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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, Atatürk Üniversitesi, Fen Fakültesi, Fizik, Türkiye 1991 - 1994

Yabancı Diller

İngilizce, B1 Orta

Yaptığı Tezler

Doktora, RFAMİD NÖROPEPTİDLERİNİN TEORİK KONFORMASYON ANALİZİ, Atatürk Üniversitesi, Fen Fakültesi, Fizik/Atom Ve Molekül, 2005

Araştırma Alanları

Fizik, Atom ve Molekül Fiziği, Temel Bilimler

Akademik Unvanlar / Görevler

Prof. Dr., Atatürk Üniversitesi, Fen Fakültesi, Fizik, 1989 - Devam Ediyor

Verdiği Dersler

Fizik I, Lisans, 2023 - 2024

Fizik II, Lisans, 2022 - 2023

Mekanik Laboratuvarı, Lisans, 2023 - 2024

Molekül Fiziği, Lisans, 2022 - 2023

Atom Fiziği, Lisans, 2023 - 2024

FizikII, Lisans, 2021 - 2022

Fizik II (Elektrik), Lisans, 2020 - 2021

Fizik I (Mekanik), Lisans, 2021 - 2022

Fizik I(mekanik), Lisans, 2021 - 2022

Molekül Fiziği, Lisans, 2020 - 2021

Atom Fiziği, Lisans, 2021 - 2022

Fizik I (mekanik), Lisans, 2020 - 2021

Fizik I, Lisans, 2020 - 2021

İleri Atom ve Molekül Fiziği, Doktora, 2012 - 2013

Atom Fiziği Laboratuvarı, Lisans, 2009 - 2010

Çekirdek Fiziği Laboratuvarı, Lisans, 2010 - 2011

Fizik I (Mekanik), Lisans, 2009 - 2010

Fizik I (Mekanik), Lisans, 2009 - 2010

Optik, Lisans, 2009 - 2010

Yönetilen Tezler

Demir L., Bor katkılı metal komplekslerinin üretimi, karakterizasyonu, yapısal özelliklerinin yük transferi ve delokalizasyon fenomenleri kullanılarak nodejs platformunda geliştirilecek yapay zeka ile incelenmesi, Doktora, Ö.FIRAT(Öğrenci), 2021

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Demir L., Geçiş metalli nano ferrit alaşımalar için K X-ışını şiddet oranı üzerine kimyasal etkilerin incelenmesi ve bu alaşımaların radyasyon soğurma kabiliyetlerinin değerlendirilmesi, Doktora, U.PERİŞANOĞLU(Öğrenci), 2018

Demir L., Sinterleme metodu ile elde edilen kimyasal özellikleri benzer bazı 3D ve 4D geçiş metal alaşımlarının dış manyetik alanda k tabakası X-ışını şiddet oranı ve valens elektron yoğunluğunun belirlenmesi, Doktora, M.UĞURLU(Öğrenci), 2018

Demir L., Tavlama sıcaklığı, basınç ve dış manyetik alanın şekil hafızalı nanoalaşımların x-ışını şiddet oranları ve valens elektron yapıları üzerine etkilerinin incelenmesi, Doktora, B.ALIM(Öğrenci), 2017

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Demir L., Bazı geçiş metal alaşımlarında farklı Co konsantrasyonuna göre valens elektron yoğunluğunun değişiminin araştırılması, Yüksek Lisans, M.UĞURLU(Öğrenci), 2013

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Demir L., Atom Numarası 78 Z 92 Aralığındaki Bazı elementlerin Li, L alfa, Lbeta, Lgama X-ışını ve Compton Saçılma Diferansiyel Tesir Kesitlerinin Ölçümü , Yüksek Lisans, İ.HAN(Öğrenci), 2005

Demir L., M ve L alt tabakaları fotoelektrik tesir kesitleri ve bazı kristallere ait compton saçılması diferansiyel tesir kesitlerinin ölçülmesi, Doktora, M.ŞAHİN(Öğrenci), 2003

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SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. An experimental study on chemical shifts and X-ray intensity ratios

Uğurlu M., AKKUŞ T., Akbulut O., DEMİR L., YILMAZ D.

