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CURRICULUM VITAE

Ergin TÖNÜK, Ph. D.
Associate Professor of Mechanical Engineering
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Date and Place of Birth	: 31 March 1968, Ankara, TURKEY
Citizenship	: Turkish

EDUCATION

1998-2000	Marquette University, Department of Biomedical Engineering, Postdoctoral Fellow.
1992-1998	Middle East Technical University, Department of Mechanical Engineering, Ph. D.
1990-1992	Middle East Technical University, Department of Mechanical Engineering, M. S.
1986-1990	Middle East Technical University, Department of Mechanical Engineering, B. S.

RESEARCH FIELDS

Kinematic synthesis of mechanisms, dynamics of machinery, application of artificial intelligence and expert systems to mechanism design, vehicle dynamics, dynamic simulation and experimental verification of pneumatic tires, structural analysis via finite element technique (finite deformation, nonlinear materials), computer aided design and modeling of machinery, computer aided theory of machines education, in vivo determination of soft tissue nonlinear elastic and viscoelastic material properties, non-integer order viscoelasticity, finite element modeling of residual limb-prosthetic socket interactions for trans-tibial amputees, dental biomechanics, biomechanics and design of dental implants, dental implant-bone interactions and bone remodeling due to implant induced stresses, constitutive modeling of nonlinear and non-elastic solids under finite strain, design of orthopeadic implants, experimental three dimensional gait analysis by opto-electronic and inertial measurement unit based custom systems, mathematical multi-body modeling of kinematics and kinetics of gait, experimental stress analysis via electric resistance strain gauges, railway technology, rigid and flexible multibody simulation of rail vehicle dynamics.

EXPERIENCE

1. Chair, METU, Graduate Program of Biomedical Engineering (2017-2019).
2. Member of Undergraduate Studies Consultancy Committee of Mechanical Engineering Department, METU (2016-present).
3. METU, Department of Mechanical Engineering, Assocaiate Professor (2016-present).
4. Vice-coordinator of Solid Mechanics Laboratory, Mechanical Engineering Department, METU (2011-2012).
5. Member (2011-) and Treasurer of Associacion of Machine Theory-Turkey (2011-2017).
6. Board member of the METU-BIOMATEN, Biomaterials and Tissue Engineering Research and Application Center (2011- present).
7. Member of the Consultancy Board of Turkish Clinics Journal of Medical Sciences (2011- present).
8. Member of Biomaterials and Tissue Engineering Society (2011-present).
9. Member of Center of Excellence on Biomaterials and Tissue Engineering (2011-).
10. Member of Graduate Studies Consultancy Committee of Mechanical Engineering Department, METU (2010-2013).
11. Member of Master of Science Consultancy Committee of Mechanical Engineering Department, METU (2009-2010).
12. Organizing Committee Member of Biyomut 2008, Biomedical National Meeting, May 2008.
13. Adjunct Faculty of Graduate Program of Biomedical Engineering, METU (2007-present).
14. Organizing Committee Member of International Railway Symposium 2006, Ankara and İstanbul, December 2006.
15. Technical Consultancy to Turkish State Railways, TCDD (2006).
16. Organizing Committee Member of the Eleventh International Conference on Machine Design and Production, Antalya, Turkey, October 2004.
17. Director of Middle East Technical University (METU), Gait Analysis and Biomechanics Laboratory (2002-present).
18. METU, Department of Mechanical Engineering, Assistant Professor (2001-2016)
19. METU, Department of Mechanical Engineering, ME 200, Orientation Program Coordinator (2001-2009)
20. METU, Department of Mechanical Engineering, Academic Advisor of Production Minor Students, (2001-present).
21. METU, Department of Mechanical Engineering, Instructor (2000-2001).
22. Marquette University (Milwaukee, Wisconsin, U. S. A.), Department of Engineering Mechanics, Lecturer (1999).
23. Marquette University, Department of Biomedical Engineering, Post-Doctoral Fellow (1998-2000).
24. Turkish Chamber of Mechanical Engineers, Transportation and Traffic Symposium Member of Program Committee (1997).
25. METU, Department of Mechanical Engineering Summer Practice, Mechanisms Group Coordinator (1992-1998).
26. METU, Department of Mechanical Engineering, Computer Committee Member (1992-1998).
27. METU, Department of Mechanical Engineering, Educational Computer Laboratory Software and Hardware Maintainer (1993-1996).
28. METU, Department of Mechanical Engineering, Local Area Network Administrator (1992-1993).

29. METU, Department of Mechanical Engineering, Responsible Assistant of Dynamic Systems Laboratory (1992-1995).
30. METU, Department of Mechanical Engineering, academic advisor of 20 to 30 B.S. students, (1991-1998, 2000-2002).
31. METU, Department of Mechanical Engineering, Research and Teaching Assistant, (1990-1998).
32. Management oriented summer internship at Yazar Pump Factory, Ankara Turkey (1989).
33. Production oriented summer internship at Standard Pump Factory, İstanbul Turkey (1988).

THESIS STUDIES

Ph. D. Thesis: "Computer Simulation of Dynamic Behavior of Pneumatic Tires" (A Finite Element Computer Model to Estimate the Cornering Force Characteristics of Pneumatic Automobile Tires with Minimum Experimental Data, Construction of a Tire Testing Setup and Experimental Verification of Computer Model Results). Middle East Technical University, Department of Mechanical Engineering, September 1998. (Supervised by Prof. Dr. Y. Samim ÜNLÜSOY).

MS Thesis: "Synthesis of Coupler Curves of Mechanisms by Pattern Recognition Techniques", Middle East Technical University, Department of Mechanical Engineering, 1992. (Supervised by Prof. Dr. Eres SÖYLEMEZ).

AWARDS/HONORS

1. The Scientific and Technical Research Council of Turkey (TÜBİTAK) Münir Birsel Ph.D. Scholarship (1994-1996).
2. NATO B2 The Scientific and Technical Research Council of Turkey (TÜBİTAK), Post Doctoral Research Scholarship for Vehicle Dynamics Research in the University of Arizona, 1998 (declined).
3. Academic Performance Premium of Middle East Technical University for years between 2002 and 2004 (2005).
4. Supervisor of the Thesis of the Year, 2007, Prof. Dr. Mustafa Parlar Foundation, M. S. Thesis by Osman Kılıç, Biomechanical Modelling of Human Hand, Co-Supervisor: Prof. Dr. S. Turgut Tümer.
5. Supervisor of the Theses of the Year, 2009, METU, M. S. Thesis by Koray S. Erer, Verification and Matlab Implementation of the Inverse Dynamic Model of METU Gait Analysis System, Co-Supervisor: Assoc. Prof. Dr. Sibel Tarı.
6. Supervisor of the Thesis of the Year, 2012, Prof. Dr. Mustafa Parlar Foundation, M. S. Thesis by Ömer Pektaş, Design and Mechanical Analysis of a New Dental Implant that would Mimic Natural Tooth with a Periodontal Ligament.
7. Supervisor of the Thesis of the Year, 2015, Prof. Dr. Mustafa Parlar Foundation, M. S. Thesis by Onur Mert Erkan, Mechanical Design of Modular Orthopeadic Implant.
8. Supervisor of the Thesis of the Year, 2022, Middle East Technical University, Institute of Natural and Applied Sciences, M. S. Thesis by Koray Melih Yatağan, Biomechanical Modelling of the Interphalangeal Joints of the Human Hand, Co-Supervisor: Prof. Dr. A. Gürsel Leblebicioğlu.

MEMBERSHIPS

1. Member of the Editorial Board of Advances in Biomechanics and Applications (2012-).

2. Member and accountant of Associaton of Machine Theory-Turkey (2011-).
3. Member of Biomaterials and Tissue Engineering Society(2011-).
4. Member of International Society of Biomechanics (2009-)
5. Member of the Editorial Board of the International Journal for Vehicle Systems Modeling and Testing (2004-)
6. American Society of Mechanical Engineers (ASME, ID: 6654503)
7. The Tire Society (Akron, OH, USA)
8. Sigma Xi The Scientific Research Society Full Membership (1999-2000, USA)
9. Turkish Chamber of Mechanical Engineers (1995-2003)
10. Machine Design and Production Society-Turkey, (1995-)
11. The Turkish Foundation for Combating Soil Erosion, Reforestation and Protection of Natural Inhabitants-Turkey (TEMA)
12. Wisconsin Trolley Museum Inc. East Troy Electric Railroad Volunteer (U. S. A.)
13. Foundation for Primary Schools (İLKYAR, Turkey)

REFEREED JOURNAL PAPERS:

1. LURIA, S., SANDOW, M, LEBLEBİCİOĞLU, G., **TÖNÜK, E.**, YATAĞAN, K. M., BEKMEZ, Ş., DEMİRCİ, N., SCHWARCZ, Y., The Use of Mathematical Modelling in Hand Surgery, Journal of Hand Surgery (European Volume), First published online March 27, 2025, 50 (6), pp. 700-709 https://doi.org/10.1177/17531934251325771.
2. YATAĞAN, K. M., LEBLEBİCİOĞLU, G, **TÖNÜK, E.**, Computational modelling of the proximal interphalangeal joint, Journal of Hand Surgery (European Volume), First published online March 14, 2023, 48 (7) , pp. 675-680 https://doi.org/10.1177/17531934231160382.
3. BAŞARIR, K., KALEM, M., ŞAHİN, E., ÖZBEK, E. A., KARACA, M. O., KÜÇÜKKARAPINAR, İ., **TÖNÜK, E.**, The Relationship Between Arthroplasty Surgeons' Experience Level and Optimal Cable Tensioning in the Fixation of Extended Trochanteric Osteotomy, Geriatric Orthopaedic Surgery & Rehabilitation, Volume 12: 1-7, https://doi.org/10.1177/21514593211063324.
4. YÜKSEL, S., AŞIK, M. D., AYDIN, H. M., **TÖNÜK, E.**, AYDIN, E. Y., BOZKURT, M., Fabrication of a Multi-layered Decellularized Amniotic Membranes as Tissue Engineering Constructs, Tissue & Cell, v. 74, p. 101693, 2022, https://doi.org/10.1016/j.tice.2021.101693.
5. EREN, M. B., AŞÇI, M., **TÖNÜK, E.**, BALTA, O., KURNAZ, R., Knotless anchors offer better prevention of meniscal excursion than knotted anchors: An experimental study of the bovine knee, Acta Ortopaedica et Traumatologica Turcica, 2020; 54(1): 97-103, https://doi.org/10.5152/j.aott.2020.01.439.
6. **TÖNÜK, E.**, Comment on: “The finite element implementation of 3D fractional viscoelastic constitutive models” by Gioacchino Alotta, Olga Barrera, Alan Cocks, Mario Di Paola, Finite elements in analysis and design, 146 (2018) 28–41, Finite elements in analysis and design (SCI-Core), v. 152 pp 17, 2018, https://doi.org/10.1016/j.finel.2018.09.001.
7. BUYUKSUNGUR, S., ENDOGAN TANIR T., BUYUKSUNGUR, A., BEKTAS, E. I., TORUN KOSE G., YUCEL, D., BEYZADEOĞLU, T., ÇETİNKAYA, E., YENİGUN, C., **TONUK, E.**, HASICI, V., HASIRCI, N., 3D Printed Poly(ε-caprolactone) Scaffolds Modified with Hydroxyapatite and Poly(propylene fumarate) and Effects on Healing of Rabbit Femur Defects, Biomaterials Science, V. 5, p. 2144-2158, 2017.
8. BEKMEZ, Ş, ÜZÜMCÜGİL, A., KALAFAT, E., MERMERKAYA, M. U., DEMİRCİ, N, **TÖNÜK, E.**, LEBLEBİCİOĞLU, G., Passive Mechanical Properties

of Skeletal Muscle: Analyzing the Effects of Denervation with Mathematical Modelling in a Rabbit Quadriceps Model, Acta Medica, V.3, 68-74, 2014.

9. ASHRAFI, P, **TÖNÜK, E.**, Indentation and Observation of Anisotropic Soft Tissues Using an Indenter Device, Süleyman Demirel University, Journal of Natural and Applied Sciences V 18, 10-20, 2014.
10. YOUSEFI, A, **TÖNÜK, E.**, KENTEL, B.B., In Vivo Verification of Different Hip Joint Center Estimation Methods in Gait Analysis For Healthy Subjects, Süleyman Demirel University, Journal of Natural and Applied Sciences V 18, 157-166, 2014.
11. PEKTAŞ, Ö., **TÖNÜK, E.**, Mechanical Design, Analysis and Laboratory Testing of a Dental Implant with Axial Flexibility Similar to Natural Tooth with Periodontal Ligament, Proceedings of The Institution of Mechanical Engineers Part H-Journal of Engineering in Medicine, v 228, No: 11, pp. 1117-1125 (SCI-Core) DOI: 10.1177/0954411914557713.
12. DEMİRCİ, N., **TÖNÜK, E.**, Non-integer viscoelastic constitutive law to model soft biological tissues to in-vivo indentation, Acta of Bioengineering and Biomechanics, v. 16 no: 4 pp: 13-21 (SCI-Expanded). DOI: 10.5277/ABB-00005-2014-03.
13. BOZKURT, M, APAYDIN, N., **TÖNÜK, E.**, IŞIK, Ç., ÇAY, N., KARTAL, G., AÇAR, H. İ., TUBBS, S. R., Impact fo fibular torsion and rotation an chronic ankle instability, Foot and Ankle Surgery, v.20, pp. 125-129 (PubMed http://www.ncbi.nlm.nih.gov/pubmed/24796832).
14. ESER, A, **TÖNÜK, E.**, AKCA, K., DARD, M.M., CEHRELİ, M. C., Predicting bone remodeling around tissue- and bone-level dental implants used in reduced bone width, Journal of Biomechanics, v.46, pp 2250-2257, 2013 (SCI-Core).
15. ÖÇGÜDER, A, GÖK, H., HEYCAN, C., TECİMEL, O., **TÖNÜK, E.**, BOZKURT, M., Effects of custom-made insole on gait pattern of patients with unilateral displaced intra-articular calcaneal fracture: Evaluation with computerized gait analysis, Acta Orthopaedica et Traumatologica Turcica, 46 (1) pp. 1-7, 2012 (SCI Expanded).
16. UYSAL, H., BOYRAZ, İ., YAĞCIOĞLU, S., OKTAY, F., KAFALI, P., **TÖNÜK, E**., Ankle clonus and its relationship with the medium-latency reflex response of the soleus by peroneal nerve stimulation, Journal of Electromyography and Kinesiology, v.21, pp.438-444, 2011 (SCI-Core).
17. PETEKKAYA, A. T., **TÖNÜK, E.**, In vivo indenter experiments via Ellipsoid Indenter Tips to Determine the Personal and Local In-Plane Anisotropic Mechanical Behavior of Soft Biological Tissues, Journal of The Faculty of Engineering and Architecture of Gazi University, v. 26, n. 1, pp. 63-72, 2011 (*in Turkish* SCI-Expanded).
18. ESER, A., **TÖNÜK, E**., AKÇA, K., ÇEHRELİ, M. C., Predicting time-dependent remodeling of bone around immediately-loaded dental implants with different designs, Medical Engineering & Physics, v.32, n.1, pp. 22-31, 2010.
19. ESER, A., **TÖNÜK, E.**, AKÇA, K., ÇEHRELİ, M. C., Numerical Simulation of Time-Dependent Remodeling of Bone Around Oral Loaded Implants, The International Journal of Oral & Maxillofacial Implants, v 24 n 4 pp. 597-608, 2009.
20. PETEKKAYA, A. T., **TÖNÜK, E.**, In vivo indenter experiments to determine soft tissue mechanical properties, Journal of Mechanical Design and Construction v. 10, n. 1, 18-31, May 2008 (*in Turkish*).
21. ÜSÜ, K., **TÖNÜK, E.**, Quasi-linear viscoelastic material models for simulation of in vivo soft tissue indenterexpriments, Journal of Mechanical Design and Construction v. 10, n. 1, 32-40, May 2008 (*in Turkish*).

22. BOZKURT, M., **TÖNÜK, E.**, ELHAN, A., TEKDEMİR, İ., DORAL, M. N., Axial rotation and mediolateral translation of the fibula during passive plantarflexion, Foot and Ankle International, v 29, n 5, pp. 502-507, 2008.
23. ÖZLÜGEDİK, S:, NAKİBOĞLU, G., SERT, C., ELHAN, A., **TÖNÜK, E.**, AKYAR, S., TEKDEMİR, İ., Numerical Study of the Aerodynamic Effects of Septoplasty and Partial Lateral Turbinectomy, The Laryngoscope, v 118, pp. 330-334, 2008.
24. ELHAN, A., TEKDEMİR, İ., CÖMERT, A., BOZKURT, M, **TÖNÜK, E.**, İPEK, G., Design and Application of Electronic Data Acquisition Unit for the Soft and Hard Tissue Testing System. Journal of Mechanical Design and Construction v. 9, n. 1, 30-35, May 2007 (*in Turkish*).
25. KAFALI, P., **TÖNÜK, E.**, TÜMER, S. T., Effect of Different Joint Center Estimation Methods on Computed Joint Kinematics in Gait Analysis Applications. Journal of Mechanical Design and Construction v. 9, n. 1, 36-48, May 2007 (*in Turkish*).
26. BOZKURT, M., YAVUZER, G., **TÖNÜK, E.**, KENTEL, B. B., Dynamic Function of the Fibula, Gait Analysis Evaluation of Three Different Parts of the Shank after Fibulectomy-Proximal, Middle and Distal- (Case report), Archives of Orthopaedic and Trauma Surgery, v. 125, pp. 713-720, 2005.
27. BOZKURT, M., ACAR, H. İ., APAYDIN, N., LEBLEBİCİOĞLU, G., ELHAN, A., TEKDEMİR, İ., **TÖNÜK, E.**, The Annular Ligament: An Anatomic Study, American Journal of Sports Medicine v. 33 n. 1, pp. 114-118, 2005.
28. ÇEHRELİ, M. C., AKÇA, K., **TÖNÜK, E.**, Accuracy of a Manual Torque Application Device for Morse-taper Implants: A Technical Note, International Journal of Oral Maxillofac Implants v. 19, pp. 743-748, 2004.
29. BOZKURT, M., KENTEL, B. B., YAVUZER, G., ÖÇGÜDER; A., HEYCAN, C., **TÖNÜK, E.**, Functional evaluation of intra-articular severely comminuted fractures of the calcaneus with gait analysis, The Journal of Foot & Ankle Surgery v. 43, n. 6, pp. 374-379, 2004.
30. **TÖNÜK, E.**, SILVER-THORN, M. B., "Nonlinear Viscoelastic Material Property Estimation of Lower Extremity Residual Limb Tissues", ASME Journal of Biomechanical Engineering v. 126, pp. 289-300, April 2004
31. BOZKURT, M., ELHAN, A., TEKDEMİR, İ., **TÖNÜK, E.**, "An Anatomic Study of the Meniscofibular Ligament", Knee Surgery Sports Traumatology Arthroscopy v. 12, n. 5, pp. 429-433, 2004.
32. **TÖNÜK, E.**, "Design and Construction of a Test System to Investigate the Mechanical Properties of Soft Tissues". Journal of Mechanical Design and Production Vol. 5, No. 1, pp. 42-49, May 2003 (*in Turkish*).
33. **TÖNÜK, E.**, SILVER-THORN, M. B., "Nonlinear Elastic Material Property Estimation of Lower Extremity Residual Limb Tissues". IEEE, Transactions on Neural Systems and Rehabilitation Engineering Vol 11, No 1, pp. 43-53, March 2003.
34. **TÖNÜK, E.**, "Studies in Experimental Determination of Soft Tissue Mechanical Properties in Trans Tibial Ampute Residual Limbs". Engineer and Machinery (Mühendis ve Makina), Vol. 43, No: 511, pp. 43-49, 2002 (*in Turkish*).
35. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Prediction of automobile tire cornering force characteristics by finite element modeling and analysis". Computers and Structures Vol.79, No: 13, pp. 1219-1232.
36. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Finite Element Estimation of Cornering Force Characteristics of Pneumatic Automobile Tires". Engineer and Machinery (Mühendis ve Makina) Vol. 42, No. 494, pp. 16-20. (*in Turkish*).

37. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Inflation and Loading Analysis of Pneumatic Automobile Tires Using Finite Element Technique", Journal of Mechanical Design and Production, v. 3, pp. 30-34, 1995 (*in Turkish*).

REFEREED CONFERENCE PAPERS

1. BİÇER, M., **TÖNÜK, E.**, The Effect of Euler Angle Sequences to the Kinematic Results of Gait Analysis, IX. Uluslararası Biyomekanik Kongresi p. 234-238, Eskişehir, 2019.
2. SÜMBÜL GHASEMLOU, E., **TÖNÜK, E.**, YAVUZER, M. G., Generalization of the Mediolateral and Anteroposterior Postural Control Responses for Different Stance Positions in Quiet Stance, IX. Uluslararası Biyomekanik Kongresi p. 269-270, Eskişehir, 2019.
3. BAŞARIR K., KÜÇÜKKARAPINAR İ. KARACA O., ERCAN N., **TÖNÜK E.**, Tensioning Cable For Trochanteric Fixation, How Much Are The Turkish Orthopaedics Tightening ?, 18th EFORT Congress in Vienna from 31 May - 02 June 2017.
4. OĞUZ, E., YILDIZ, C., ÖZKAN, H., **TÖNÜK, E.**, PEKTAŞ, Ö., KESKİN, C., ERKAN, O. M., YENİGÜN, Ç., AKPANCAR, S., BAHTİYAR, E. E., Modüler, Multiplanar, Poliaksiyal, Aanatomik, Biyolojik, Minimalistik, Kişiye Özgü, Yeni Bir Kemik Tesbit İmplantı: "ORTOSTAR – 1",Bildiri No: 6403, 26. Ulusal Türk Ortopedi ve Travmatoloji Kongresi, Antalya, 2016.
5. BAŞARIR, K., KARACA, M. O., KÜÇÜKKARAPINAR, İ., ERCAN, N., **TÖNÜK, E.**, Trokanterik Osteotomi Sonrası Kablo Gerginliği, Ne Kadar Sıkıyoruz, Tork Kısıtlayıcı Gerekli mi?, Bildiri no: 7731, 26. Ulusal Türk Ortopedi ve Travmatoloji Kongresi, Antalya, 2016
6. SÜMBÜL, E, DEMİR, G. U., **TÖNÜK, E.**, Dinamik Postürografi Cihazının Denge Bozukluğu Üzerindeki Etkileri, VIII Ulusal Biyomekanik Kongresi p. 46, Ankara, 2016.
7. ÇUVALCI, A. U., **TÖNÜK, E.**, Biyomekanik Kullanım Amaçlı Denge Platformu Tasarımı, VIII Ulusal Biyomekanik Kongresi p. 114, Ankara, 2016.
8. ASHRAFI, P., **TÖNÜK, E.**, Indentation and Observation of Anisotropic Soft Tissues Using an Indenter Device, VII. Ulusal Biyomekanik Kongresi, Isparta, 2014.
9. YOUSEFI, A., **TÖNÜK, E.**,KENTEL, B. B. In vivo Verification of Different Hip Joint Center Estimation Methods in Gait Analysis for Healthy Subjects, VII. Ulusal Biyomekanik Kongresi, Isparta, 2014.
10. DEMİRCİ, N., **TÖNÜK, E.**, A Fractional Calculus Based Viscoelastic Material Model for Soft Biological Tissues and Its Finite Element Application, Tenth Tissue Elasticity Conference, Arlington, Texas, USA, 12-15 October 2011.
11. BORA, C., SERİNAĞAOĞLU, Y., **TÖNÜK, E.**, Electromechanical Heart Tissue Model Using Cellular Automaton, 2010 15th National Biomedical Engineering Meeting (BIYOMUT 2010), DOI: 10.1109/BIYOMUT.2010.5479738 (*in Turkish*).
12. **TÖNÜK, E.,** Modeling of Soft Tissue Mechanical Behavior on Computer, VIth Europian Sports Medicine Congress, Antalya, Turkey, 2009, (Abstract Published in Journal of Sports Science & Medicine [SCI-Expanded], v. 8, supp. 11, p. 35).
13. ERER, K.S., **TÖNÜK, E.**, TÜMER, S.T., ACCURACY REQURIEMENTS IN BSIP ESTIMATIONS FOR ANALYSIS OF NORMAL GAIT, ESMAC 2008, 17th Annual Meeting of Europian Society of Movement Analysis for Adults and Children, Antalya, Turkey, 2008 (Gait & Posture [SCI-core] V. 28 Supplement 2 p S81-S82).

