

Prof. METİN ORBAY

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International Researcher IDs

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Biography

Prof.Dr. Metin ORBAY

Born in Kırşehir in 1973, Orbay completed his primary, secondary and high school education in his hometown (1990). He graduated from Department of Physics-Faculty of Education in Ondokuz Mayıs University (1994). He received his master degree with the thesis titled as "The classic and quantum mechanical gain calculations for Free Electron Laser" from Department of Physics, Institute of Sciences, Ondokuz Mayıs University (1996). He was awarded his doctoral degree with the thesis titled as "The theory of electric multipole moments and applications to some diatomic molecules" in the atom and molecule physics field-Institute of Sciences, Ondokuz Mayıs University (2000). He was appointed as a Research Assistant in 1994, an Assistant Professor in 2000, and Associate Professor in 2004, then has become Full Professor in 2009. Worked as head of the department of science education of Amasya Education Faculty and the dean of Faculty of Art and Science in Amasya University.

He was elected and appointed as the Rector of Amasya University between 2011-2019.

He has numerous publications in national-international scientific journals (SCI, SCI-Expanded, SSCI, ERIC) and published many books. In addition, he has many conference proceedings presented in national and international symposiums. His recent research and teaching activities are in the theoretical atom and molecule physics, mathematical physics, numeric analysis and scientometric.

Education Information

Doctorate, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Fizik Anabilim Dalı, Turkey 1996 - 2000

Postgraduate, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Fizik Anabilim Dalı, Turkey 1994 - 1996

Undergraduate, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1990 - 1994

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Elektrik multipol momentlerin teorisi ve bazı iki atomlu moleküllere uygulanması, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Fizik Anabilim Dalı, 2000
Postgraduate, Serbest elektron lazer için klasik ve kuantum mekaniksel kazanç hesaplamaları, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Fizik Anabilim Dalı, 1996

Research Areas

Education, Mathematics, Physics

Academic Titles / Tasks

Professor, Ankara Hacı Bayram Veli University, Polatlı Faculty Of Arts And Sciences, Department Of Physics, 2023 - Continues
Professor, Amasya University, Eğitim Fakültesi, Fen ve Matematik Eğitimi, 2009 - Continues
Associate Professor, Amasya University, Eğitim Fakültesi, Fen ve Matematik Eğitimi, 2006 - 2009
Associate Professor, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2004 - 2006
Assistant Professor, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2000 - 2004
Research Assistant, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 1994 - 2000

Academic and Administrative Experience

Rector, Amasya University, 2015 - 2019
Rector, Amasya University, 2011 - 2015
Dean, Amasya University, Fen-Edebiyat Fakültesi, 2009 - 2011
Director of The Institution, Amasya University, Fen Bilimleri Enstitüsü, 2008 - 2009
Head of Department, Amasya University, Eğitim Fakültesi, İlköğretim Bölümü, 2006 - 2009
Head of Department, Amasya University, Eğitim Fakültesi, Fen ve Matematik Eğitimi, 2006 - 2009
Head of Department, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2004 - 2006
Head of Department, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2000 - 2006

Courses

Uzmanlık Alanı, Postgraduate, 2022 - 2023
Topluma Hizmet Uygulamaları, Undergraduate, 2022 - 2023
Öğretmenlik Uygulaması II, Undergraduate, 2022 - 2023
Teknoloji Yönetimi, Postgraduate, 2022 - 2023
Bilimin Teknolojideki Uygulamaları, Undergraduate, 2022 - 2023
Öğretmenlik Uygulaması I, Undergraduate, 2022 - 2023

Advising Theses

Orbay M., Pandemi sürecinde ilk okuma yazma öğretiminde eğitim platformları ve z-kitapların kullanımına yönelik öğretmen görüşleri, Postgraduate, A.ABASİOĞLU(Student), 2023

