

Prof. Ahmet Altındal

Personal Information

Email: altindal@itu.edu.tr

Web: <https://avesis.itu.edu.tr/altindal>

International Researcher IDs

ORCID: 0000-0002-2185-4094

ScopusID: 6506595283

Yoksis Researcher ID: 189450

Research Areas

Natural Sciences

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Nitrate Ion Sensing Properties of Peripheral 3,4,5-Trimethoxyphenoxy and Chlorine Substituted Metallo and Metal-free Phthalocyanines**
Bilen Şentürk C., ŞAHİN A. N., Çetin A., ALTINDAL A., ODABAŞ Z.
Journal of Inorganic and Organometallic Polymers and Materials, vol.32, no.4, pp.1436-1447, 2022 (SCI-Expanded)
- II. **A series of asymmetric zinc (II) phthalocyanines containing fluoro and alkynyl groups: Synthesis and examination of humidity sensing performance by using QCM based sensor**
Ahmetali E., Pekbelgin Karaoğlu H. R., Urfa Y., ALTINDAL A., Koçak M.
MATERIALS CHEMISTRY AND PHYSICS, vol.254, 2020 (SCI-Expanded)
- III. **Investigation of the photoconductive properties of thiophene substituted metallo-phthalocyanines**
Kumral E., Yenilmez H. Y., Albayrak S., Şahin A. N., Altindal A., Bayır Z.
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- IV. **Thiazole-substituted non-symmetrical metallophthalocyanines: synthesis, characterization, electrochemical and heavy metal ion sensing properties**
Beduoglu A., Sevim A. M., Koca A., Altindal A., Bayır Z.
NEW JOURNAL OF CHEMISTRY, vol.44, pp.5201-5210, 2020 (SCI-Expanded)
- V. **Sensing alcohol vapours with novel unsymmetrically substituted metallophthalocyanines**
Polat M. P., Akyuz D., Yenilmez H. Y., KOCA A., ALTINDAL A., Bayır Z.
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- VI. **pi-Extended hexadeca-substituted cobalt phthalocyanine as an active layer for organic field-effect transistors**
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- VII. **Metallophthalocyanines bearing four 3-(pyrrol-1-yl)phenoxy units as photosensitizer for dye-sensitized solar cells**
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- VIII. **Ferrocenyl Phthalocyanine as Donor in Non-Poly(3-hexylthiophen-2,5-diyl) Bulk Heterojunction Solar Cell**
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- CHEMISTRY-A EUROPEAN JOURNAL, vol.24, no.27, pp.6946-6949, 2018 (SCI-Expanded)
- IX. **Synthesis, characterization and OFET property of four diaminouracil bridged novel ball-type phthalocyanines**
Yazici A., Avci A., ALTINDAL A., SALİH B., Bekaroglu O.
JOURNAL OF PORPHYRINS AND PHTHALOCYANINES, vol.22, pp.149-156, 2018 (SCI-Expanded)
- X. **Electrochemical, spectroelectrochemical, and dielectric properties of metallophthalocyanines bearing redox active cobalt and manganese metal centres**
UZUNMEHMETOGLU H. Z., Yenilmez H. Y., Kaya K., Koca A., ALTINDAL A., Bayir Z. A.
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- XI. **Partition coefficient-Lewis basicity correlation in four dioxycyclobutenedion-bridged novel ball-type phthalocyanines**
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- XII. **Microwave-assisted synthesis of novel non-peripherally substituted metallophthalocyanines and their sensing behaviour for a broad range of Lewis bases**
Duruk E. G., Yenilmez H. Y., ALTINDAL A., BAYIR Z. A.
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- XIII. **Synthesis, characterization and gas sensing properties of novel homo and hetero dinuclear ball-type phthalocyanines**
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- XIV. **Kinetics of CO₂ adsorption on ball-type dicopper phthalocyanine thin film**
ALTINDAL A., Kurt O., ŞENGÜL A., Bekaroglu O.
SENSORS AND ACTUATORS B-CHEMICAL, vol.202, pp.373-381, 2014 (SCI-Expanded)
- XV. **Ethanol sensing property of novel phthalocyanines substituted with 3,4-dihydroxy-3-cyclobuten-1,2-dione**
Yazici A., Dalbul N., ALTINDAL A., SALİH B., Bekaroglu O.
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- XVI. **A.c. and d.c. conduction processes in octakis[(4-tert-butylbenzylthio)-porphyrzinato]Cu(II) thin films with gold electrodes**
KESKİN B., ALTINDAL A., Avciata U., Gül A.
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- XVII. **Synthesis, characterization, oxygen electrocatalysis and OFET properties of novel mono- and ball-type metallophthalocyanines**
