

Prof.Dr. ŞENAY KATIRCIOĞLU

Kişisel Bilgiler

E-posta: senay@metu.edu.tr

Web: <https://avesis.metu.edu.tr/senay>

Eğitim Bilgileri

Doktora, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, Türkiye 1982 - 1987

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, Türkiye 1979 - 1982

Lisans, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, Türkiye 1974 - 1979

Yaptığı Tezler

Doktora, Two dimensional systems in solid state physics, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 1987

Yüksek Lisans, Electronic Properties of Si (Schottky) Diodes, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 1982

Akademik Unvanlar / Görevler

Prof.Dr., Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 1998 - Devam Ediyor

Doç.Dr., Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 1989 - 1998

Öğretim Görevlisi, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 1988 - 1989

Yönetilen Tezler

KATIRCIOĞLU Ş., The adsorption and dissociation of AsH₃ ve B₂H₆ molecules on stepped Ge(100) surface, Yüksek Lisans, M.TÜRKMENOĞLU(Öğrenci), 2011

KATIRCIOĞLU Ş., AsH₃ and B₂H₆ moleküllerinin basamaklı Ge(100) yüzeyine yapışması ve ayrışması, Yüksek Lisans, M.Türkmenoğlu(Öğrenci), 2011

KATIRCIOĞLU Ş., The electronic band structure of III (In, Al, Ga)-V (N,As, Sb) compounds and ternary alloys, Doktora, R.MOHAMMAD(Öğrenci), 2005

KATIRCIOĞLU Ş., Electronic band structure of stepped Si(100) and water-stepped Si(100) systems, Doktora, S.SAED(Öğrenci), 2000

KATIRCIOĞLU Ş., Adsorption of O, H and water and stepped Si (100) surface, Yüksek Lisans, S.SAED(Öğrenci), 1997

KATIRCIOĞLU Ş., Adsorption of O,H and water on stepped SI(100) surface, Yüksek Lisans, S.A(Öğrenci), 1997

KATIRCIOĞLU Ş., The Water adsorption on silicon (110) surface, Yüksek Lisans, I.AL(Öğrenci), 1992

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

1. **Structural stability and electronic properties of different cross-sectional unstrained and rectangular cross-sectional strained GaP nanowires**
Mohammad R., KATIRCIOĞLU Ş.

- INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.33, sa.4, 2019 (SCI İndekslerine Giren Dergi)
- II. **First-principles calculations for mechanical and electronic features of strained GaP nanowires**
Mohammad R., KATIRCIOĞLU Ş.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, cilt.28, sa.3, 2017 (SCI İndekslerine Giren Dergi)
- III. **First-principles calculations for the structural and electronic properties of GaAs_{1-x}P_x nanowires**
Mohammad R., KATIRCIOĞLU Ş.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, cilt.27, sa.3, 2016 (SCI İndekslerine Giren Dergi)
- IV. **Structural and electronic properties of GaP nanowires**
Mohammad R., KATIRCIOĞLU Ş.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, cilt.73, ss.213-219, 2015 (SCI İndekslerine Giren Dergi)
- V. **Structural properties of Aluminum nitride compound**
Mohammad R., KATIRCIOĞLU Ş.
INDIAN JOURNAL OF PHYSICS, cilt.88, sa.10, ss.1021-1029, 2014 (SCI İndekslerine Giren Dergi)
- VI. **FIRST-PRINCIPLES CALCULATIONS FOR THE STRUCTURAL AND ELECTRONIC PROPERTIES OF Sc_xAl_{1-x}N ALLOYS**
Mohammad R., KATIRCIOĞLU Ş.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, cilt.24, sa.10, 2013 (SCI İndekslerine Giren Dergi)
- VII. **THE STRUCTURAL AND ELECTRONIC PROPERTIES OF BN_xAs_{1-x} ALLOYS**
Mohammad R., KATIRCIOĞLU Ş.
SURFACE REVIEW AND LETTERS, cilt.19, sa.5, 2012 (SCI İndekslerine Giren Dergi)
- VIII. **A comparative study for structural and electronic properties of single-crystal ScN**
Mohammad R., KATIRCIOĞLU Ş.
CONDENSED MATTER PHYSICS, cilt.14, sa.2, 2011 (SCI İndekslerine Giren Dergi)
- IX. **The structural and electronic properties of BAs and BP compounds and BP_xAs_{1-x} alloys**
Mohammad R., KATIRCIOĞLU Ş.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.485, ss.687-694, 2009 (SCI İndekslerine Giren Dergi)
- X. **The structural and electronic properties of BN and BP compounds and BN_xP_{1-x} alloys**
Mohammad R., KATIRCIOĞLU Ş.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.478, ss.531-537, 2009 (SCI İndekslerine Giren Dergi)
- XI. **The electronic band structures of InN_xAs_{1-x}, InN_xSb_{1-x} and InAs_xSb_{1-x} alloys**
Mohammad R., KATIRCIOĞLU Ş.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.469, ss.504-511, 2009 (SCI İndekslerine Giren Dergi)
- XII. **Adsorption and dissociation of PH₃ on SiGe(100) (2x1) surface**
Turkmenoglu M., KATIRCIOĞLU Ş.
SURFACE REVIEW AND LETTERS, cilt.15, sa.3, ss.307-317, 2008 (SCI İndekslerine Giren Dergi)
- XIII. **The electronic band structure of InN, InAs and InSb compounds**
Mohammad R., KATIRCIOĞLU Ş., El-Hasan M.
JOURNAL OF MATERIALS SCIENCE, cilt.43, sa.8, ss.2935-2946, 2008 (SCI İndekslerine Giren Dergi)
- XIV. **The electronic structure of capped and uncapped CdS nanoparticles**
Ercan I., KATIRCIOĞLU Ş.
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, cilt.8, sa.2, ss.645-649, 2008 (SCI İndekslerine Giren Dergi)
- XV. **The electronic band structure of Gan, GaAs and In_xGa_{1-x}As_{1-y}N_y alloys**
Mohammad R., KATIRCIOĞLU Ş.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.21, sa.25, ss.4357-4375, 2007 (SCI İndekslerine Giren Dergi)
- XVI. **Dissociation of Ph-3 and AsH₃ on Ge(100)(2x1) surface**
Katircioglu S.
SURFACE REVIEW AND LETTERS, cilt.14, sa.3, ss.507-515, 2007 (SCI İndekslerine Giren Dergi)
- XVII. **The electronic band structure of AlN, AlSb, AlAs and their ternary alloys with In**
Mohammad R., Katircioglu S.

- INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.20, sa.22, ss.3199-3221, 2006 (SCI İndekslerine Giren Dergi)
- XVIII. **The electronic structure of Ga_nPm_{n+m} ($n+m = 5, 17, 29, 35$), $Ga_{13}P_4$ (in SiO_2) and $Ga_{13}P_4$ (in sodalite) clusters**
Katircioglu S., Kokten H.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.712, ss.67-73, 2004 (SCI İndekslerine Giren Dergi)
- XIX. **Electronic structure of Ge-5, Ge-17, Ge-5-O, and Ge-5-SiO₂ nanoparticles**
Katircioglu S.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.680, ss.83-89, 2004 (SCI İndekslerine Giren Dergi)
- XX. **Adsorption sites of the products of GeH₄ on asymmetric Si(100)(2 x 1) surface**
Katircioglu S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.18, sa.8, ss.1191-1202, 2004 (SCI İndekslerine Giren Dergi)
- XXI. **Decomposition of Ge₂H₆ on the Si(100)(2x1) surface**
Katircioglu S.
SURFACE REVIEW AND LETTERS, cilt.10, sa.4, ss.577-583, 2003 (SCI İndekslerine Giren Dergi)
- XXII. **Structure and stability of Ga_nCm_n clusters**
Katircioglu S.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.629, ss.295-302, 2003 (SCI İndekslerine Giren Dergi)
- XXIII. **Decomposition of CH₄ on S-A type stepped Si(100) surface**
Katircioglu S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.16, sa.16, ss.2191-2200, 2002 (SCI İndekslerine Giren Dergi)
- XXIV. **Decomposition of SiH₄ on the S-A type stepped Si(100) surface**
Katircioglu S., Erkok S.
SURFACE REVIEW AND LETTERS, cilt.9, ss.1401-1407, 2002 (SCI İndekslerine Giren Dergi)
- XXV. **Density functional theory calculations of small Zn_mSn_n clusters**
Katircioglu S., Erkok A.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.546, ss.99-106, 2001 (SCI İndekslerine Giren Dergi)
- XXVI. **Adsorption of water on single and double layer stepped Si(100) surfaces**
Katircioglu S., Salman S., Erkok S.
SURFACE REVIEW AND LETTERS, cilt.8, ss.251-259, 2001 (SCI İndekslerine Giren Dergi)
- XXVII. **Adsorption of hydrogen and oxygen on single and double layer stepped Si(100) surfaces**
Salman S., Katircioglu S., Erkok S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.15, sa.16, ss.2261-2274, 2001 (SCI İndekslerine Giren Dergi)
- XXVIII. **Structural and electronic properties of In_mSn_n microclusters: density functional theory calculations**
Erkok S., Katircioglu S., Yilmaz T.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.542, ss.101-105, 2001 (SCI İndekslerine Giren Dergi)
- XXIX. **Structural and electronic properties of bare and hydrogenated silicon clusters**
Katircioglu S., Erkok S.
PHYSICA E, cilt.9, sa.2, ss.314-320, 2001 (SCI İndekslerine Giren Dergi)
- XXX. **Electronic band structure of stepped Si(100) surfaces**
Salman S., Katircioglu S., Erkok S.
SURFACE REVIEW AND LETTERS, cilt.8, ss.61-66, 2001 (SCI İndekslerine Giren Dergi)
- XXXI. **Molecular-dynamics simulation of stepped Si(100) surface**
Katircioglu S., Salman S., Erkok S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, cilt.11, sa.5, ss.999-1011, 2000 (SCI İndekslerine Giren Dergi)
- XXXII. **Decomposition of C-60 molecules on Si(100)(2 x 1) surface**
Erkok S., Katircioglu S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, cilt.11, sa.5, ss.1067-1076, 2000 (SCI İndekslerine Giren

Dergi)