Orbay M., Teknoloji ve inovasyon yönetiminde teknoloji değerlendirme aracı, Postgraduate, T.Güven(Student), 2023
Orbay M., Türkiye'nin güneş enerjisi ile ilgili araştırmalara katkısı: 2000-2019 dönemi için bibliyometrik analiz, Postgraduate, M.KOÇ(Student), 2021
Orbay M., İki merkezli örtme integrallerinin Bessel fonksiyonları ile çözümü, Doctorate, S.DEĞİRİMENÇİ(Student), 2005

Advising Graduates (Non-Thesis)

Orbay M., TÜRKİYE'DE İNOVASYON YÖNETİMİ ALANINA İLİŞKİN YAPILAN ÇALIŞMALARIN İNCELENMESİ, Masters (Non-Thesis), M.Saray(Student), 2023
Orbay M., Okulöncesi Çocuklarında Teknoloji Kullanımı Kullanımı ve Davranışları Arasındaki İlişki, Masters (Non-Thesis), A.Yıldız(Student), 2023
Orbay M., RÜZGAR ENERJİ SİSTEMLERİ VE TÜRKİYEDEKİ ON-SHORE RÜZGAR ENERJİ SANTRALLERİ MALİYET ANALİZİ, Masters (Non-Thesis), M.Ulutaş(Student), 2023

Jury Memberships

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Amasya Üniversitesi, May, 2023
Associate Professor Exam, Associate Professor Exam, ÜAK, January, 2023
Associate Professor Exam, Associate Professor Exam, ÜAK, January, 2022
Associate Professor Exam, Associate Professor Exam, January, 2021
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Çankırı Karatekin Üniversitesi, January, 2021
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Ondokuz Mayıs Üniversitesi, June, 2020
Associate Professor Exam, Associate Professor Exam, ÜAK, January, 2020
Associate Professor Exam, Associate Professor Exam, ÜAK, January, 2020
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Ankara Hacı Bayram Veli Üniversitesi, June, 2019
Associate Professor Exam, Associate Professor Exam, January, 2019
Associate Professor Exam, Associate Professor Exam, January, 2018
Associate Professor Exam, Associate Professor Exam, ÜAK, June, 2015
Associate Professor Exam, Associate Professor Exam, Ankara Hacı Bayram Veli University, June, 2014

Research Infrastructure Information

Orbay M., Amasya Üniversitesi Uygulama ve Araştırma Merkezi, September 2011

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Hartree Fock Roothaan theory of molecular Compton profiles via the position space method**
Özdoğan T., Eraslan M., Orbay M.
ADVANCES IN QUANTUM CHEMISTRY, vol.78, no.2, pp.11-18, 2023 (SCI-Expanded)
- II. **Analysis of research trends on the investigation of molecular integrals over Slater type orbitals**
Kara M., Özdoğan T., Orbay M.
ADVANCES IN QUANTUM CHEMISTRY, vol.78, no.2, pp.1-7, 2023 (SCI-Expanded)
- III. **Exponential type orbitals with hyperbolic cosine function basis sets for isoelectronic series of the atoms Be to Ne**

Sahin E., Ertürk M., Ozdogan T., Orbay M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, vol.78, no.1, pp.1-8, 2023 (SCI-Expanded)

