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Education Information

Doctorate, Anadolu University, Chemistry, Turkey 2003 - 2010

Postgraduate, Anadolu University, Chemistry , Turkey 2000 - 2003

Undergraduate, Anadolu University, Science Faculty, Chemistry, Turkey 1996 - 2000

Research Areas

Metallurgical and Materials Engineering, Chemistry

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Selective photocatalytic and photoelectrocatalytic synthesis of valuable compounds in aqueous medium**
Bellardita M., Loddo V., Augugliaro V., Palmisano L., YURDAKAL S.
Catalysis Today, vol.432, 2024 (SCI-Expanded)
- II. **Transient photocatalytic oxidation of toluene vapor via nanostructured layers prepared by sol-gel on anatase particles**
Soria J., Sanz J., Sobrados I., Fresno F., YURDAKAL S., Augugliaro V.
Journal of Environmental Chemical Engineering, vol.12, no.1, 2024 (SCI-Expanded)
- III. **Voltammetric determination of arbutin using carbon paste electrode modified with low crystalline home-prepared rutile TiO₂ nanoparticles**
Özcan L., Ünlüsoy B., Yurdakal S.
Materials Chemistry and Physics, vol.301, 2023 (SCI-Expanded)
- IV. **Selective photoelectrocatalytic oxidation of 3-methylpyridine to vitamin B3 by WO₃ decorated nanotube-structured TiO₂**
Çetinkaya S., Özcan L., Alagöz O., Palmisano L., Yurdakal S.
Chemical Communications, vol.59, no.38, pp.5741-5744, 2023 (SCI-Expanded)
- V. **Preparation of PHEMA/TiO₂ nanocomposites by combination of in-situ polymerization/hydrothermal method and determination of their thermal, swelling, biological and dielectric properties**

- Erol I., Yurdakal S., Demirelli K., Gurler Z.
JOURNAL OF POLYMER RESEARCH, vol.29, no.7, 2022 (SCI-Expanded)
- VI. Selective Photocatalytic Oxidation of Glycerol and 3-Pyridinemethanol by Nanotube/Nanowire-Structured TiO₂ Powders Obtained by Breakdown Anodization
Cetinkaya S., Khamidov G., Ozcan L., Palmisano L., Yurdakal S.
FRONTIERS IN CHEMISTRY, vol.10, 2022 (SCI-Expanded)
- VII. Selective photoelectrocatalytic oxidation of glycerol by nanotube, nanobelt and nanosponge structured TiO₂ on Ti plates
Cetinkaya S., Khamidov G., Oezcan L., Palmisano L., Yurdakal S.
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.10, no.2, 2022 (SCI-Expanded)
- VIII. Partial photoelectrocatalytic oxidation of 3-pyridinemethanol by Pt, Au and Pd loaded TiO₂ nanotubes on Ti plate
YURDAKAL S., Cetinkaya S., Ozcan L., Gok O., Palmisano L.
CATALYSIS TODAY, vol.380, pp.248-258, 2021 (SCI-Expanded)
- IX. Aqueous selective photocatalytic oxidation of salicyl alcohol by TiO₂ catalysts: Influence of some physico-chemical features
Yurdakal S., Bellardita M., Pibiri I., Palmisano L., Loddo V.
CATALYSIS TODAY, vol.380, pp.16-24, 2021 (SCI-Expanded)
- X. Preface to the special issue entitled "New frontiers in photo(thermo)catalysis" in honour of Prof. Leonardo Palmisano
Augugliaro V., Loddo V., Bellardita M., Marci G., Yurdakal S.
CATALYSIS TODAY, vol.380, pp.1-2, 2021 (SCI-Expanded)
- XI. Partial photocatalytic oxidations of 3-pyridinemethanol and 3-picoline by TiO₂ prepared in HCl, HNO₃ and H₂SO₄ at different temperatures
Cetinkaya S., YURDAKAL S.
CATALYSIS TODAY, vol.380, pp.237-247, 2021 (SCI-Expanded)
- XII. Tuning the selectivity to aldehyde via pH regulation in the photocatalytic oxidation of 4-methoxybenzyl alcohol and vanillyl alcohol by TiO₂ catalysts
Bellardita M., YURDAKAL S., Tek B. S., Degirmenci C., Palmisano G., Loddo V., Palmisano L., Soria J., Sanz J., Augugliaro V.
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.9, no.4, 2021 (SCI-Expanded)
- XIII. Selective photocatalytic oxidation of 3-pyridinemethanol on platinized acid/base modified TiO₂
YURDAKAL S., Cetinkaya S., Augugliaro V., Palmisano G., Sa J., Lewin E., Garlisi C.
CATALYSIS SCIENCE & TECHNOLOGY, vol.11, no.13, pp.4549-4559, 2021 (SCI-Expanded)
- XIV. Alkaline treatment as a means to boost the activity of TiO₂ in selective photocatalytic processes
YURDAKAL S., Cetinkaya S., Augugliaro V., Palmisano G., Soria J., Sanz J., Torralvo M. J., Livraghi S., Giamello E., Garlisi C.
CATALYSIS SCIENCE & TECHNOLOGY, vol.10, no.15, pp.5000-5012, 2020 (SCI-Expanded)
- XV. Photoelectrocatalytic oxidation of 3-pyridinemethanol to 3-pyridinemethanal and vitamin B-3 by TiO₂ nanotubes
Yurdakal S., Cetinkaya S., Sarlak M. B., Ozcan L., Loddo V., Palmisano L.
CATALYSIS SCIENCE & TECHNOLOGY, vol.10, no.1, pp.124-137, 2020 (SCI-Expanded)
- XVI. Heterogeneous photocatalysis: guidelines on experimental setup, catalyst characterization, interpretation, and assessment of reactivity
Parrino F., Loddo V., Augugliaro V., Camera-Roda G., Palmisano G., Palmisano L., YURDAKAL S.
CATALYSIS REVIEWS-SCIENCE AND ENGINEERING, vol.61, no.2, pp.163-213, 2019 (SCI-Expanded)
- XVII. Photoelectrocatalytic Degradation of Paraquat by Pt Loaded TiO₂ Nanotubes on Ti Anodes
Ozcan L., Mutlu T., YURDAKAL S.
MATERIALS, vol.11, no.9, 2018 (SCI-Expanded)
- XVIII. Influence of the Preparation Temperature on the Photocatalytic Activity of 3D-Ordered Macroporous Anatase Formed with an Opal Polymer Template

