

## Prof. KIVANÇ AKÇA

### Personal Information

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### International Researcher IDs

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### Biography

He is a professor of prosthodontics with tenure track position at Hacettepe University, Faculty of Dentistry mainly for education & research(clinical/preclinical) activities, and maintains clinical practice in his private dental office in Ankara.

He integrates educational/research expertise and skills in the field of Dental Implantology, Digital Dentistry and Evidence Based Dentistry with daily clinical practice.

Accordingly, his focus of interest is optimization of evolving dental technologies in treatment planning and clinical practice of teeth/implant supported fixed prosthesis both in esthetic and functional zone.

### Education Information

Doctorate, Hacettepe University, Dış Hekimliği Fakültesi, Protetik Dış Tedavisi , Turkey 1994 - 1998

### Certificates, Courses and Trainings

Vocational Training, Evidence Based Practice Workshop, McMaster University, Hamilton, Ontario, Canada , 2013

Vocational Course, Master's Course in Regenerative and Esthetic Periodontal Therapy, University of Bern, Switzerland., 2013

Vocational Course, Master Course in GBR and Sinus Grafting Procedures, University of Berne, Switzerland., 2010

Vocational Training, CEBM Workshop in Evidence Based Practice-II. , University of Oxford, England., 2010

Vocational Training, CEBM Workshop in Evidence Based Practice-I, University of Oxford, England., 2009

Vocational Course, Master's Course in Esthetic Implant Dentistry, University of Berne, Switzerland, 2005

Vocational Course, ITI(International Team for Implantology) Education Week. , University of Berne, Switzerland., 2001

### Research Areas

Dentistry, Clinical Sciences, Prosthetic Dentistry, Crown Bridge, Health Sciences

## Advising Theses

- Akça K., Evaluation of Intraoral Scanning Technique in Fabrication of Implant Supported Full Arch Fixed Screw Retained Superstructure. , Dental Specialty, M.VAROL(Student), 2017
- Akça K., In-vitro Examination of the Biomechanical Relationship Between Titanium-Zirconium Alloy Dental Implants and Different Abutment Materials, Dental Specialty, H.YERLİKAYA(Student), 2015
- Akça K., Evaluation of biomechanical properties of glass-ceramic endocrowns clinically and pre-clinically, Doctorate, D.HASANOĞLU(Student), 2012
- AKÇA K., Finite element investigation of mechanical interaction of dental implants with bone, Postgraduate, A.ESER(Student), 2007

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

- I. **Occlusal adjustment of 3-unit tooth-supported fixed dental prostheses fabricated with complete-digital and -analog workflows: A non-randomized crossover clinical trial**  
Karasan D., Sailer I., Lee H., DEMİR F., Zarauz C., AKÇA K.  
Journal of Dentistry, vol.128, 2023 (SCI-Expanded)
- II. **Mechanical Failure of Endocrowns Manufactured with Different Ceramic Materials: An In Vitro Biomechanical Study**  
AKTAŞ G., YERLİKAYA H., AKÇA K.  
JOURNAL OF PROSTHODONTICS-IMPLANT ESTHETIC AND RECONSTRUCTIVE DENTISTRY, vol.27, no.4, pp.340-346, 2018 (SCI-Expanded)
- III. **Implant fractures: etiology, prevention, and treatment**  
Eckert S. E., Salinas T. J., AKÇA K.  
DENTAL IMPLANT COMPLICATIONS: ETIOLOGY, PREVENTION, AND TREATMENT, 2ND EDITION, pp.132-144, 2016 (SCI-Expanded)
- IV. **Numerical assessment of bone remodeling around conventionally and early loaded titanium and titanium-zirconium alloy dental implants.**  
Akça K., Eser A., Çavuşoğlu Y., Sağırkaya E., Çehreli M.  
Medical & biological engineering & computing, vol.53, pp.453-62, 2015 (SCI-Expanded)
- V. **EFFECT OF DIGITIZING TECHNIQUES ON THE FIT OF IMPLANT-RETAINED CROWNS WITH DIFFERENT ANTI ROTATIONAL ABUTMENT FEATURES**  
AKTAŞ G., Ozcan N., Aydin D. H., Sahin E., AKÇA K.  
JOURNAL OF PROSTHETIC DENTISTRY, vol.111, no.5, pp.367-372, 2014 (SCI-Expanded)
- VI. **A pilot study of joint stability at the zirconium or titanium abutment/titanium implant interface.**  
Cavusoglu Y., Akça K., Gürbüz R., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.29, pp.338-43, 2014 (SCI-Expanded)
- VII. **CAD/CAM glass ceramics for single-tooth implant crowns: a finite element analysis.**  
Akça K., Cavusoglu Y., Sagirkaya E., Aybar B., Cehreli M.  
Implant dentistry, vol.22, pp.623-6, 2013 (SCI-Expanded)
- VIII. **The Effects of Pulsed Electromagnetic Field (PEMF) on Osteoblast-Like Cells Cultured on Titanium and Titanium-Zirconium Surfaces**  
Atalay B., Aybar B., Erguven M., Emes Y., Bultan O., AKÇA K., Yalcin S., BAYSAL U., Issever H., Cehreli M. C., et al.  
JOURNAL OF CRANIOFACIAL SURGERY, vol.24, no.6, pp.2127-2134, 2013 (SCI-Expanded)
- IX. **Predicting bone remodeling around tissue- and bone-level dental implants used in reduced bone width.**  
Eser A., Tonuk E., Akca K., Dard M., Cehreli M.  
Journal of biomechanics, vol.46, pp.2250-7, 2013 (SCI-Expanded)
- X. **Comparative Assessments, Meta-Analysis, and Recommended Guidelines for Reporting Studies on Histomorphometric Bone-Implant Contact in Humans**