14. CİVEK E., **TÖNÜK, E.**, YAVUZER G., TÜMER T., Comparison of Kinematic Ressults of Middle East Technical University Custom Made KISS and Ankara University VICON Gait Analysis Systems, ESMAC 2008, 17th Annual Meeting of Europian Society of Movement Analysis for Adults and Children, Antalya, Turkey, 2008 (Gait & Posture [SCI-core] V. 28 Supplement 2 p S99-S100).
15. PETEKKAYA, A. T., **TÖNÜK, E**., Determination of *in vivo* Anisotropic Material properties of Soft Biological Tissues via Indenter Experiments, National Meeting of Biomedical Engineers, BİYOMUT 2008, Ankara, Turkey, 2008 (*in Turkish*).
16. ÜSÜ, K., **TÖNÜK, E.**, Soft Tissue Constitutive Equations I: Quasi-linear Viscoelastic Model, National Meeting of Biomedical Engineers BİYOMUT 2008, Ankara, Turkey, 2008 (*in Turkish*).
17. ÜSÜ, K., **TÖNÜK, E.**, Soft Tissue Constitutive Equations II: Enhanced Quasi-linear Viscoelastic Model, National Meeting of Biomedical Engineers BİYOMUT 2008, Ankara, Turkey, 2008 (*in Turkish*).
18. KILIÇ, O., **TÖNÜK, E**., TÜMER, S. T., Biomechanical Modeling of Human Wrist, National Meeting of Biomedical Engineers, BİYOMUT 2007, İstanbul, Turkey, s. 83-85, 2007 (*in Turkish*).
19. PETEKKAYA, A. T., **TÖNÜK, E**., Cyclic, Relaxation and Creep Response of Soft Tissue Indenter Experiments, National Meeting of Biomedical Engineers ı, BİYOMUT 2007, İstanbul, Turkey, s. 86-91, 2007 (*in Turkish*).
20. PETEKKAYA, A. T., **TÖNÜK, E**., Indentor Tests for Soft Tissue Viscoelastic Property Identification, National Meeting of Biomedical Engineers, BİYOMUT 2007, İstanbul, Turkey, s. 106-111, 2007 (*in Turkish*).
21. **TÖNÜK, E.**, "A Device for Assessment of Nonlinear Viscoelastic Material Properties of Soft Tissues In Vivo", Third International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Lake Windermere, Cumbria, United Kingdom, October 17-20, 2004.
22. **TÖNÜK, E.**, YILDIZ, C., ATEŞALP, A. S., "The Assessment of Nonlinear Viscoelastic Material Properties of Soft Tissues of Residual Limbs of Trans Tibial Amputees", Third International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Lake Windermere, Cumbria, United Kingdom, October 17-20, 2004.
23. YILDIZ, C., **TÖNÜK, E.**, ATEŞALP, A. S., DAŞTAN, N., "Assessment of Trans Tibial Amputee Soft Tissue Mechanical Properties via a Soft Tissue Testing System (Initial Results)", 18th National Turkish Orthopedy and Traumatology Congress in Istanbul in 18-23 October 2003 (*in Turkish*).
24. APAYDIN, N., ACAR, H. İ., BOZKURT, M., **TÖNÜK, E.**, ELHAN, A., TEKDEMİR, İ., ESMER, A. F., "Anatomy of the annular ligament: cadaveric study", Presented at First Joint Meeting of the European Association of Clinical Anatomy and the American Association of Clinical Anatomists, Graz, Austria, and abstract published in Clinical Anatomy 16:542–564 (2003).
25. TOYRAN, U. A., **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Experimental Determination of Rolling Resistance of Automobile Tires According to SAE J1269 and SAE J1270 Standards", 11th National Machine Theory Symposium in Ankara in September 4-6, 2003, pp. 523-531 (*in Turkish*).
26. **TÖNÜK, E.**, SILVER-THORN, M. B., "Nonlinear Viscoelastic Material Property Estimation of Lower Extremity Residual Limb Tissues". The First Joint Meeting of BMES and EMBS in Atlanta in October 13-16, 1999, Vol 1, p. 645.
27. **TÖNÜK, E.**, SILVER-THORN, M. B., "Effect of Curvature on Lower Extremity Residual Limb Models". The First Joint Meeting of BMES and EMBS in Atlanta in October 13-16, 1999, Vol 1, p. 639.

28. SILVER-THORN, M. B., **TÖNÜK, E.**, KEMP, J., "In Vivo Indentation of Lower Extremity Limb Soft Tissues". The First Joint Meeting of BMES and EMBS in Atlanta in October 13-16, 1999, Vol 1, p. 637.
29. SILVER-THORN, M. B., **TÖNÜK, E.**, "A Device for Viscoelastic Assesment of the Residual Limb Bulk Soft Tissue Response to Load". The First Joint Meeting of BMES and EMBS in Atlanta in October 13-16, 1999 , Vol 1, p. 646.
30. SÖYLEMEZ, E., **TÖNÜK, E.**, "Design of Draft Pipes in Hydroelectric Power Plants". Presented at the 8th International Machine Design and Production Conference held in Ankara, Turkey in September 9-11, 1998 (*in Turkish*).
31. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Static Finite Element Modeling of Radial Tires". Presented at the 17th Annual Meeting of the Tire Society in Akron, 1998.
32. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Finite Element Modeling of Radial Belted Pneumatic Tires", Proceedings of the 2nd National Computational Mechanics Conference pp. 101-110, 1996 Trabzon, Turkey (*in Turkish)*.
33. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Simple Analytical Tire Models to Simulate Vehicle Dynamic Behavior, I: Tire Models", Proceedings of the 7th. National Machine Theory Symposium, v. 2, pp. 606-614, 1995 Istanbul, Turkey (*in Turkish*).
34. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Simple Analytical Tire Models to Simulate Vehicle Dynamic Behavior, II: Benchmarking", Proceedings of the 7th National Machine Theory Symposium, v. 2, pp. 615-623, 1995 Istanbul, Turkey (*in Turkish*).
35. SÖYLEMEZ, E., **TÖNÜK, E.**, "Design of Piston Driven Six-Link Mechanisms with Large Swing Angle and Optimum Transmission", IFToMM, SYROM'93 v. 1, pp. 301-308, June 1-5 1993 Bucharest, Romania.
36. **TÖNÜK, E.**, SÖYLEMEZ, E., "Synthesis of Coupler Curves Using Pattern Recognition Techniques", Proceedings of the 5th National Machine Design and Production Symposium, pp. 201-208, September 16-18, 1992, Ankara, Turkey (*in Turkish*).
37. SÖYLEMEZ, E., **TÖNÜK, E.**, "Function Synthesis Design of Spatial Four-Bar Mechanisms with Optimum Force Transmission Characteristics", Proceedings of the 5th National Machine Theory Symposium, pp. 81-87, September 21-22, 1991, Bursa, Turkey (*in Turkish*).
38. SÖYLEMEZ, E., **TÖNÜK, E.**, "Optimum Design of Piston Driven Large Swing Angle Mechanisms", Proceedings of the 4th National Machine Theory Symposium pp. 211-220, September 22-24, 1990, Yalova, Turkey (*in Turkish*).

CHAPTER IN A BOOK

1. **TÖNÜK, E.**, CHAPTER 8. Strain Measurement and Electric Resistance Strain Gauges, in, Biomechanics of Oral Implants: Handbook of Researchers, Murat Cavit Cehreli (Ed), Nova Publishers, 2012, ISBN: 978-1-62100-780-7.
2. PETEKKAYA, A. T., ÜSÜ, K., **TÖNÜK, E.**, Soft Tissue Mechanical Models, in, Musclo-Skeletal Support System Biomechanics (Kas İskelet Sistemi Biyomekaniği), Akçalı, İ. D., Gülşen, M., Ün, K. (Eds), ISBN 978-975-6813-89-9, v 1, pp. 197-226 (*in Turkish*).
3. **TÖNÜK, E.**, TÜMER, S. T., Gait Analysis, Basic Principles, in, Musclo-Skeletal Support System Biomechanics (Kas İskelet Sistemi Biyomekaniği), Akçalı, İ. D., Gülşen, M., Ün, K. (Eds), ISBN 978-975-6813-89-9, v 2, pp. 1109-1136 (*in Turkish*).

TRANSLATION

1. Gifford, Clive, Cutaway Cars, Usborne Publishing Ltd., 1994. Translation in Turkish by **TÖNÜK, E.**, The Scientific and Technical Research Council of Turkey, ISBN 975-403-131-2, 1998.

EDITORSHIP OF TURKISH TRASNLATIONS

1. En İyi İlacı Ararken: Bir Doktor ve Hastanın Yaşantısından Kesitler (Searching for the Best Medicine) Dr. Arthur Bank, Translation: M. Ender Arkun, Reduction, **Dr. Ergin Tönük**, TÜBİTAK Popüler Bilim Kitapları, 765, September 2015, ISBN: 978-605-312-028-5.
2. Sıfırın Altında Matematik, Matematik Kurallarını Olumlu Anlamda Nasıl Bükebiliriz (Negative Math - How Mathematical Rules Can Be Positively Bent) Alberto A. Martínez, Turkish Translation E. Sezer, Reduction **Dr. Ergin Tönük**, TÜBİTAK Popüler Bilim Kitapları, 278, December 2017, ISBN: 978605-312-199-2.

PROJECTS INVOLVED

1. Postür Bozukluklarının İncelenebilmesi için Tasınabilir, Altı Eksenli bir Kuvvet Ölçer Yüzey Tasarım ve Üretimi, ODTÜ-BAP-03-02-2016-001 (2016)
2. Patient-specific orthopedic implant design and production with tissue engineering method, TUBİTAK 1003, 213M708 (2014-2016).
3. Multiplanar Internal and External Bone Fixation Implant, TUBİTAK 1003, 113S103 (2013-2016).
4. Foundation of Biomaterials and Tissue Engineering Research and Application Center (ODTÜ-BİOMATEN BAP.08-11 DPT 2011 K 120350, 2011-2015).
5. Renovation of Current Indenter Device for the Purpose of Determining Biological Soft Tissue Material Law In Vivo using Inverse Finite Element Method (METU BAP 03-2010-02, 2010-2011).
6. Experimental Setup Preperation for Undergraduate and Graduate Students using Tequipment SM 100 Universal Materials Testing Machine (METU BAP-2008-03-02-02, August 2008-December 2010).
7. Experimental determination and computer modelling of mechanical behavior of bulk soft tissues (METU BAP-2006-07-02-00-01, March 2006-September 2008).
8. Electronic data acquisiton system integration to the existing soft and hard tissue testing setup, Researcher (TÜBİTAK SBAG-AYD-479, February 2005-February 2006).
9. Experimental Investigation of Soft Tissue Mechanical Properties of Trans-Tibial Amputee Residual Limbs, Principal Investigator (METU BAP-2003-07-02-00-06, April 2003-April 2005).
10. The Measurement Method of the Fibular Torsion and Exposition of the Clinical Importance of the Fibular Torsion, Researcher (TÜBİTAK SBAG-2592 , August 2002-August 2005).
11. Improvement of METU Tire Testing Setup Facility, Principal Investigator (TÜBİTAK MİSAG-A-65, August 2002-January 2003).
12. An Indenter for the Investigation of Soft Tissue Mechanical Properties of Trans Tibial Prosthesis Users, Principal Investigator (TÜBİTAK MİSAG-183, August 2001-June 2004)
13. Investigation of Bulk Soft Tissue of Trans-Tibial Amputees, Researcher (The Whitaker Foundation, USA, October 1998- May 2000).

14. Finite Element Analysis of Çamlıca Dam Pipes, Researcher (January 1997)
15. Finite Element Modeling of Pneumatic Automobile Tires, Researcher (TÜBİTAK MİSAG-86 July 1996- September 1998)
16. Finite Element Modeling of Pneumatic Automobile Tires, Researcher (METU AFP-96-03-02-01 June 1996-September 1998)

PATENT

Flexible Dental Implant, Patent No: TR 2013 07609 Y.

THESES SUPERVISED

1. Toyran, Uğur Ahmet, Experimental Analysis and Comparison of Rolling Resistance of Passanger Car Tires, co-supervised by Prof. Dr. Y. Samim Ünlüsoy, December 2002, METU.
2. Civek, Ezgi, Comparison of Kinematic Results between METU-Kiss and Ankara University-Vicon Gait Analysis Systems, co-supervised by Prof. Dr. S. Turgut Tümer, December 2006, METU.
3. Kafalı, Pınar, Evaluation of Sensitivity of METU Gait Analysis System, May 2007, co-supervised by Prof. Dr. S. Turgut Tümer, May 2007.
4. ESER, Atılım, Finite Element Investigation of Mechanical Interaction of Dental Implants with Bone, co-supervised by Assoc. Prof. Dr. Kıvanç Akça (Hacettepe University, Faculty of Dentistry), July 2007.
5. Kılıç, Osman, Biomechanical Modelling of Human Hand, co-supervised by Prof. Dr. S. Turgut Tümer, September 2007 (*Prof. Dr. Mustafa N. Parlar Foundation Thesis of the Year Award*).
6. Erer, Koray S., Verification and Matlab Implementation of Incverse Dynamics Model of the METU Gait Analysis System, co-supervised by Dr. Sibel Tarı, February 2008 (*METU Thesis of the Year Award*).
7. Petekkaya, Ali Tolga, Finite Element Modeling of Soft Biological Tissues, September 2008.
8. Üsü, Kerem, Computer Simulation of Mechanical Behavior of Soft Biological Tissues by Inverse Finite Element Method, September 2008.
9. Bora, Ceren, Electromechanical Modeling of the Heart, supervised by Yeşim Serinağaoğlu Doğrusöz in Biomedical Engineering, September 2010.
10. Demirci, Nagehan, Formulation and Implementation of a Fractional Order Viscoelastic Material Model into Finite Element Software and material Model Parameter Identification Using In-Vivo Indenter Experiments for Soft Biological Tissues, February 2012.
11. Pektaş, Ömer, Design and Mechanical Analysis of a New Dental Implant that would Mimic Natural Tooth with a Periodontal Ligament, February 2012 (Supported by Ministry of Industry and Trade 00627.STZ.2010-1 (SANTEZ) Grant), (*Prof. Dr. Mustafa N. Parlar Foundation Thesis of the Year Award*).
12. Avgın, M. Atacan, Evolutionary Structural Optimization of Multiple Load Case Generic Aircraft Components, July 2012.
13. Yousefi, Abdollah, In Vivo Verification of Different Hip Joint Center Estimation Methods in Gait Analysis for Healthy Subjects, January 2014.
14. Ashrafi, Parinaz, In-vivo Testing of Biological Soft Tissues by a Non-axisymmetric Tip Indenter Using Displacement and Force Control, co-supervised by Prof. Dr. Murat Bozkurt, in Biomedical Engineering, February 2015.

15. Erkan, Onur Mert, Mechanical Design of Modular Orthopeadic Implant, August 2015 (TÜBİTAK 1003, 113S103 support) (*Prof. Dr. Mustafa N. Parlar Foundation Thesis of the Year Award*).
16. Yenigün, Çağrı, Mechanical Design and Analysis of a Novel Fixation Device for Human Bone Fractures, co-supervised by Prof. Dr. Erbil Oğuz, in Biomedical Engineering, February 2016.
17. Ovalı, Orçun, Comparison of Constructional Aspects of Different Railway Point Machines, co-supervised by Prof. Dr. Eres Söylemez, January 2019.
18. Biçer, Metin, On the Implementation of OpenSim: Applications of Marker Based and Inertial Measurement Unit Based Systems, co-supervised by Prof. Dr. S. Turgut Tümer, June 2019.
19. Hesammokri, Parnian, Implementation of Fractional Order Viscoelastic Models to Finite Element Method, September 2019.
20. Sümbül Ghasemlou, Ezgi, Generalization of Mediolateral and Anteroposterior Postural Control Responses for Different Stance Positions in Quiet Stance, co-supervised by Prof. Dr. M. Güneş Yavuzer, in Biomedical Engineering, September 2019.
21. Çuvalcı, Ufuk, Design of a Computerized Dynamic Posturagraphy Machine, November 2019.
22. Yatağan, Koray Melih, Biomechanical Modelling of the Interphalangeal Joints of the Human Hand, co-supervised by Prof. Dr. A. Gürsel Leblebicioğlu, July 2021 (*METU Thesis of the Year Award*).
23. Çetin, Can, *Rotator Manşet Rüptüründe Tedavi Amacıyla Tasarlanan Subakromiyal Bursa Replasman İmplantının Omuz Biyomekanik Modeline Uygulanması*, T. C. Başkent Üniversitesi Tıp Fakültesi Ortopedi ve Travmatoloji Anabilim Dalı Tıpta Uzmanlık Tezi, Tez Danışmanı Prof. Dr. İlhami Kuru, Eş-danışman Ergin Tönük, May 2023.
24. Kidwai, Alina Nawab, Estimating Muscle Forces in Patients with Cerebral Palsy during Walking Using Optimization Methods, co-supervised by Prof. Dr. Yunus Ziya Arslan, December 2023.
25. Çakır, Muhammed, Constitutive Modeling and Experimental Identification of Material Parameters of Viscoelastic Materials by Variable Order Non-integer Derivatives, Ph. D. Thesis, co-supervised by Prod. Dr. Hamdullah Yücel, February 2025.

COURSES OFFERED

- BME 501 Introduction to Biomedical Engineering, *Biomechanics Section* (*Spring-2008, Spring-2009, Spring-2010, Spring-2011, Spring-2012, Spring-2013, Spring-2015, Spring-2018*).
- ENME 020 Dynamics *(Fall-1999 at Marquette University, Milwaukee, Wisconsin, U. S. A.)*

  Contents: Fundamentals of motion of particles and rigid bodies. Application of Newton's laws. Principles of position, velocity and acceleration. Use of work-energy and impulse-momentum methods.
  Textbook: Beer, Ferdinand Pierre and Johnston, Elwood Russel Jr., Vector Mechanics for Engineers: Dynamics, Sixth Edition, McGraw-Hill, 1997. TA352.B39 1997 (ISBN 0-07-912637-5).
- ME 205 Statics *(Fall-2000, Spring-2001, Summer-2001, Fall-2011, Fall-2016)*

  Contents: Fundamentals of mechanics. Important vector quantities. Equivalent force systems. Equations of equilibrium. Structural mechanics. Frictional forces. Method of virtual work. Method of minimum potential energy. Properties of surfaces.
  Textbook: I. H. Shames, Engineering Mechanics, Statics, John Wiley, 1980 for 2000-2001 and R. C. Hibbeler, Engineering Mechanics, Statics, Twelfth Edition in SI Units, Pearson, 2010 for 2011.
- ME 206 Strength of Materials *(Fall-2001, Summer-2002, Fall-2004, Fall-2005, Fall-2006, Summer-2006, Fall-2008)*

Contents: Concepts: normal and shear stress, strain. Materials, factor of safety, stress concentration. Pressurized thin walled cylinders. Simple loading tension, torsion and bending. Deflections with simple loadings, superposition techniques. Statically indeterminate members, thermal stresses. Combined stresses, Mohr's circle, combined loadings. Buckling. Energy methods.
Textbook: P. Beer and E.R. Johnston, Mechanics of Materials, McGraw-Hill International Book Company, 1992

- ME 208 Dynamics *(Spring-2001, Spring-2003, Spring-2005, Fall-2005, Spring-2005, Fall-2007, Fall-2009, Spring-2010, Spring-2011, Spring-2012, Spring 2013, Spring-2017, Spring-2018, Spring-2019, Spring-2020, Spring-2021, Spring-2022, Spring-2023, Spring-2024, Spring-2025)*
  Contents: Kinematics and kinetics of particles and system of particles. Plane kinematics and kinetics of rigid bodies. Newton's second law of motion. Methods of work energy and impulse-momentum.
  Textbook: J.L. Meriam and L.G. Kraige, Engineering Mechanics, Dynamics, John Wiley
- ME 301 Theory of Machines I *(Fall-2000, Fall-2002, Fall-2003, Fall-2004, Fall-2008, Fall-2009, Fall-2010, Fall-2012, Fall-2014, Fall-2015, Fall-2016, Fall-2017, Fall-2019, Fall-2020, Fall-2021, Fall-2022)*
  Contents: Introduction to mechanisms: basic concepts, mobility, basic types of mechanisms. Position, velocity and acceleration analysis of linkages. Cam mechanisms. Gear trains. Static and dynamic force analysis of mechanisms.
  Textbook: E. Söylemez, Mechanisms, METU Publication No.64, 1999 and 2009).
- ME 302 Theory of Machines II *(Spring-2002, Spring-2004, Spring 2007, Spring-2008, Spring-2009, Spring-2010, Spring-2011, Fall-2011, Spring-2012, Spring-2013, Spring-2014, Spring-2015, Spring-2016*)
  Contents: Virtual work method. Driving torque characteristics and machine-prime mover interactions. Modelling and elements of vibratory systems. Free and forced vibrations of single degree-of-freedom systems. Introduction to multi degree-of-freedom systems. Vibration control. Critical speeds of shafts. Balancing of rotating machinery.
  Textbook: S.G. Kelly, Fundamentals of Mechanical Vibrations, International Edition, McGraw-Hill, 1993.
- ME 307 Machine Elements I *(Fall-2002, Fall-2003, Fall-2024*)
  Contents: Stress analysis in 3-D. Tolerances and allowances. Static design criteria; stress concentration, factor of safety, theories of failure for ductile and brittle materials. Fatigue design criteria under mean and combined stresses. Design of shafts. Design of permanent joints; riveted joints, welded joints. Design of detachable joints, bolted joints, power screws, keys, splines, pins, rings. Design of springs.
  Textbook:J.E. Shigley, Mechanical Engineering Design, Metric Edition, McGraw-Hill, 1986.
- ME 410 Mechanical Engineering Systems Laboratory, Theoretical Background of Experiment 5, Stress Analysis by Using Strain Gages *(Fall-2006, Spring-2007, Fall-2007, Spring-2008, Fall-2008, Spring-2009, Fall-2010, Spring 2011, Fall-2011, Spring 2012, Fall-1012, Spring 2013, Fall-2013, Spring-2014, Fall-2023, Spring-2024)*
  Contents: The need for experiments. Experimental procedure. Professional safety. Generalized measurement system. Report writing. Error treatment. Uncertainity. Frequency distribution. Expected value, standart deviation. Presentation of experimental results. Plotting data. Curve fitting, linear regression. Non-linear relationships. Dimensional analysis. Laboratory experiments.
- ME 418 Dynamics of Machinery *(Spring-2016)*
  Contents: Kinematic influence coefficients. Equation of motion and dynamic response of single degree-of-freedom machines: analytical and numerical solution methods. Shaking forces and moments. Balancing of a four-bar linkage. Dynamically equivalent mass systems. Analysis of unbalance in multi-cylinder engines. Kinetostatics: effects of dry friction, power flow in simple and planetary gear trains. Jump phenomenon in rigid cam-follower systems.
- ME 431 Kinematic Synthesis of Mechanisms *(Fall-2013, Fall-2014, Spring-2017, Fall-2017, Fall-2021)*
  Contents: Introduction to synthesis, graphical and analytical methods in dimensional synthesis. Two, three and four positions of a plane. Correlation of crank angles. Classical transmission angle problem. Optimization for the transmission angle. Chebyshev theorem. Current topics in mechanism synthesis.
- ME 519 Kinematic Analysis of Mechanisms (*Fall-2019, Fall-2020*)
  Contents: Introduction to modern kinematic analysis, Analytical representation of motions, Euler-Savary equation, Curvature theory, Instantaneous invariants and higher accelerations, Cams, Three-dimensional mechanisms, Intermittent mechanisms, Miscellaneous mechanisms, Computer aided kinematic design, Current applications.

