacement patterns in surgically assisted rapid maxillary expansion without pterygomaxillary disjunction: a finite element analysis study**  
Koç O., Bolat Gümüş E.  
Computer Methods in Biomechanics and Biomedical Engineering, vol.27, no.1, pp.56-66, 2024 (SCI-Expanded)
- IV. **Comparison of 3 different bone-borne type expansion appliances used in surgically-assisted rapid palatal expansion: A finite element analysis**  
Koç O., Pamukçu H., Kocabalkan A. A.  
AMERICAN JOURNAL OF ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS, vol.1, pp.1-15, 2022 (SCI-Expanded)
- V. **Surgically assisted rapid palatal expansion: is the pterygomaxillary disjunction necessary? A finite element study**  
Koç O., Jacob H. B.  
Seminars in Orthodontics, vol.28, no.3, pp.227-242, 2022 (SCI-Expanded)
- VI. **Influence of fiber insertion and different material type on stress distribution in endocrown restorations: a 3D-FEA study**  
Yildirim G., Demir C., Guven M. C., Koç O., Dalkılıç E.

## Articles Published in Other Journals

- I. **Effect of different palatal expanders with miniscrews in surgically assisted rapid palatal expansion: A non-linear finite element analysis**  
Koç O., Koç N., Jacob H. B.  
Dental Press Journal of Orthodontics, vol.29, no.1, 2024 (Scopus)
- II. **Fren Balata Sisteminde Sürtünme Sonucu Oluşan Isı Transferi Ve Termal Gerilme Analizi**  
Koç O., Taşgetiren S., Mutlu İ.  
Teknolojik Araştırmalar Dergisi, vol.1, no.2, pp.9-20, 2009 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **EVALUATION OF THE EFFECTS OF 2 DIFFERENT MINI-SCREW-ASSISTED MAXILLARY EXPANSION APPLIANCES IN UNILATERAL CROSSBITE CASES BY FINITE ELEMENT ANALYSIS**  
Baştaş M., Koç O., Aras A.  
XIX. Uluslararası Türk Ortodonti Derneği Kongresi, Antalya, Turkey, 2 - 06 November 2024, pp.383-384
- II. **Comparison of Stress Distribution Around Sloped İmplant With Finite Element Analysis**  
Ünüvar Y., Çalış A., Koç O.  
Türk Oral ve Maksillofasiyal Cerrahi Derneği (TAOMS'23) 30. ULUSLARARASI BİLİMSEL KONGRESİ, Antalya, Turkey, 17 - 21 November 2023, pp.64

## Supported Projects

KOÇ O., Endüstride Kullanılan Yüksek Güçlü Elektrik Motorlarının Arızalarını Önlemeye Yönelik Yenilikçi Bir Soğutma Sistemi Tasarımı, 2012 - 2013

KOÇ O., TUBİTAK Project, Bor minareleri katkılı otomotiv fren balatası üretimi ve frenleme karakteristiğinin incelenmesi, 2007 - 2008

## Metrics

Publication: 10

Citation (WoS): 1

Citation (Scopus): 9

H-Index (WoS): 1

H-Index (Scopus): 2

## Non Academic Experience

Trakya Üniversitesi