Sağırkaya E., Kucukekenci A., Karasoy D., Akça K., Eckert S., Çehreli M.

INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS, vol.28, no.5, pp.1243-1263, 2013 (SCI-Expanded)

- XI. **Early-loaded one-stage implants retaining mandibular overdentures by two different mechanisms: 5-year results.**  
Akça K., Çavuşoğlu Y., Sağırkaya E., Çehreli M.  
The International journal of oral & maxillofacial implants, vol.28, pp.824-30, 2013 (SCI-Expanded)
- XII. **Low-level laser therapy vs. pulsed electromagnetic field on neonatal rat calvarial osteoblast-like cells**  
Emes Y., AKÇA K., Aybar B., Yalcin S., CAVUSOGLU Y., BAYSAL U., Issever H., Atalay B., Vural P., Erguven M., et al.  
LASERS IN MEDICAL SCIENCE, vol.28, no.3, pp.901-909, 2013 (SCI-Expanded)
- XIII. **A prospective, open-ended, single-cohort clinical trial on early loaded Titanium-zirconia alloy implants in partially edentulous patients: up-to-24-month results.**  
Akca K., Cavusoglu Y., Uysal S., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.28, pp.573-8, 2013 (SCI-Expanded)
- XIV. **Immediate versus conventional loading of implant-supported maxillary overdentures: a finite element stress analysis.**  
Akca K., Eser A., Eckert S., Cavusoglu Y., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.28, 2013 (SCI-Expanded)
- XV. **Efficacy of resonance frequency analysis in the diagnosis of compromised bone-implant interface.**  
Çavuşoğlu Y., Şahin E., Akça K.  
Implant dentistry, vol.21, pp.394-8, 2012 (SCI-Expanded)
- XVI. **Fatigue resistance of 2 different CAD/CAM glass-ceramic materials used for single-tooth implant crowns.**  
Çavuşoğlu Y., Sahin E., Gürbüz R., Akça K.  
Implant dentistry, vol.20, pp.374-8, 2011 (SCI-Expanded)
- XVII. **A Randomized Controlled Clinical Trial of Feldspathic Versus Glass-Infiltrated Alumina All-Ceramic Crowns: A 3-Year Follow-up**  
Cehreli M., Kokat A., Ozpay C., Karasoy D., Akca K.  
INTERNATIONAL JOURNAL OF PROSTHODONTICS, vol.24, no.1, pp.77-84, 2011 (SCI-Expanded)
- XVIII. **Spontaneous early exposure and marginal bone loss around conventionally and early-placed submerged implants: a double-blind study.**  
Cehreli M., Kökat A., Uysal S., Akca K.  
Clinical oral implants research, vol.21, pp.1327-33, 2010 (SCI-Expanded)
- XIX. **Micro ct analysis of sellar floor in pituitary adenomas, especially in Cushing's disease**  
BERKER M., Hazer D. B., Çehreli M., Salmon P., AKÇA K., Tekdemir I.  
Acta Endocrinologica, vol.6, no.4, pp.481-492, 2010 (SCI-Expanded)
- XX. **Marginal bone level changes and prosthetic maintenance of mandibular overdentures supported by 2 implants: a 5-year randomized clinical trial.**  
Cehreli M., Uysal S., Akca K.  
Clinical implant dentistry and related research, vol.12, pp.114-21, 2010 (SCI-Expanded)
- XXI. **A Systematic Review of Marginal Bone Loss Around Implants Retaining or Supporting Overdentures**  
Cehreli M., Karasoy D., Kökat A., Akça K., Eckert S.  
INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS, vol.25, no.2, pp.266-277, 2010 (SCI-Expanded)
- XXII. **Torque-fitting and resonance frequency analyses of implants in conventional sockets versus controlled bone defects in vitro.**  
Akça K., Kökat A., Cömert A., Akkocaoğlu M., Tekdemir I., Cehreli M.  
International journal of oral and maxillofacial surgery, vol.39, pp.169-73, 2010 (SCI-Expanded)
- XXIII. **Predicting time-dependent remodeling of bone around immediately loaded dental implants with different designs.**