- ME 547 Introduction to Continuum Mechanics *(Spring-2008, Spring-2009, Fall-2010, Fall-2012, Fall-2013, Fall-2018)*

  Contents: General aspects, basic assumptions. Developmment of mathematical tools. Kinematics of a continuum. Stress. General principles. Theory of constitutive equations. Basic material laws. Curvilinear coordinate systems.

  Textbooks: Y. C. Fung, A First Course in Continuum Mechanics, Third Edition, Prentice-Hall, 1994., L. E. Malvern, Introduction to the Mechanics of a Continuous Medium, Prentice Hall, 1969.
- ME 549 Experimental Stress Analysis I *(Fall-2018, Fall-2023)*

  Contents: Introduction, Strain Measurement Methods, Factors Influencing Gauge Selection, Gauge Selection Procedure, Gauge Application, Strain Gauge Circuits, Sources of Error in Strain Gauge Measurements, Strain Gauge Excitation Levels, Force Measurements and Transducers, Special Purpose Gauge Patterns, Rosette Analysis, Corrections for Transverse Strain Effects
  Textbook: Dally, J. W., Riley, W. F., Experimental Stress Analysis.
- ME 200 Mechanical Engineering Orientation, Coordinator *(2001-2009)*
- ME 590 Thesis Seminar, Coordinator *(2001-2002 and 2008-2009 academic years and 2013 spring semester)*
- ME 599 Research Methods and Ethics in Engineering (*Spring-2018, Spring-2019, Spring-2020*)

  Contents: Basic concepts, Research, Research methodology, Scientific method, Logical thinking, Problem identification and hypothesis, Types of research methods, Project proposal, How to conduct a literature survey, how to design a study, How to analyze and present results of a study, How to prepare a manuscript, How the scientific publication system works, Conflict of interest, Plagiarism, Code of ethics in engineering, Research misconduct, Rights and responsibilities of engineers.
- ES 541 Introduction to Biomechanics, *Guest Lecturer, An Introduction to Linear Viscoelastic Materials (Fall-2005, Fall-2006, Fall-2007)*
- MDM 521 Kinematic Synthesis of Mechanisms *(Spring-2017)*

  Contents: Introduction to synthesis, graphical and analytical methods in dimensional synthesis. Two, three and four positions of a plane. Correlation of crank angles. Classical transmission angle problem. Optimization for the transmission angle. Chebyshev theorem. Current topics in mechanism synthesis.
- MDM 526 Machine Dynamics (*Spring-2016*)

  Contents: Kinematic influence coefficients. Equation of motion and dynamic response of single degree-of-freedom machines: analytical and numerical solution methods. Shaking forces and moments. Balancing of a four-bar linkage. Dynamically equivalent mass systems. Analysis of unbalance in multi-cylinder engines. Kinetostatics: effects of dry friction, power flow in simple and planetary gear trains. Jump phenomenon in rigid cam-follower systems.
- OPZ 105 Physics I *(Fall-2018 at Ankara University Prosthetics and Orthodics Department)*

  Contents: Measurement and units, equilibrium, linear motion, plane motion, Newton's laws, work-energy, impulkse-momentum, fixed axis rotation, harmonic motion, elasticity, hydrostatics, temperature and thermal expansion, work and heat, laws of thermodynamics.
  Textbook: None.

MIDDLE EAST TECHNICAL UNIVERSITY OPEN COURSEWARE

- ME 208 Dynamics (*https://ocw.metu.edu.tr/course/view.php?id=339 available since 2021*).
- ME 301 Theory of Machines I (*https://ocw.metu.edu.tr/course/view.php?id=340 available since 2021*).
- ME 519 Kinematic Analysis of Mechanisms (*https://ocw.metu.edu.tr/course/view.php?id=341 available since 2021*).

CITATIONS

Web of Science or Google Scholar for the most recent state of citations.

1. **TÖNÜK, E.**, ÜNLÜSOY, Y. S., "Prediction of automobile tire cornering force characteristics by finite element modeling and analysis". Computers and Structures Vol.79, No: 13, pp. 1219-1232, May 2001.
   - *1.1. Venturini, Simone; Bonisoli, Elvio; Rosso, Carlo; Velardocchia, Mauro, A tyre-rim interaction digital twin for biaxial loading conditions, Mechanism And Machine Theory, 191, 2024.*
   - *1.2. Zeng, Haiyang; Zhao, Chunlai; Chen, Shunhua; Xu, Wei; Zang, Mengyan, Numerical Simulations of Tire-Soil Interactions: A Comprehensive Review, Archives Of Computational Methods In Engineering, 30 (8) , pp.4801-4829, 2023.*
   - *1.3. Zijah Jelkić, Boran Pikula, The Establishment of an Advanced Brush Model for Simulation of Vehicle Dynamics in New Technologies, Development and Application V, Editors: Isak Karabegović, Ahmed Kovačević, Sadko Mandžuka, pp 260–273, DOI: 10.1007/978-3-031-05230-9_30, Springer, 2022.*
   - *1.4. Shan, Yongfeng; Cui, Haitao; Zhang, Hongjian; Liu, Haijian, Deformation behavior of rubber composite based on FEA and experimental verification, Science And Engineering Of Composite Materials, 29 (1) , pp.194-205, https://doi.org/10.1515/secm-2022-0011.*
   - *1.5. Koppisetti, Suresh Babu; Nallu, Ramanaiah; Penmetsa, Ramamurty Raju, Passenger Cars Wheel Performance Test Simulation for Service Life Evaluation: A Review, Journal Of Failure Analysis And Prevention, https://doi.org/10.1007/s11668-022-01447-0.*
   - *1.6. Daniel Garcia-Pozuelo, Oluremi Olatunbosun, Gianluca Palli, Salvatore Strano, Mario Terzo & Ciro Tordela, Estimation of tire-road contact forces through a model-based approach employing strain measurements, Meccanica, https://doi.org/10.1007/s11012-022-01548-y.*
   - *1.7. Zhuang, Ye; Song, Zhanshuai; Gao, Xueliang; Yang, Xiaoguang; Liu, Weiping, A Combined-Slip Physical Tire Model Based on the Vector Distribution Considering Tire Anisotropic Stiffness, NONLINEAR DYNAMICS, https://doi.org/10.1007/s11071-022-07462-y.*
   - *1.8. Romano, Luigi; Strano, Salvatore; Terzo, Mario, Synthesis and comparative analysis of three model-based observers for normal load and friction estimation in intelligent tyre concepts, PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART D-JOURNAL OF AUTOMOBILE ENGINEERING, Volume: 235, Issue: 6, Pages: 1629-1642, DOI: 10.1177/0954407020975346.*
   - *1.9. Ballo, F.; Previati, G.; Mastinu, G.; Comolli, F, Impact tests of wheels of road vehicles: A comprehensive method for numerical simulation, INTERNATIONAL JOURNAL OF IMPACT ENGINEERING, Volume: 146, Article Number: 103719, DOI: 10.1016/j.ijimpeng.2020.103719 Published: DEC 2020 (SCI-Expanded).*
   - *1.10. Zhang, Zifeng; Fu, Hongxun; Liang, Xuemeng; Chen, Xiaoxia; Tan, Di, Comparative Analysis of Static and Dynamic Performance of Nonpneumatic Tire with Flexible Spoke Structure, STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, Volume: 66 Issue: 7-8, Pages: 458-466, Published: 2020 (SCI-Expanded).*
   - *1.11. Behroozinia, Pooya; Khaleghian, Seyedmeysam; Taheri, Saied;, An investigation towards intelligent tyres using finite element analysis, INTERNATIONAL JOURNAL OF PAVEMENT ENGINEERING, Volume: 21Issue: 3Pages: 311-321Published: FEB 23 2020 (SCI-Expanded).*
   - *1.12. El-Sayegh, Zeinab; El-Gindy, Moustafa; Johansson, Inge; Oijer, Fredrik, PREDICTION OF OUT-OF-PLANE RIGID RING TRUCK TIRE MODEL PARAMETERS OVER FLOODED SURFACE USING FEA-SPH TECHNIQUES, Proceedings Of The ASME International Design Engineering Technical Conferences And Computers And Information In Engineering Conference, 2019, Vol 3, Proceedings Paper.*
   - *1.13. Korunovic, Nikola; Fragassa, Cristiano; Marinkovic, Dragan, Performance evaluation of cord material models applied to structural analysis of tires, COMPOSITE STRUCTURES, Volume: ? 224Article Number: UNSP 111006 Published: ?SEP 15 2019 SCI-Expanded).*
   - *1.14. Deng, YJ; Zhao, YQ; Xu, H; Lin, F; Wang, QW, Rigid-flexible coupling modelling and dynamic performance analysis of novel flexible road wheel, PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART K-JOURNAL OF MULTI-BODY DYNAMICS, 10.1177/1464419319874198 (SCI-Core).*
   - *1.15. Sun, Peng-Fei; Huang, Hong-Wu; Zhou, Shui-Ting, Experiment and Analysis of Cord Stress on High-Speed Radial Tire Standing Waves, SHOCK AND VIBRATION Volume: ? 2019Article Number: 3607670 Published: ?JUL 30 2019 (SCI-Expanded).*
   - *1.16. Garcia-Pozuelo, D; Olatunbosun, OA; Romano, L; Strano, S; Terzo, M; Tuononen, AJ; Xiong, Y, Development and experimental validation of a real-time analytical model for different intelligent tyre concepts, VEHICLE SYSTEM DYNAMICS, 57 (12):1970-1988; 10.1080/00423114.2019.1566560 DEC 2 2019 (SCI-Core).*
   - *1.17. Garcia-Pozuelo, D; Olatunbosun, O; Strano, S; Terzo, M, A real-time physical model for strain-based intelligent tires, SENSORS AND ACTUATORS A-PHYSICAL, 288 1-9; 10.1016/j.sna.2018.12.010 APR 1 2019 (SCI-Core).*
   - *1.18. El-Sayegh, Z; El-Gindy, M; Johansson, I; Oijer, F, DEVELOPMENT OF IN-PLANE TRUCK TIRE-FLOODED SURFACE INTERACTION MODELS USING FEA-SPH TECHNIQUESPROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, 2018, VOL 3, 2018 (Proceeding).*
   - *1.19. Previati, G; Ballo, F; Gobbi, M; Mastinu, G, Radial impact test of aluminium wheels-Numerical simulation and experimental validation, INTERNATIONAL JOURNAL OF IMPACT ENGINEERING, 126 117-134; 10.1016/j.ijimpeng.2018.12.002 APR 2019 (SCI-Core).*
   - *1.20. Zhu, MM; Zhao, YQ; Lin, F; Xiao, Z; Deng, YJ, Thermo-mechanical coupled modeling for numerical analyzing the influence of thermal and frictional factors on the cornering behaviors of non-pneumatic mechanical elastic wheel, SIMULATION MODELLING PRACTICE AND THEORY, 91 13-27; 10.1016/j.simpat.2018.11.002 FEB 2019 (SCI-Expanded).*
   - *1.21. Morales, E; Filiatrault, A; Aref, A Seismic floor isolation using recycled tires for essential buildings in developing countries, BULLETIN OF EARTHQUAKE ENGINEERING, 16 (12):6299-6333; 10.1007/s10518-018-0416-7 DEC 2018 (SCI-Expanded).*

1.22. Zhao, YQ; Du, XB; Lin, F; Wang, Q; Fu, HX, Static stiffness characteristics of a new non-pneumatic tire with different hinge structure and distribution, JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, 32 (7):3057-3064; 10.1007/s12206-018-0608-8 JUL 2018(SCI-Expanded).

1.23. *Ballo, F; Previati, G; Gobbi, M; Mastinu, G, Tire-Rim Interaction, a Semi-Analytical Tire Model, JOURNAL OF MECHANICAL DESIGN, 140 (4):10.1115/1.4038927 APR 2018 (SCI-Expanded).*

1.24. *Ballo, F; Frizzi, R; Gobbi, M; Mastinu, G; Previati, G; Sorlini, C, NUMERICAL AND EXPERIMENTAL STUDY OF RADIAL IMPACT TEST OF AN ALUMINUM WHEEL - TOWARDS INDUSTRY 4.0 VIRTUAL PROCESS ASSESSMENT, PROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, 2017, VOL 3, 2017, Cleveland, OH (Proceeding).*

1.25. *Ballo, F; Previati, G; Gobbi, M; Mastinu, G, A SEMI-ANALYTICAL TYRE MODEL FOR THE STUDY OF TYRE/RIM INTERACTION ON A ROAD VEHICLE, PROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, 2017, VOL 3, 2017, Cleveland, OH (Proceeding).*

1.26. *Rafei, M; Ghoreishy, MHR; Naderi, G, Thermo-mechanical coupled finite element simulation of tire cornering characteristics-Effect of complex material models and friction law, MATHEMATICS AND COMPUTERS IN SIMULATION, 144 35-51; FEB 2018 (SCI-Expanded).*

1.27. *Suvanjumrat, C; Rugsaj, R, Finite Element Modeling with Embed Rebar Elements and Steady State Rolling Analysis for Rolling Resistance Test of Pneumatic Tire, 2016 THE 3RD INTERNATIONAL CONFERENCE ON MECHATRONICS AND MECHANICAL ENGINEERING (ICMME 2016) (Conference).*

1.28. *Du, XB; Zhao, YQ; Lin, F; Fu, HX; Wang, Q, Numerical and experimental investigation on the camber performance of a non-pneumatic mechanical elastic wheel, JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, 39 (9):3315-3327; 10.1007/s40430-016-0702-8 SEP 2017 (SCI-Expanded).*

1.29. *Massera, CM; Terra, MH; Wolf, DF, Guaranteed Cost Model Predictive Control-based Driver Assistance System for Vehicle Stabilization Under Tire Parameters Uncertainties, 2016 IEEE 19TH INTERNATIONAL CONFERENCE ON INTELLIGENT TRANSPORTATION SYSTEMS (ITSC), 322-327; 2016 (Conference).*

1.30. *Ballo, F; Gobbi, M; Mastinu, G; Previati, G; Zerboni, R, MOTORCYCLE TIRE MODELING, INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, 2015, VOL 3, 2016, ASME (Conference).*

1.31. *Ballo, F; Gobbi, M; Mastinu, G; Previati, G, Motorcycle Tire Modeling for the Study of Tire-Rim Interaction, JOURNAL OF MECHANICAL DESIGN, 138 (5):10.1115/1.4032470 MAY 2016 (SCI-Expanded).*

1.32. *Baranowski, P; Malachowski, J; Mazurkiewicz, L., Numerical and experimental testing of vehicle tyre under impulse loading conditions, INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, 106 346-356; FEB 2016 (SCI-Core).*

1.33. *Silva, LCA; Dedini, FG; Correa, FC; Eckert, JJ; Becker, M, Measurement of wheelchair contact force with a low cost bench test, MEDICAL ENGINEERING & PHYSICS, 38 (2):163-170; 10.1016/j.medengphy.2015.11.014 FEB 2016 (SCI-Core).*

1.34. *Gutierrez-Lopez, MD; de Jalon, JG, A NOVEL METHOD FOR PRODUCING LOW COST DYNAMOMETRIC WHEELS, PROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, 2013, VOL 1, 2014.*

1.35. *Kim, SJ; Kim, KS; Yoon, YS, Development of a tire model based on an analysis of tire strain obtained by an intelligent tire system, INTERNATIONAL JOURNAL OF AUTOMOTIVE TECHNOLOGY, 16 (5):865-875; OCT 2015 (SCI-Expanded).*

1.36. *Gutierrez-Lopez, MD; de Jalon, JG; Cubillo, A, A novel method for producing low cost dynamometric wheels based on harmonic elimination techniques, MECHANICAL SYSTEMS AND SIGNAL PROCESSING, 52-53 577-599; FEB 2015 (SCI-Expanded).*

1.37. *Varela, CA; Sierra, FZ, Cyclic strain rate in tyres as power source to augment automobile autonomy, INTERNATIONAL JOURNAL OF VEHICLE DESIGN, 65 (2-3):270-285; 2014 (SCI-Expanded).*

1.38. *Cueto, OG; Coronel, CEI; Morfa, CAR; Sosa, GU; Gomez, LHH; Calderon, GU; Suarez, MH, Three dimensional finite element model of soil compaction caused by agricultural tire traffic, COMPUTERS AND ELECTRONICS IN AGRICULTURE, 99 146-152; NOV 2013 (SCI-Expanded).*

1.39. *Bolarinwa, EO; Mahadevaiah, U; Marzougui, D; Opiela, KS, The development of an enhanced finite element tire model for roadside safety hardware assessment, PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART K-JOURNAL OF MULTI-BODY DYNAMICS, 226 (K3):206-219; 2012 (SCI-Expanded).*

1.40. *Ju, J; Kim, DM; Kim, K, Flexible cellular solid spokes of a non-pneumatic tire, COMPOSITE STRUCTURES, 94 (8):2285-2295; 2 JUL 2012 (SCI-Expanded).*

1.41. *Korunovic, N; Trajanovic, M; Stojkovic, M; Misic, D; Milovanovic, J, Finite Element Analysis of a Tire Steady Rolling on the Drum and Comparison with Experiment, STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, 57 (12):888-897, DEC 2011 (SCI-Expanded).*

1.42. *Alkan, V.; Karamihas, S. M.; Anlas, G., Finite element modeling of static tire enveloping characteristics, INTERNATIONAL JOURNAL OF AUTOMOTIVE TECHNOLOGY 12 (4): 529-535 AUG 2011 (SCI-Expanded).*

1.43. *Cerit, M, Numerical simulation of dynamic side impact test for an aluminium alloy wheel, SCIENTIFIC RESEARCH AND ESSAYS 5 (18): 2694-2701 SEP 18 2010 (SCI-Expanded).*

1.44. *Slade, J; El-Gindy, M; Lescoe, R; Oijer, F; Trivedi, M; Johansson, I, OFF-ROAD TIRE-SOIL MODELING USING FINITE ELEMENT ANALYSIS TECHNIQUE, DETC2009: PROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNICAL CONFERENCES/COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE : 815-829 2010 (Proceedings).*

1.45. *Neves, R. R. V.; Micheli, G. B.; Alves, M., An experimental and numerical investigation on tyre impact, INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 37 (6): 685-693 Sp. Iss. SI JUN 2010 (SCI-Core).*

1.46. *Mohsenimanesh, A, Ward, SM; Gilchrist, MD, Stress analysis of a multi-laminated tractor tyre using non-linear 3D finite element analysis, MATERIALS & DESIGN 30 (4): 1124-1132 APR 2009 (SCI-Expanded).*

1.47. *Liu, H.H., Load and inflation effects on force and moment of passenger tires using explicit transient dynamics, Tire Science and Technology 35 (1), pp. 41-55, 2007.*

1.48. *Rao, K.V.N., Kumar, R.K., Simulation of tire dynamic behavior using various finite element techniques, International Journal of Computational Methods in Engineering Science and Mechanics 8 (5), pp. 363-372, 2007.*

1.49. *K. V. Narasimha Rao, R. Krishna Kumar, R. Mukhopadhyay, and V. K. Misr, A study of the relationship between Magic Formula coefficients and tyre design attributes through finite element analysis, Vehicle System Dynamics, Vol. 44, No. 1, January 2006, 33-63 (SCI-expanded).*

1.50. *Li, L., Wang, F.-Y., Zhou, Q., A watch in developments of intelligent tire inspection and monitoring, 2005 IEEE International Conference on Vehicular Electronics and Safety Proceedings 2005, art. no. 1563668, pp. 333-338, 2005.*

1.51. *Cho, J. R., Shin, S. W., Yoo, W. S., Crown shape optimization for enhancing tire wear performance by ANN. Computers and Structures 83 (12-13), 920-933, 2005 (SCI-core).*

1.52. *Wideberg JP Simplified method for evaluation of the lateral dynamic behaviour of a heavy vehicle HEAVY VEH SYST 11 (2): 195-207 2004 (SCI-expanded)*

1.53. *Olatunbosun, O. A., Bolarinwa, O. FE simulation of the effect of tire design parameters on lateral forces and moments Tire Science and Technology 32 (3), 146-163, 2004.*

1.54. *Mackerle, J., Rubber and rubber-like materials, finite-element analyses and simulations, an addendum: a bibliography (1997-2003), Modelling and Simulation in Materials Science and Engineering 12 (5): 1031-1053 SEP 2004.*

1.55. *Wideberg JP A graphical user interface for the learning of lateral vehicle dynamics, European Journal of Engineering Education v. 28, n. 2, pp. 225-235, 2003.*

1.56. *Rao, K., Kumar, R., Bohara, P., Transient finite element analysis of tire dynamic behavior, Tire Science and Technology 31 (2), pp. 104-127, 2003.*

2. **TÖNÜK, E.**, SILVER-THORN, M. B., "Nonlinear Elastic Material Property Estimation of Lower Extremity Residual Limb Tissues". IEEE, Transactions on Rehabilitation Engineering Vol 11, No 1, pp. 43-53, March 2003.

