

## Prof. RAİF ORHAN YILDIRIM

### Personal Information

**Email:** orhany@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/orhany>

### Advising Theses

- YILDIRIM R. O. , Design of a frangible composite cover for missile launch tube, Postgraduate, O.AKKAŞ(Student), 2018
- Dal H., Yıldırım R. O. , Dynamic fracture of explosive bolt, Postgraduate, B.GÖKÇE(Student), 2018
- YILDIRIM R. O. , Investigation of layered-spaced and oblique mild steel targets against 7.62 mm AP projectile, Postgraduate, M.ÇAKIR(Student), 2017
- YILDIRIM R. O. , Investigation of dynamic behavior of aluminum alloy armor materials / , Doctorate, M.MACAR(Student), 2014
- YILDIRIM R. O. , INVESTIGATION ON PARAMETERS AFFECTING FORMATION AND PENETRATION OF EXPLOSIVELY FORMED PENETRATOR (EFP), Doctorate, Ç.GÖRKEM(Student), 2012
- YILDIRIM R. O. , Investigation of rain erosion on germanium by using finite element method, Postgraduate, H.Anıl(Student), 2011
- YILDIRIM R. O. , Ballistic penetration of hardened steel plates, Postgraduate, T.Deniz(Student), 2011
- YILDIRIM R. O. , Numerical and experimental investigation of perforation of st-37 steel plates by oblique impact, Postgraduate, G.Öztürk(Student), 2010
- YILDIRIM R. O. , ÖGEL B., Effect of aging on the mechanical properties of boron carbide particle reinforced aluminum metal matrix composites, Doctorate, M.SERDAR(Student), 2007
- YILDIRIM R. O. , Mechanical energy absorbtion using tube inversion., Doctorate, A.Mürteza(Student), 1996

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Effect of material properties on interaction of ceramic and glass flyer plates with hypervelocity jet**  
Deniz T., YILDIRIM R. O.  
INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY, vol.19, no.4, pp.2259-2275, 2022 (Journal Indexed in SCI)
- II. **The ballistic performance of SiC-AA7075 functionally graded composite produced by powder metallurgy**  
ÜBEYLİ M., BALCI E., Sarıkan B., ÖZTAŞ M. O. , CAMUŞCU N., YILDIRIM R. O. , KELEŞ Ö.  
MATERIALS & DESIGN, vol.56, pp.31-36, 2014 (Journal Indexed in SCI)
- III. **On the ballistic performance of the AA7075 based functionally graded material with boron carbide reinforcement**  
Balci E., Sarıkan B., ÜBEYLİ M., CAMUŞCU N., YILDIRIM R. O.  
KOVVOVE MATERIALY-METALLIC MATERIALS, vol.51, no.4, pp.257-262, 2013 (Journal Indexed in SCI)
- IV. **Investigation on the ballistic performance of a dual phase steel against 7.62 mm AP projectile**  
Ubeyli M., DEMİR T., Deniz H., YILDIRIM R. O. , KELEŞ Ö.  
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.527, pp.2036-2044, 2010 (Journal Indexed in SCI)
- V. **Effect of Hardness on the Ballistic Impact Behavior of High-Strength Steels Against 7.62-mm Armor Piercing Projectiles**  
DEMİR T., Ubeyli M., YILDIRIM R. O.

JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.18, no.2, pp.145-153, 2009 (Journal Indexed in SCI)

- VI. **Response of Alumina/4340 Steel Laminated Composites against the Impact of 7.62 mm Armor Piercing Projectiles**  
DEMİR T., Ubeyli M., YILDIRIM R. O. , Karakas M. S.  
SCIENCE AND ENGINEERING OF COMPOSITE MATERIALS, vol.16, no.2, pp.89-98, 2009 (Journal Indexed in SCI)
- VII. **Effect of heat treatment on the formation of adiabatic shear bands in high strength steels impacted by AP projectiles**  
Ubeyli M., DEMİR T., YILDIRIM R. O. , Aycan M. F.  
KOVOVE MATERIALY-METALLIC MATERIALS, vol.47, no.6, pp.409-413, 2009 (Journal Indexed in SCI)
- VIII. **Investigation on the ballistic impact behavior of various alloys against 7.62 mm armor piercing projectile**  
DEMİR T., Ubeyli M., YILDIRIM R. O.  
MATERIALS & DESIGN, vol.29, no.10, pp.2009-2016, 2008 (Journal Indexed in SCI)
- IX. **Investigation on the ballistic behavior of Al(2)O(3)/Al2O24 laminated composites**  
Ubeyli M., YILDIRIM R. O. , ÖGEL B.  
JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.196, pp.356-364, 2008 (Journal Indexed in SCI)
- X. **On the comparison of the ballistic performance of steel and laminated composite armors**  
Ubeyli M., Yildirim R. O. , Ogel B.  
MATERIALS & DESIGN, vol.28, no.4, pp.1257-1262, 2007 (Journal Indexed in SCI)
- XI. **On the drop-weight testing of alumina/aluminum laminated composites**  
Ubeyli M., Yildirim R., Ogel B.  
SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.30, pp.673-686, 2005 (Journal Indexed in SCI)
- XII. **LONGITUDINAL ELASTIC-WAVE PROPAGATION AND ENERGY FLUX AT A DISCONTINUITY OF 2 DISSIMILAR SEMIINFINITE CIRCULAR RODS**  
YILDIRIM R.  
JSME INTERNATIONAL JOURNAL SERIES A-MECHANICS AND MATERIAL ENGINEERING, vol.37, no.4, pp.495-501, 1994 (Journal Indexed in SCI)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **BALLISTIC PENETRATION OF HARDENED STEEL PLATES**  
Deniz T., YILDIRIM R. O.  
27th International Symposium on Ballistics (ISB), Freiburg, Germany, 22 - 26 April 2013, pp.1390-1401
- II. **DETRIMENTAL EFFECTS OF FLEXIBLE LINEAR SHAPED CHARGE (FLSC) TO NEARBY PLATES DUE TO VARYING BACKSPACE DISTANCE**  
Bingol C. G. , Yildirim R. O.  
26th International Symposium on Ballistics, Florida, United States Of America, 12 - 16 September 2011, pp.1553-1564
- III. **Analytical solution and experimental verification of shaped charge jet penetration**  
Gozubuyuk S., Yildirim R. O.  
8th Biennial Conference on Engineering Systems Design and Analysis, Turin, Italy, 4 - 07 July 2006, pp.419-425

## **Citations**

Total Citations (WOS):264

h-index (WOS):7