- Eser A., Tonuk E., Akca K., Cehreli M.  
Medical engineering & physics, vol.32, pp.22-31, 2010 (SCI-Expanded)
- XXIV. **Numerical simulation of the effect of time-to-loading on peri-implant bone.**  
Akça K., Eser A., Canay S.  
Medical engineering & physics, vol.32, pp.7-13, 2010 (SCI-Expanded)
- XXV. **BIOMECHANICS OF ORAL IMPLANTS**  
Cehreli M., AKÇA K.  
DENTAL IMPLANTATION AND TECHNOLOGY, pp.125-162, 2010 (SCI-Expanded)
- XXVI. **Systematic Review of Prosthetic Maintenance Requirements for Implant-Supported Overdentures**  
Cehreli M., Karasoy D., Kokat A., Akca K., Eckert S.  
INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS, vol.25, no.1, pp.163-180, 2010 (SCI-Expanded)
- XXVII. **Marginal bone loss and prosthetic maintenance of bar-retained implant-supported overdentures: a prospective study.**  
Akca K., Cehreli M., Uysal S.  
The International journal of oral & maxillofacial implants, vol.25, pp.137-45, 2010 (SCI-Expanded)
- XXVIII. **Meta-analysis of Methods Used to Assess Implant Stability**  
Cehreli M., Karasoy D., Akca K., Eckert S.  
INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS, vol.24, no.6, pp.1015-1032, 2009 (SCI-Expanded)
- XXIX. **Implant stability and bone density: assessment of correlation in fresh cadavers using conventional and osteotome implant sockets.**  
Cehreli M., Kökat A., Comert A., Akkocaoğlu M., Tekdemir I., Akça K.  
Clinical oral implants research, vol.20, pp.1163-9, 2009 (SCI-Expanded)
- XXX. **Effects of prosthesis design and impression techniques on human cortical bone strain around oral implants under load.**  
Akça K., Kokat A., Sahin S., Iplikcioglu H., Cehreli M.  
Medical engineering & physics, vol.31, pp.758-63, 2009 (SCI-Expanded)
- XXXI. **Numeric simulation of time-dependent remodeling of bone around loaded oral implants.**  
Eser A., Tonuk E., Akca K., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.24, pp.597-608, 2009 (SCI-Expanded)
- XXXII. **Biomechanical aspects of bone-level diameter shifting at implant-abutment interface.**  
Canay S., Akça K.  
Implant dentistry, vol.18, pp.239-48, 2009 (SCI-Expanded)
- XXXIII. **Nonlinear finite element analysis versus ex vivo strain gauge measurements on immediately loaded implants.**  
Eser A., Akça K., Eckert S., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.24, pp.439-46, 2009 (SCI-Expanded)
- XXXIV. **Fresh-frozen vs. embalmed bone: is it possible to use formalin-fixed human bone for biomechanical experiments on implants?**  
Cömert A., Kökat A., Akkocaoğlu M., Tekdemir I., Akça K., Cehreli M.  
Clinical oral implants research, vol.20, pp.521-5, 2009 (SCI-Expanded)
- XXXV. **Human ex vivo bone tissue strains around immediately-loaded implants supporting mandibular fixed prostheses.**  
Kökat A., Cömert A., Tekdemir I., Akkocaoğlu M., Akça K., Cehreli M.  
Implant dentistry, vol.18, pp.162-71, 2009 (SCI-Expanded)
- XXXVI. **CAD/CAM Zirconia vs. slip-cast glass-infiltrated Alumina/Zirconia all-ceramic crowns: 2-year results of a randomized controlled clinical trial.**  
Cehreli M., Kökat A., Akça K.  
Journal of applied oral science : revista FOB, vol.17, pp.49-55, 2009 (SCI-Expanded)
- XXXVII. **Two-year prospective follow-up of implant/tooth-supported versus freestanding implant-supported**