2.1. *Oddes, Zohar; Solav, Dana, Identifiability of soft tissue constitutive parameters from in-vivo macro-indentation, Journal of The Mechanical Behavior of Biomedical Materials, Volume 140, April 2023, https://doi.org/10.1016/j.jmbbm.2023.105708.*

2.2. *Plesec, Vasja; Harih, Gregor, Development of a Generic Numerical Transtibial Model for Limb-Prosthesis System Evaluation, Applied Sciences-basel, 13 (4), https://doi.org/10.3390/app13042339.*

2.3. *Maes, Frederick; Van Bockstal, Karel, Uniqueness for inverse source problems of determining a space-dependent source in thermoelastic systems, Journal of Inverse and Ill-posed Problems, https://doi.org/10.1515/jiip-2021-0055.*

2.4. *Seyed Sajad Mirjavadi, Andrew J. Taberner, Martyn P Nash, Poul M. F. Nielsen, Characterising the Soft Tissue Mechanical Properties of the Lower Limb of a Below-Knee Amputee: A Review, in book: Computational Biomechanics for Medicine, DOI: 10.1007/978-3-030-70123-9_8.*

2.5. *Steer, J. W.; Worsley, P. R.; Browne, M.; Dickinson, Alex, Key considerations for finite element modelling of the residuum-prosthetic socket interface, PROSTHETICS AND ORTHOTICS INTERNATIONAL Article Number: 0309364620967781.*

2.6. *Marinopoulos, Theodoros; Zani, Lorenzo; Li, Simin; Silberschmidt, Vadim V., Modelling indentation of human lower-limb soft tissue: simulation parameters and their effects, CONTINUUM MECHANICS AND THERMODYNAMICS, DOI: 10.1007/s00161-020-00933-w (SCI-Expanded).*

2.7. *Fougeron, Nolwenn; Rohan, Pierre-Yves; Haering, Diane; Rose, Jean-Loic; Bonnet, Xavier; et al., Combining Freehand Ultrasound-Based Indentation and Inverse Finite Element Modeling for the Identification of Hyperelastic Material Properties of Thigh Soft Tissues, JOURNAL OF BIOMECHANICAL ENGINEERING-TRANSACTIONS OF THE ASME Volume: 142 Issue: 9 Article Number: 091004 DOI: 10.1115/1.4046444 Published: SEP 1 2020 (SCI-Expanded).*

2.8. *Yang, YC; Weidemann, A; Tison, C; Hao, ZL, NUMERICAL ANALYSIS OF ELASTICITY MEASUREMENT OF SOFT TISSUES VIA A 2D DISTRIBUTED-DEFLECTION SENSOR: SIGNIFICANCE OF TISSUE PARAMETERS, PROCEEDINGS OF THE ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS AND EXPOSITION, 2017, VOL 3, 2018 (Proceeding).*

2.9. *Dickinson, AS; Steer, JW; Worsley, PR, Finite element analysis of the amputated lower limb: A systematic review and recommendations, MEDICAL ENGINEERING & PHYSICS, 43 1-18; 10.1016/j.medengphy.2017.02.008 MAY 2017 (SCI-Core).*

2.10. *Yang, Yichao; Hao, Zhili, EFFECT OF TUMOR VARIABLES AND SENSOR DESIGN ON THE MEASURED STIFFNESS DISTRIBUTION OF TUMOR-EMBEDDED TISSUES: A NUMERICAL STUDY, ASME International Mechanical Engineering Congress and Exposition (IMECE2016) Location: Phoenix, AZ (Proceeding).*

2.11. *Zheng, YP; Huang, YP, Measurement of Soft Tissue Elasticity in Vivo: Techniques and Applications, CRC PRESS-TAYLOR & FRANCIS GROUP, 6000 BROKEN SOUND PARKWAY NW, STE 300, BOCA RATON, FL 33487-2742 USA, ISBN: 978-1-4665-7629-2; 978-1-4665-7628-5 (Book).*

2.12. *Witzenburg, CM; Barocas, VHA nonlinear anisotropic inverse method for computational dissection of inhomogeneous planar tissues, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 19 (15):1630-1646; 10.1080/10255842.2016.1176154 2016 (SCI-Expanded).*

2.13. *Sengeh, DM; Moerman, KM; Petron, A; Herr, H, Multi-material 3-D viscoelastic model of a transtibial residuum from in-vivo indentation and MRI data, JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS, 59 379-392; 10.1016/j.jmbbm.2016.02.020 JUN 2016(SCI-Expanded).*

2.14. *Affagard, J. -S.; Feissel, P.; Bensamoun, S. F., Measurement of the quadriceps muscle displacement and strain fields with ultrasound and Digital Image Correlation (DIC) techniques, IRBM Volume: 36 Issue: 3 Pages: 170-177 Published: JUN 2015 (SCI-Expanded).*

2.15. *Sangpradit, K; Liu, HB; Dasgupta, P; Althoefer, K; Seneviratne, LD, Finite-Element Modeling of Soft Tissue Rolling Indentation, IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, 58 (12):3319-3327; Part 1, DEC 2011 (SCI-Core).*

2.16. *Diehm, N; Sin, S; Hoppe, H; Baumgartner, I; Buchler, P, Computational Biomechanics to Simulate the Femoropopliteal Intersection During Knee Flexion: A Preliminary Study, JOURNAL OF ENDOVASCULAR THERAPY 18 (3): 388-396 JUN 2011 (SCI-Core).*

2.17. *Petekkaya, AT; **Tönük**, E, IN VIVO INDENTER EXPERIMENTS VIA ELLIPSOID INDENTER TIPS TO DETERMINE THE PERSONAL AND LOCAL IN-PLANE ANISOTROPIC MECHANICAL BEHAVIOR OF SOFT BIOLOGICAL TISSUES, JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY 26 (1): 63-72 MAR 2011 (SCI-Expanded).*

2.18. *Gabbiadini, S; Colombo, G; Facoetti, G; Rizzi, C, KNOWLEDGE MANAGEMENT AND CUSTOMISED 3D MODELLING TO IMPROVE PROSTHESIS DESIGN, ASME INTERNATIONAL DESIGN ENGINEERING*

TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, PROCEEDINGS, VOL 2, PTS A AND B : 625-633 2010 (Conference paper).

2.19. *Bradley and Russel, Mechatronics in Action, Case Studies in Mechatronics, Application and Education (book), in "Force Sensing in Medical Robotics" by Althoefer, Liu, Puangmali, Zybszewski, Noonan, Seneviratne, pp. 157-172, Springer 2010.*

2.20. *Mak, AFT; Zhang, M; Tam, EWC, Biomechanics of Pressure Ulcer in Body Tissues Interacting with External Forces during Locomotion, ANNUAL REVIEW OF BIOMEDICAL ENGINEERING, VOL 12 12: 29-53 2010 (SCI-Core).*

2.21. *Colombo, G; Filippi, S; Rizzi, C; Rotini, F, A new design paradigm for the development of custom-fit soft sockets for lower limb prostheses, COMPUTERS IN INDUSTRY 61 (6): 513-523 Sp. Iss. SI AUG 2010 (SCI-Expanded).*

2.22. *Namani, R; Simha, N, Inverse finite element analysis of indentation tests to determine hyperelastic parameters of soft-tissue layers, JOURNAL OF STRAIN ANALYSIS FOR ENGINEERING DESIGN 44 (5): 347-362 Sp. Iss. SI JUL 2009 (SCI-Core).*

2.23. *Woo, S. S. M.; Yew, K. S. A.; Toh, S. L.; Goh, J. C. H.; Lee, P. V. S., , Mechanical Characterisation of Bulk Soft Tissue for Intelligent CAD-FEA Prosthetics Application, WORLD CONGRESS ON MEDICAL PHYSICS AND BIOMEDICAL ENGINEERING 2006, VOL 14, PTS 1-6 14: 2804-2806 Part 1-6 2007 (Conference Proceeding).*

2.24. *Misra, S; Ramesh, KT; Okamura, AM, Modeling of tool-tissue interactions for computer-based surgical simulation: A literature review, PRESENCE-TELEOPERATORS AND VIRTUAL ENVIRONMENTS 17 (5): 463-491 OCT 2008 (SCI-core).*

2.25. *Al-Ja'afreh, T; Zweiri, Y; Seneviratne, L; Althoefer, K, A new soft-tissue indentation model for estimating circular indenter 'force-displacement' characteristics, PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE 222 (H5): 805-815 JUL 2008 (SCI-core)*

2.26. *Kang, I; Panneerselvam, D; Panoskaltsis, VP; Eppell, SJ; Marchant, RE; Doerschuk, CM, Changes in the hyperelastic properties of endothelial cells induced by tumor necrosis factor-alpha, BIOPHYSICAL JOURNAL 94 (8): 3273-3285, 2008 (SCI-core).*

2.27. *Samur, E., Sedef, M., Basdogan, C., Avtan, L., Duzgun, O., A robotic indenter for minimally invasive measurement and characterization of soft tissue response, Medical Image Analysis 11 (4), pp. 361-373, 2007 (SCI-core).*

2.28. *Bliss, C.L., Szivek, J.A., Tellis, B.C., Margolis, D.S., Schnepp, A.B., Ruth, J.T., Sensate scaffolds can reliably detect joint loading, Journal of Biomedical Materials Research - Part B Applied Biomaterials 81 (1), pp. 30-39, 2007 (SCI-core).*

2.29. *Portnoy, S; Yarnitzky, G; Yizhar, Z; Kristal, A; Oppenheim, U; Siev-Ner, I; Gefen, A, Real-time patient-specific finite element analysis of internal stresses in the soft tissues of a residual limb: A new tool for prosthetic fitting, ANNALS OF BIOMEDICAL ENGINEERING 35 (1): 120-135 JAN 2007 (SCI-core).*

2.30. *Amy Elizabeth Kerdok, Characterizing the Nonlinear Mechanical Response of Liver to Surgical Manipulation, Ph. D. Dissertation, Engineering Sciences, Harvard University, Cambridge, MA, USA, May 25, 2006.*

2.31. *Li, Z., Kim, J.-E., Davidson, J.S., Eberhardt, A.W., Finite element modeling of the human pelvis in experimental side impacts, Proceedings of the 2005 Summer Bioengineering Conference 2005, pp. 1232-1233, 2005.*

2.32. *Howell, E.B., Klute, G., Devasia, S., Passive and active shock absorbing prostheses for lower limb amputees, American Society of Mechanical Engineers, Dynamic Systems and Control Division (Publication) DSC 74 DSC (1 PART A), pp. 627-636, 2005.*

2.33. *Huang YP, Zheng YP, Leung SF Quasi-linear viscoelastic properties of fibrotic neck tissues obtained from ultrasound indentation tests in vivo CLINICAL BIOMECHANICS 20 (2): 145-154 FEB 2005 (SCI-core)*

2.34. *Lu MH, Zheng YP Indentation test of soft tissues with curved substrates: A finite element study MED BIOL ENG COMPUT 42 (4): 535-540 JUL 2004 (SCI-core)*

2.35. ***Tönük E**, Silver-Thorn MB Nonlinear viscoelastic material property estimation of lower extremity residual limb tissues J BIOMECH ENG-T ASME 126 (2): 289-300 APR 2004 (SCI-core)*

3. **TÖNÜK, E.**, SILVER-THORN, M. B., Nonlinear Viscoelastic Material Property Estimation of Lower Extremity Residual Limb Tissues, ASME Journal of Biomechanical Engineering v. 126, pp. 289-300, April 2004.

3.1. *Steer, J. W.; Worsley, P. R.; Browne, M.; Dickinson, Alex, Key considerations for finite element modelling of the residuum-prosthetic socket interface, PROSTHETICS AND ORTHOTICS INTERNATIONAL Article Number: 0309364620967781.*

3.2. *Yu Chen, Suhao Qiu, Zhao He, Fuhua Yan, Ruokun Li, Yuan Fen1, Comparative analysis of indentation and magnetic resonance elastography for measuring viscoelastic properties, Acta Mechanica Sinica, https://doi.org/10.1007/s10409-020-01042-2.*

3.3. *Safari, Reza, Lower limb prosthetic interfaces: Clinical and technological advancement and potential future direction, PROSTHETICS AND ORTHOTICS INTERNATIONAL Volume: ? 44Issue: ? 6Pages: ? 384-401Published: ?DEC 2020 (SCI-Expanded).*

3.4. *Dickinson, AS; Steer, JW; Worsley, PR, Finite element analysis of the amputated lower limb: A systematic review and recommendations, MEDICAL ENGINEERING & PHYSICS, 43 1-18; 10.1016/j.medengphy.2017.02.008 MAY 2017 (SCI-Core).*

3.5. *Affagard, JS; Feissel, P; Bensamoun, SF, Use of digital image correlation and ultrasound: analysis of thigh muscle displacement fields, 2015 37TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC), 3827-3830; 2015 (Conference paper).*

3.6. *Affagard, J. -S.; Feissel, P.; Bensamoun, S. F., Measurement of the quadriceps muscle displacement and strain fields with ultrasound and Digital Image Correlation (DIC) techniques, IRBM Volume: 36 Issue: 3 Pages: 170-177 Published: JUN 2015(SCI-Expanded).*

3.7. *Demirci, N; Tönük, E, Non-integer viscoelastic constitutive law to model soft biological tissues to in-vivo indentation, ACTA OF BIOENGINEERING AND BIOMECHANICS, 16 (4):13-21; 2014(SCI-Expanded).*

3.8. *Colombo, G; Facoetti, G; Rizzi, C, A digital patient for computer-aided prosthesis design, INTERFACE FOCUS, 3 (2): 2013 ((SCI-Expanded).*

3.9. *Petekkaya, AT; Tonuk, E, IN VIVO INDENTER EXPERIMENTS VIA ELLIPSOID INDENTER TIPS TO DETERMINE THE PERSONAL AND LOCAL IN-PLANE ANISOTROPIC MECHANICAL BEHAVIOR OF SOFT BIOLOGICAL TISSUES, JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY 26 (1): 63-72 MAR 2011 (SCI-Expanded).*

3.10. *Gabbiadini, S; Colombo, G; Facoetti, G; Rizzi, C, KNOWLEDGE MANAGEMENT AND CUSTOMISED 3D MODELLING TO IMPROVE PROSTHESIS DESIGN, ASME INTERNATIONAL DESIGN ENGINEERING*

TECHNICAL CONFERENCES AND COMPUTERS AND INFORMATION IN ENGINEERING CONFERENCE, PROCEEDINGS, VOL 2, PTS A AND B : 625-633 2010 (Conference paper).

3.11. Colombo, G; Filippi, S; Rizzi, C; Rotini, F, A new design paradigm for the development of custom-fit soft sockets for lower limb prostheses, COMPUTERS IN INDUSTRY 61 (6): 513-523 Sp. Iss. SI AUG 2010 (SCI-Expanded).

3.12. Portnoy, S., Siev-Ner, I., Yizhar, Z., Kristal, A, Shabshin, N, Gefen, A., Surgical and Morphological Factors that Affect Internal Mechanical Loads in Soft Tissues of the Transtibial Residuum, ANNALS OF BIOMEDICAL ENGINEERING 37 (12): 2583-2605 DEC 2009 (SCI-Core).

3.13. Portnoy, S., Yizhar, Z., Shabshin, Y., Itzchak, Y., Kristal, A., Dotan-Marom, Y., Siev-Ner, I., Gefen, A., Internal mechanical conditions in the soft tissues of a residual limb of a trans-tibial amputee, Journal of Biomechanics, v. 41 1897-1909, pp. 2008 (SCI-Core).

3.14. Mazza, E.; Nava, A.; Halmloser, D.; Jochum, W.; Bajka, M., The mechanical response of human liver and its relation to histology: An in vivo study, MEDICAL IMAGE ANALYSIS 11 (6): 663-672 DEC 2007 (SCI-Core).

3.15. Li, Z., Kim, J.-E., Davidson, J.S., Etheridge, B.S., Alonso, J.E., Eberhardt, A.W., Biomechanical response of the pubic symphysis in lateral pelvic impacts: A finite element study, Journal of Biomechanics 40 (12), pp. 2758-2766, 2007 (SCI-core).

3.16. Portnoy, S; Yarnitzky, G; Yizhar, Z; Kristal, A; Oppenheim, U; Siev-Ner, I; Gefen, A, Real-time patient-specific finite element analysis of internal stresses in the soft tissues of a residual limb: A new tool for prosthetic fitting, ANNALS OF BIOMEDICAL ENGINEERING 35 (1): 120-135 JAN 2007(SCI-core).

3.17. Bliss, CL; Szivek, JA; Tellis, BC; Margolis, DS; Schnepp, AB; Ruth, JT, Sensate scaffolds can reliably detect joint loading, JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS 81B (1): 30-39 APR 2007 (SCI-core).

3.18. Li, ZP; Alonso, JE; Kim, JE; Davidson, JS; Etheridge, BS; Eberhardt, AW, Three-dimensional finite element models of the human pubic symphysis with viscohyperelastic soft tissues, ANNALS OF BIOMEDICAL ENGINEERING 34 (9): 1452-1462 SEP 2006 (SCI-core).

3.19. Mazza E, Nava A, Bauer M, Winter R, Bajka M, Holzapfel GA, Mechanical properties of the human uterine cervix: An in vivo study, MEDICAL IMAGE ANALYSIS 10 (2): 125-136 APR 2006 (SCI-core).

3.20. Gerhard A. Holzapfel,R. W. Ogden (eds), Mechanics of biological tissue (book), "In vivo experiments to characterize the mechanical behavior of the human uterine cervix byMaza, Nava, Bauer, Winter, Bajka, Holzapfel, pp. 431-444, Springer, Berlin, 2006.

3.21. Huang, YP; Zheng, YP; Wang, SZ; Chen, ZP; Huang, QH; He, YH, An optical coherence tomography (OCT)-based air jet indentation system for measuring the mechanical properties of soft tissues, MEASUREMENT SCIENCE & TECHNOLOGY 20 (1): Art. No. 015805 JAN 2009 (SCI-Core).

4. ÇEHRELİ, M. C., AKÇA, K., **TÖNÜK, E.**, Accuracy of a Manual Torque Application Device for Morse-taper Implants: A Technical Note, International Journal of Oral Maxillofac Implants v. 19, pp. 743-748, 2004.

4.1. Alzoubi, Fawaz M.; Sabti, Mohammad; Alsarraf, Esra; Alshahrani, Faris A.; Sadowsky, Steven J., Preload evaluation of 2 implant-supported fixed partial denture abutment designs, The Journal of Prosthetic Dentistry, Volume 128, Issue 5, November 2022, Pages 1067.e1-1067.e6 https://doi.org/10.1016/j.prosdent.2022.09.002.

4.2. Alnasser, Abdullah H.; Wadhwani, Chandur P. K.; Schoenbaum, Todd R.; Kattadiyil, Mathew T., Evaluation of implant abutment screw tightening protocols on reverse tightening values: An in vitro study, JOURNAL OF PROSTHETIC DENTISTRY, Volume: 125, Issue:,3 Pages: 486-490, Published: MAR 2021.

4.3. Goldstein, Gary; Ghoujal, Bashar; Abdullah, Saria, An in vitro assessment of the accuracy of new and in-use torque-limiting devices, JOURNAL OF PROSTHETIC DENTISTRY Volume: 124 Issue: 6 Pages: 716-719 Published: DEC 2020 (SCI-Expanded).

4.4. Aliabadi, Ehsan; Tavanafar, Saeid; Khaghaninejad, Mohammad Saleh, Marginal bone resorption of posterior mandible dental implants with different insertion methods, BMC ORAL HEALTH, Volume: 20, Issue: 1, DOI: 10.1186/s12903-020-1019-7, Published: JAN 31 2020 (SCI-Expanded).

4.5. Erdem, MA; Karatasli, B; Kose, OD; Kose, TE; Cene, E; Aya, SA; Cankaya, AB, The Accuracy of New and Aged Mechanical Torque Devices Employed in Five Dental Implant Systems, BIOMED RESEARCH INTERNATIONAL, 10.1155/2017/8652720 2017 (SCI-Expanded).

4.6. Pozzi, A; Beumer, J; Moy, PK; Faulkner, RF, Immediate Loading, Immediate Provisionalization, and Delayed Loading, in FUNDAMENTALS OF IMPLANT DENTISTRY, VOL 2: SURGICAL PRINCIPLES, Moy PK; Pozzi A; Beumer J (eds), 333-373; 2016, QUINTESSENCE PUBLISHING CO INC, 4350 CHANDLER DRIVE, HANOVER PARK, IL 60133 USA, ISBN: 978-0-86715-584-6 (Book Chapter).

4.7. Albayrak, H; Gumus, HO; Tursun, F; Kocaagaoglu, HH; Kilinc, HI, Accuracy of torque-limiting devices: A comparative evaluation, JOURNAL OF PROSTHETIC DENTISTRY, 117 (1):81-86; JAN 2017(SCI-Core).

4.8. Neugebauer, J; Petermoller, S; Scheer, M; Happe, A; Faber, FJ; Zoeller, JE, Comparison of Design and Torque Measurements of Various Manual Wrenches, INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS, 30 (3):526-533; MAY-JUN 2015 (SCI-Core).

4.9. L'Homme-Langlois, E; Yilmaz, B; Chien, HH; McGlumphy, E, Accuracy of mechanical torque-limiting devices for dental implants, JOURNAL OF PROSTHETIC DENTISTRY, 114 (4):524-528; OCT 2015 (SCI-Core).

4.10. Cehreli, S; Ozcirpici, AA; Yilmaz, A, Tilted orthodontic micro implants: a photoelastic stress analysis, EUROPEAN JOURNAL OF ORTHODONTICS, 35 (5):563-567; OCT 2013 (SCI-Core).

4.11. Mahshid, Minoo; Saboury, Aboulfazl; Sadr, Seyed Jalil; et al., The combined effect of dismantling for steam sterilization and aging on the accuracy of spring-style mechanical torque devices, JOURNAL OF PERIODONTAL AND IMPLANT SCIENCE Volume: 43 Issue: 5 Pages: 221-226 Published: OCT 2013 (SCI-Expanded).

4.12. Cehreli, S; Arman-Ozcirpici, A, Primary stability and histomorphometric bone-implant contact of self-drilling and self-tapping orthodontic microimplants, AMERICAN JOURNAL OF ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS, 141 (2):187-195; FEB 2012 (SCI-Core).

4.13. Akca, K.; Kokat, A. M.; Comert, A.; et al., Torque-fitting and resonance frequency analyses of implants in conventional sockets versus controlled bone defects in vitro, JOURNAL OF PROSTHODONTICS-IMPLANT ESTHETIC AND RECONSTRUCTIVE DENTISTRY, Volume: 19, Issue: 1, Pages: 20-24, JAN 2010 (SCI-Expanded).

4.14. McCracken, MS; Mitchell, L; Hegde, R; Mavalli, MD, Variability of Mechanical Torque-Limiting Devices in Clinical Service at a US Dental School, JOURNAL OF PROSTHODONTICS-IMPLANT ESTHETIC AND RECONSTRUCTIVE DENTISTRY 19 (1): 20-24 JAN 2010 (SCI-Expanded).

4.15. Akca, K; Kokat, AM; Comert, A; Akkocaoglu, M; Tekdemir, I; Cehreli, MC, Torque-fitting and resonance frequency analyses of implants in conventional sockets versus controlled bone defects in vitro, INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY 39 (2): 169-173 FEB 2010 (SCI-core).

4.16. Cehreli, MC; Karasoy, D; Akca, K; Eckert, SE, Meta-analysis of Methods Used to Assess Implant Stability, INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS 24 (6): 1015-1032 NOV-DEC 2009 (SCI-core).

4.17. Cehreli, MC; Kokat, AM; Comert, A; Akkocaoglu, M; Tekdemir, I; Akca, K, Implant stability and bone density: assessment of correlation in fresh cadavers using conventional and osteotome implant sockets, CLINICAL ORAL IMPLANTS RESEARCH 20 (10): 1163-1169 OCT 2009 (SCI-Core).

4.18. Kokat, AM; Comert, A; Tekdemir, I; Akkocaoglu, M; Akca, K; Cehreli, MC, Human Ex Vivo Bone Tissue Strains Around Immediately-Loaded Implants Supporting Mandibular Fixed Prostheses, IMPLANT DENTISTRY 18 (2): 162-171 APR 2009 (SCI-expanded).

4.19. Karl, M; Graef, F; Heckmann, S; Krafft, T, Parameters of resonance frequency measurement values: a retrospective study of 385 ITI dental implants, CLINICAL ORAL IMPLANTS RESEARCH 19 (2): 214-218 FEB 2008 (SCI-core).

4.20. Fanuscu, MI; Chang, TL; Akca, K, Effect of surgical techniques on primary implant stability and peri-implant bone, JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY 65 (12): 2487-2491 DEC 2007 (SCI-Core).

4.21. Cehreli, MC; Akkocaoglu, M; Comert, A; Tekdemir, I; Akca, K, Bone strains around apically free versus grafted implants in the posterior maxilla of human cadavers, MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING 45 (4): 395-402 APR 2007 (SCI-core)

4.22. Akkocaoglu, M; Cehreli, MC; Tekdemir, I; Comert, A; Guzel, E; Dagdeviren, A; Akca, K, Primary stability of simultaneously placed dental implants in extraoral donor graft sites: A human cadaver study, JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY 65 (3): 400-407 MAR 2007 (SCI-core)

4.23. Akca, K; Akkocaoglu, M; Comert, A; Tekdemir, I; Cehreli, MC, Bone strains around immediately loaded implants supporting mandibular overdentures in human cadavers, INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS 22 (1): 101-109 JAN-FEB 2007 (SCI-core)

4.24. Akça, K, Chang, T.L., Tekdemir, İ., Fanuscu, M.I., Biomechanical aspects of initial intraosseous stability and implant design: a quantitative micro-morphometric analysis, CLINICAL ORAL IMPLANTS RESEARCH 17 (4): 465-472 AUG 2006 (SCI-core).