- IV. **Educational Research Review From Diverse Perspectives: A Bibliometric Analysis of Web of Science (2011–2020)**
Sezgin A., Orbay K., Orbay M.
SAGE Open, vol.12, no.4, 2022 (SSCI)
- V. **DFT investigation of the electronic structure and nonlinear optic properties (NLO) of 3-amino-4-(Boc-amino)pyridine**
Vural H., Ozdogan T., Orbay M.
Indian Journal of Physics, vol.93, no.9, pp.1113-1122, 2019 (SCI-Expanded)
- VI. **A comparative evaluation of speed of sound and specific heat capacities of gases by using the quantum mechanical and classical second virial coefficients**
Somuncu E., Oner F., Orbay M., Mamedov B. A.
Journal of Mathematical Chemistry, vol.57, no.8, pp.1935-1948, 2019 (SCI-Expanded)
- VII. **Experimental and theoretical studies of bis[(E)-1-((3-chloro-4-methylphenylimino)methyl)naphthalen-2-olate-N,O]copper(II)**
Toprak Ş., Tanak H., Macit M., Dege N., Orbay M.
Journal of Molecular Structure, vol.1174, pp.184-191, 2018 (SCI-Expanded)
- VIII. **Correction to: On the effectiveness of exponential type orbitals with hyperbolic cosine functions in atomic calculations (J Math Chem, (2017), 55, (1849–1856), 10.1007/s10910-017-0764-6)**
Sahin E., Ozdogan T., Orbay M.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.56, pp.315, 2018 (SCI-Expanded)
- IX. **Synthesis, crystal structure, spectroscopic investigations and DFT calculations of the copper(II) complex of 4-(Trifluoromethyl)pyridine-2-carboxylic acid**
Vural H., Orbay M.
Journal of Molecular Structure, vol.1146, pp.669-676, 2017 (SCI-Expanded)
- X. **On the effectiveness of exponential type orbitals with hyperbolic cosine functions in atomic calculations**
Sahin E., Ozdogan T., Orbay M.
Journal of Mathematical Chemistry, vol.55, no.9, pp.1849-1856, 2017 (SCI-Expanded)
- XI. **Synthesis, crystal structure, spectroscopic characterization and DFT studies of bis[(1Z,2E)-N-(2,6-diethylphenyl)-N'-hydroxy-2-(hydroxyimino)acetimidamido]nickel(II)**
Macit M., Tanak H., Orbay M., Özdemir N.
Inorganica Chimica Acta, vol.459, pp.36-44, 2017 (SCI-Expanded)
- XII. **Attitudes of gifted students towards science depending on some variables: A Turkish sample**
Orbay M., Gokdere M., Tereci H., Aydin M.
Scientific Research and Essays, vol.5, no.7, pp.693-699, 2010 (SCI-Expanded)
- XIII. **On pre-service science teachers' preexisting knowledge levels about basic astronomy concepts**
Turkoglu O., Ornek F., Gokdere M., Süleymanoğlu N., Orbay M.
International Journal of Physical Sciences, vol.4, no.11, pp.734-739, 2009 (SCI-Expanded)
- XIV. **The measurements of radon concentrations in drinking water and the Yeşilirmak River water in the area of Amasya in Turkey**
Oner F., Yalim H., Akkurt A., Orbay M.
Radiation Protection Dosimetry, vol.133, no.4, pp.223-226, 2009 (SCI-Expanded)
- XV. **Expansion formula for the product of two normalized associated Legendre functions and its advantages in the evaluation of multicenter integrals**
Özdogan T., Orbay M.
Mathematical Notes, vol.80, no.1-2, pp.141-145, 2006 (SCI-Expanded)
- XVI. **Evaluation of two-center overlap integrals using slater type orbitals in terms of bessel type orbitals**
Özdoğan T., Orbay M., Değirmenci S.
Journal of Mathematical Chemistry, vol.37, no.1, pp.27-35, 2005 (SCI-Expanded)