- Jose Torralvo-Fernandez M., Enciso E., Martinez S., Sobrados I., Sanz J., Toni D., Soria J., YURDAKAL S., Palmisano G., Augugliaro V.
ACS APPLIED NANO MATERIALS, vol.1, no.6, pp.2567-2578, 2018 (SCI-Expanded)
- XIX. **Anatase photocatalyst with supported low crystalline TiO₂: The influence of amorphous phase on the activity**
Torralvo M. J., Sanz J., Sobrados I., Soria J., Garlisi C., Palmisano G., Cetinkaya S., YURDAKAL S., Augugliaro V.
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.221, pp.140-151, 2018 (SCI-Expanded)
- XX. **Selective photoelectrocatalytic oxidation of 5-(hydroxymethyl)-2-furaldehyde in water by using Pt loaded nanotube structure of TiO₂ on Ti photoanodes**
Ozcan L., Yalcin P., Alagoz O., YURDAKAL S.
CATALYSIS TODAY, vol.281, pp.205-213, 2017 (SCI-Expanded)
- XXI. **Anatase nanoparticles boundaries resulting from titanium tetrachloride hydrolysis**
Sanz J., Sobrados I., Soria J., YURDAKAL S., Augugliaro V.
CATALYSIS TODAY, vol.281, pp.198-204, 2017 (SCI-Expanded)
- XXII. **Heterogeneous photocatalysis from fundamentals to possible applications**
Palmisano L., Loddo V., YURDAKAL S.
CATALYSIS TODAY, vol.281, pp.1, 2017 (SCI-Expanded)
- XXIII. **Green photocatalytic synthesis of vitamin B-3 by Pt, loaded TiO₂ photocatalysts**
YURDAKAL S., Yanar S. O., Cetinkaya S., Alagoz O., Yalcin P., Ozcan L.
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.202, pp.500-508, 2017 (SCI-Expanded)
- XXIV. **Selective photocatalytic oxidation of aromatic alcohols in solar-irradiated aqueous suspensions of Pt, Au, Pd and Ag loaded TiO₂ catalysts**
YURDAKAL S., Tek B. S., Degirmenci C., Palmisano G.
CATALYSIS TODAY, vol.281, pp.53-59, 2017 (SCI-Expanded)
- XXV. **The effect of the surface disordered layer on the photoreactivity of titania nanoparticles**
Soria J., Sanz J., Torralvo M. J., Sobrados I., Garlisi C., Palmisano G., Cetinkaya S., YURDAKAL S., Augugliaro V.
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.210, pp.306-319, 2017 (SCI-Expanded)
- XXVI. **Selective photooxidation of ortho-substituted benzyl alcohols and the catalytic role of ortho-methoxybenzaldehyde**
Scandura G., Palmisano G., YURDAKAL S., Tek B. S., Ozcan L., Loddo V., Augugliaro V.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.328, pp.122-128, 2016 (SCI-Expanded)
- XXVII. **Electrochemical Determination of Bisphenol A with Pencil Graphite Electrodes Modified with Co(II), Ni(II), Cu(II) and Fe(II) Phthalocyaninetetrasulfonates**
Ozcan L., Altuntas M., Buyuksagis A., Turk H., YURDAKAL S.
ANALYTICAL SCIENCES, vol.32, no.8, pp.881-886, 2016 (SCI-Expanded)
- XXVIII. **Heterogeneous Photocatalysis and Photoelectrocatalysis: From Unselective Abatement of Noxious Species to Selective Production of High-Value Chemicals**
Augugliaro V., Camera-Roda G., Loddo V., Palmisano G., Palmisano L., Soria J., YURDAKAL S.
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, vol.6, no.10, pp.1968-1981, 2015 (SCI-Expanded)
- XXIX. **Unexpectedly ambivalent O-2 role in the autocatalytic photooxidation of 2-methoxybenzyl alcohol in water**
Palmisano G., Scandura G., Augugliaro V., Loddo V., Pace A., Tek B. S., YURDAKAL S., Palmisano L.
JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL, vol.403, pp.37-42, 2015 (SCI-Expanded)
- XXX. **N-Doped Anatase/Rutile Photocatalysts for the Synthesis of Aromatic Aldehydes Under Ultraviolet and Solar Irradiation**
Tek B. S., YURDAKAL S., Ozcan L., Augugliaro V., Loddo V., Palmisano G.
SCIENCE OF ADVANCED MATERIALS, vol.7, no.11, pp.2306-2319, 2015 (SCI-Expanded)
- XXXI. **Facile two-step preparation of polystyrene/anatase TiO₂ core/shell colloidal particles and their potential use as an oxidation photocatalyst**
Karabacak R. B., Erdem M., YURDAKAL S., Cimen Y., Turk H.
MATERIALS CHEMISTRY AND PHYSICS, vol.144, no.3, pp.498-504, 2014 (SCI-Expanded)

