

## Prof. RAİF ORHAN YILDIRIM

### Personal Information

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### Advising Theses

YILDIRIM R. O., Hypervelocity jet interaction with lightweight flyer plates, Doctorate, T.DENİZ(Student), 2022

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

ÖGEL B., YILDIRIM R. O., 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

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

- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)

- 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 (SCI-Expanded)
- 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.  
KOVVOVE MATERIALY-METALLIC MATERIALS, vol.47, no.6, pp.409-413, 2009 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)
- 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 (SCI-Expanded)

### **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. **Investigation of the effect of thickness and radius of curvature on explosively formed penetrator (efp) formation**  
Bingol C., YILDIRIM R. O.  
25th International Symposium on Ballistics, ISB 2010, Beijing, China, 16 - 22 May 2010, pp.821-828
- IV. **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

## **Metrics**

Publication: 18

Citation (WoS): 303

Citation (Scopus): 231

H-Index (WoS): 7

H-Index (Scopus): 7

## **Non Academic Experience**

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