- XVII. **The symmetry properties of linear combination coefficients for molecular orbitals of diatomic molecules**
Orbay M., Özdoğan T.
Communications in Theoretical Physics, vol.39, no.6, pp.697-700, 2003 (SCI-Expanded)
- XVIII. **Cartesian expressions for surface and regular solid spherical harmonics using binomial coefficients and its use in the evaluation of multicenter integrals**
Özdoğan T., Orbay M.
Czechoslovak Journal of Physics, vol.52, no.12, pp.1297-1302, 2002 (SCI-Expanded)
- XIX. **A theoretical investigation of DEPTQ NMR spectroscopy for InS spin system ($I = 1/2$, $S = 1/2$)**
Özdoğan T., Orbay M.
Spectroscopy Letters, vol.35, no.3, pp.447-454, 2002 (SCI-Expanded)
- XX. **Calculation of nuclear-attraction and modified overlap integrals using Gegenbauer coefficients**
Öztekin E., Özcan S., Orbay M., Yavuz M.
International Journal of Quantum Chemistry, vol.90, no.1, pp.136-143, 2002 (SCI-Expanded)
- XXI. **On the evaluation of two-center overlap integrals over integer and noninteger n-Slater-type orbitals**
Özdoğan T., Orbay M., Gümüş S.
Communications in Theoretical Physics, vol.37, no.6, pp.711-714, 2002 (SCI-Expanded)
- XXII. **Evaluation of two-center overlap and nuclear attraction integrals over Slater-type orbitals with integer and noninteger principal quantum numbers**
Ozdoan T., Orbay M.
International Journal of Quantum Chemistry, vol.87, no.1, pp.15-22, 2002 (SCI-Expanded)
- XXIII. **A new algorithm for the calculation of two-center overlap integrals over slater-type orbitals**
Mamedov B., Kara M. N., Orbay M.
Chinese Journal of Physics, vol.40, no.3, pp.283-287, 2002 (SCI-Expanded)
- XXIV. **Erratum: Electric multipole moments for some first-row diatomic hydride molecules (Communications in Theoretical Physics (2001) 35 (585-588))**
Orbay M., Özdoğan T.
COMMUNICATIONS IN THEORETICAL PHYSICS, vol.37, pp.768, 2002 (SCI-Expanded)
- XXV. **Electric Multipole Moments for Some First-Row Diatomic Hydride Molecules**
Orbay M., Özdoğan T.
Communications in Theoretical Physics, vol.35, no.5, pp.585-588, 2001 (SCI-Expanded)
- XXVI. **On the computation of molecular auxiliary functions A_n and B_n**
Guseinov I., Mamedov B., Kara M. N., Orbay M.
Pramana - Journal of Physics, vol.56, no.5, pp.691-696, 2001 (SCI-Expanded)
- XXVII. **Calculation of Arbitrary Overlap Integrals over Slater Type Orbitals Using Basic Overlap Integrals**
Guseinov I., Mamedov B., Orbay M., Özdoğan T.
Communications in Theoretical Physics, vol.33, no.2, pp.161-166, 2000 (SCI-Expanded)
- XXVIII. **Calculation of Electric Multipole Moment Integrals Using Translation Formulas for Slater-Type Orbitals**
Guseinov I., Mamedov B., Orbay M., Özdoğan T., Rzaeva A., Gasanov A.
Communications in Theoretical Physics, vol.33, no.1, pp.27-32, 2000 (SCI-Expanded)
- XXIX. **Three-center electric and magnetic multipol moment integrals using translation formulas**
Guseinov I., Mehmetoğlu B., Orbay M.
THEORETICAL CHEMISTRY ACCOUNTS, vol.104, pp.407-410, 2000 (SCI-Expanded)
- XXX. **Computation of molecular integrals over Slater type orbitals. II. Calculation of electric multipole moment integrals using translation formulas**
Guseinov I., Rzaeva A., Mamedov B., Orbay M., Özdoğan T., Öner F.
Journal of Molecular Structure: THEOCHEM, vol.465, no.1, pp.7-9, 1999 (SCI-Expanded)