4.25. Akça, K., Akkocaoğlu, M., Cömert, A., Tekdemir, İ, Cehreli, M. C., Human ex vivo bone tissue strains around immediately loaded implants supporting maxillary overdentures, CLINICAL ORAL IMPLANTS RESEARCH, 16 (6): 715-722 DEC 2005 (SCI-core).

5. Bozkurt, M., Yavuzer, G., **Tönük, E.**, Kentel, B., Dynamic function of the fibula. Gait analysis evaluation of three different parts of the shank after fibulectomy: Proximal, middle and distal, (2005) Archives of Orthopaedic and Trauma Surgery, 125 (10), pp. 713-720.

5.1. Foroughi, Ali H.; Valeri, Caleb; Jiang, Dayue; Ning, Fuda; Razavi, Masoud; et al., Understanding compressive viscoelastic properties of additively manufactured PLA for bone-mimetic scaffold design, Medical Engineering and Physics, Volume114, Article Number: 103972, DOI10.1016/j.medengphy.2023.103972, Published: APR 2023.

5.2. Yilmaz, Recai; Ledwos, Nicole; Sawaya, Robin; Winkler-Schwartz, Alexander; Mirchi, Nykan; et al., Gait, Function, and Strength Following Lower Limb Salvage Surgery for a Primary Malignant Bone Tumor: A Systematic Review, Rehabilitation Oncology, 40 (3) , pp.105-115, DOI: 10.1097/01.REO.0000000000000309.

5.3. Vij, Neeraj; Ranade, Ashish S.; Belthur, Mohan, V, Progressive Ankle Subluxation Following Panfibular Osteomyelitis Requiring Fibular Resection, Cureus Journal Of Medical Science, Apr 13 2022, DOI: 10.7759/cureus.24112.

5.4. Lai, Chien-Cheng; Wang, Ting-Ming; Chang, Chih-Hung; Pao, Jwo-Luen; Fang, Hsu-Wei, Calcaneal lengthening using ipsilateral fibula autograft in the treatment of symptomatic pes valgus in adolescents, DOI: 10.1186/s12891-021-04855-9.

5.5. Huntley, Kyle; Al-Hardan, Waleed; Pretell-Mazzini, Juan, Surgical Management of Benign Tumors of the Proximal Fibula, Journal Of The American Academy Of Orthopaedic Surgeons Global Research And Reviews, Sep. 2021, DOI10.5435/JAAOSGlobal-D-21-00207.

5.6. Gumustas, Seyit Ali; Cevik, Huseyin Bilgehan; Kayahan, Sibel, An Epidemiological Study of Primary Bone Tumors of the Fibula, ARCHIVES OF BONE AND JOINT SURGERY-ABJS 9 (5) , pp.548-553.

5.7. Luo, Zhaobiao; Dong, Zhonggen; Ni, Jiangdong; Wei, Jianwei; Peng, Ping; et al., Distally Based Peroneal Artery Perforator-Plus Fasciocutaneous Flap to Reconstruct Soft Tissue Defect Combined With Chronic Osteomyelitis in the Lateral Malleolus, INTERNATIONAL JOURNAL OF LOWER EXTREMITY WOUNDS, Article Number: 1534734620956782 (SCI- Expanded).

5.8. McKeon, JMM; Hoch, MC, The Ankle-Joint Complex: A Kinesiologic Approach to Lateral Ankle Sprains, JOURNAL OF ATHLETIC TRAINING, 54 (6):589-602; 10.4085/1062-6050-472-17 JUN 2019 (SCI-Core).

5.9. Awad, ME; Altman, A; Elrefai, R; Shipman, P; Looney, S; Elsalanty, M, The use of vascularized fibula flap in mandibular reconstruction; A comprehensive systematic review and meta-analysis of the observational studies, JOURNAL OF CRANIO-MAXILLOFACIAL SURGERY, 47 (4):629-641; 10.1016/j.jcms.2019.01.037 APR 2019 (SCI-Core).

5.10. Ohana, N; Benharroch, D; Sheinis, D, Challenge of handling a Charcot spinal arthropathy with a novel hybrid fibular autograft and expandable cage, JOURNAL OF NEUROSURGERY-SPINE, 29 (1):34-39; 10.3171/2017.10.SPINE17606 JUL 2018 (SCI- Expanded).

5.11. Kundu, ZS; Tanwar, M; Rana, P; Sen, R, Fibulectomy for primary proximal fibular bone tumors: A functional and clinical outcome in 46 patients, INDIAN JOURNAL OF ORTHOPAEDICS, 52 (1):3-9; 10.4103/ortho.IJOrtho_323_16 JAN-FEB 2018 (SCI- Expanded).

5.12. Shi, BW; Shu, HS; Wang, Z; Cai, CK; Chand, BB; Fang, L; Ma, BT, Soft-Tissue Reconstruction Without Fibular Reconstruction in Traumatic Injuries of the Ankle With Fibular Loss: Two Case Reports, FOOT & ANKLE INTERNATIONAL, 38 (1):80-85; JAN 2017(SCI- Expanded).

5.13. Feuvrier, D; Sagawa, Y; Beliard, S; Pauchot, J; Decavel, P, Long-term donor-site morbidity after vascularized free fibula flap harvesting: Clinical and gait analysis, JOURNAL OF PLASTIC RECONSTRUCTIVE AND AESTHETIC SURGERY, 69 (2):262-269; 10.1016/j.bjps.2015.10.007 FEB 2016 (SCI-Core).

5.14. *Lungkee, M; Woraratsoontom, P; Bamrungwongtaree, J, The Study of Fibula Effect on Stress Distribution in Deformed Knee Joint Using 3D Finite Element Model, INTERNATIONAL CONFERENCE ON POWER ELECTRONICS AND ENERGY ENGINEERING (PEEE 2015), 179-182; 2015 (Proceedings).*

5.15. *Yin, P; Zhang, LH; Zhang, LN; Li, TT; Li, ZR; Li, JT; Zhou, JF; Yao, Q;Zhang, Q; Tang, PF, Ilizarov bone transport for the treatment of fibular osteomyelitis: a report of five cases, BMC MUSCULOSKELETAL DISORDERS, 16 10.1186/s12891-015-0708-x SEP 5 2015 (SCI-Expanded).*

5.16. *Mohtajeb, M; Tabatabaei, SM; Mallakzadeh, MR; RezaYazdi, H, Investigation in fibula effects on stress distribution in tibiofemoral joint 2012 19TH IRANIAN CONFERENCE OF BIOMEDICAL ENGINEERING (ICBME), 73-78; 2012 (Proceedings).*

5.17. *Perisano, C; Marzetti, E; Spinelli, MS; Graci, C; Fabbriciani, C; Maffulli, N; Maccauro, G, Clinical management and surgical treatment of distal fibular tumours: a case series and review of the literature, INTERNATIONAL ORTHOPAEDICS, 36 (9):1907-1913, SEP 2012 (SCI-Expanded).*

5.18. *Abdel, MP; Papagelopoulos, PJ; Morrey, ME; Wenger, DE; Rose, PS; Sim, FH, Surgical Management of 121 Benign Proximal Fibula Tumors, CLINICAL ORTHOPAEDICS AND RELATED RESEARCH 468 (11): 3056-3062 NOV 2010 (SCI-Core).*

5.19. *Dieckmann, R; Ahrens, H; Streitburger, A; Budny, TB; Henrichs, MP; Vieth, V; Gebert, C; Hardes, J, Reconstruction after wide resection of the entire distal fibula in malignant bone tumours, INTERNATIONAL ORTHOPAEDICS 35 (1): 87-92 JAN 2011 (SCI-Expanded).*

5.20. *Bozkurt, M., Doral, M. N. Anatomic Factors and Biomechanics in Ankle Instability, Foot and Ankle Clinics of North America, Volume 11, Issue 3, Pages 451-463, 2006.*

6. Bozkurt, M., Elhan, A., Tekdemir, İ., **Tönük, E.**, An anatomical study of the meniscofibular ligament, (2004) Knee Surgery, Sports Traumatology, Arthroscopy, 12 (5), pp. 429-433.

6.1. *Morales-Avalos, Rodolfo; Diabb-Zavala, Jose Manuel; Mohamed-Noriega, Nasser; Vilchez-Cavazos, Felix; Perelli, Simone; et al., Effect of Injury to the Lateral Meniscotibial Ligament and Meniscofibular Ligament on Meniscal Extrusion: Biomechanical Evaluation of the Capsulodesis and Centralization Techniques in a Porcine Knee Model, Orthopaedic Journal of Sports Medicine, 11, 11, 2023.*

6.2. *Jorge Chahla, Alexander Beletsky, Robert Smigielski, Charles H Brown, Meniscal Pathology in Evidence-Based Management of Complex Knee Injuries, Robert F. LaPrade and Jorge Chahla (eds.), Elsevier, 2021, ISBN: 978-0-323-71310-8, DOI: 10.1016/B978-0-323-71310-8.00013-X (Book Chapter).*

6.3. *Joachim Feger, Meniscofibular ligament, in Radiopaedia.org, DOI: 10.53347/rID-89423 (Scientific Website).*

6.4. *Mameri, Enzo S.; Dasari, Suhas P.; Fortier, Luc M.; Verdejo, Fernando Gomez; Gursoy, Safa; et al., Review of Meniscus Anatomy and Biomechanics, Current Reviews In Musculoskeletal Medicine,2022, DOI: 10.1007/s12178-022-09768-1.*

6.5. *Roth E.S., He L. (2022) Elbow: Anatomy and MRI Optimization. In: Casagranda B.U. (eds) MRI of the Upper Extremity. Springer, Cham. https://doi.org/10.1007/978-3-030-81612-4_2, ISBN 978-3-030-81611-7 (Book).*

6.6. *Zdanowicz, U. E.; Ciszkowska-Lyson, B.; Krajewski, P.; Ciszek, B.; Badylak, S. F., Menisco-fibular ligament - an overview: cadaveric dissection, clinical and magnetic resonance imaging diagnosis, arthroscopic visualisation and treatment, Folia Morphologica, 80 (3) , pp.683-690.*

6.7. *Beel, Wouter; Macchiarola, Luca; Mouton, Caroline; Laver, Lior; Seil, Romain, The hypermobile and unstable lateral meniscus: a narrative review of the anatomy, biomechanics, diagnosis and treatment options, ANNALS OF JOINT, DOI10.21037/aoj-21-9.*

6.8. *Morales-Avalos, Rodolfo; Masferrer-Pino, Angel; Ruiz-Chapa, Eustorgio; Ramon Padilla-Medina, Jose; Vilchez-Cavazos, Felix; et al., MRI evaluation of the peripheral attachments of the lateral meniscal body: the menisco-tibio-popliteus-fibular complex, KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, DOI: 10.1007/s00167-021-06633-5.*

6.9. *Alberto Grassi, Nicola Pizza, Gian Andrea Lucidi, Luca Macchiarola, Massimiliano Mosca, Stefano Zaffagnini, Anatomy, magnetic resonance and arthroscopy of the popliteal hiatus of the knee: normal aspect and pathological conditions, Published Online:4 Jan 2021https://doi.org/10.1302/2058-5241.6.200089.*

6.10. *Natsis, K; Karasavvidis, T; Kola, D (; Papadopoulos, S; Totlis, T, Meniscofibular ligament: how much do we know about this structure of the posterolateral corner of the knee: anatomical study and review of literature, SURGICAL AND RADIOLOGIC ANATOMY, DOI: 10.1007/s00276-020-02459-x (SCI-Expanded).*

6.11. *Tomczyk, J; Rachalewski, M; Bianek-Bodzak, A; Domzalski, M, Anatomical variations of knee ligaments in magnetic resonance imaging: pictorial essay, FOLIA MORPHOLOGICA, 78 (3):467-475; 10.5603/FM.a2019.0004 2019 (SCI-Expanded).*

6.12. *Suga, N; Nakasa, T; Ishikawa, M; Nakamae, A; Hayashi, S; Yoshikawa, M; Sumida, Y; Tsuyuguchi, Y; Adachi, N, Characteristic morphology of the proximal tibiofibular joint in patients with discoid lateral meniscus, KNEE, 25 (6):1027-1032; 10.1016/j.knee.2018.07.019 DEC 2018 (SCI-Expanded).*

6.13. *Bonnin, MP; de Kok, A; Verstraete, M; Van Hoof, T; Van der Straten, C; Popliteus impingement after TKA may occur with well-sized prostheses, KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, 25 (6):1720-1730; 10.1007/s00167-016-4330-8 JUN 2017 (SCI-Core).*

6.14. *Saffarini, M; Victor, JWang, CT; Hing, LT, Proximal Tibiofibular Joint: An overview, JOURNAL OF ORTHOPAEDICS TRAUMA AND REHABILITATION, 20 2-7; 10.1016/j.jotr.2014.12.002 JUN 2016.*

6.15. *Barba, D; Barker, L; Chhabra, A, Anatomy and Biomechanics of the Posterior Cruciate Ligament and Posterolateral Corner, OPERATIVE TECHNIQUES IN SPORTS MEDICINE, 23 (4):256-268; 10.1053/j.otsm.2015.06.007 DEC 2015, (SCI-Expanded).*

6.16. *Lui, TH, Arthroscopic treatment of pigmented villonodular synovitis of the proximal tibiofibular joint, KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, 23 (8):2278-2282; AUG 2015(SCI-Core).*

6.17. *Osti, M; Tschann, P; Kunzel, KH; Benedetto, KP, Posterolateral Corner of the Knee: Microsurgical Analysis of Anatomy and Morphometry, ORTHOPEDICS, 36 (9):E1114-E1120; SEP 2013 (SCI-Expanded).*

6.18. *Lee, YH; Song, HT; Kim, S; Kim, SJ; Suh, JS, Magnetic Resonance Arthrographic Dissection of Posterolateral Corner of the Knee: Revealing the Meniscofibular Ligament, YONSEI MEDICAL JOURNAL, 53 (4):820-824; 10.3349/ymj.2012.53.4.820 JUL 1 2012 (SCI-Expanded).*

6.19. *Tyler, P; Datir, A; Saifuddin, A, Magnetic resonance imaging of anatomical variations in the knee. Part 1: ligamentous and musculotendinous, SKELETAL RADIOLOGY 39 (12): 1161-1173 DEC 2010 (SCI-Core).*

6.20. *Javois, C; Tardieu, C; Lebel, B; Seil, R; Hulet, C, Comparative anatomy of the knee joint: Effects on the lateral meniscus, ORTHOPAEDICS & TRAUMATOLOGY-SURGERY & RESEARCH 95 (8): S49-S59 Suppl. 1 DEC 2009 (SCI-Expanded).*

6.21. *Obaid, H; Gartner, L; Haydar, AA; Briggs, TWR; Saifuddin, A., The meniscofibular ligament: An MRI study, EUROPEAN JOURNAL OF RADIOLOGY 73 (1): 159-161 JAN 2010 (SCI-Expanded).*

6.22. *Bozkurt, M; Tonuk, E; Elhan, A; Tekdemir, I; Doral, MN, Axial rotation and mediolateral translation of the fibula during passive plantarflexion, FOOT & ANKLE INTERNATIONAL 29 (5): 502-507 MAY 2008.*

6.23. *Bozkurt, M., Doral, M. N. Anatomic Factors and Biomechanics in Ankle Instability, Foot and Ankle Clinics of North America, Volume 11, Issue 3, Pages 451-463, 2006.*

6.24. *Peduto, AJ; Nguyen, A; Trudell, DJ; Resnick, DL, Popliteomeniscal fascicles: Anatomic considerations using MR arthrography in cadavers, AMERICAN JOURNAL OF ROENTGENOLOGY 190 (2): 442-448 FEB 2008 (SCI-core).*

7. Bozkurt, M., Acar, H.I., Apaydin, N., Leblebicioglu, G., Elhan, A., Tekdemir, I., **Tönük, E.**, The annular ligament: An anatomical study (2005) American Journal of Sports Medicine, 33 (1), pp. 114-118.

7.1. *Flávio Cruz, Gustavo Vinagre, Pieter D'Hooghe, Clinical Tests for Assessment of Instability of the Ankle and Syndesmosis in The Art of the Musculoskeletal Physical Exam (book), John G. Lane, Alberto Gobbi, João Espregueira-Mendes, Camila Cohen Kaleka, Nobuo Adachi (eds.), Springer, 2023.*

7.2. *Luhmann, Paul; Kremer, Thomas; Siemers, Frank; Rein, Susanne, Comparative histomorphological analysis of elbow ligaments and capsule, Clinical Anatomy, 2022, https://doi.org/10.1002/ca.23913.*

7.3. *Chanlalit, C, Mahasupachai, N,; Sakdapanichkul, C., Arthroscopic Lateral Collateral Ligament Complex Reconstruction for Posterolateral Rotatory Instability of the Elbow, the Operative Technique, ARTHROSCOPY TECHNIQUES 10 (12) , pp.e2805-e2812, 2021.*

7.4. *Roth E.S., He L. (2022) Elbow: Anatomy and MRI Optimization. In: Casagranda B.U. (eds) MRI of the Upper Extremity. Springer, Cham. https://doi.org/10.1007/978-3-030-81612-4_2, ISBN 978-3-030-81611-7 (Book).*

7.5. *Jamieson, Richard P.; Ek, Eugene T., Isolated Proximal Radioulnar Joint Instability Anatomy, Clinical Presentation, and Current Treatment Options, JBJS REVIEWS Volume: ? 8Issue: ? 5Article Number: e0169 Published: ? MAY 2020 (ESCI).*

7.6. *Lee, SH; Kim, SG; Kwak, D; Hong, SH; Lee, YK; Jang, WY, The usefulness of ultrasound and the posterior fat pad sign in pulled elbow, INJURY-INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED, 50 (6):1227-1231; 10.1016/j.injury.2019.04.026 JUN 2019 (SCI-Expanded).*

7.7. *Janssen, R; Falkowski, AL; Hirschmann, A, Assessment of ligament and tendon injuries of the elbow using magnetic resonance imaging, RADIOLOGE, 58 (11):996-1003; 10.1007/s00117-018-0441-1 NOV 2018 (SCI-Core).*

7.8. *Saba, JES; Abrego, MO; Bosio, ST; Puigdevall, M; Maenza, R, Isolated irreducible anterior radial head dislocation in a child: a rare case report, ARCHIVOS ARGENTINOS DE PEDIATRIA, 116 (4):E630-E634; 10.5546/aap.2018.e630 AUG 2018 (SCI-Expanded).*

7.9. *Barnes, JW; Chouhan, VL; Egekeze, NC; Rinaldi, CE; Cil, A, The annular ligament-revisited, JOURNAL OF SHOULDER AND ELBOW SURGERY, 27 (1):E16-E19; JAN 2018 (SCI-Core).*

7.10. *Leschinger, T; Muller, LP; Hackl, M; Scaal, M; Schmidt-Horlohe, K; Wegmann, K, Concomitant injury of the annular ligament in fractures of the coronoid process and the supinator crest, JOURNAL OF SHOULDER AND ELBOW SURGERY, 26 (4):604-610; 10.1016/j.jse.2016.09.029 APR 2017(SCI-Core).*

7.11. *Hackl, M; Wegmann, K; Ries, C; Lappen, S; Scaal, M; Muller, LP, Annular ligament reconstruction with the superficial head of the brachialis: surgical technique and biomechanical evaluation, SURGICAL AND RADIOLOGIC ANATOMY, 39 (6):585-591; 10.1007/s00276-016-1774-y JUN 2017 (SCI-Expanded).*

7.12. *Tan, L; Li, YH; Sun, DH; Zhu, D; Ning, SY, Modified technique for correction of isolated radial head dislocation without apparent ulnar bowing: a retrospective case study, INTERNATIONAL JOURNAL OF CLINICAL AND EXPERIMENTAL MEDICINE, 8 (10):18197-18202; 2015(SCI-Expanded).*

7.13. *Mak, S; Beltran, LS; Bencardino, J; Orr, J; Jazrawi, L; Cerezal, L; Beltran, J, MRI of the Annular Ligament of the Elbow: Review of Anatomic Considerations and Pathologic Findings in Patients With Posterolateral Elbow Instability, AMERICAN JOURNAL OF ROENTGENOLOGY, 203 (6):1272-1279; DEC 2014 (SCI-Core).*

7.14. *Han, SH; Lee, SC; Ryu, KJ; Lee, JH, Repairing the annular ligament is not necessary in the operation of Mason type 2, 3 isolated radial head fractures if the lateral collateral ligament is intact: Minimum 5 years follow-up, INJURY-INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED, 44 (12):1851-1854DEC 2013 (SCI-Expanded).*

7.15. *Schaeffeler, C; Waldt, S; Woertler, K, Traumatic instability of the elbow - anatomy, pathomechanisms and presentation on imaging, EUROPEAN RADIOLOGY, 23 (9):2582-2593; SEP 2013 (SCI-Core).*

7.16. *Nwoko, OE; Patel, PP; Richard, MJ; Leversedge, FJ, Annular Ligament Reconstruction Using the Distal Tendon of the Superficial Head of the Brachialis Muscle: An Anatomical Feasibility Study, JOURNAL OF HAND SURGERY-AMERICAN VOLUME, 38A (7):1315-1319, JUL 2013 (SCI-Expanded).*

7.17. *McCabe, MP; Savoie, FH, Simple Elbow Dislocations: Evaluation, Management, and Outcomes, PHYSICIAN AND SPORTSMEDICINE, 40 (1):62-71; FEB 2012 (SCI-Expanded).*

7.18. *Wang, E; Wenger, DR; Zhang, LJ; Zhao, Q; Ji, SJ; Li, JJ, The Mechanism of Acute Elbow Flexion Contracture in Children With Congenital Proximal Radioulnar Synostosis, JOURNAL OF PEDIATRIC ORTHOPAEDICS 30 (3): 277-281 APR-MAY 2010 (SCI-expanded).*

7.19. *Moorey, B. F., Santez-Sochello, J, The Elbow and Its Disorders, in "Chapter 2 Anatomy of the Elbow Joint by Morrey", pp. 11-38, Elsevier, The Mayo Clinic Foundation, 2009 (Book).*

7.20. *Sanal, HT; Chen, L; Haghighi, P; Trudell, DJ; Resnick, DL, Annular Ligament of the Elbow: MR Arthrography Appearance With Anatomic and Histologic Correlation, AMERICAN JOURNAL OF ROENTGENOLOGY 193 (2): W122-W126 AUG 2009 (SCI-Core).*

7.21. *Kelly, M., Safran, M. R., The elbow: Current literature, publications and concepts, Current Opinion in Orthopaedics, Volume 17, Issue 4, August 2006, Pages 364-368.*

7.22. *Gurbuz, H., Kutoglu, T., Mesut, R., Calpur, OU., Ozcan, M., Anatomical dimensions of lateral ulnar collateral and annular ligaments, TRAKYA UNIVERSITESI TIP FAKULTESI DERGISI 24 (2): 137-140 AUG 2007.*

8. ÖZLÜGEDİK, S:, NAKİBOĞLU, G., SERT, C., ELHAN, A., **TÖNÜK, E.**, AKYAR, S., TEKDEMİR, İ., Numerical Study of the Aerodynamic Effects of

Septoplasty and Partial Lateral Turbinectomy, The Laryngoscope, v 118, pp.330-334, 2008 (SCI-Core).