- XXXII. **The influence of the anatase nanoparticles boundaries on the titania activity performance**
YURDAKAL S., Augugliaro V., Sanz J., Soria J., Sobrados I., Torralvo M. J.
JOURNAL OF CATALYSIS, vol.309, pp.97-104, 2014 (SCI-Expanded)
- XXXIII. **Synthesis, characterization, thermal and optical properties of styrene derivatives having pendant p-substituted benzylic ether groups**
Erol I., Ozcan L., YURDAKAL S.
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, vol.114, no.1, pp.377-385, 2013 (SCI-Expanded)
- XXXIV. **Photocatalytic Selective Oxidation of 5-(Hydroxymethyl)-2-furaldehyde to 2,5-Furandicarbaldehyde in Water by Using Anatase, Rutile, and Brookite TiO₂ Nanoparticles**
YURDAKAL S., Tek B. S., Alagoz O., Augugliaro V., Loddo V., Palmisano G., Palmisano L.
ACS SUSTAINABLE CHEMISTRY & ENGINEERING, vol.1, no.5, pp.456-461, 2013 (SCI-Expanded)
- XXXV. **Photoelectrocatalytic selective oxidation of 4-methoxybenzyl alcohol in water by TiO₂ supported on titanium anodes**
Ozcan L., YURDAKAL S., Augugliaro V., Loddo V., Palmas S., Palmisano G., Palmisano L.
APPLIED CATALYSIS B-ENVIRONMENTAL, vol.132-133, pp.535-542, 2013 (SCI-Expanded)
- XXXVI. **Extruded expanded polystyrene sheets coated by TiO₂ as new photocatalytic materials for foodstuffs packaging**
Loddo V., Marci G., Palmisano G., YURDAKAL S., Brazzoli M., Garavaglia L., Palmisano L.
APPLIED SURFACE SCIENCE, vol.261, pp.783-788, 2012 (SCI-Expanded)
- XXXVII. **Partial oxidation of aromatic alcohols via TiO₂ photocatalysis: the influence of substituent groups on the activity and selectivity**
YURDAKAL S., Augugliaro V.
RSC ADVANCES, vol.2, no.22, pp.8375-8380, 2012 (SCI-Expanded)
- XXXVIII. **Overview on oxidation mechanisms of organic compounds by TiO₂ in heterogeneous photocatalysis**
Augugliaro V., Bellardita M., Loddo V., Palmisano G., Palmisano L., YURDAKAL S.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY C-PHOTOCHEMISTRY REVIEWS, vol.13, no.3, pp.224-245, 2012 (SCI-Expanded)
- XXXIX. **Influence of Amorphous TiO_{2-x} on Titania Nanoparticle Growth and Anatase-to-Rutile Transformation**
Sanz J., Soria J., Sobrados I., YURDAKAL S., Augugliaro V.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.116, no.8, pp.5110-5115, 2012 (SCI-Expanded)
- XL. **Enhancing selectivity in photocatalytic formation of p-anisaldehyde in aqueous suspension under solar light irradiation via TiO₂ N-doping**
YURDAKAL S., Augugliaro V., Loddo V., Palmisano G., Palmisano L.
NEW JOURNAL OF CHEMISTRY, vol.36, no.9, pp.1762-1768, 2012 (SCI-Expanded)
- XLI. **Titania Photocatalysts for Selective Oxidations in Water**
Palmisano L., Augugliaro V., Bellardita M., Di Paola A., Lopez E. G., Loddo V., Marci G., Palmisano G., YURDAKAL S.
CHEMSUSCHEM, vol.4, no.10, pp.1431-1438, 2011 (SCI-Expanded)
- XLII. **Photocatalytic process intensification by coupling with pervaporation**
Camera-Roda G., Santarelli F., Augugliaro V., Loddo V., Palmisano G., Palmisano L., YURDAKAL S.
CATALYSIS TODAY, vol.161, no.1, pp.209-213, 2011 (SCI-Expanded)
- XLIII. **Advances in selective conversions by heterogeneous photocatalysis**
Palmisano G., Garcia-Lopez E., Marci G., Loddo V., YURDAKAL S., Augugliaro V., Palmisano L.
CHEMICAL COMMUNICATIONS, vol.46, no.38, pp.7074-7089, 2010 (SCI-Expanded)
- XLIV. **Kinetics of 4-Methoxybenzyl Alcohol Oxidation in Aqueous Solution in a Fixed Bed Photocatalytic Reactor**
YURDAKAL S., Loddo V., Palmisano G., Augugliaro V., Berber H., Palmisano L.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.49, no.15, pp.6699-6708, 2010 (SCI-Expanded)
- XLV. **Partial photocatalytic oxidation of glycerol in TiO₂ water suspensions**
Augugliaro V., El Nazer H. A. H., Loddo V., Mele A., Palmisano G., Palmisano L., YURDAKAL S.
CATALYSIS TODAY, vol.151, no.1-2, pp.21-28, 2010 (SCI-Expanded)