Articles Published in Other Journals

- I. **A bibliometric analysis of publications on special education between 2011 and 2020**
Arslan R., Orbay K., Orbay M.
HUNGARIAN EDUCATIONAL RESEARCH JOURNAL, vol.14, no.2, pp.142-157, 2024 (Peer-Reviewed Journal)
- II. **The bibliometric journey of IJATE from local to global**
Karamustafaoğlu O., Orbay M., Kara İ.
INTERNATIONAL JOURNAL OF ASSESSMENT TOOLS IN EDUCATION, vol.10, no.1, pp.1-11, 2023 (ESCI)
- III. **A Bibliometric Analysis of Geometry Education Research Based on Web of Science Core Collection Database**
Aydemir G., Orbay K., Orbay M.
SHANLAX INTERNATIONAL JOURNAL OF EDUCATION, vol.11, no.2, pp.1-9, 2023 (Peer-Reviewed Journal)
- IV. **Analysis of semigroups with soft intersection ideals**
Sezgin A., Orbay M.
Acta Universitatis Sapientiae, Mathematica, vol.14, no.1, pp.166-210, 2022 (ESCI)
- V. **On Technology Readiness Levels and Their Applications**
Çeliksever T. G., Orbay M.
Oriental Renaissance: Innovative, Educational, Natural and Social Sciences, vol.5, no.2, pp.22-35, 2022 (Peer-Reviewed Journal)
- VI. **The tracking of paper usage data versus citation counts for Library Philosophy and Practice**
Arslan R., Orbay K., Orbay M.
Library Philosophy and Practice, vol.6989, pp.1-17, 2022 (Peer-Reviewed Journal)
- VII. **On the Widespread Impact of the Most Prolific Countries in Special Education Research: A Bibliometric Analysis**
Sezer A., Orbay K., Orbay M.
SHANLAX INTERNATIONAL JOURNAL OF EDUCATION, vol.10, pp.59-66, 2022 (Peer-Reviewed Journal)
- VIII. **Assessing the publication output in the field of forensic science and legal medicine using Web of Science database from 2011 to 2020**
Öner B. S., Orbay M.
Forensic Sciences Research, vol.7, no.4, pp.748-760, 2022 (Scopus)
- IX. **Investigating the Journal Impact Factor of Special Education Journals Indexed in the Social Sciences Science Edition from Web of Science.**
Örnek F., Miranda R., Orbay M.
Journal of the American Academy of Special Education Professionals, no.Winter, pp.161-182, 2022 (Peer-Reviewed Journal)
- X. **Bibliometric Profile of an Emerging Journal: Participatory Educational Research**
Arslan R., Orbay K., Orbay M.
Participatory Educational Research, vol.9, no.4, pp.153-171, 2022 (Scopus)
- XI. **The Bridge of Hearts from Amasya to Navoiy: "Ferhat and Şirin Lovers Museum"**
Orbay K., Orbay M.
Science and Society, vol.3, no.1, pp.101-106, 2021 (Peer-Reviewed Journal)
- XII. **Examples of Practice for Out-Of-School Learning from an Inspection Report Prepared in the First Year of the Alphabet Reform**
Orbay K., Orbay M.
Journal of Research in Informal Environments, vol.6, no.1, pp.43-65, 2021 (Peer-Reviewed Journal)
- XIII. **Should Quality Be Measured in Quantity?**
Karamustafaoğlu O., Orbay M.
Academia Letters, vol.975, pp.1-6, 2021 (Peer-Reviewed Journal)
- XIV. **Analysis of the journal impact factor and related bibliometric indicators in education and educational research category**
Orbay M., Karamustafaoğlu O., Miranda R.

Education for Information, vol.37, no.3, pp.315-336, 2021 (ESCI)