**fixed partial dentures.**

Akça K., Cehreli M.

The International journal of periodontics & restorative dentistry, vol.28, pp.593-9, 2008 (SCI-Expanded)

XXXVIII. **Effect of compromised cortical bone on implant load distribution.**

Akça K., Fanuscu M., Caputo A.

Journal of prosthodontics : official journal of the American College of Prosthodontists, vol.17, pp.616-20, 2008 (SCI-Expanded)

XXXIX. **A photoelastic and strain-gauge analysis of interface force transmission of internal-cone implants.**

Akça K., Cehreli M.

The International journal of periodontics & restorative dentistry, vol.28, pp.391-9, 2008 (SCI-Expanded)

XL. **PRIMARY STABILITY OF IMMEDIATE DENTAL IMPLANTS: CONVENTIONAL PLACEMENT VERSUS AN OSTEOTOME TECHNIQUE**

Kokat A. M., Comert A., Tekdemir I., AKÇA K., Cehreli M. C.

INTERNATIONAL JOURNAL OF ARTIFICIAL ORGANS, vol.31, no.7, pp.610, 2008 (SCI-Expanded)

XLI. **Effect of surgical techniques on primary implant stability and peri-implant bone.**

Fanuscu M., Chang T., Akça K.

Journal of oral and maxillofacial surgery : official journal of the American Association of Oral and Maxillofacial Surgeons, vol.65, pp.2487-91, 2007 (SCI-Expanded)

XLII. **Platelet-rich plasma and bone healing: A histologic study in titanium bone chambers**

Akca K., Demiralp B., Dagdeviren A.

INTERNATIONAL JOURNAL OF PERIODONTICS & RESTORATIVE DENTISTRY, vol.27, no.4, pp.387-392, 2007 (SCI-Expanded)

XLIII. **Micro-morphologic changes around biophysically-stimulated titanium implants in ovariectomized rats.**

Akca K., Sarac E., Baysal U., Fanuscu M., Chang T., Cehreli M.

Head & face medicine, vol.3, pp.28, 2007 (SCI-Expanded)

XLIV. **Effects of attachment design on strains around implants supporting overdentures.**

Cekiç C., Akça K., Cehreli M.

Quintessence international (Berlin, Germany : 1985), vol.38, 2007 (SCI-Expanded)

XLV. **Impact of similarity in chemical composition of light-polymerized resin composites on post-gel strains and interface integrity.**

Cehreli M., Cehreli Z., Akca K.

Journal of materials science. Materials in medicine, vol.18, pp.1053-60, 2007 (SCI-Expanded)

XLVI. **Bone strains around apically free versus grafted implants in the posterior maxilla of human cadavers.**

Cehreli M., Akkocaoglu M., Comert A., Tekdemir I., Akca K.

Medical & biological engineering & computing, vol.45, pp.395-402, 2007 (SCI-Expanded)

XLVII. **Primary stability of simultaneously placed dental implants in extraoral donor graft sites: a human cadaver study.**

Akkocaoglu M., Cehreli M., Tekdemir I., Comert A., Güzel E., Dağdeviren A., Akca K.

Journal of oral and maxillofacial surgery : official journal of the American Association of Oral and Maxillofacial Surgeons, vol.65, pp.400-7, 2007 (SCI-Expanded)

XLVIII. **Bone strains around immediately loaded implants supporting mandibular overdentures in human cadavers.**

Akça K., Akkocaoglu M., Cömert A., Tekdemir I., Cehreli M.