- XLVI. Graphite-supported TiO₂ for 4-nitrophenol degradation in a photoelectrocatalytic reactor**
 Palmisano G., Loddo V., El Nazer H. H., YURDAKAL S., Augugliaro V., Ciriminna R., Pagliaro M.
 CHEMICAL ENGINEERING JOURNAL, vol.155, no.1-2, pp.339-346, 2009 (SCI-Expanded)
- XLVII. Determination of Photoadsorption Capacity of Polychrystalline TiO₂ Catalyst in Irradiated Slurry**
 Augugliaro V., YURDAKAL S., Loddo V., Palmisano G., Palmisano L.
 PHOTOCATALYTIC TECHNOLOGIES, vol.36, pp.1-35, 2009 (SCI-Expanded)
- XLVIII. A quantitative method of photoadsorption determination for irradiated catalyst in liquid-solid system**
 YURDAKAL S., Loddo V., Palmisano G., Augugliaro V., Palmisano L.
 CATALYSIS TODAY, vol.143, no.3-4, pp.189-194, 2009 (SCI-Expanded)
- XLIX. Selective photocatalytic oxidation of 4-substituted aromatic alcohols in water with rutile TiO₂ prepared at room temperature**
 YURDAKAL S., Palmisano G., Loddo V., Alagoez O., Augugliaro V., Palmisano L.
 GREEN CHEMISTRY, vol.11, no.4, pp.510-51, 2009 (SCI-Expanded)
- L. Self-assembled titania-silica-sepiolite based nanocomposites for water decontamination**
 Nieto-Suarez M., Palmisano G., Ferrer M. L., Concepcion Gutierrez M., YURDAKAL S., Augugliaro V., Pagliaro M., del Monte F.
 JOURNAL OF MATERIALS CHEMISTRY, vol.19, no.14, pp.2070-2075, 2009 (SCI-Expanded)
- LI. Home-prepared anatase, rutile, and brookite TiO₂ for selective photocatalytic oxidation of 4-methoxybenzyl alcohol in water: reactivity and ATR-FTIR study**
 Augugliaro V., Loddo V., Jose Lopez-Munoz M., Marquez-Alvarez C., Palmisano G., Palmisano L., YURDAKAL S.
 PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES, vol.8, no.5, pp.663-669, 2009 (SCI-Expanded)
- LII. Environmentally Friendly Photocatalytic Oxidation of Aromatic Alcohol to Aldehyde in Aqueous Suspension of Brookite TiO(2)**
 Addamo M., Augugliaro V., Bellardita M., Di Paola A., Loddo V., Palmisano G., Palmisano L., YURDAKAL S.
 CATALYSIS LETTERS, vol.126, no.1-2, pp.58-62, 2008 (SCI-Expanded)
- LIII. Photocatalytic oxidation of aromatic alcohols to aldehydes in aqueous suspension of home prepared titanium dioxide 2. Intrinsic and surface features of catalysts**
 Augugliaro V., Kisch H., Loddo V., Jose Lopez-Munoz M., Marquez-Alvarez C., Palmisano G., Palmisano L., Parrino F., YURDAKAL S.
 APPLIED CATALYSIS A-GENERAL, vol.349, no.1-2, pp.189-197, 2008 (SCI-Expanded)
- LIV. Photocatalytic oxidation of aromatic alcohols to aldehydes in aqueous suspension of home-prepared titanium dioxide 1. Selectivity enhancement by aliphatic alcohols**
 Augugliaro V., Kisch H., Loddo V., Lopez-Munoz M. J., Marquez-Alvarez C., Palmisano G., Palmisano L., Parrino F., YURDAKAL S.
 APPLIED CATALYSIS A-GENERAL, vol.349, no.1-2, pp.182-188, 2008 (SCI-Expanded)
- LV. Oxidation of aromatic alcohols in irradiated aqueous suspensions of commercial and home-prepared ruffle TiO₂: A selectivity study**
 Augugliaro V., Caronna T., Loddo V., Marci G., Palmisano G., Palmisano L., YURDAKAL S.
 CHEMISTRY-A EUROPEAN JOURNAL, vol.14, no.15, pp.4640-4646, 2008 (SCI-Expanded)
- LVI. TiO₂/ORMOSIL thin films doped with phthalocyanine dyes: New photocatalytic devices activated by solar light**
 Palmisano G., Gutierrez M. C., Ferrer M. L., Gil-Luna M. D., Augugliaro V., YURDAKAL S., Pagliaro M.
 JOURNAL OF PHYSICAL CHEMISTRY C, vol.112, no.7, pp.2667-2670, 2008 (SCI-Expanded)
- LVII. Nanostructured rutile TiO₂ for selective photocatalytic oxidation of aromatic alcohols to aldehydes in water**
 YURDAKAL S., Palmisano G., Loddo V., Augugliaro V., Palmisano L.
 JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.130, no.5, pp.1568-1569, 2008 (SCI-Expanded)
- LVIII. Photocatalytic Degradation of 4-Nitrophenol in a Continuous Reactor Containing Titanium Dioxide Supported on Glass Beads**
 Yurdakal S., Loddo V., Palmisano G., Augugliaro V., Berber H., Palmisano L.