- XV. **Building journal impact factor quartile into the assessment of academic performance: A case study**
Orbay K., Miranda R., Orbay M.
Participatory Educational Research, vol.7, no.2, 2020 (Scopus)
- XVI. **"MERZİFON AMERICAN SCHOOL (1928-1929)" IN THE INSPECTION REPORT OF A PRIMARY SCHOOL INSPECTOR, MR. REMZİ**
Kılınç M., Orbay M.
AMASYA ÜNİVERSİTESİ SOSYAL BİLİMLER DERGİSİ (ASOBİD), vol.2, no.4, pp.103-129, 2018 (Peer-Reviewed Journal)
- XVII. **Activity-based Interactive Engagement in Science (Physics) Laboratory An Approach to Stimulate Pre-Service Teachers' Conceptual Understanding**
Örnek F., Orbay M.
Physics Education, vol.24, no.2, pp.1-16, 2012 (Peer-Reviewed Journal)
- XVIII. **Fen ve Teknoloji Öğretimi ile Astronominin İlişkisi**
Türkoğlu O., Süleymanoğlu N., Orbay M.
İlköğretmen Eğitimci Dergisi, vol.20, pp.40-42, 2008 (Peer-Reviewed Journal)
- XIX. **Chinese Journal of Chemistry's Hirsch Index: A Case Study of 1995-2005**
Karamustafaoğlu O., Orbay M.
CHINESE LIBRARIANSHIP, vol.29, pp.1-7, 2007 (Peer-Reviewed Journal)
- XX. **E= mc²'yi Öğretmek: Kütlesiz Kütle**
Orbay M.
TÜBİTAK Bilim ve Teknik Dergisi, vol.75, pp.62-63, 2006 (Peer-Reviewed Journal)
- XXI. **Fen bilgisi laboratuvar uygulamaları I-II dersinde karşılaşılan güçlükler ve çözüm önerileri**
Orbay M., Özdoğan T., Öner F., Kara M., Gümüş S.
MILLİ EĞİTİM, vol.157, pp.151-158, 2003 (Scopus)
- XXII. **Isı ve sıcaklık üzerine kavram yanılgıları**
Gümüş S., Öner F., Kara M., Orbay M., Yaman S.
MILLİ EĞİTİM, vol.157, pp.157-163, 2003 (Scopus)
- XXIII. **Free electron lasers as a communication source**
Orbay M., Özdoğan T., Kara M., Öztek E.
Bulletin of Pure and Applied Sciences Section D-Physics, vol.19, pp.111-113, 2000 (Peer-Reviewed Journal)
- XXIV. **The second order perturbation solution and gain for free electron lasers**
Orbay M., Özdoğan T., Öztek E.
Bulletin of Pure and Applied Sciences Section D-Physics, vol.18, pp.165-168, 1999 (Peer-Reviewed Journal)
- XXV. **Serbest elektron laser için kuantum mekaniksel hareket denklemi ve çözümleri**
Öztek E., Orbay M.
Fen Dergisi, vol.6, pp.151-158, 1995 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Advances in Quantum Chemistry: Chapter 3: "Hartree Fock Roothaan theory of molecular Compton profiles via the position space method", cilt.78, sa.2, ss.11-18, 2023**
Özdoğan T., Eraslan M., Orbay M.
Elsevier Science, Oxford/Amsterdam , Amsterdam, 2023
- II. **ADVANCES IN QUANTUM CHEMISTRY: Chapter 4: Analysis of research trends on the investigation of molecular integrals over Slater type orbitals, cilt.78, sa.2, ss.1-7, 2023**
Kara M., Özdoğan T., Orbay M.
Elsevier Science, Oxford/Amsterdam , Amsterdam, 2023
- III. **Molecular Docking Study of 3-Amino-4-(Boc-Amino) Pyridine**
Vural H., Özdoğan T., Orbay M.

in: Current Topics and Emerging Issues in Chemical Science Vol. 1 , Rachid Masrour, Editor, BP International, London, pp.27-32, 2023