The International journal of oral & maxillofacial implants, vol.22, pp.101-9, 2007 (SCI-Expanded)

XLIX. **Numerical simulation of in vivo intraosseous torsional failure of a hollow-screw oral implant.**

Cehreli M., Akkocaoglu M., Akca K.

Head & face medicine, vol.2, pp.36, 2006 (SCI-Expanded)

L. **Neural response to sandblasted/acid-etched, TiO<sub>2</sub>-blasted, polished, and mechanochemically polished/nanostructured titanium implant surfaces.**

Onur M., Sezgin A., Gürpınar A., Sommer A., Akça K., Cehreli M.

Clinical oral implants research, vol.17, pp.541-7, 2006 (SCI-Expanded)

- LI. Impression techniques and misfit-induced strains on implant-supported superstructures: an in vitro study.**  
Cehreli M., Akça K.  
The International journal of periodontics & restorative dentistry, vol.26, pp.379-85, 2006 (SCI-Expanded)
- LII. Biomechanical aspects of initial intraosseous stability and implant design: a quantitative micro-morphometric analysis.**  
Akça K., Chang T., Tekdemir I., Fanuscu M.  
Clinical oral implants research, vol.17, pp.465-72, 2006 (SCI-Expanded)
- LIII. Biomechanical consequences of progressive marginal bone loss around oral implants: a finite element stress analysis.**  
Akca K., Cehreli M.  
Medical & biological engineering & computing, vol.44, pp.527-35, 2006 (SCI-Expanded)
- LIV. Implant-tooth-supported fixed partial prostheses: correlations between in vivo occlusal bite forces and marginal bone reactions**  
AKCA K., UYSAL S., CEHRELI M. C.  
CLINICAL ORAL IMPLANTS RESEARCH, vol.17, no.3, pp.331-336, 2006 (SCI-Expanded)
- LV. Towards the limit of quantifying low-amplitude strains on bone and in coagulum around immediately loaded oral implants in extraction sockets.**  
Cehreli M., Comert A., Akkocaoglu M., Tekdemir I., Akca K.  
Medical & biological engineering & computing, vol.44, pp.86-94, 2006 (SCI-Expanded)
- LVI. Human ex vivo bone tissue strains around immediately loaded implants supporting maxillary overdentures.**  
Akça K., Akkocaoğlu M., Cömert A., Tekdemir I., Cehreli M.  
Clinical oral implants research, vol.16, pp.715-22, 2005 (SCI-Expanded)
- LVII. Human ex vivo bone tissue strains around natural teeth vs. immediate oral implants.**  
Cehreli M., Akkocaoglu M., Comert A., Tekdemir I., Akca K.  
Clinical oral implants research, vol.16, pp.540-8, 2005 (SCI-Expanded)
- LVIII. Implant design and intraosseous stability of immediately placed implants: a human cadaver study.**  
Akkocaoglu M., Uysal S., Tekdemir I., Akca K., Cehreli M.  
Clinical oral implants research, vol.16, no.2, pp.202-9, 2005 (SCI-Expanded)
- LIX. Superadhesion: Attachment of nanobacteria to tissues - Model simulation**  
Sommer A., Cehreli M., Akca K., Sirin T., Piskin E.  
CRYSTAL GROWTH & DESIGN, vol.5, no.1, pp.21-23, 2005 (SCI-Expanded)
- LX. Narrow-diameter implants as terminal support for occlusal three-unit FPDs: a biomechanical analysis.**  
Cehreli M., Akça K.  
The International journal of periodontics & restorative dentistry, vol.24, pp.513-9, 2004 (SCI-Expanded)
- LXI. Accuracy of a manual torque application device for morse-taper implants: a technical note.**  
Cehreli M., Akça K., Tönük E.  
The International journal of oral & maxillofacial implants, vol.19, pp.743-8, 2004 (SCI-Expanded)
- LXII. Dynamic fatigue resistance of implant-abutment junction in an internally notched morse-taper oral implant: influence of abutment design.**  
Cehreli M., Akça K., Iplikçioğlu H., Sahin S.  
Clinical oral implants research, vol.15, pp.459-65, 2004 (SCI-Expanded)
- LXIII. Force transmission of one- and two-piece morse-taper oral implants: a nonlinear finite element analysis.**  
Cehreli M., Akça K., Iplikçioğlu H.  
Clinical oral implants research, vol.15, pp.481-9, 2004 (SCI-Expanded)
- LXIV. Accuracy of 2 impression techniques for ITI implants.**