- Journal of Advanced Oxidation Technologies, vol.11, no.3, pp.501-509, 2008 (SCI-Expanded)
- LIX. **Photodegradation of pharmaceutical drugs in aqueous TiO₂ suspensions: Mechanism and kinetics**
 YURDAKAL S., Loddo V., Augugliaro V., Berber H., Palmisano G., Palmisano L.
CATALYSIS TODAY, vol.129, no.1-2, pp.9-15, 2007 (SCI-Expanded)
- LX. **Optical properties of TiO₂ suspensions: Influence of pH and powder concentration on mean particle size**
 YURDAKAL S., Loddo V., Ferrer B. B., Palmisano G., Augugliaro V., Farreras J. G., Palmisano L.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.46, no.23, pp.7620-7626, 2007 (SCI-Expanded)
- LXI. **Photocatalytic oxidation of nitrobenzene and phenylamine: Pathways and kinetics**
 Palmisano G., Loddo V., Augugliaro V., Palmisano L., YURDAKAL S.
AICHE JOURNAL, vol.53, no.4, pp.961-968, 2007 (SCI-Expanded)
- LXII. **Photocatalytic selective oxidation of 4-methoxybenzyl alcohol to aldehyde in aqueous suspension of home-prepared titanium dioxide catalyst**
 Palmisano G., YURDAKAL S., Augugliaro V., Loddo V., Palmisano L.
ADVANCED SYNTHESIS & CATALYSIS, vol.349, no.6, pp.964-970, 2007 (SCI-Expanded)
- LXIII. **Selective photocatalytic oxidation of 4-methoxybenzyl alcohol to p-anisaldehyde in organic-free water in a continuous annular fixed bed reactor**
 Loddo V., YURDAKAL S., Palmisano G., Eduardo Imoberdorf G., Antonio Irazoqui H., Alfano O. M., Augugliaro V., Berber H., Palmisano L.
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, vol.5, 2007 (SCI-Expanded)