Applied Radiation and Isotopes, cilt.198, 2023 (SCI-Expanded)

II. Investigation of coherent/Compton scattering differential cross section ratios in Cu alloys as

- depending on chemical environment and scattering angle**
Urtekin E., Kavaz E., Perişanoğlu U., Demir L.
APPLIED RADIATION AND ISOTOPES, cilt.1, sa.1, ss.1-12, 2022 (SCI-Expanded)
- III. Precipitation-hardening stainless steels: Potential use radiation shielding materials**
Alim B., ÖZPOLAT Ö. F., ŞAKAR E., Han I., Arslan I., Singh V. P., DEMİR L.
RADIATION PHYSICS AND CHEMISTRY, cilt.194, 2022 (SCI-Expanded)
- IV. Determination of L X-ray fluorescence cross-sections in the atomic range of elements $57 \leq Z \leq 69$ in an external magnetic field**
Ugurlu M., AKKUŞ T., DEMİR L.
JOURNAL OF MOLECULAR STRUCTURE, cilt.1244, 2021 (SCI-Expanded)
- V. The coherent to Compton scattering differential cross section ratios of some fifth period elements in the external magnetic field**
Ugurlu M., Akkus T., Demir L.
Indian Journal of Physics, cilt.94, sa.11, ss.1699-1703, 2020 (SCI-Expanded)
- VI. Relative K X-ray intensity ratios of the first and second transition elements in the magnetic field**
Ugurlu M., DEMİR L.
JOURNAL OF MOLECULAR STRUCTURE, cilt.1203, 2020 (SCI-Expanded)
- VII. K X-ray fluorescence parameters of some fourth period elements in a magnetic field**
Ugurlu M., DEMİR L.
SPECTROSCOPY LETTERS, cilt.53, sa.3, ss.163-171, 2020 (SCI-Expanded)
- VIII. Investigating photon interaction characteristics of $\text{Fe}_{\text{x}}\text{Ni}_{1-\text{x}}$ alloys**
Urtekin E., Perisanoglu U., Demir L., Ozturk A. E.
Materials Chemistry and Physics, cilt.242, 2020 (SCI-Expanded)
- IX. The magnetic field effect of K X-ray fluorescence parameters of elements in the range $39 \leq Z \leq 48$**
Ugurlu M., AKKUŞ T., DEMİR L.
CANADIAN JOURNAL OF PHYSICS, cilt.98, sa.2, ss.217-221, 2020 (SCI-Expanded)
- X. Examining alloying effect on K X ray intensity ratios and chemical shifts of the Zn, Mn and mixed spinel ferrites**
Perişanoğlu U., Kavaz E., Urtekin E., Demir L.
Applied Radiation and Isotopes, cilt.156, 2020 (SCI-Expanded)
- XI. The effect of external magnetic field on the coherent to Compton scattering differential cross section ratios of elements in the range $20 \leq Z \leq 32$**
DEMİR L., Ugurlu M.
CANADIAN JOURNAL OF PHYSICS, cilt.98, sa.1, ss.107-110, 2020 (SCI-Expanded)
- XII. Experimental investigation of radiation shielding performances of some important AISI-coded stainless steels: Part I**
ALIM B., ŞAKAR E., Baltakesmez A., HAN İ., Sayyed M., DEMİR L.
RADIATION PHYSICS AND CHEMISTRY, cilt.166, 2020 (SCI-Expanded)
- XIII. The relationship between the external magnetic field and K X-ray intensity ratios of immiscible $\text{MoxAg}_{1-\text{x}}$ alloys**
UĞURLU M., Alim B., DEMİR L.
RADIATION PHYSICS AND CHEMISTRY, cilt.165, 2019 (SCI-Expanded)
- XIV. Variation of coherent to Compton scattering differential cross-section ratios of some lanthanides with the external magnetic field at 59.54 keV**
AKKUŞ T., UĞURLU M., DEMİR L.
RESULTS IN PHYSICS, cilt.13, 2019 (SCI-Expanded)
- XV. Investigating XRF parameters and valance electronic structure of the Co, Ni, and Cu spinel ferrites**
DEMİR L., PERİŞANOĞLU U., ŞAHİN M.
CERAMICS INTERNATIONAL, cilt.45, sa.6, ss.7748-7753, 2019 (SCI-Expanded)
- XVI. Investigation of alloying effects on XRF parameters of 3d transition metals in Permendur49, Kovar**