- Akça K., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.19, pp.517-23, 2004 (SCI-Expanded)
- LXV. **Fabrication of a screw-retained fixed provisional prosthesis supported by dental implants.**  
Kökcat A., Akça K.  
The Journal of prosthetic dentistry, vol.91, pp.293-7, 2004 (SCI-Expanded)
- LXVI. **Role of mechanical environment and implant design on bone tissue differentiation: current knowledge and future contexts.**  
Cehreli M., Sahin S., Akça K.  
Journal of dentistry, vol.32, pp.123-32, 2004 (SCI-Expanded)
- LXVII. **Two-year follow-up of a patient with oligodontia treated with implant- and tooth-supported fixed partial dentures: a case report.**  
Giray B., Akça K., Iplikçioğlu H., Akça E.  
The International journal of oral & maxillofacial implants, vol.18, pp.905-11, 2003 (SCI-Expanded)
- LXVIII. **Evaluation of the mechanical characteristics of the implant-abutment complex of a reduced-diameter morse-taper implant. A nonlinear finite element stress analysis.**  
Akça K., Cehreli M., Iplikçioğlu H.  
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- LXIX. **Comparison of non-linear finite element stress analysis with in vitro strain gauge measurements on a Morse taper implant.**  
Iplikçioğlu H., Akça K., Cehreli M., Sahin S.  
The International journal of oral & maxillofacial implants, vol.18, pp.258-65, 2003 (SCI-Expanded)
- LXX. **Comparison of microleakage properties of three different filling materials. An autoradiographic study**  
Hersek N. E., Canay S., Akça K., Ciftçi Y.  
JOURNAL OF ORAL REHABILITATION, vol.29, no.12, pp.1212-1217, 2002 (SCI-Expanded)
- LXXI. **Comparison of uniaxial resistance forces of cements used with implant-supported crowns.**  
Akça K., Iplikçioğlu H., Cehreli M.  
The International journal of oral & maxillofacial implants, vol.17, pp.536-42, 2002 (SCI-Expanded)
- LXXII. **Tensile strength of type IV dental stones dried in a microwave oven**  
Hersek N. E., Canay S., Akça K., Ciftçi Y.  
JOURNAL OF PROSTHETIC DENTISTRY, vol.87, no.5, pp.499-502, 2002 (SCI-Expanded)
- LXXIII. **Finite element stress analysis of the effect of short implant usage in place of cantilever extensions in mandibular posterior edentulism.**  
Akça K., Iplikçioğlu H.  
Journal of oral rehabilitation, vol.29, pp.350-6, 2002 (SCI-Expanded)
- LXXIV. **A comparison of three-dimensional finite element stress analysis with in vitro strain gauge measurements on dental implants.**  
Akça K., Cehreli M., Iplikçioğlu H.  
The International journal of prosthodontics, vol.15, pp.115-21, 2002 (SCI-Expanded)
- LXXV. **A surgical guide for accurate mesiodistal paralleling of implants in the posterior edentulous mandible.**  
Akça K., Iplikçioğlu H., Cehreli M.  
The Journal of prosthetic dentistry, vol.87, pp.233-5, 2002 (SCI-Expanded)
- LXXVI. **One-year follow-up of an implant with early radiographic signs of loss of osseointegration: case report.**  
Akça K., Iplikçioğlu H.  
Clinical implant dentistry and related research, vol.4, pp.43-6, 2002 (SCI-Expanded)
- LXXVII. **Comparative evaluation of the effect of diameter, length and number of implants supporting three-unit fixed partial prostheses on stress distribution in the bone.**  
Iplikçioğlu H., Akça K.  
Journal of dentistry, vol.30, pp.41-6, 2002 (SCI-Expanded)