- IV. **"Kimsesizler Sığınağı: Amasya Yetim Kızlar Yurdu"**
Kılınç M., Değirmenci R., Kösterelioğlu İ., Orbay M.
Pegem A Yayıncılık, Amasya, 2021
- V. **Alternative and New Methods in Airway Management**
Şahin M., Orbay M. (Editor)
İstanbul Sağlık ve Medikal Yayıncılık, İstanbul, 2019
- VI. **Harf İnkılabının İlk Yılında Bir Teftiş Raporu İlköğretim Müfettişi Remzi Bey**
Kılınç M., Orbay M.
Pegem A Yayıncılık, Ankara, 2018
- VII. **Fizik Öğretiminde Kavram Yanılgıları**
Orbay M.
in: Fizik Öğretimi, Ahmet İlhan Şen, Ali Rıza Akdeniz, Editor, Pegem A Yayıncılık, Ankara, pp.111-140, 2017
- VIII. **Genel Fizik II: Klasik Elektrik ve Manyetizma Teorisine Giriş**
Taşar M. F. (Editor), Orbay M. (Editor)
Pegem A Yayıncılık, Ankara, 2009
- IX. **Elektromanyetizmanın Güncel Uygulamaları**
Orbay M.
in: Genel Fizik II: Klasik Elektrik ve Manyetizma Teorisine Giriş, Taşar MF, Orbay M, Editor, Pegem A Yayıncılık, Ankara, pp.331-352, 2009
- X. **Genel Fizik I: Newtoncu Kuvvet ve Hareket Teorisi**
Taşar M. F. (Editor), Orbay M. (Editor)
Pegem A Yayıncılık, Ankara, 2008
- XI. **Titreşim Hareketi**
Orbay M.
in: Genel Fizik I: Newtoncu Kuvvet ve Hareket Teorisi , Taşar MF, Orbay M, Editor, Pegem A Yayıncılık, Ankara, pp.317-352, 2008
- XII. **Higher Electric Multipole Moments of Molecules F2 and CO Using Slater Type Orbitals**
Kara M., Gümüş S., Orbay M.
in: Recent Advances in Computational Chemistry. Molecular Integrals over Slater Orbitals, Telhat Ozdogan, Maria Ruiz Belen, Editor, Transworld Research Network Press, Kataka, pp.71-83, 2008
- XIII. **Ölçme ve Birim Sistemleri Problem Çözümleri**
Orbay M.
in: Genel Fizik ve Teknolojinin Bilimsel İlkeleri Problem Çözümleri, Orbay M, Öner F, Editor, Pegem A Yayıncılık, Ankara, pp.1-18, 2007
- XIV. **Bilgisayar Giriş I-II**
Öner F., Orbay M.
Pegem A Yayıncılık, Ankara, 2006
- XV. **Modern Fiziğe Giriş**
Özdoğan T., Kara M., Gümüş S., Orbay M.
Pegem A Yayıncılık, Ankara, 2005
- XVI. **Genel Fizik ve Teknolojinin Bilimsel İlkeleri Problem Çözümleri**
Orbay M. (Editor), Öner F. (Editor)
Pegem A Yayıncılık, Ankara, 2005
- XVII. **Ölçme ve Birim Sistemleri**
Orbay M.
in: Genel Fizik ve Teknolojinin Bilimsel İlkeleri, Orbay M, Öner F, Editor, Pegem A Yayıncılık, Ankara, pp.3-19, 2005
- XVIII. **Manyetizma**
Orbay M.
in: Genel Fizik ve Teknolojinin Bilimsel İlkeleri, Orbay M, Öner F, Editor, Pegem A Yayıncılık, Ankara, pp.241-262,

2005

XIX. Manyetizma Problem Çözümleri

Orbay M.

in: Genel Fizik ve Teknolojinin Bilimsel İlkeleri Problem Çözümleri, Orbay M, Öner F, Editor, Pegem A Yayıncılık, Ankara, pp.97-104, 2005

Refereed Congress / Symposium Publications in Proceedings

- I. **HFR theory of Compton Profile**
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6th International Conference on Molecular Electronic Structure, Tunis, Tunisia, 10 - 24 June 2022, pp.89
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Supported Projects

Orbay M., AB IPA Project, "Üretim İçin Enerji, İstihdam İçin Mesleki Eğitim", 2016 - 2017

Orbay M., Development Agency, Üretirken Öğreniyoruz, 2014 - 2015

Orbay M., TUBITAK Project, Sınıf Öğretmenleri ve Öğretmen Adaylarının Bilgisayar Okuryazarlık Düzeyini Geliştirme Çalışması, 2012 - 2012

Orbay M., TUBITAK Project, Okulöncesi Öğretmen ve Öğretmen Adaylarına Yönelik Fen ve Doğa Etkinlikleri, 2011 - 2011

Orbay M., TUBITAK Project, Sınıf Öğretmenleri ve Öğretmen Adaylarının Özel Eğitim Semineri, 2011 - 2011

Orbay M., TUBITAK Project, Sınıf Öğretmenlerine Yönelik Basit Araç Gereçlerle Fen Deneyleri ve Günlük Yaşam Etkinlikleri, 2010 - 2010

Orbay M., TUBITAK Project, Amasya İli ve Çevresinde Ekoloji Temelli Doğa Eğitimi, 2010 - 2010

Orbay M., TUBITAK Project, Fen ve Teknoloji Öğretmenlerine Yönelik Bilim Danışmanlığı Kursu, 2007 - 2007