- and Ti50Co50 alloys**
Alim B., Ugurlu M., Han I., DEMİR L.
JOURNAL OF RADIATION RESEARCH AND APPLIED SCIENCES, cilt.11, sa.2, ss.144-149, 2018 (SCI-Expanded)
- XVII. Alloying effect on K shell X-ray fluorescence cross-sections and yields in Ti-Ni based shape memory alloys**
Alim B., Han I., DEMİR L.
JOURNAL OF RADIATION RESEARCH AND APPLIED SCIENCES, cilt.11, sa.2, ss.150-156, 2018 (SCI-Expanded)
- XVIII. Delocalization and charge transfer studies of PERMENDUR49, KOVAR and Ti50Co50 alloys from relative K X-ray intensity ratios**
Ugurlu M., Alim B., Han I., DEMİR L.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.695, ss.2619-2627, 2017 (SCI-Expanded)
- XIX. Effect of external magnetic field on the K beta/K alpha X-ray intensity ratios of $TixNi_{1-x}$ alloys excited by 59.54 and 22.69 keV photons**
Perisanoglu U., Alim B., Ugurlu M., DEMİR L.
APPLIED RADIATION AND ISOTOPES, cilt.115, ss.183-189, 2016 (SCI-Expanded)
- XX. Effect of external magnetic field on valence-electron structures of Fe and Ni in Invar, Permalloy and the other Fe-Ni alloys by using K beta-to-K alpha X-ray intensity ratios**
Alim B., Han I., DEMİR L.
APPLIED RADIATION AND ISOTOPES, cilt.112, ss.5-12, 2016 (SCI-Expanded)
- XXI. A study of K shell X-ray intensity ratios of $NixCr_{1-x}$ alloys in external magnetic field and determination of effective atomic numbers of these alloys**
Perisanoglu U., DEMİR L.
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- XXII. Determination of effective atomic numbers for 3d transition metal alloys with a new semi-empirical approach**
HAN İ., AYGÜN M., DEMİR L., ŞAHİN Y.
ANNALS OF NUCLEAR ENERGY, cilt.39, sa.1, ss.56-61, 2012 (SCI-Expanded)
- XXIII. Angular Distribution of Fluorescent L X-Rays and Compton-Scattering Photons**
HAN İ., DEMİR L.
SPECTROSCOPY LETTERS, cilt.44, sa.2, ss.95-102, 2011 (SCI-Expanded)
- XXIV. A study on the mean free path and half value layer at various alloys for different photon energies**
HAN İ., AYGÜN M., DEMİR L., Narmanlı E.
JOURNAL OF X-RAY SCIENCE AND TECHNOLOGY, cilt.19, sa.4, ss.501-508, 2011 (SCI-Expanded)
- XXV. Angular dependence of L-3-subshell X-ray emission following photoionisation**
HAN İ., DEMİR L.
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- XXVI. Alloying effect on K to L shell vacancy transfer probabilities in 3d transition metals**
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- XXVII. Relative K x-ray intensity studies on valence-electron structure of Ti and Co in $TixCo_{1-x}$ alloys**
HAN İ., DEMİR L.
PHYSICAL REVIEW A, cilt.82, sa.4, 2010 (SCI-Expanded)
- XXVIII. Charge transfer and delocalization studies from K beta-to-K alpha intensity ratios in $CoxCu_{1-x}$ alloys**
HAN İ., DEMİR L.
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- XXIX. Measurement of L alpha, L beta and Total L X-ray fluorescence cross-sections for some elements with $40 \leq Z \leq 53$**
HAN İ., PORİKLİ S., ŞAHİN M., DEMİR L.
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- XXX. Studies on effective atomic numbers, electron densities and mass attenuation coefficients in Au alloys**