- LXXVIII. **The use of computerized tomography for diagnosis and treatment planning in implant dentistry.**  
Iplikçioğlu H., Akça K., Cehreli M.  
The Journal of oral implantology, vol.28, pp.29-36, 2002 (SCI-Expanded)
- LXXIX. **Finite element stress analysis of the influence of staggered versus straight placement of dental implants.**  
Akça K., Iplikçioğlu H.  
The International journal of oral & maxillofacial implants, vol.16, pp.722-30, 2001 (SCI-Expanded)
- LXXX. **Tensile bond strength of ceramic orthodontic brackets bonded to porcelain surfaces.**  
Kocadereli I., Canay S., Akça K.  
American journal of orthodontics and dentofacial orthopedics : official publication of the American Association of Orthodontists, its constituent societies, and the American Board of Orthodontics, vol.119, pp.617-20, 2001 (SCI-Expanded)
- LXXXI. **Evaluation of the effect of the residual bone angulation on implant-supported fixed prosthesis in mandibular posterior edentulism. Part II: 3-D finite element stress analysis.**  
Akça K., Iplikçioğlu H.  
Implant dentistry, vol.10, pp.238-45, 2001 (SCI-Expanded)
- LXXXII. **Evaluation of the effect of the residual bone angulation on implant-supported fixed prostheses in mandibular posterior edentulism. Part I: Spiral computed tomography study.**  
Akça K., Iplikçioğlu H.  
Implant dentistry, vol.10, pp.216-22, 2001 (SCI-Expanded)
- LXXXIII. **A multidisciplinary approach to single-tooth, implant-supported prostheses: a report of three cases.**  
Akça K., Iplikçioğlu H., Akça E.  
The Journal of oral implantology, vol.26, pp.199-203, 2000 (SCI-Expanded)
- LXXXIV. **Comparison of diametral tensile strength of microwave and oven-dried investment materials**  
Canay S., Hersek N. E., Ciftçi Y., Akça K.  
JOURNAL OF PROSTHETIC DENTISTRY, vol.82, no.3, pp.286-290, 1999 (SCI-Expanded)
- LXXXV. **Effect of microwave drying on the strength of gypsum materials**  
Hersek N., Canay S., Ciftçi Y., Akça K.  
JOURNAL OF DENTAL RESEARCH, vol.77, pp.823, 1998 (SCI-Expanded)
- LXXXVI. **The effect of weight loss of liquid on the diametral tensile strengths of various kinds of luting cements.**  
Canay S., Hersek N., Akça K., Ciftçi Y.  
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## Articles Published in Other Journals

- I. **Immediately placed and functionally loaded implants supported a fixed prosthesis in a mandibular edentulous arch a case report**  
AKTAŞ G., AKTAŞ A., AKÇA K.  
Clinical Dentistry and Research, vol.39, pp.80-86, 2015 (Scopus)
- II. **İki Farklı Polivinil Silikon Ölçü Maddesinin Boyutsal Hassasiyetlerinin Karşılaştırılması**  
Meral Y. E., Akça K.  
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- III. **Restoratif Dis Hekimlig inde CAD CAM Laboratuvar Uygulamaları Sirona inLab Sistemi**  
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- IV. **Restoratif Diş Hekimliğinde CAD/CAM Klinik Uygulamalar: Sirona Cerec Sistemi**  
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- V. **Mechanobiology of bone and mechanocoupling of endosseous titanium oral implants.**



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## Books & Book Chapters

- I. **Implant fractures: etiology, prevention, and treatment**  
Akça K.  
in: Dental Implant Complications: Etiology, Prevention, and Treatment, Stuart J. Froum, Editor, John Wiley & Sons, West Sussex, UK , New-Jersey, pp.132-144, 2015
- II. **Implant Supported Fixed Partial Prosthesis: Current Concepts and Future Directions**  
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in: Biomechanics of Dental Implants: Handbook for Researchers, murat cehreli, Editor, NOVA Science Publishers Inc. , New-York, pp.341-372, 2012
- III. **Biomechanics of Oral Implants**  
Akça K.  
in: Dental Implantation and Technology, Paul A. Williams, Editor, NOVA Science Publishers Inc. , New-York, pp.125-162, 2009

## Refereed Congress / Symposium Publications in Proceedings

- I. **Dudak damak yarıklı hastanın protetik rehabilitasyonu: Vaka raporu**  
DENİZ D., AKÇA K., AKTAŞ G.  
23. ULUSLARARASI TÜRK PROSTODONTİ VE İMPLANTOLOJİ DERNEĞİ BİLİMSEL KONGRESİ, 9 - 12 November 2017
- II. **The influences of pulsed electromagnetic field and low level laser therapy on neonatal rat calvarial osteoblast-like cells.**  
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European Association for Osseointegration 19th Annual Scientific Meeting , Glasgow, United Kingdom, 7 - 09 October 2010, pp.1180
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Akça K., Canay R. Ş.  
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## VIII. İnterdisipliner tedavi yaklaşımı İmplant destekli RPE ve Ortognatik Cerrahi

AKSU M., ENACAR A., MAVİLİ M. E., GİRAY B., AKÇA K., GÜNCÜ M. B.