8.1. *Han, Kyuho; Lee, Sung-Gwang; Kim, Kwanwoo; Jeong, Baren; Paek, Munyoung; et al., Investigation of the effects of nasal surgery on nasal cavity flow using magnetic resonance velocimetry and computational fluid dynamics, Physics of Fluids, 35(11), 2023.*

8.2. *Na, Yang; Kim, Youn-Ji; Kim, Hyo Yeol; Jung, Yong Gi, Improvements in airflow characteristics and effect on the NOSE score after septoturbinoplasty: A computational fluid dynamics analysis, PLOS ONE, v. 17, No: 11, 2022, https://doi.org/10.1371/journal.pone.0277712.*

8.3. *Na, Y; Kwon, KW and Jang, YJ, Impact of the Location of Nasal Septal Deviation on the Nasal Airflow and Air Conditioning Characteristics, Facial Plastic Surgery, DOI: 10.1055/s-0042-1759764.*

8.4. *Topal, K; Kars, A; Atalay, F.; Kilic, K, Evaluation of effect of septoplasty on nasal mucosal dryness using intranasal Schirmer test, Acta Oto-Laryngologica Volume 142, 2022 - Issue 6, https://doi.org/10.1080/00016489.2022.2087101.*

8.5. *Mataraci, F; Karimov, U; (...); Altindag, A, CFD SIMULATIONS AND ANALYSES OF ASYMPTOMATIC AND SYMPTOMATIC NASAL AIRWAY OBSTRUCTIONS, JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY 22 (01), https://doi.org/10.1142/S0219519422500051.*

8.6. *Reid, Alex W. N.; Chen, Xinye; Wen, Haoxiang; Li, Haoyuan; Wang, Zhixing; et al., The Virtual Nose: Assessment of Static Nasal Airway Obstruction Using Computational Simulations and 3D-Printed Models, FACIAL PLASTIC SURGERY & AESTHETIC MEDICINE, DOI: 10.1089/fpsam.2020.0576.*

8.7. *Ramanathan, M.; Ramesh, P.; Aggarwal, N.; Parameswaran, A.; Sailer, H. F.; et al., Evaluation of airflow characteristics before and after septoplasty in unilateral cleft patients with a deviated nasal septum: a computational fluid dynamics study, INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY Volume: ? 50Issue: ? 4Pages: ? 451-456 Published: ?APR 2021.*

8.8. *Lou, M; Zhang, LY; (...); Zheng, GX, Numerical Simulation of Nasal Airflow Aerodynamics, and Warming and Humidification in Models of Clival Chordoma Pre and Post-Endoscopic Endonasal Surgery, RESPIRATORY PHYSIOLOGY & NEUROBIOLOGY 291, https://doi.org/10.1016/j.resp.2021.103693.*

8.9. *Siu, Joey; Inthavong, Kiao; Shang, Yidan; Vahaji, Sara; Douglas, Richard George, Aerodynamic impact of total inferior turbinectomy versus inferior turbinoplasty a computational fluid dynamics study, RHINOLOGY, Volume: ? 5, 8Issue: ? 4, Pages: ? 349-359, Published: ? 2020(SCI-expanded).*

8.10. *Shi, Bing; Huang, Hanyao, Computational technology for nasal cartilage-related clinical research and application, INTERNATIONAL JOURNAL OF ORAL SCIENCE Volume: ? 12Issue: ? 1Article Number: 21 Published: ? JUL 27 2020 (SCI-expanded).*

8.11. *Andaloro, C.; La Mantia, I; Castro, V; Grillo, C., Comparison of nasal and olfactory functions between two surgical approaches for the treatment of concha bullosa: a randomised clinical trial, JOURNAL OF LARYNGOLOGY AND OTOLOGY, Volume: 133, Issue: 10, Pages: 913-917, Article Number: PII S0022215119001968, DOI: 10.1017/S0022215119001968, Published: OCT 2019, (SCI-expanded).*

8.12. *Marks, TN; Maddux, SD; Butaric, LN; Franciscus, RG, Climatic adaptation in human inferior nasal turbinate morphology: Evidence from Arctic and equatorial populations, AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY, 169 (3):498-512; 10.1002/ajpa.23840 JUL 2019 (SCI-Core).*

8.13. *Sommer, F; Grossi, AS; Scheithauer, MO; Hoffmann, TK; Stupp, F; Briner, HR; Lindemann, J, Negative effects of stripe conchotomy on intranasal conditioning, HNO, 67 (5):373-378; 10.1007/s00106-019-0619-5 MAY 2019 (SCI-expanded).*

8.14. *Leite, SHP; Jain, R; Douglas, RG, The clinical implications of computerised fluid dynamic modelling in rhinology, RHINOLOGY, 57 (1):2-9; 10.4193/Rhin18.035 2019 (SCI-expanded).*

8.15. *Frank-Ito, DO; Kimbell, JS; Borojeni, AAT; Garcia, GJM; Fthee, JS, A hierarchical stepwise approach to evaluate nasal patency after virtual surgery for nasal airway obstruction, CLINICAL BIOMECHANICS, 61 172-180; 10.1016/j.clinbiomech.2018.12.014 JAN 2019 (SCI-Core).*

8.16. *Keusterman, W; Huysmans, T; Schmelzer, B; Sijbers, J; Dirckx, JJJ, Matlab® toolbox for semi-automatic segmentation of the human nasal cavity based on active shape modeling, COMPUTERS IN BIOLOGY AND MEDICINE, 105 27-38; 10.1016/j.compbiomed.2018.12.008 FEB 2019 (SCI-Core).*

8.17. *Celebi, OO; Server, EA; Yigit, O; Yildiz, M; Longur, ES, The Impact of Septal Deviation on Intranasal Schirmer Test Values, TURKISH ARCHIVES OF OTORHINOLARYNGOLOGY-TURK OTORINOLARENGOLOJI ARSIVI, 56 (3):145-148; 10.5152/tao.2018.3416 SEP 2018 (SCI-expanded).*

8.18. *Sanmiguel-Rojas, E; Burgos, MA; del Pino, C; Sevilla-Garcia, MA; Esteban-Ortega, F, Robust nondimensional estimators to assess the nasal airflow in health and disease, INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, 34 (1):10.1002/cnm.2906 JAN 2018 (SCI-expanded).*

8.19. *Borojeni, AA; Frank-Ito, DO; Kimbell, JS; Rhee, JS; Garcia, GJM, Creation of an idealized nasopharynx geometry for accurate computational fluid dynamics simulations of nasal airflow in patient-specific models lacking the nasopharynx anatomy, INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, 33 (5) MAY 2017, (SCI-expanded).*

8.20. *Pawar, SS; Garcia, GJM; Rhee, JS, Advances in Technology for Functional Rhinoplasty: The Next Frontier, FACIAL PLASTIC SURGERY CLINICS OF NORTH AMERICA, 25 (2):263, MAY 2017 (SCI-expanded).*

8.21. *Verhoeven, S; Schmelzer, B, Type and severity of septal deviation are not related with the degree of subjective nasal obstruction, RHINOLOGY, 54 (4):355-360; 10.4193/Rhino15226 DEC 2016 (SCI-expanded).*

8.22. *Van Hove, S; Storey, J; Adams, C; Dey, K; Geoghegan, PH; Kabaliuk, N;, An Experimental and Numerical Investigation of CO2 Distribution in the Upper Airways During Nasal High Flow Therapy, ANNALS OF BIOMEDICAL ENGINEERING, 44 (10):3007-3019; OCT 2016 (SCI-Core).*

8.23. *Derin, S; Sahan, M; Deveer, M; Erdogan, S; Tetiker, H; Koseoglu, S, The Causes of Persistent and Recurrent Nasal Obstruction After Primary Septoplasty, JOURNAL OF CRANIOFACIAL SURGERY, 27 (4):828-830; JUN 2016 (SCI-Core).*

8.24. *Erdag, TK; Kurtoglu, G, The 100 Most Cited Turkish Papers in the Otorhinolaryngology Journals of Web of Science, TURKISH ARCHIVES OF OTORHINOLARYNGOLOGY-TURK OTORINOLARENGOLOJI ARSIVI, 53 (3):112-119; 10.5152/tao.2015.1352 SEP 2015 (Non-SCI).*

8.25. *Bahmanzadeh, H; Abouali, O; Faramarzi, M; Ahmadi, G, Numerical simulation of airflow and micro-particle deposition in human nasal airway pre- and post-virtual sphenoidotomy surgery, COMPUTERS IN BIOLOGY AND MEDICINE, 61 8-18; 10.1016/j.compbiomed.2015.03.015 JUN 1 2015 (SCI-Core).*

8.26. *Dong, Xian; Zhu, Chenyuan; Qian, Yumei; et al., The Influence of Obturators on the Respiration of Patients with Maxillary Defects: A Clinical Study, PLOS ONE Volume: 10 Issue: 5 Article Number: e0127597 Published: MAY 26 2015 (SCI-expanded).*

8.27. *Hemtiwakorn, K; Mahasitthiwat, V; Tungjitkusolmun, S; Hamamoto, K; Pintavirooj, C, Patient-Specific Aided Surgery Approach of Deviated Nasal Septum Using Computational Fluid Dynamics, IEEJ TRANSACTIONS ON ELECTRICAL AND ELECTRONIC ENGINEERING, 10 (3):274-286; 10.1002/tee.22084 MAY 2015(SCI-expanded).*

8.28. *Frank-Ito, DO; Kimbell, JS; Laud, P; Garcia, GJM; Rhee, JS, Predicting Postsurgery Nasal Physiology with Computational Modeling: Current Challenges and Limitations, OTOLARYNGOLOGY-HEAD AND NECK SURGERY, 151 (5):751-759; NOV 2014 (SCI-Core).*

8.29. *Van Valkenburgh, B; Smith, TD; Craven, BA, Tour of a Labyrinth: Exploring the Vertebrate Nose, ANATOMICAL RECORD-ADVANCES IN INTEGRATIVE ANATOMY AND EVOLUTIONARY BIOLOGY, 297 (11):1975-1984; NOV 2014 (SCI-Core).*

8.30. *Zhao, Kai; Malhotra, Prashant; Rosen, David; et al., Computational Fluid Dynamics as Surgical Planning Tool: A Pilot Study on Middle Turbinate Resection, ANATOMICAL RECORD-ADVANCES IN INTEGRATIVE ANATOMY AND EVOLUTIONARY BIOLOGY Volume: 297 Issue: 11 Special Issue: SI Pages: 2187-2195 Published: NOV 2014 (SCI-Core).*

8.31. *Shadfar, S; Shockley, WW; Fleischman, GM; Dugar, AR; McKinney, KA; Frank-Ito, DO; Kimbell, JS, Characterization of Postoperative Changes in Nasal Airflow Using a Cadaveric Computational Fluid Dynamics Model Supporting the Internal Nasal Valve, JAMA FACIAL PLASTIC SURGERY, 16 (5):319-327; 10.1001/jamafacial.2014.395 SEP-OCT 2014 (SCI-expanded).*

8.32. *Zhu, JH; Lim, KM; Thong, KTM; Wang, DY; Lee, HP, Assessment of airflow ventilation in human nasal cavity and maxillary sinus before and after targeted sinonasal surgery: A numerical case study, RESPIRATORY PHYSIOLOGY & NEUROBIOLOGY, 194 29-36; APR 1 2014 (SCI-Core).*

8.33. *Kim, SK; Heo, GE; Seo, A; Na, Y; Chung, SK, Correlation between nasal airflow characteristics and clinical relevance of nasal septal deviation to nasal airway obstruction, RESPIRATORY PHYSIOLOGY & NEUROBIOLOGY, 192 95-101; FEB 1 2014 (SCI-Core).*

8.34. *Ralph Mösges, Computational Fluid Dynamics of the Nasal Cavity, in Nasal Physiology and Pathophysiology of Nasal Disorders, Önerci, T. M. (ed), Springer, ISBN: 978-3-642-37250-6, 2013.*

8.35. *Qian, YM; Qian, HX; Wu, YD; Jiao, T, Numeric Simulation of the Upper Airway Structure and Airflow Dynamic Characteristics After Unilateral Complete Maxillary Resection, INTERNATIONAL JOURNAL OF PROSTHODONTICS, 26 (3):268-271; MAY-JUN 2013 (SCI-Expanded).*

8.36. *Achilles, N; Pasch, N; Linterman, A; Schroder, W; Mosges, R, Computational fluid dynamics: a suitable assessment tool for demonstrating the antiobstructive effect of drugs in the therapy of allergic rhinitis, ACTA OTORHINOLARYNGOLOGICA ITALICA, 33 (1):36-42; FEB 2013 (SCI-Expanded).*

8.37. *Lee, HP; Garlapati, RR; Chong, VFH; Wang, DY, Comparison between effects of various partial inferior turbinectomy options on nasal airflow: a computer simulation study, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 16 (1):112-118; JAN 1 2013 (SCI Expanded).*

8.38. *Kim, SK; Na, Y; Kim, JI; Chung, SK, Patient specific CFD models of nasal airflow: Overview of methods and challenges, JOURNAL OF BIOMECHANICS, 46 (2):299-306; 2013 (SCI-Core).*

8.39. *Qian Yumei; Wu Yadong; Jiao Ting, Characteristics of airflow dynamics in upper airway after unilateral maxillectomy, Journal of Medical Biomechanics, 27 (2):192-197,219; 2012 (-).*

8.40. *Kimbell, JS; Garcia, GJM; Frank, DO; Cannon, DE; Pawar, SS; Rhee, JS, Computed nasal resistance compared with patient-reported symptoms in surgically treated nasal airway passages: A preliminary report, AMERICAN JOURNAL OF RHINOLOGY & ALLERGY, 26 (3):E94-E98; MAY-JUN 2012 (SCI-Core).*

8.41. *Zang, HR; Liu, YX; Han, DM; Zhang, L; Wang, T; Sun, XZ; Li, LF, Airflow and temperature distribution inside the maxillary sinus: A computational fluid dynamics simulation, ACTA OTO-LARYNGOLOGICA, 132 (6):637-644; JUN 2012 (SCI-Core).*

8.42. *Wang, Y; Wang, J; Liu, YX; Yu, S; Sun, XZ; Li, SJ; Shen, S; Zhao, W, Fluid-structure interaction modeling of upper airways before and after nasal surgery for obstructive sleep apnea, INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, 28 (5):528-546; MAY 2012 (SCI-Expanded).*

8.43. *Cho, GS; Kim, JH; Jang, YJ, Correlation of Nasal Obstruction With Nasal Cross-Sectional Area Measured by Computed Tomography in Patients With Nasal Septal Deviation, ANNALS OF OTOLOGY RHINOLOGY AND LARYNGOLOGY, 121 (4):239-245; Part 1 APR 2012 (SCI-Core).*

8.44. *Kleven, M; Melaaen, MC; Djupesland, PG, COMPUTATIONAL FLUID DYNAMICS (CFD) APPLIED IN THE DRUG DELIVERY DESIGN PROCESS TO THE NASAL PASSAGES: A REVIEW, JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, 12 (1): MAR 2012 (SCI-Expanded).*

8.45. *Liu, T; Han, DM; Wang, J; Tan, J; Zang, HR; Wang, T; Li, YC; Cui, SJ, Effects of septal deviation on the airflow characteristics: Using computational fluid dynamics models, ACTA OTO-LARYNGOLOGICA, 132 (3):290-298; MAR 2012 (SCI-Core).*

8.46. *Singh, DP; Forte, AJV; Apostolides, JG; Zahiri, HR; Stromberg, J; Alonso, N; Persing, JA, Transoral Submucosal Resection of the Inferior Turbinate A Novel Approach to Functional Rhinoplasty, ANNALS OF PLASTIC SURGERY, 68 (1):46-48; JAN 2012 (SCI-Core).*

8.47. *Rhee, JS; Pawar, SS; Garcia, GJM; Kimbell, JS, Toward Personalized Nasal Surgery Using Computational Fluid Dynamics, ARCHIVES OF FACIAL PLASTIC SURGERY 13 (5): 305-310 (SCI-Expanded).*

8.48. *Moghadas, H; Abouali, O; Faramarzi, A; Ahmadi, G, Numerical investigation of septal deviation effect on deposition of nano/microparticles in human nasal passage, RESPIRATORY PHYSIOLOGY & NEUROBIOLOGY 177 (1): 9-18 10.1016/j.resp.2011.02.011 JUN 30 2011 (SCI-Core).*

8.49. *Sanges, G; Feleppa, M; Gamerra, M; Sorrentino, G; De Luca, R; Merone, M; Cacace, L; Bigal, ME, Fronto-turbinalis Sinus Expansion and Headache, CURRENT PAIN AND HEADACHE REPORTS 15 (4): 308-313 10.1007/s11916-011-0194-2 AUG 2011 (SCI-Expanded).*

8.50. *Leong, S. C.; Chen, X. B.; Lee, H. P.; Wang, D. Y., A review of the implications of computational fluid dynamic studies on nasal airflow and physiology, RHINOLOGY 48 (2): 139-145 JUN 2010 (SCI-Espanded).*

8.51. *Moghadas, H; Abouali, O; Faramarzi, A; Ahmadi, G, Numerical investigation of septal deviation effect on deposition of nano/microparticles in human nasal passage, RESPIRATORY PHYSIOLOGY & NEUROBIOLOGY 177 (1): 9-18 JUN 30 2011 (SCI-Core).*

8.52. *Gokcan, MK; Kurtulus, DF; Ustuner, E; Ozyurek, E; Kesici, GG; Erden, SC; Dursun, G; Yagci, C, A Computational Study on the Characteristics of Airflow in Bilateral Abductor Vocal Fold Immobility, LARYNGOSCOPE 120 (9): 1808-1818 SEP 2010 (SCI-Core).*

8.53. *Pawar, SS; Garcia, GJM; Kimbell, JS; Rhee, JS, Objective Measures in Aesthetic and Functional Nasal Surgery: Perspectives on Nasal Form and Function, FACIAL PLASTIC SURGERY 26 (4): 320-327 AUG 2010 (SCI-Expanded).*

8.54. *Coan, BS, Neff, E, Mukundan, S, Marcus, JR, Validation of a Cadaveric Model for Comprehensive Physiologic and Anatomic Evaluation of Rhinoplastic Techniques, PLASTIC AND RECONSTRUCTIVE SURGERY 124 (6): 2107-2117 DEC 2009 (SCI-Core).*

8.55. *Chung SK, Kim SK, Digital particle image velocimetry studies of nasal airflow, RESPIRATORY PHYSIOLOGY & NEUROBIOLOGY, 163 (1-3), 111-120, NOV 2008 (SCI-Core).*

9. ESER, A., **TÖNÜK, E.**, AKÇA, K., ÇEHRELİ, M. C., Numerical Simulation of Time-Dependent Remodeling of Bone Around Oral Loaded Implants, The International Journal of Oral & Maxillofacial Implants, v 24 n 4 pp. 597-608, 2009 (SCI-Core).

9.1. *Murakami, Kazuhiro; Yamamoto, Kazuhiko; Kawakami, Masayoshi; Horita, Satoshi; Kirita, Tadaaki, Changes in strain energy density in the temporomandibular joint disk after sagittal split ramus osteotomy using a computed tomography-based finite element model, Journal of Orofacial Orthopedics-fortschritte Der Kieferorthopadie, DOI10.1007/s00056-022-00441-3, 2023.*

9.2. *Stender, ME; Carpenter, RD; Regueiro, RA; Ferguson, VL, An evolutionary model of osteoarthritis including articular cartilage damage, and bone remodeling in a computational study, JOURNAL OF BIOMECHANICS, 49 (14):3502-3508; OCT 3 2016(SCI-Core).*

9.3. *Sotto-Maior, BS; Mercuri, EGF; Senna, PM; Assis, NMSP; Francischone, CE;, Evaluation of bone remodeling around single dental implants of different lengths: a mechanobiological numerical simulation and validation using clinical data, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 19 (7):699-706; 10.1080/10255842.2015.1052418 2016 (SCI-Expanded).*

9.4. *Eser, A; Tonuk, E; Akca, K; Dard, MM; Cehreli, MC, Predicting bone remodeling around tissue- and bone-level dental implants used in reduced bone width, JOURNAL OF BIOMECHANICS, 46 (13):2250-2257; SEP 3 2013 (SCI-Core).*

9.5. *Sagirkaya, E; Kucukekenci, AS; Karasoy, D; Akca, K; Eckert, S; Cehreli, MC, Comparative Assessments, Meta-Analysis, and Recommended Guidelines for Reporting Studies on Histomorphometric Bone-Implant Contact in Humans, INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS, 28 (5):1243; SEP-OCT 2013 (SCI-Core).*

9.6. *ESER, A., TÖNÜK, E., AKÇA, K., ÇEHRELİ, M. C., Predicting time-dependent remodeling of bone around immediately-loaded dental implants with different designs, Medical Engineering & Physics, v.32, n.1, pp. 22-31, 2010 (SCI-core).*

10. ESER, A., TÖNÜK, E., AKÇA, K., ÇEHRELİ, M. C., Predicting time-dependent remodeling of bone around immediately-loaded dental implants with different designs, Medical Engineering & Physics, v.32, n.1, pp. 22-31, 2010 (SCI-Core).