- XXXIII. **Atomic and electronic properties of spherical silicon clusters**
Erkoc S., Katircioglu S.
PHYSICA E, cilt.4, sa.3, ss.185-191, 1999 (SCI İndekslerine Giren Dergi)
- XXXIV. **Adsorption of oxygen and hydrogen on stepped Si(100) surface**
Salman S., Katircioglu S.
PHYSICA STATUS SOLIDI B-BASIC RESEARCH, cilt.213, sa.2, ss.333-341, 1999 (SCI İndekslerine Giren Dergi)
- XXXV. **Dependence of energy levels and optical transitions on layer thicknesses in InSe/GaSe superlattices**
Erkoc S., Katircioglu S.
JOURNAL OF CRYSTAL GROWTH, cilt.194, ss.331-335, 1998 (SCI İndekslerine Giren Dergi)
- XXXVI. **Optical transitions in InSe/GaSe superlattices**
Katircioglu S., Erkoc S., Allahverdi K.
THIN SOLID FILMS, cilt.323, ss.194-198, 1998 (SCI İndekslerine Giren Dergi)
- XXXVII. **Adsorption of H₂O on double layer stepped Si(111) surface**
Katircioglu S., Erkoc S.
SURFACE SCIENCE, cilt.374, ss.208-214, 1997 (SCI İndekslerine Giren Dergi)
- XXXVIII. **Optical transitions in Si/Ge superlattices**
Erkoc S., Katircioglu S.
THIN SOLID FILMS, cilt.295, ss.206-209, 1997 (SCI İndekslerine Giren Dergi)
- XXXIX. **Water adsorption on the stepped Si(110) surface**
Katircioglu S., Erkoc S.
PHYSICA STATUS SOLIDI B-BASIC RESEARCH, cilt.196, sa.1, ss.77-84, 1996 (SCI İndekslerine Giren Dergi)
- XL. **ADSORPTION SITES OF GE ADATOMS ON STEPPED SI(110) SURFACE**
KATIRCIOGLU S., ERKOC S.
SURFACE SCIENCE, cilt.311, sa.3, 1994 (SCI İndekslerine Giren Dergi)
- XLI. **DEPENDENCE OF RESONANCE STATES ON DOPING LEVEL AND DOPING DISTRIBUTION TYPE IN GAAS GA_{0.75}AL_{0.25}AS SUPERLATTICE**
KATIRCIOGLU S., ERKOC S.
SURFACE SCIENCE, cilt.311, 1994 (SCI İndekslerine Giren Dergi)
- XLII. **EMPIRICAL TIGHT-BINDING TOTAL ELECTRONIC-ENERGY CALCULATION FOR SiH₂M (N = 1 TO 6, M = 1 TO 3) CLUSTERS**
KATIRCIOGLU S., ERKOC S.
PHYSICA STATUS SOLIDI B-BASIC RESEARCH, cilt.177, sa.2, ss.373-378, 1993 (SCI İndekslerine Giren Dergi)
- XLIII. **WATER-ADSORPTION ON THE SI(110) SURFACE**
ALHAYEK I., KATIRCIOGLU S.
SURFACE SCIENCE, cilt.286, ss.92-96, 1993 (SCI İndekslerine Giren Dergi)
- XLIV. **ELECTRONIC-ENERGY CALCULATION OF C-60 CLUSTERS**
KATIRCIOGLU S., ERKOC S., HALICIOGLU T.
MATERIALS CHEMISTRY AND PHYSICS, cilt.34, sa.1, ss.78-80, 1993 (SCI İndekslerine Giren Dergi)
- XLV. **STRUCTURAL STABILITY AND ENERGETICS OF Si₄ ISOMERS - TOTAL ELECTRONIC-ENERGY CALCULATION**
KATIRCIOGLU S., ERKOC S.
CHEMICAL PHYSICS LETTERS, cilt.184, ss.118-120, 1991 (SCI İndekslerine Giren Dergi)
- XLVI. **STRUCTURAL STABILITY AND ENERGETICS OF AS, SB AND BI MICROCLUSTERS - EMPIRICAL MANY-BODY POTENTIAL-ENERGY FUNCTION CALCULATION**
KATIRCIOGLU S., ERKOC S.
CHEMICAL PHYSICS LETTERS, cilt.182, sa.5, ss.451-454, 1991 (SCI İndekslerine Giren Dergi)
- XLVII. **MOLECULAR-DYNAMICS SIMULATION OF GALLIUM MICROCLUSTERS**
KATIRCIOGLU S., ERKOC S.
JOURNAL OF CRYSTAL GROWTH, cilt.94, sa.3, ss.807-809, 1989 (SCI İndekslerine Giren Dergi)
- XLVIII. **METALLIC PHASE OF AMORPHOUS-SILICON**

- ERKOC S., KATIRCIOGLU S.
JOURNAL OF NON-CRYSTALLINE SOLIDS, cilt.107, ss.328-329, 1989 (SCI İndekslerine Giren Dergi)
- XLIX. **DISSOCIATION OF Au-n (n=3,4) MICROCLUSTERS: A MOLECULAR DYNAMICS SIMULATION**
Katircioglu S., Erkoc S.
MOLECULAR SIMULATION, cilt.4, sa.4, ss.247-250, 1989 (SCI İndekslerine Giren Dergi)
- L. **MOLECULAR-DYNAMICS SIMULATION OF GOLD MICROCLUSTERS**
ERKOC S., KATIRCIOGLU S.
CHEMICAL PHYSICS LETTERS, cilt.147, sa.5, ss.476-478, 1988 (SCI İndekslerine Giren Dergi)
- LI. **INTERACTION OF WATER MOLECULE WITH SILICON SURFACES**
KATIRCIOGLU S.
SURFACE SCIENCE, cilt.187, ss.569-579, 1987 (SCI İndekslerine Giren Dergi)
- LII. **Dihydride Phase on Si (110) Surface**
Katirciođlu Ő., Őıracı S.
Solid State Communications, cilt.56, sa.10, ss.877-880, 1985 (SCI Expanded İndekslerine Giren Dergi)

Diđer Dergilerde Yayınlanan Makaleler

- I. **A comparative study of the electronic properties of aluminum nitride compounds**
Mohammad R., KATIRCIOĐLU Ő.
TURKISH JOURNAL OF PHYSICS, cilt.40, sa.3, ss.219-230, 2016 (ESCI İndekslerine Giren Dergi)

Atıflar

Toplam Atıf Sayısı (WOS):235
h-İndeksi (WOS):8