9. Uluslararası Türk Ortodonti Derneği Kongresi, Antalya, Turkey, 3 - 06 October 2004

## Supported Projects

AKTAŞ G., GÜNCÜ G. N., AKÇA K., GÜNCÜ M. B., DENİZ D., Project Supported by Higher Education Institutions, Bilgisayar destekli tasarım ve üretim (CAD/CAM) ile üç farklı materyalden üretilen tek kronların klinik performansı: Bir yıllık başlangıç sonuçlarının değerlendirilmesi, 2016 - 2018

AKÇA K., Varol M., Project Supported by Higher Education Institutions, İMPLANT DESTEKLİ TAM ARK TEK PARÇA ÜST YAPI ÜRETİMİNDE AĞIZIÇI DİJİTAL ÖLÇÜ YÖNTEMİNİN DEĞERLENDİRİLMESİ, 2016 - 2017

AKÇA K., Project Supported by Higher Education Institutions, Cam Seramik Endokronların Biyomekaniksel Özelliklerinin prelinik ve klinik olarak değerlendirilmesi, 2012 - 2017

Akça K., TUBITAK Project, İmplant-dayanak arayüzünde titanyum ve zirkonyum arasındaki mekaniksel ilişki, 2012 - 2013

Akça K., Çehreli M. C., Usubütün A., Project Supported by Higher Education Institutions, Farklı Yükleme Koşullarının Oral İmplantları Çevreleyen Kemige Etkisinin Histolojik ve Histomorfometrik Olarak İncelenmesi, 2003 - 2010

Akça K., Project Supported by Higher Education Institutions, İmplant-Dayanak Birleşim Aralığının Yatay Yönde Farklı Konumlandırılmasının Biyomekaniksel Etkileri, 2008 - 2009

Akça K., Şahin E., Project Supported by Higher Education Institutions, CEREC 3 direkt (ağızıçi) görüntüleme ile Sirona In EOS (model) görüntüleme kullanılarak CAD/CAM teknolojisiyle yapılan tam seramik sabit protetik restorasyonların kenar uyumlarının karşılaştırılması, 2007 - 2009

Şahin S., Çehreli M. C., İplikçioğlu H., Akça K., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, FONKSİYONEL KUVVETLERİN İMPLANT DESTEKLİ PROTEZLERDE OLUŞTURDUĞU DEFORMASYONUN IN-VIVO STRAIN-GAUGE ANALİZ YÖNTEMİ İLE İNCELENMESİ, 2003 - 2006

Akça K., Baysal U., TUBITAK Project, Darbeli manyetik alanların oral implantları destekleyen kemikteki biyolojik reaksiyonları incelemek için kontrollü elektromanyetik alan meydana getiren bobin sistemi geliştirilmesi, 2004 - 2005

## Activities in Scientific Journals

Medical Engineering & Physics, Committee Member, 2012 - Continues

Journal Of Dentistry, Committee Member, 2006 - Continues

## Memberships / Tasks in Scientific Organizations

ITI (International Team for Implantology), Associate Member, 2005 - Continues

ITI Turkey&Azerbaijan Section Leadership , Chairman, 2015 - 2016, Turkey

ITI Study Club Committee , Member, 2011 - 2016, Switzerland

ITI Turkey&Azerbaijan Section Leadership Member (Study Club Coordinator) , Member, 2010 - 2015, Turkey

## Metrics

Publication: 103

Citation (WoS): 2214

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H-Index (Scopus): 33

## **Scholarships**

Post Doctorate Research Scholarship (UCLA School of Dentistry, Division of Restorative Dentistry, The Jane and Jerry Weintraub Center for Reconstructive Biotechnology.), University, 2005 - 2005

## **Awards**

Akça K, Ralph V. McKinney, Jr. Annual Award (outstanding article) in Basic and Clinical Research, International Congress Of Oral Implantologists (Icoi), April 2010

Baysal U, Akça K., Darbeli elektromanyetik uyarımlı implant, Hacettepe Üniversitesi Teknokent A.Ş. Ve Interfarma A.Ş., November 2007