- HAN İ., DEMİR L.
JOURNAL OF X-RAY SCIENCE AND TECHNOLOGY, cilt.18, sa.1, ss.39-46, 2010 (SCI-Expanded)
- XXXI. **Valence-electron configuration of Fe, Cr, and Ni in binary and ternary alloys from K beta-to-K alpha x-ray intensity ratios**
HAN İ., DEMİR L.
Physical Review A, cilt.81, ss.1035-1039, 2010 (SCI-Expanded)
- XXXII. **Effect of annealing treatment on K to K intensity ratios of 3d transition metal alloys**
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Physical Review A, cilt.81, ss.1-5, 2010 (SCI-Expanded)
- XXXIII. **Studies on effective atomic numbers, electron densities from mass attenuation coefficients in $TixCo_{1-x}$ and $CoxCu_{1-x}$ alloys**
Han I., Demir L.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, cilt.267, ss.3505-3510, 2009 (SCI-Expanded)
- XXXIV. **Determination of mass attenuation coefficients, effective atomic and electron numbers for some natural minerals**
HAN İ., DEMİR L., ŞAHİN M.
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- XXXV. **Mass attenuation coefficients, effective atomic numbers and electron densities of undoped and differently doped GaAs and InP crystals**
DEMİR L., HAN İ.
ANNALS OF NUCLEAR ENERGY, cilt.36, sa.7, ss.869-873, 2009 (SCI-Expanded)
- XXXVI. **The polarization of X-rays and magnetic photoionization cross-sections for L-3 sub-shell**
HAN İ., ŞAHİN M., DEMİR L.
APPLIED RADIATION AND ISOTOPES, cilt.67, sa.6, ss.1027-1032, 2009 (SCI-Expanded)
- XXXVII. **Mass attenuation coefficients, effective atomic and electron numbers of Ti and Ni alloys**
Han I., Demir L.
RADIATION MEASUREMENTS, cilt.44, sa.3, ss.289-294, 2009 (SCI-Expanded)
- XXXVIII. **Determination of mass attenuation coefficients, effective atomic and electron numbers for Cr, Fe and Ni alloys at different energies**
HAN İ., DEMİR L.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, cilt.267, sa.1, ss.3-8, 2009 (SCI-Expanded)
- XXXIX. **Nondestructive analysis of the gold quarter liras**
Çakır C., Gürol A., Demir L., Şahin Y.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, cilt.279, sa.1, ss.345-348, 2009 (SCI-Expanded)
- XL. **Angular variations of K and L X-ray fluorescence cross sections for some lanthanides**
HAN İ., ŞAHİN M., DEMİR L.
CANADIAN JOURNAL OF PHYSICS, cilt.86, sa.2, ss.361-367, 2008 (SCI-Expanded)
- XLI. **Measurement of L X-ray fluorescence cross sections and relative intensities for some elements in the atomic range 78 <= Z <= 92**
DEMİR L., HAN İ., ŞAHİN M. H.
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- XLII. **Measurements of L X-ray production cross sections, L subshell fluorescence yields and K to L shell vacancy transfer probabilities**
HAN İ., DEMİR L., AĞBABA m.
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- XLIII. **Measurement of K X-ray fluorescence cross-sections, fluorescence yields and intensity ratios for some elements in the atomic range 22 <= Z <= 68**
HAN İ., ŞAHİN M., DEMİR L., ŞAHİN Y.

- APPLIED RADIATION AND ISOTOPES, cilt.65, sa.6, ss.669-675, 2007 (SCI-Expanded)
- XLIV. **F-4 Effect of X-ray Tube Power On Intensities of K α X-Rays of Trace Elements from Samples Obtained by Using Different Sample Preparation Methods in WDXRF Spectrometer**
DEMİR F., HAN İ., budak G., DEMİR L., GÜROL A., KARABULUT A.
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- XLV. **F-10 Determination of K to L Vacancy Transfer Probabilities**
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- XLVI. **Measurement of K X-ray fluorescence cross-sections and yields for 5.96 keV photons**
ŞAHİN M., Demir L., Budak G.
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- XLVII. **Measurement of L I , L α , L β and L γ X-ray fluorescence cross-sections in Hg, Tl, Pb and Bi for the exciting photons of 16.90-59.54keV energy**
BAŞTUĞ A., YALÇIN P., DEMİR L., Şahin Y.
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- XLVIII. **Measurement of angular dependencies of M X-ray differential cross sections and production cross sections using 5.96 keV photons**
ŞAHİN M., Demir L., Kurucu Y.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, cilt.261, sa.2, ss.415-419, 2004 (SCI-Expanded)
- XLIX. **Angular dependence of L I , L α , L β and L γ X-ray differential and fluorescence cross-sections for Er, Ta, W, Au, Hg and Tl**
DEMİR L., ŞAHİN M. H., KURUCU Y., KARABULUT A., ŞAHİN Y.
Radiation Physics and Chemistry, cilt.67, sa.5, ss.605-612, 2003 (SCI-Expanded)
- L. **Angular dependence of L X-ray differential cross-section for In, Sn, Sb, and Te at 5.96 keV**
Demir L., Sahin M., Sahin Y.
JOURNAL OF TRACE AND MICROPROBE TECHNIQUES, cilt.21, sa.4, ss.593-599, 2003 (SCI-Expanded)
- LI. **Conformational analysis of Pol-RFamide II (Glu(1)-Trp(2)-Leu(3)-Lys(4)-Gly(5)-Arg(6)-Phe(7)-NH₂) heptapeptide**
Demir L., Godjaev N.
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- LII. **Calculation of multi-center integrals for the region of moderate and weak overlap**
KARABULUT A., budak G., DEMİR L., NABIYEV N., ŞAHİN Y.
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- LIII. **Measurement of angular dependence of photon-induced differential cross-sections of M X-rays from Pt, Au and Hg at 5.96 keV**
Demir L., Sahin M., Sogut O., Sahin Y.
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- LIV. **L-subshell fluorescence cross sections and L-subshell fluorescence yields in elements 68 <= Z <= 92 by 59.5 keV photons**
ŞAHİN M., DEMİR L., SÖZÜT Ö., Ertugrul M., İÇELİ O.
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, cilt.33, sa.1, ss.93-98, 2000 (SCI-Expanded)
- LV. **Measurement of K alpha and K beta fluorescence cross sections for elements in the range 44 <= Z <= 68 at 59.5 keV**
Budak G., Karabulut A., Demir L., Sahin Y.
PHYSICAL REVIEW A, cilt.60, sa.3, ss.2015-2017, 1999 (SCI-Expanded)
- LVI. **K alpha and K beta X-ray fluorescence cross-sections in the atomic region 26 <= Z <= 42 excited by 59.5 keV photons**
Karabulut A., Budak G., Demir L., Sahin Y.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, cilt.155, sa.4, ss.369-372, 1999 (SCI-Expanded)
- LVII. **Incoherent scattering functions of 59.5 keV gamma rays by Ti, Ni, Zr, In, Au and Pb**