Orbay M., Project Supported by Higher Education Institutions, Fen Bilgisi Eğitimi Laboratuvar Uygulamalarında Karşılaşılan Güçlükler ve Çözüm Önerileri, 2001 - 2002

Orbay M., TUBITAK Project, Hartree-Fock-Roothan (HFR) Denkleminin Çözümünde Ortaya Çıkan Çok Merkezli Moleküler İntegrallerin Slater Atom Orbitali Bazında Hesaplamaları, 2000 - 2001

Orbay M., TUBITAK Project, Slater Atom Orbitali Bazında HFR Yaklaşımını Kullanarak Elektrik Multipol Momentlerin ve Spektroskopik Parametrelerin Hesaplanması, 1999 - 2000

Orbay M., Project Supported by Higher Education Institutions, Moleküllerin Elektrik ve Manyetik Multipol Momentlerinin Hesaplanması, 1997 - 1998

Orbay M., Project Supported by Higher Education Institutions, Çok Atomlu Moleküllerin Fiziksel ve Kimyasal Özelliklerinin HFR Yöntemi ile Hesaplanması, 1996 - 1997

Scientific Refereeing

INTERNATIONAL JOURNAL OF SPECIAL EDUCATION, Journal Indexed in SSCI, January 2022

JOURNAL OF MOLECULAR STRUCTURE, SCI Journal, January 2022

Materials Today Physics, SCI Journal, January 2022

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INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, SCI Journal, January 2010

Tasks In Event Organizations

Orbay M., 6th International Conference on Molecular Electronic Structure, Scientific Congress, Tunis, Tunisia, Eylül 2022

Orbay M., Computational Science Congress, Scientific Congress, Amasya, Turkey, Ekim 2018

Orbay M., Turkish Physical Society 34rd International Physical Congress, Scientific Congress, Turkey, Eylül 2018

Orbay M., Turkish Physical Society 33rd International Physical Congress , Scientific Congress, Balıkesir, Turkey, Eylül 2017

Orbay M., MES 2014 Molecular Electronic Structure Workshop, Scientific Congress, Amasya, Turkey, Eylül 2014

Metrics

Publication: 103

Citation (WoS): 266

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Awards

Orbay M., Onur Ödülü, Türk Fizik Derneği, September 2019

Orbay M., Yayın Teşvik Ödülü, Tübitak, March 2006

Orbay M., Yayın Teşvik Ödülü, Tübitak, August 2005

Orbay M., Yayın Teşvik Ödülü, Tübitak, October 2004

Orbay M., Yayın Teşvik Ödülü, Ondokuzmayıs Üniversitesi, June 2004

Orbay M., Yayın Teşvik Ödülü, Tübitak, September 2003

Orbay M., Yayın Teşvik Ödülü, Tübitak, August 2002

Orbay M., Yayın Teşvik Ödülü, Tübitak, July 2001

Orbay M., Yayın Teşvik Ödülü, Tübitak, February 2000

Orbay M., Yayın Teşvik Ödülü, Tübitak, January 1999

Representation and Promotion Activities

Institutional Representation, Ortak Fikir Programı, HaberAksTV, Turkey, Samsun, 2019 - 2019

Institutional Representation, Gönül Elçileri, TRT Haber, Turkey, Ankara, 2019 - 2019

Institutional Representation, Meslek ve Kariyer Programı, HaberAksTV, Turkey, Samsun, 2018 - 2018

Institutional Promotion, Odak Noktası Programı, TV2020 KKTC, Cyprus (Kktc), Lefkoşa, 2018 - 2018

Institutional Representation, Haberin Sesi Programı, AksTV, Turkey, Samsun, 2017 - 2017

Institutional Representation, Yeni Gün Programı, TRT Avaz, Turkey, Amasya, 2014 - 2014

Institutional Representation, Akşam Vakti Programı, TRT Okul, Turkey, Ankara, 2014 - 2014

Non Academic Experience

KALKINMA BAKANLIĞI

Ministry, Kalkınma Bakanlığı, Orta Karadeniz Kalkınma Ajansı (OKA)

Ministry, Milli Eğitim Bakanlığı, Amasya Bilim ve Sanat Merkezi

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