10.1. *Rigotti, Renan Leonardi de Oliveira; Tardelli, Juliana Dias Corpa; Dos Reis, Andrea Candido; da Valente, Mariana Lima Costa, Influence of dental implant/mini-implant design on stress distribution in overdentures: a systematic review, Oral And Maxillofacial Surgery-heidelberg, 2023.*

10.2. *Choi, A. H., Understanding Bone Structures, in Bone Remodeling and Osseointegration of Implants by Choi, A. H., Springer, ISBN: 978-981-99-1425-8, 2023, DOI: 10.1007/978-981-99-1425-8_5.*

10.3. *Elizabeth Dimbath, Anup Pant, Ali Vahdati, Digital twins for understanding the mechanical adaptation of bone in disease and postsurgery, in Digital Human Modeling and Medicine, Gunther Paul, Mohamed Hamdy Doweidar (eds), Academic Press, 2023, https://doi.org/10.1016/B978-0-12-823913-1.00001-4 (Book Chapter).*

10.4. *Deng, Yuping; Zhao, Dongliang; Yang, Yang; Ouyang, Hanbin; Xu, Chujiang; et al., Optimal design and biomechanical analysis of sandwich composite metal locking screws for far cortical locking constructs, Front. Bioeng. Biotechnol. 10:967430., https://doi.org/10.3389/fbioe.2022.967430.*

10.5. *Pant, Anup; Paul, Elliot; Niebur, L. Glen; Vahdati, Ali, Integration of mechanics and biology in computer simulation of bone remodeling, Progress in Biophysics & Molecular Biology, Volume164, Page33-45, DOI10.1016/j.pbiomolbio.2021.05.001*

10.6. *Mirulla, Agostino Igor; Pinelli, Salvatore; Zaffagnini, Stefano; Nigrelli, Vincenzo; Ingrassia, Tommaso; et al., Numerical simulations on periprosthetic bone remodeling: a systematic review, COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, Volume: 204, Article Number: 106072, DOI: 10.1016/j.cmpb.2021.106072, Published: JUN 2021.*

10.7. *Maydanshahi, Mohammad Reza; Nazarian, Ara; Eygendaal, Denise; Ebrahimzadeh, Mohammad Hossein; Kachooei, Amir Reza; et al., 3D printing-assisted fabrication of a patient-specific antibacterial radial head prosthesis with high periprosthetic bone preservation, BIOMEDICAL MATERIALS Volume: 16Issue: Article Number: 035027 Published: MAY 1 2021.*

10.8. *MacLeod, A; Simpson, AHRW; Pankaj, P, Experimental and numerical investigation into the influence of loading conditions in biomechanical testing of locking plate fracture fixation devices, BONE & JOINT RESEARCH, 7 (1):111-120; JAN 2018 (SCI-Expanded).*

10.9. *Luo, ST; Shen, XQ; Bai, X; Bai, J; Han, JN; Shang, Y, Validation of Material Algorithms for Femur Remodelling Using Medical Image Data, APPLIED BIONICS AND BIOMECHANICS, 10.1155/2017/5932545 2017 (SCI-Expanded).*

10.10. *Marsico, VD; Lehmann, RB; Claro, CAD; Amaral, M; Vitti, RP; Neves, ACC;, Three-dimensional finite element analysis of occlusal splint and implant connection on stress distribution in implant-supported fixed dental prosthesis and peri-implantal bone, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, 80 141-148; 2017 (SCI-Expanded).*

10.11. *Sotto-Maior, BS; Mercuri, EGF; Senna, PM; Assis, NMSP; Francischone, CE;, Evaluation of bone remodeling around single dental implants of different lengths: a mechanobiological numerical simulation and validation using clinical data, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 19 (7):699-706; 10.1080/10255842.2015.1052418 2016 (SCI-Expanded).*

10.12. *Garitaonaindia, U; Alcaraz, JL, Influence of a micro-thread at cervical position and a cylindrical intermediate zone on the mechanical behaviour of dental implants: A three-dimensional finite element analysis, PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, 229 (9):670-680; SEP 2015, (SCI-Core).*

10.13. *MacLeod, Alisdair R.; Simpson, A. Hamish R. W.; Pankaj, Pankaj, Reasons why dynamic compression plates are inferior to locking plates in osteoporotic bone: a finite element explanation, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING Volume: 18 Issue: 16 Pages: 1818-1825 Published: DEC 10 2015(SCI-Expanded).*

10.14. *Borie, E; Orsi, IA; de Araujo, CPR, The influence of the connection, length and diameter of an implant on bone biomechanics, ACTA ODONTOLOGICA SCANDINAVICA, 73 (5):321-329; 10.3109/00016357.2014.961957 JUL 2015(SCI-Core).*

10.15. *Akca, K; Eser, A; Cavusoglu, Y; Sagirkaya, E; Cehreli, MC, Numerical assessment of bone remodeling around conventionally and early loaded titanium and titanium-zirconium alloy dental implants, MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, 53 (5):453-462; MAY 2015 (SCI-Core).*

10.16. *MacLeod, AR; Simpson, AHRW; Pankaj, P, Reasons why dynamic compression plates are inferior to locking plates in osteoporotic bone: a finite element explanation, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 18 (16):1818-1825; DEC 10 2015 (SCI-Expanded).*

10.17. *Luo, SL; Xu, X; Yuan, KF; Lai, QG; Tang, XP; Li, Y, Angular Immediate Loading: Three-Dimensional Finite Element Analysis, JOURNAL OF CRANIOFACIAL SURGERY, 25 (3):1072-1075; MAY 2014 (SCI-Core).*

10.18. *Chou, IC; Lee, SY; Wu, MC; Sun, CW; Jiang, CP, Finite element modelling of implant designs and cortical bone thickness on stress distribution in maxillary type IV bone, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 17 (5):516-526; APR 4 2014 (SCI-Expanded).*

10.19. *Wang, C; Wang, LZ; Liu, XY; Fan, YB, Numerical simulation of the remodelling process of trabecular architecture around dental implants, COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 17 (3):286-295; FEB 17 2014 (SCI-Expanded).*

10.20. *MacLeod, AR; Pankaj, P; Simpson, AHRW, Does screw-bone interface modelling matter in finite element analyses?, JOURNAL OF BIOMECHANICS, 45 (9):1712-1716, JUN 1 2012 (SCI-Core).*

10.21. *ESER, A., TÖNÜK, E., AKÇA, K., ÇEHRELİ, M. C., Numeric Simulation of Time-Dependent Remodeling of Bone Around Oral Loaded Implants, The International Journal of Oral & Maxillofacial Implants, v 24 n 4 pp. 597-608, 2009 (SCI-Core).*

10.22. *Tabassum, A; Meijer, GJ; Walboomers, XF; Jansen, JA, Biological limits of the undersized surgical technique: a study in goats, CLINICAL ORAL IMPLANTS RESEARCH 22 (2): 129-134 FEB 2011 (SCI-core).*

10.23. *Ojeda, J; Martinez-Reina, J; Garcia-Aznar, JM; Dominguez, J; Doblare, M, Numerical simulation of bone remodelling around dental implants, PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE 225 (H9): 897-906 (SCI-Core)*

11. UYSAL, H., BOYRAZ, İ., YAĞCIOĞLU, S., OKTAY, F., KAFALI, P., **TÖNÜK, E.**, Ankle clonus and its relationship with the medium-latency reflex response of the soleus by peroneal nerve stimulation, Journal of Electromyography and Kinesiology, v.21, pp.438-444.

11.1. *Sonkodi, Balazs, Delayed Onset Muscle Soreness and Critical Neural Microdamage-Derived Neuroinflammation, Biomolecules 2022, 12(9), 1207; https://doi.org/10.3390/biom12091207.*

11.2. *Uslu, Serkan; Nuzket, Tunca; Gurbuz, Mehmet; Uysal, Hilmi, Electrophysiological and kinesiological analysis of deep tendon reflex responses, importance of angular velocity, Medical & Biological Engineering & Computing volume 60, pages 2917-2929 (2022), https://doi.org/10.1007/s11517-022-02638-5.*

11.3. *Sonkodi, Balazs; Hortobagyi, Tibor, Amyotrophic lateral sclerosis and delayed onset muscle soreness in light of the impaired blink and stretch reflexes - watch out for Piezo2, 17 (1) , pp.397-402, https://doi.org/10.1515/med-2022-0444.*

11.4. *Goztepe, Mehmet Berke; Ozyurt, Mustafa Gorkem; Turker, Kemal Sitki; Uysal, Hilmi, Comparison of the temporal properties of medium latency responses induced by cortical and peripheral stimulation, JOURNAL OF ELECTROMYOGRAPHY AND KINESIOLOGY Volume: 55, Article Number: 102477, DOI: 10.1016/j.jelekin.2020.102477, 2020 (SCI-Expanded).*

11.5. *Thompson, Aiko K.; Mrachacz-Kersting, N.; Sinkjaer, T.; Andersen, J. B., Modulation of soleus stretch reflexes during walking in people with chronic incomplete spinal cord injury, Experimental Brain Research, V 237, n. 10, pp: 2461-2479, DOI: 10.1007/s00221-019-05603-1, 2019 (SCI-Expanded).*

11.6. *Uysal, H; Ozyurt, MG; Goztepe, MB; Turker, KS, Medium latency excitatory reflex of soleus re-examined, EXPERIMENTAL BRAIN RESEARCH, 237 (7):1717-1725; 10.1007/s00221-019-05544-9 JUL 2019 (SCI-Core).*

11.7. *Uysal, H; Kizilay, F; Inel, SE; Ozen, H; Pek, G, Medium-latency reflex response elicited from the flexor carpi radialis by radial nerve stimulation, EXPERIMENTAL BRAIN RESEARCH, 217 (2):223-235; MAR 2012 (SCI-Core).*

12. ESER, A, TÖNÜK, E., AKCA, K., DARD, M.M., CEHRELİ, M. C., Predicting bone remodeling around tissue- and bone-level dental implants used in reduced bone width, Journal of Biomechanics, v.46, pp 2250-2257, 2013.

12.1. *Tardelli, Juliana Dias Corpa; Alves, Bruna Monteiro de Barros Ciribelli; Valente, Mariana Lima da Costa; dos Reis, Andrea Candido, Influence of the modulus of elasticity of dental implants on the distribution of stresses in the alveolar bone by the finite element method: A systematic review, Journal Of Oral And Maxillofacial Surgery Medicine And Pathology, 35 (5) , pp.383-389, 2023.*

12.2. *Choi, A. H., Understanding Bone Structures, in Bone Remodeling and Osseointegration of Implants by Choi, A. H., Springer, ISBN: 978-981-99-1425-8, 2023, DOI: 10.1007/978-981-99-1425-8_5.*

12.3. *Gil, Javier; Sandino, Clara; Cerrolaza, Miguel; Perez, Roman; Herrero-Climent, Mariano; et al., Influence of Bone-Level Dental Implants Placement and of Cortical Thickness on Osseointegration: In Silico and In Vivo Analyses, Journal of Clinical Medicine, https://doi.org/10.3390/jcm11041027.*

12.4. *Miszuk, Jacob M.; Hu, Jue; Sun, Hongli, Biomimetic Nanofibrous 3D Materials for Craniofacial Bone Tissue Engineering, ACS APPLIED BIO MATERIALS, Volume: 3, Issue: ? 10, Pages: ? 6538-6545, Published: ? OCT 19 2020.*

12.5. Sahin, Sezgi Cinel, Static and Dynamic Stress Analysis of Standard- and Narrow-Diameter Implants: A 3D Finite Element Analysis, International Journal Of Oral & Maxillofacial Implants, Volume: 35Issue: 4Pages: E58-E68 Published:?JUL-AUG 2020 (SCI-Expanded).

12.6. Kilic, Erdem; Doganay, Ozge, Evaluation of Stress in Tilted Implant Concept With Variable Diameters in the Atrophic Mandible: Three-Dimensional Finite Element Analysis, Journal Of Oral Implantology, Volume: 46 Issue: Pages: 19-26 Published: FEB 2020 (SCI-Expanded).

12.7. Wiest, W; Rack, A; Zabler, S; Schaer, A; Swain, M; Nelson, K, Validation offinite-element simulations with synchrotron radiography - A descriptive study of micromechanics in two-piece dental implants, HELIYON, 4 (2):10.1016/j.heliyon.2018.e00524 FEB 2018.

12.8. Cinel, S; Celik, E; Sagirkaya, E; Sahin, O, Experimental evaluation of stress distribution with narrow diameter implants: A finite element analysis, JOURNAL OF PROSTHETIC DENTISTRY, 119 (3):417-425; MAR 2018(SCI-Core).

12.9. Stender, ME; Carpenter, RD; Regueiro, RA; Ferguson, VL, An evolutionary model of osteoarthritis including articular cartilage damage, and bone remodeling in a computational study, JOURNAL OF BIOMECHANICS, 49 (14):3502-3508; OCT 3 2016 (SCI-Core).

12.10. Yi, W; Wang, C; Liu, XH, A microscale bone remodeling simulation method considering the influence of medicine and the impact of strain on osteoblast cells, FINITE ELEMENTS IN ANALYSIS AND DESIGN, 104 16-25; OCT 15 2015 (SCI-Core).

12.11. Shibata, Y; Tanimoto, Y; Maruyama, N; Nagakura, M, A review of improved fixation methods for dental implants. Part II: Biomechanical integrity at bone-implant interface, JOURNAL OF PROSTHODONTIC RESEARCH, 59 (2):84-95; APR 2015(SCI-Expanded).

12.12. Akca, K; Eser, A; Cavusoglu, Y; Sagirkaya, E; Cehreli, MC, Numerical assessment of bone remodeling around conventionally and early loaded titanium and titanium-zirconium alloy dental implants, MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, 53 (5):453-462; MAY 2015 (SCI-Core).

12.13. Podshivalov, L; Fischer, A; Bar-Yoseph, PZ, On the Road to Personalized Medicine: Multiscale Computational Modeling of Bone Tissue, ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, 21 (4):399-479; DEC 2014 (SCI-Expanded).

12.14. Choi, AH; Conway, RC; Ben-Nissan, B, Finite-element modeling and analysis in nanomedicine and dentistry, NANOMEDICINE, 9 (11):1681-1695; 2014. (SCI-Expanded).

12.15. Ye, DX; Peramo, A, Implementing tissue engineering and regenerative medicine solutions in medical implants, BRITISH MEDICAL BULLETIN, 109 (1):3 MAR 2014. (SCI-Core).

13. PETEKKAYA, A. T., TÖNÜK, E., Yumuşak Biyolojik Dokuların Düzlemsel Eşyönsüz Mekanik Davranışının Bireye ve Noktaya Özel Belirlenmesi için Elipsoid Uçlarla Yerinde Canlı (İn Vivo) İndentör Deneyleri, Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, Cilt 26, Sayı 1, Sayfa: 63-72, Mart 2011 (SCI-Expanded).

13.1. Tönük, E., Comment on: "The finite element implementation of 3D fractional viscoelastic constitutive models" by Gioacchino Alotta, Olga Barrera, Alan Cocks, Mario Di Paola, Finite elements in analysis and design, 146 (2018) 28-41, FINITE ELEMENTS IN ANALYSIS AND DESIGN, 152 17-17; 10.1016/j.finel.2018.09.001 DEC 2018 (SCI-Core).

13.2. Demirci, N; Tönük, E, Non-integer viscoelastic constitutive law to model soft biological tissues to in-vivo indentation, ACTA OF BIOENGINEERING AND BIOMECHANICS, 16 (4):13-21; 2014(SCI-Expanded).

14. ÖÇGÜDER, A, GÖK, H., HEYCAN, C., TECİMEL, O., **TÖNÜK, E.**, BOZKURT, M., Effects of custom-made insole on gait pattern of patients with unilateral displaced intra-articular calcaneal fracture: Evaluation with computerized gait analysis, Acta Orthopaedica et Traumatologica Turcica, 46 (1) pp. 1-7, 2012 (SCI Expanded, -) DOI: 10.3944/AOTT.2012.2401.

14.1. Jandova, Sona; Mendricky, Radomir, Benefits of 3D Printed and Customized Anatomical Footwear Insoles for Plantar Pressure Distribution, 3d Printing And Additive Manufacturing, DOI: 10.1089/3dp.2021.0002 (2021).

14.2. Li, Zihua; Wu, Xinbo; Zhou, Haichao; Xu, Shaochen; Xiao, Fajiao; et al., Cost-utility analysis of extensile lateral approach versus sinus tarsi approach in Sanders type II/III calcaneus fractures, JOURNAL OF ORTHOPAEDIC SURGERY AND RESEARCH Volume: 15 Issue: ? 1Article Number: 430 Published: ? SEP 18 2020 (SCI Expanded).

14.3. Erdem, Melek Merve; Koc, Gonul; Kismet, Kemal; Yasti, Cinar; Topuz, Semra, Evaluation of spatio-temporal gait parameters and gait symmetry in diabetic polyneuropathic patients with burn injury: A pilot study, BURNS, Volume: 46, Issue: 4Pages: 897-905Published: ? JUN 2020 (SCI Expanded).

14.4. Sanders, Fay R. K.; Peters, Jess J.; Schallig, Wouter; Mittlmeier, Thomas; Schepers, Tim, What is the added value of pedobarography for assessing functional outcome of displaced intra-articular calcaneal fractures? A systematic review of existing literature, Clinical Biomechanics, Volume: 72, Pages: 8-15, DOI: 10.1016/j.clinbiomech.2019.11.013, Published:? FEB 2020 (SCI Expanded).

14.5. Jandova, S; Pazour, J; Janura, M, Comparison of Plantar Pressure Distribution During Walking After Two Different Surgical Treatments for Calcaneal Fracture, JOURNAL OF FOOT & ANKLE SURGERY, 58 (2):260-265; 10.1053/j.jfas.2018.08.051 MAR 2019

14.6. Braun, BJ; Veith, NT; Herath, SC; Hell, R; Rollmann, M; Orth, M; Holstein, JH; Pohlemann, T, A new continuous gait analysis system for ankle fracture aftercare, UNFALLCHIRURG, 121 (4):293-299; 10.1007/s00113-017-0332-3 APR 2018 (SCI Expanded).

14.7. Wang, Q; Li, XL; Sun, Y; Yan, LQ; Xiong, CZ; Wang, JC, Comparison of the Outcomes of Two Operational Methods Used for the Fixation of Calcaneal Fracture, CELL BIOCHEMISTRY AND BIOPHYSICS, 72 (1):191-196; 10.1007/s12013-014-0436-0 MAY 2015 (SCI Expanded).

14.8. Serbest, K; Cilli, M; Eldogan, O, Biomechanical effects of daily physical activities on the lower limb, ACTA ORTHOPAEDICA ET TRAUMATOLOGICA TURCICA, 49 (1):85-90; 10.3944/AOTT.2015.3180 2015 (SCI Expanded).

15. DEMİRCİ, N., TÖNÜK, E., Non-integer viscoelastic constitutive law to model soft biological tissues to in-vivo indentation, Acta of Bioengineering and Biomechanics, v. 16 no: 4 13-21. (SCI-Expanded, B-18, Engineering, Biomedical; Biophysics) DOI: 10.5277/ABB-00005-2014-03.
    15.1. Song, Sehwan; Lee, Youlim; Uhm, Won -Young; Yoon, Sang-Hee, Prediction of the low-pass filtering characteristics of viscoelastic polymer plates, Mechanical Systems And Signal Processing, 120, March 2024.
    15.2. Bardini, Roberta; Di Carlo, Stefano, Computational methods for biofabrication in tissue engineering and regenerative medicine - a literature review, Computational and Structural Biotechnology Journal, 23, 601-616, 2024.
    15.3. Jelic, Sladan; Zorica, Dusan, Energy balance for fractional anti-Zener and Zener models in terms of relaxation modulus and creep compliance, Applied Mathematical Modelling, 123 , pp.688-728, 2023.
    15.4. Pinnola, Francesco Paolo; Vaccaro, Marzia Sara, Stochastic analysis of small-scale beams with internal and external damping, Probabilistic Engineering Mechanics, https://doi.org/10.1016/j.probengmech.2022.103401, 2023.
    15.5. Zhang, Ze; Huang, Canjie; Jin, Huijun; Feng, Wenjie; Jin, Doudou; et al., A creep model for frozen soil based on the fractional Kelvin-Voigt's model, ACTA GEOTECHNICA, https://doi.org/10.1007/s11440-021-01390-8.
    15.6. Pinnola, Francesco Paolo; Barretta, Raffaele; Marotti de Sciarra, Francesco; Pirrotta, Antonina, Analytical Solutions of Viscoelastic Nonlocal Timoshenko Beams, Mathematics, 10 (3) 477; https://doi.org/10.3390/math10030477.
    15.7. Barretta, Raffaele; Marotti de Sciarra, Francesco; Pinnola, Francesco P.; Vaccaro, Marzia S., On the nonlocal bending problem with fractional hereditariness, MECCANICA, DOI: 10.1007/s11012-021-01366-8.
    15.8. Burlon, Andrea; Alotta, Gioacchino; Di Paola, Mario; Failla, Giuseppe, An original perspective on variable-order fractional operators for viscoelastic materials, Meccanica, DOI: 10.1007/s11012-021-01316-4.
    15.9. Sattari, Samaneh; Eskandari, Mona, Characterizing the viscoelasticity of extra- and intra-parenchymal lung bronchi, JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS, Volume: 11, Article Number: 103824, Published: OCT 2020 (SCI-Expanded).
    15.10. Di Paola, M.; Alotta, G.; Burlon, A.; Failla, G, A novel approach to nonlinear variable-order fractional viscoelasticity, PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES Volume: 37,8 Issue: 2172, Published: MAY 29 2020 (SCI-Expanded).
    15.11. Palomares-Ruiz, Juan; Ruelas, Efren; Munoz, Flavio; Castro, Jose; Rodriguez, Angel, A fractional approach to 3D artery simulation under a regular pulse load, MATHEMATICAL BIOSCIENCES AND ENGINEERING, Volume: 17, Issue: 3, Pages: 2516-2529, DOI: 10.3934/mbe.2020138, Published: 2020 (SCI-Expanded).
    15.12. Okuka, Aleksandar S.; Zorica, Dusan, Fractional Burgers models in creep and stress relaxation tests, Applied Mathematical Modelling, Volume: 77, Pages: 1894-1935, Part: 2, DOI: 10.1016/j.apm.2019.09.035, JAN 2020 (SCI-Expanded).
    15.13. Tönük, E., Comment on: "The finite element implementation of 3D fractional viscoelastic constitutive models" by Gioacchino Alotta, Olga Barrera, Alan Cocks, Mario Di Paola, Finite elements in analysis and design, 146 (2018) 28-41, FINITE ELEMENTS IN ANALYSIS AND DESIGN, 152 17-17; 10.1016/j.finel.2018.09.001 DEC 2018 (SCI-Core).
    15.14. Alotta, G; Barrera, O; Cocks, A; Di Paola, M, The finite element implementation of 3D fractional viscoelastic constitutive models, FINITE ELEMENTS IN ANALYSIS AND DESIGN, 146 28-41; 10.1016/j.finel.2018.04.003 JUL 2018 (SCI-Core).
    15.15. Makuch, AM; Skalski, KR; Pawlikowski, M, The influence of the cumulated deformation energy in the measurement by the DSI method on the selected mechanical properties of bone tissues, ACTA OF BIOENGINEERING AND BIOMECHANICS, 19 (2):79-91; 10.5277/ABB-00679-2016-04 2017 (SCI-Expanded).
    15.16. Alotta, G; Barrera, O; Cocks, ACF; Di Paola, M, On the behavior of a three-dimensional fractional viscoelastic constitutive model, MECCANICA, 52 (9):2127-2142; JUL 2017, (SCI-Core).
    15.17. Dawidowicz, J; Matysiak, N; Szotek, S; Maksymowicz, K, Telocytes of Fascial Structures, Wang X; Cretoiu D (eds) in TELOCYTES: CONNECTING CELLS, 913 403-424; 10.1007/978-981-10-1061-3_26 2016, Book Series: Advances in Experimental Medicine and BiologySPRINGER-VERLAG SINGAPORE PTE LTD, SINGAPORE, SINGAPORE, ISBN: 978-981-10-1061-3; 978-981-10-1060-6 (Book Chapter).
    15.18. Szotek, S; Dawidowicz, J; Eyden, B; Matysiak, N; Czogalla, A; Dudzik, G; Lesniewicz, A; Maksymowicz, K, Morphological features of fascia lata in relation to fascia diseases, ULTRASTRUCTURAL PATHOLOGY, 40 (6):297-310; NOV-DEC 2016(SCI-Core).
    15.19. Palomares Ruiz, J.E.; Rodríguez Madrigal, M.; Castro Lugo, J. G.; Ramírez Treviño, A.; Rodríguez Soto, A. A., Modelación y simulación de la arteria aorta a partir de datos clínicos utilizando un modelo fraccional viscoelástico y el método del elemento finite (Modeling and simulation of the aorta from clinical data using a fractional viscoelastic model and finite element method), Revista mexicana de ingeniería biomédica, Volume: 36, Issue: 3, Pages: 211-223, DOI: 10.17488/RMIB.36.3.1, Published: 2015-12 (SciELO Citation Index).
    15.20. Dawidowicz, J; Szotek, S; Matysiak, N; Mielanczyk, L; Maksymowicz, K, Electron microscopy of human fascia lata: focus on telocytes, JOURNAL OF CELLULAR AND MOLECULAR MEDICINE, 19 (10):2500-2506; 10.1111/jcmm.12665 OCT 2015 (SCI-Expanded).
16. BOZKURT, M., TÖNÜK, E., ELHAN, A., TEKDEMİR, İ., DORAL, M. N., Axial rotation and mediolateral translation of the fibula during passive plantarflexion, Foot and Ankle International, v 29, n 5, pp. 502-507, 2008 DOI:10.3113/FAI-2008-0502.
    16.1 Nichols, Jennifer A.; Baratta, Chloe; Reb, Christopher W., Biomechanical Sequelae of Syndesmosis Injury and Repair, Foot And Ankle Clinics, 28 (1) , pp.77-98, 2023.
    16.2 Barg, Alexej; Kahn, Timothy L.; Dekeyser, Graham; Sripanich, Yantarat; Valderrabano, Victor, Can a fibular malunion be corrected by a Z-shaped fibular osteotomy?, ORTHOPADE Early Access: JAN 2020, (SCI-Expanded).
    16.3 Alves-da-Silva, T; Guerra-Pinto, F; Matias, R; Pessoa, P, Kinematics of the proximal tibiofibular joint is influenced by ligament integrity, knee and ankle mobility: an exploratory cadaver study, KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, 27 (2):405-411; 10.1007/s00167-018-5070-8 FEB 2019 (SCI-Core).
    16.4 Wilson, WK; Morris, RP; Ward, AJ; Carayannopoulos, NL; Panchbhavi, VK, Torsional Failure of Carbon Fiber Composite Plates Versus Stainless Steel Plates for Comminuted Distal Fibula Fractures, FOOT & ANKLE INTERNATIONAL, 37 (5):548-553; 10.1177/1071100715625291 MAY 2016 (SCI-Expanded).