- Kurucu Y., Demir L., Sahin Y.
 PHYSICA SCRIPTA, cilt.59, sa.2, ss.118-121, 1999 (SCI-Expanded)
- LVIII. **Conformational analysis of linear peptide (Glu(1)-Leu(2)-Leu(3)-Gly(4)-Gly(5)-Arg(6)-Phe(7)NH(2))**
 Demir L., Karabulut A., Budak G., Sahin Y., Sefterooglu N.
 TURKISH JOURNAL OF CHEMISTRY, cilt.23, sa.3, ss.257-262, 1999 (SCI-Expanded)
- LIX. **Experimental studies on the coherent scattering of 59.5 keV gamma-rays by Fe, Zn and Nb**
 Erzeneoglu S. Z., Demir L., Sahin Y.
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- LX. **Conformational analysis of the sea anemone and sea pansies neuropeptide Antho-RFamide (Glu(1)-Gly(2)-Arg(3)-Phe(4)-NH₂) by molecular-mechanics calculations**
 DEMİR L., SEFTEROĞLU N., BUDAK G., KARABULUT A., ŞAHİN Y.
 NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA D-CONDENSED MATTER ATOMIC MOLECULAR AND CHEMICAL PHYSICS FLUIDS PLASMAS BIOPHYSICS, cilt.19, sa.6, ss.827-833, 1997 (SCI-Expanded)
- LXI. **Monte Carlo calculations of XRF intensities in annular arrangements of radioactive source, sample, cylindrical collimator and detector**
 Budak C., Karabulut A., Demir L., Sahin Y.
 APPLIED SPECTROSCOPY REVIEWS, cilt.31, sa.3, ss.321-332, 1996 (SCI-Expanded)

Diger Dergilerde Yayınlanan Makaleler

- I. **Studies on mass attenuation coefficient, mass energy absorption coefficient, and kerma for Fe alloys at photon energies of 17.44 to 51.70 keV**
 YILMAZ D., SAHİN Y., DEMİR L.
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- II. **X Ray Intensity Ratios for Elements from 22 Z 40**
 KÜÇÜKKÖNDER A., ŞAHİN Y., DEMİR L., BÜYÜKKASAP E.
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- III. **X-ray Fluorescence in some medium-Z elements excited by 59.5 keV photons**
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- IV. **Kacal, The Change of Compton Scattering Depending on Tendency of crystals**
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- V. **X ray Fluorescence in some medium Z elements excited by 59 5 keV photons Volume XVI Issue2 2010 Pages 628 632**
 HAN İ., DEMİR L.
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 Demir L.
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- VII. **Computation of Overlap Kinetic and Nuclear Attraction Integrals by a Novel Method**
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- VIII. **X-Ray Intensity Ratios for Elements from 20- Z-40.**
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Kitap & Kitap Bölümleri

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Demir L.

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