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- XVIII. **Synthesis, characterization, electrochemistry and VOC sensing properties of novel metallophthalocyanines with four cyclohexyl-phenoxyphthalonitrile groups**
Kaki E., ÖZKAYA A. R., ALTINDAL A., SALİH B., Bekaroglu O.
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- XIX. **Analysis of rectifying behavior of novel ball-type binuclear phthalocyanine based devices**
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- XX. **Synthesis, characterization, OFET and electrochemical properties of novel dimeric metallophthalocyanines**
Ozer L. M., ÖZER M., Altindal A., ÖZKAYA A. R., SALİH B., Bekaroglu O.
DALTON TRANSACTIONS, vol.42, no.18, pp.6633-6644, 2013 (SCI-Expanded)
- XXI. **Synthesis of Ni(II) porphyrazine peripherally 4-tert-butylbenzylthio moiety and electronic Schottky barrier diode octa-substituted with the properties of the Al/Ni(II)Pz/p-Si Schottky barrier diode**
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- XXV. **Photovoltaic and electrocatalytic properties of novel ball-type phthalocyanines bridged with four dicumarol**
SALAN Ü., ALTINDAL A., ÖZKAYA A. R., SALİH B., Bekaroglu O.
DALTON TRANSACTIONS, vol.41, no.17, pp.5177-5187, 2012 (SCI-Expanded)
- XXVI. **Synthesis, characterization, and electrochemical and electrical properties of novel mono and ball-type metallophthalocyanines with four 9,9-bis(4-hydroxyphenyl)fluorene**
Ağırtaş M. S., Altindal A., SALİH B., SAYDAM S., Bekaroglu O.
DALTON TRANSACTIONS, vol.40, no.13, pp.3315-3324, 2011 (SCI-Expanded)
- XXVII. **Synthesis and electrochemical, electrical and gas sensing properties of novel mononuclear metal-free, Zn(II), Ni(II), Co(II), Cu(II), Lu(III) and double-decker Lu(III) phthalocyanines substituted with 2-(2H-1,2,3-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl) phenoxy**
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- XXVIII. **Synthesis and characterization, novel across adjacent ring formed phthalocyanine**
ELMALI D., Altindal A., ÖZKAYA A. R., SALİH B., Bekaroglu O.
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- XXIX. **Synthesis and electrochemical, in situ spectroelectrochemical, electrical and gas sensing properties of ball-type homo- and hetero-dinuclear phthalocyanines with four [1a,8b-dihydronaphtho[b]naphthofuro[3,2-d]furan-7,10-diyl] bridges**
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SYNTHETIC METALS, vol.160, pp.967-977, 2010 (SCI-Expanded)
- XXX. **Novel ball-type homo- and hetero-dinuclear phthalocyanines with four 1,1'-methylenediphenylbenzene-2-ol bridges: Synthesis and characterization, electrical and gas sensing properties and electrocatalytic performance towards oxygen reduction**
ODABAŞ Z., Altindal A., ÖZKAYA A. R., SALİH B., Bekaroglu O.
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- XXXI. **Novel ball-type four dithioerythritol bridged metallophthalocyanines and their water-soluble derivatives: Synthesis and characterization, and electrochemical, electrocatalytic, electrical and gas sensing properties**
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- XXXII. **Synthesis, characterization, and electrocatalytic and electrical properties of novel ball-type four cyclopentyldisilanoxy-POSS bridged metallophthalocyanines**
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- XXXV. **Synthesis, characterization, and electrochemical, and electrical measurements of novel 4,4'-isopropylidenedioxydiphenyl bridged bis and cofacial bis-metallocphthalocyanines (Zn, Co)**
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- XXXVI. **Synthesis and characterization of novel cofacial bis-phthalocyanines containing 16-crown-5 ether groups**
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- XL. **Synthesis, characterization, and electrochemical and electrical properties of novel mononuclear and binuclear ball-type Zn(II) phthalocyanines substituted with 1a,8b-dihydronaphtho[b]naphthofuro-[3,2-d]furan-7,10-diyl**
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- XLI. **Synthesis, characterization, and electrochemical and electrical properties of a novel ball-type hexanuclear metallocphthalocyanine, bridged by calix[4]arenes substituted with four hexylthiometallocphthalocyanines through nitro coupling**
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