17. ÖÇGÜDER, A, GÖK, H., HEYCAN, C., TECİMEL, O., **TÖNÜK, E.**, BOZKURT, M., Effects of custom-made insole on gait pattern of patients with unilateral displaced intra-articular calcaneal fracture: Evaluation with computerized gait analysis, Acta Orthopaedica et Traumatologica Turcica, 46 (1) pp. 1-7, 2012 (SCI Expanded, -) DOI: 10.3944/AOTT.2012.2401.
    - *17.1 Colak, TK; Colak, I; Timurtas, E; Bulut, G; Polat, MG, Pedobarographic and Radiological Analysis After Treating a Talus Neck Fracture, JOURNAL OF FOOT & ANKLE SURGERY, 55 (6):1216-1222; NOV-DEC 2016 (SCI-Expanded).*
18. BUYUKSUNGUR, S., ENDOGAN TANIR T., BUYUKSUNGUR, A., BEKTAS, E. I., TORUN KOSE G., YUCEL, D., BEYZADEOĞLU, T., ÇETİNKAYA, E., YENİGUN, C., **TÖNÜK, E.**, HASICI, V., HASIRCI, N., 3D Printed Poly(ε-caprolactone) Scaffolds Modified with Hydroxyapatite and Poly(propylene fumarate) and Effects on Healing of Rabbit Femur Defects, Biomaterials Science, (SCI-Expanded-A-904, Materials Science, Biomaterials) V. 5, p. 2144-2158, 2017.
    - *18.1 Yazdanpanah, Zahra; Ketabat, Farinaz; Gomez-Picos, Patsy; Raquin, Alice; Fazel Anvari-Yazdi, Abbas; et al., 3D printed PCL/nHAp scaffolds: Influence of scaffold structural parameters on osteoblast performance in vitro, NANO SELECT 4 (9-10), pp.537-550, Oct 2023.*
    - *18.2 Akhoundi, Behnam; Lahijani, Yasser Taghipour; Modanloo, Vahid, Optimizing compressive mechanical properties and water absorption of polycaprolactone/nano-hydroxyapatite composite scaffolds by 3D printing based on fused deposition modeling, Proceedings Of The Institution Of Mechanical Engineers Part N-journal Of Nanomaterials Nanoengineering And Nanosystems, 2023.*
    - *18.3 Wang, Qi; Du, Jialei; Sun, Quanbo; Xiao, Shanwen; Huang, Wei, Evaluation of the osteoconductivity and the degradation of novel hydroxyapatite/polyurethane combined with mesoporous silica microspheres in a rabbit osteomyelitis model, Journal Of Orthopaedic Surgery, 31 (3), 2023.*
    - *18.4 Yazdanpanah, Zahra; Sharma, Nitin Kumar; Zimmerling, Amanda; Cooper, David M. L.; Johnston, James D.; et al., Investigation into relationships between design parameters and mechanical properties of 3D printed PCL/nHAp bone scaffolds, Plos One, 18 (7), 2023.*
    - *18.5 Yazdanpanah, Zahra; Sharma, Nitin Kumar; Raquin, Alice; Cooper, David M. L.; Chen, Xiongbiao; et al., Printing tissue-engineered scaffolds made of polycaprolactone and nano-hydroxyapatite with mechanical properties appropriate for trabecular bone substitutes, Biomedical Engineering Online, 22 (1), 2023.*
    - *18.6 Buyuksungur, Senem; Huri, Pinar Yilgor; Schmidt, Juergen; Pana, Iulian; Dinu, Mihaela; et al., In vitro cytotoxicity, corrosion and antibacterial efficiencies of Zn doped hydroxyapatite coated Ti based implant materials, Ceramics International, 49 (8) , pp.12570-12584, 2023, https://doi.org/10.1016/j.ceramint.2022.12.119.*
    - *18.7 Lai, Huinan; Huang, Yuye; Yin, Jun; Qian, Jin, Printing channels with millimeter-scale curvature and deciphering their effect on the proliferation, morphology, orientation, and migration of M-22 cells, International Journal Of Bioprinting, 9 (3) , pp.38-51, 2023.*
    - *18.8 Luo, Yuansen; Xu, Xuefeng; Ye, Zhiming; Xu, Qikun; Li, Jin; et al., 3D bioprinted mesenchymal stromal cells in skin wound repair, Sec. Reconstructive and Plastic Surgery https://doi.org/10.3389/fsurg.2022.988843.*
    - *18.9 Zhang, Xiaoyi; Lu, Qingqing; Ding, Zhaozhao; Cheng, Weinan; Xiao, Liying; et al., Injectable Biopolymer Hydrogels for Regenerative Medicine, INJECTABLE HYDROGELS FOR 3D BIOPRINTING, Insup Noh, Xiumei Wang, Sandra van Vlierberghe (eds), 8, pp.155-200 (Book) https://eds.s.ebscohost.com/eds/ebookviewer/ebook?sid=bde3306d-04b3-4761-b626-e8dbf740515f%40redis&vid=0&format=EB, 2021.*
    - *18.10 Lu, Weiying; Shi, Yang; Xie, Zhijian, Novel structural designs of 3D-printed osteogenic graft for rapid angiogenesis, Bio-Design and Manufacturing, 2022, https://doi.org/10.1007/s42242-022-00212-4.*
    - *18.11 Gide, Kunal Manoj; Islam, Sabrina; Bagheri, Z. Shaghayegh, Polymer-Based Materials Built with Additive Manufacturing Methods for Orthopedic Applications: A Review, Journal Of Composites Science, 2022, 6(9), 262; https://doi.org/10.3390/jcs6090262*
    - *18.12 Zhang, Ye; Jo, Jun-Ichiro; Chen, Liji; Hontsu, Shigeki; Hashimoto, Yoshiya, Effect of Hydroxyapatite Coating by Er: YAG Pulsed Laser Deposition on the Bone Formation Efficacy by Polycaprolactone Porous Scaffold, International Journal of Molecular Sciences, 23 (16), 2022, https://doi.org/10.3390/ijms23169048.*
    - *18.13 Dabasinskaite, Lauryna; Krugly, Edvinas; Baniukaitiene, Odeta; Ciuzas, Darius; Martuzevicius, Dainius; et al., Design and fabrication method of bi-layered fibrous scaffold for cartilage regeneration, Biochemical Engineering Journal, Volume 182, May 2022, 108413, https://doi.org/10.1016/j.bej.2022.108413.*
    - *18.14 Lee, Jinkyu; Huh, Seung Jae; Seok, Ji Min; Lee, Sangmin; Byun, Hayeon; et al., Surface engineering of 3D-printed scaffolds with minerals and a pro-angiogenic factor for vascularized bone regeneration, Acta Biomaterialia, Volume 140, 1 March 2022, Pages 730-744 , https://doi.org/10.1016/j.actbio.2021.12.007.*
    - *18.15 Haixia Xu, Chengqiang Wang, Chun Liu, Jianjun Li, Ziyue Peng, Jiasong Guo and Lixin Zhu, Stem Cell-Seeded 3D-Printed Scaffolds Combined with Self-Assembling Peptides for Bone Defect Repair, Tissue Engineering Part A, https://doi.org/10.1089/ten.tea.2021.0055.*
    - *18.16 Liu, Wei; Liu, Shifeng; Li, Yunzhe; Zhou, Peng; Ma, Qian, Biomimetic Design of 3D Printed Tissue-Engineered Bone Constructs, Current Nanoscience, 17 (2) , pp.223-240.*
    - *18.17 Remy, Matthew T.; Akkouch, Adil; He, Li; Eliason, Steven; Sweat, Mason E.; et al., Rat Calvarial Bone Regeneration by 3D-Printed beta-Tricalcium Phosphate Incorporating MicroRNA-200c, Acs Biomaterials Science & Engineering, 7 (9) , pp.4521-4534.*
    - *18.18 Asgarpour, Rahil; Masaeli, Elahe; Kermani, Shabnam, Development of meniscus-inspired 3D-printed PCL scaffolds engineered with chitosan/extracellular matrix hydrogel, Polymers For Advanced Technologies, DOI10.1002/pat.5465.*
    - *18.19 Kovylin, R. S.; Aleynik, D. Ya.; Fedushkin, I. L., Modern Porous Polymer Implants: Synthesis, Properties, and Application, Polymer Science Series C, Volume 63, Issue 1,Page 29-46, DOI10.1134/S1811238221010033, Published JAN 2021.*

18.20 *Freeman, Fiona E.; Burdis, Ross; Kelly, Daniel J, Printing New Bones: From Print-and-Implant Devices to Bioprinted Bone Organ Precursors, Trends in Molecular Medicine, Volume27, Issue 7, Page700-711, DOI10.1016/j.molmed.2021.05.001, Published JUL 2021.*

18.21 *Ivone, Ryan; Yang, Yan; Shen, Jie, Recent Advances in 3D Printing for Parenteral Applications, AAPS JOURNAL, Volume23, Issue4, Article Number87, DOI10.1208/s12248-021-00610-z, Published: JUN 18 2021.*

18.22 *Khandaker, M.; Kotturi, H.; Progri, H.; Tummala, S.; Nikfarjam, S.; et al., In vitro and in vivo effect of polycaprolactone nanofiber coating on polyethylene glycol diacrylate scaffolds for intervertebral disc repair, BIOMEDICAL MATERIALS, Volume: 16, Issue: 4, Article Number: 045024, DOI: 10.1088/1748-605X/abfd12, Published: JUL 1 2021.*

18.23 *Buyuksungur, Senem; Hasirci, Vasif; Hasirci, Nesrin, 3D printed hybrid bone constructs of PCL and dental pulp stem cells loaded GelMA, JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A, DOI: 10.1002/jbm.a.37235.*

18.24 *Liu, Wei; Liu, Shifeng; Li, Yunzhe; Zhou, Peng; Ma, Qian, Biomimetic Design of 3D Printed Tissue-Engineered Bone Constructs, URRENT NANOSCIENCE, Volume: 17, Issue: 2, Pages: 223-240, Published: 2021*

18.25 *Tamay, Dilara Goksu; Hasirci, Nesrin, Bioinks-materials used in printing cells in designed 3D forms, JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, OI: 10.1080/09205063.2021.1892470.*

18.26 *Saska, Sybele; Pilatti, Livia; Blay, Alberto; Shibli, Jamil Awad, Bioresorbable Polymers: Advanced Materials and 4D Printing for Tissue Engineering, POLYMERS, Volume: 13, Issue: 4, Article Number: 563, Published: FEB 2021.*

18.27 *Zhu, Shuang; Tong, Ge; Xiang, Jian-ping; Qiu, Shuai; Yao, Zhi; et al., Microstructure Analysis and Reconstruction of a Meniscus, ORTHOPAEDIC SURGERY, DOI: 10.1111/os.12899, 2021 (SCI-Expanded).*

18.28 *Shuai, Cijun; Yang, Wenjing; Feng, Pei; Peng, Shuping; Pan, Hao, Accelerated degradation of HAP/PLLA bone scaffold by PGA blending facilitates bioactivity and osteoconductivity, BIOACTIVE MATERIALS, Volume: 6, Issue: 2, Pages: 490-502, DOI: 10.1016/j.bioactmat.2020.09.001, 2021 (SCI-Expanded).*

18.29 *Jiang, Pan; Ji, Zhongying; Wang, Xiaolong, Surface functionalization - a new functional dimension added to 3D printing, JOURNAL OF MATERIALS CHEMISTRY C Volume: 8, Issue: 36, Pages: 12380-12411, Published: SEP 28 2020, (SCI-Expanded).*

18.30 *Wang, Qing; Yang, Xiaojie; Wang, Guangfei; Wan, Leilei; Wang, Shiwei; et al., Osteogenic growth peptide-loaded 3D-printed PCL scaffolds for the promotion of osteogenesis through the ERK pathway, MATERIALS & DESIGN, Volume: 193 , Article Number: 108811, Published: AUG 2020, (SCI-Expanded).*

18.31 *Kondiah, Pierre P. D.; Choonara, Yahya E.; Kondiah, Pariksha J.; Marimuthu, Thashree; du Toit, Lisa C.; et al., Recent progress in 3D-printed polymeric scaffolds for bone tissue engineering, ADVANCED 3D-PRINTED SYSTEMS AND NANOSYSTEMS FOR DRUG DELIVERY AND TISSUE ENGINEERING Book Series: Woodhead Publishing Series in Biomaterials Pages: 59-81 Published: 2020.*

18.32 *Tufail, Asma; Schmidt, Franziska; Maqbool, Muhammad, Three-dimensional printing of hydroxyapatite, HANDBOOK OF IONIC SUBSTITUTED HYDROXYAPATITES, Book Series:Woodhead Publishing Series in Biomaterials, Pages: ? 355-381Published: 2020.*

18.33 *Vasconcellos, Luana M. R.; Elias, Conceicao de M. V.; Minhoto, Giovanna B.; et al., Rotary-jet spun polycaprolactone/nano-hydroxyapatite scaffolds modified by simulated body fluid influenced the flexural mode of the neoformed bone, JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE Volume: ? 31Issue: ? 8Article Number: 72 Published: ? JUL 27 2020 (SCI-Expanded).*

18.34 *Liu, Y; Wang, R; Chen, SY; Xu, ZJ; Wang, QQ; Yuan, P; Zhou, YY; Zhang, Y; Chen, JH, Heparan sulfate loaded polycaprolactone-hydroxyapatite scaffolds with 3D printing for bone defect repair, INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, Volume: 148, Pages: 153-162, DOI: 10.1016/j.ijbiomac.2020.01.109, Published: APR 1 2020 (SCI-Expanded).*

18.35 *Samvelyan, Hasmik Jasmine; Hughes, David; Stevens, Craig; Staines, Katherine Ann, Models of Osteoarthritis: Relevance and New Insights, CALCIFIED TISSUE INTERNATIONAL, DOI: 10.1007/s00223-020-00670-x (SCI-Expanded).*

18.36 *Mondal, Sudip; Nguyen, Thanh Phuoc; Pham, Van Hiep; Hoang, Giang; Manivasagan, Panchanathan; et al., Hydroxyapatite nano bioceramics optimized 3D printed poly lactic acid scaffold for bone tissue engineering application, CERAMICS INTERNATIONAL, Volume: 46, Issue: 3, Pages: 3443-3455, Published: FEB 15 2020 (SCI-Expanded).*

18.37 *Beheshtizadeh, Nima; Lotfibakhshaiesh, Nasrin; Pazhouhnia, Zahra; Hoseinpour, Mahdieh; Nafari, Masoud, A review of 3D bio-printing for bone and skin tissue engineering: a commercial approach, Journal Of Materials Science, Early Access: DEC 2019 (SCI-Expanded).*

18.38 *Hasany, M; Taebnia, N; Yaghmaei, S; Shahbazi, MA; Mehrali, M; Dolatshahi-Pirouz, A; Arpanaei, A, Silica nanoparticle surface chemistry: An important trait affecting cellular biocompatibility in two and three dimensional culture systems, COLLOIDS AND SURFACES B-BIOINTERFACES, 182 10.1016/j.colsurfb.2019.110353 OCT 1 2019 (SCI-Expanded).*

18.39 *Tamay, DG; Usal, TD; Alagoz, AS; Yucel, D; Hasirci, N; Hasirci, V, 3D and 4D Printing of Polymers for Tissue Engineering Applications, FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY, Volume: 7 Published: JUL 9 2019 DOI: 10.3389/fbioe.2019.00164 (SCI-Expanded).*

18.40 *Gonzalez-Henriquez, CM; Sarabia-Vallejos, MA; Rodriguez-Hernandez, J, Polymers for additive manufacturing and 4D-printing: Materials, methodologies, and biomedical applications, PROGRESS IN POLYMER SCIENCE (SCI-Core).*

18.41 *Ma, JQ; Lin, LL; Zuo, Y; Zou, Q; Ren, X; Li, JD; Li, YB, Modification of 3D printed PCL scaffolds by PVAc and HA to enhance cytocompatibility and osteogenesis, RSC ADVANCES, Volume: 9 Issue: 10 Pages: 5338-5346 Published: FEB 17 2019, DOI: 10.1039/c8ra06652c (SCI-Expanded).*

18.42 *Malikmammadov, E; Tanir, TE; Kiziltay, A; Hasirci, N, Preparation and characterization of poly(epsilon-caprolactone) scaffolds modified with cell-loaded fibrin gel, INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, Volume: 125 Pages: 683-689, Published: MAR 15 2019, DOI: 10.1016/j.ijbiomac.2018.12.036 (SCI-Core).*

18.43 *Kose, S; Kankilic, B; Gizer, M; Dede, EC; Bayramli, E; Korkusuz, P; Korkusuz, F, Stem Cell and Advanced Nano Bioceramic Interactions, in NOVEL BIOMATERIALS FOR REGENERATIVE MEDICINE, Chun HJ; Park K; Kim CH; Khang G (eds.), Volume: 1077, Pages: 317-342, Published: 2018DOI: 10.1007/978-981-13-0947-2_17 (Book chapter).*

18.44 *Zhang, L; Yang, GJ; Johnson, BN; Jia, XF, Three-dimensional (3D) printed scaffold and material selection for bone repair, ACTA BIOMATERIALIA, Volume: 84, Pages: 16-33, Published: JAN 15 2019, DOI: 10.1016/j.actbio.2018.11.039 (SCI-Core).*

18.45 *Zhang, L; Yang, GJ; Johnson, BN; Jia, XF, Three-dimensional (3D) printed scaffold and material selection for bone repair, ACTA BIOMATERIALIA, Volume: 84, Pages: 16-33, Published: JAN 15 2019, DOI: 10.1016/j.actbio.2018.11.039 (SCI-Core).*

18.46 *Bahcecioglu, G; Hasirci, N; Bilgen, B; Hasirci, V, A 3D printed PCL/hydrogel construct with zone-specific biochemical composition mimicking that of the meniscus, BIOFABRICATION, Volume: 11, Issue: 2, Article Number: 025002 (SCI-Expanded).*

18.47 *Bahcecioglu, G; Hasirci, N; Bilgen, B; Hasirci, V, Hydrogels of agarose, and methacrylated gelatin and hyaluronic acid are more supportive for in vitro meniscus regeneration than three dimensional printed polycaprolactone scaffolds, INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, Volume: 122, Pages: 1152-1162, Published: FEB 1 2019 (SCI-Core).*

18.48 *Roopavath, UK; Malferrari, S; Van Haver, A; Verstreken, F; Rath, SN; Kalaskar, DM, Optimization of extrusion based ceramic 3D printing process for complex bony designs, MATERIALS & DESIGN, Volume: 162 Pages: 263-270 Published: JAN 15 2019 (SCI-Expanded).*

18.49 *Xu, JZ; Ren, Y; Yin, HM; Huang, YF; Liu, W; Zhao, BS; Gul, RM; Li, ZM, Bone-like Polymeric Composites with a Combination of Bioactive Glass and Hydroxyapatite: Simultaneous Enhancement of Mechanical Performance and Bioactivity, ACS BIOMATERIALS SCIENCE & ENGINEERING, Volume: 4, Issue: 12, Pages: 4434-4442, Published: DEC 2018 (SCI-Expanded).*

18.50 *Wang, JB; Lin, CC; Gao, X; Zheng, ZW; Lv, MM; Sun, J; Zhang, ZY, The enhanced osteogenesis and osteointegration of 3-DP PCL scaffolds via structural and functional optimization using collagen networks, RSC ADVANCES, Volume: 8 Issue: 56 Pages: 32304-32316 Published: 2018 (SCI-Expanded).*

18.51 *Mutch, AL; Grondahl, L, Challenges for the development of surface modified biodegradable polyester biomaterials: A chemistry perspective, BIOINTERPHASES, 13 (6):10.1116/1.5045857 NOV-DEC 2018 (SCI-Expanded).*

18.52 *Dong, LN; Wang, WY; Chen, JH; Ding, XW; Fang, BX; Miao, XX; Liu, Y; Yu, F; Xin, HB; Wang, XL, Silver nanowire net knitted anisotropic aerogel as an ultralight and sensitive physiological activity monitor, BIOMATERIALS SCIENCE, 6 (9):2312-2315; 10.1039/c8bm00651b SEP 1 2018 (SCI-Expanded).*

18.53 *Germain, L; Fuentes, CA; van Vuure, AW; des Rieux, A; Dupont-Gillain, C, 3D-printed biodegradable gyroid scaffolds for tissue engineering applications, MATERIALS & DESIGN, 151 113-122; 10.1016/j.matdes.2018.04.037 AUG 5 2018 (SCI-Expanded).*

18.54 *Malikmammadov, E; Tanir, TE; Kiziltay, A; Hasirci, V; Hasirci, N, PCL and PCL-based materials in biomedical applications, JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, 29 (7-9):863-893; 2018 (SCI-Core).*

19. PEKTAŞ, Ö., **TÖNÜK, E.**, Mechanical Design, Analysis and Laboratory Testing of a Dental Implant with Axial Flexibility Similar to Natural Tooth with Periodontal Ligament, Proceedings of The Institution of Mechanical Engineers Part H-Journal of Engineering in Medicine, v 228, No: 11, pp. 1117-1125 (SCI-Core) DOI: 10.1177/0954411914557713.

19.1 *Meral, Salih Eren; Tuz, Hakan Hifz, A Novel Design to Optimize Biomechanical Properties of Dental Implant, Clinical and Experimental Health Sciences, 12(4), pp 926-931, 2022, DOI: 10.33808/clinexphealthsci.1005677.*

19.2 *Manea, Avram; Baciut, Grigore; Baciut, Mihaela; Pop, Dumitru; Comsa, Dan Sorin; et al., New Dental Implant with 3D Shock Absorbers and Tooth-Like Mobility-Prototype Development, Finite Element Analysis (FEA), and Mechanical Testing, MATERIALS Volume: 12 Issue: 20 Article Number: 3444 (SCI-Expanded).*

19.3 *Ashrafi, Mehran; Ghalichi, Farzan; Mirzakouchaki, Behnam; Arruga, Alberto; Doblare, Manuel, Finite element comparison of the effect of absorbers' design in the surrounding bone of dental implants, INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING Article Number: e3270, 2019 (SCI-Expanded).*

19.4 *Dong, H; Zhou, N; Liu, H; Huang, HH; Yang, GW; Chen, L; Ding, M; Mou, YB, Satisfaction analysis of patients with single implant treatments based on a questionnaire survey, PATIENT PREFERENCE AND ADHERENCE, Volume: 13, Pages: 695-704, Published: 2019 (SCI-Expanded).*

19.5 *Prados-Privado, M; Gehrke, SA; Rojo, R; Prados-Frutos, JC, Complete mechanical characterization of an external hexagonal implant connection: in vitro study, 3D FEM, and probabilistic fatigue, MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, Volume: 56, Issue: 12 Pages: 2233-2244 Published: DEC 2018, SCI-Core).*

20. EREN, M. B., AŞÇI, M., **TÖNÜK, E.**, BALTA, O., KURNAZ, R., Knotless anchors offer better prevention of meniscal excursion than knotted anchors: An experimental study of the bovine knee, Acta Ortopaedica et Traumatologica Turcica, 2020; 54(1): 97-103 DOI:10.5152/j.aott.2020.01.439.

20.1 *Hélène Vignes, Rana Smaida, Guillaume Conzatti, Guoqiang Hua et al., Custom-made meniscus biofabrication. Trends in Biotechnology, Jul 2023.*

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- Anatomy Research International
- Automatica
- Biyomut, Biyomedikal Mühendisliği Ulusal Toplantısı, 2014
- Computer Methods in Biomechanics and Biomedical Engineering
- Computers in Biology and Medicine
- Eklem Hastalıkları ve Cerrahisi Dergisi
- Gait and Posture
- Gazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi
- IEEE Industrial Electronics Society
- IEEE BME
- IEEE International Conference on Innovations in Intelligent SysTems and Applications (INISTA) 2005
- International Journal for Numerical Methods in Engineering
- International Journal of Oral and Maxillafacial Implants
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