Books & Book Chapters

- I. **Selective photoelectrocatalytic transformations of organic compounds**
 YURDAKAL S., ALAGÖZ O., ÖZCAN L., Palmisano L.
 in: *Photoelectrocatalysis: Fundamentals and Applications*, Leonardo Palmisano, Sedat Yurdakal, Editor, Elsevier, pp.361-420, 2023
- II. **Future perspectives**
 YURDAKAL S., Parrino F., Palmisano L.
 in: *Photoelectrocatalysis: Fundamentals and Applications*, Leonardo Palmisano, Sedat Yurdakal, Editor, Elsevier, pp.441-459, 2023
- III. **Synthesis, deposition and characterization of titanium dioxide and titanium dioxide based materials**
 Bellardita M., YURDAKAL S., Palmisano L.
 in: *TiO₂ and its applications*, Francesco Parrino and Leonardo Palmisano, Editor, Elsevier, pp.87-165, 2020
- IV. **Economical aspects, toxicity, and environmental fate of cerium oxide**
 Loddo V., YURDAKAL S., Parrino F.
 in: *Cerium Oxide (CeO₂): Synthesis, Properties and Applications*, Salvatore Scirè and Leonardo Palmisano, Editor, Elsevier, pp.359-373, 2020
- V. **Adsorption Isotherms and BET, SEM, FTIR, UV-Vis, Photoluminescence, and Electrochemical Characterizations**
 YURDAKAL S., Garlisi C., ÖZCAN L., Bellardita M., Palmisano G.
 in: *Heterogeneous Photocatalysis: Relationships with Heterogeneous Catalysis and Perspectives*, Giuseppe Marci, Leonardo Palmisano, Editor, Elsevier, Amsterdam, pp.87-152, 2019
- VI. **Preparation of catalysts and photocatalysts used for similar processes**
 Bellardita M., Di Paola A., YURDAKAL S., Palmisano L.
 in: *Heterogeneous Photocatalysis: Relationships with Heterogeneous Catalysis and Perspectives*, Giuseppe Marci, Leonardo Palmisano, Editor, Elsevier, Amsterdam, pp.25-56, 2019

Refereed Congress / Symposium Publications in Proceedings

- I. **Asit, baz muamelesi ve Pt katkısı ile etkinliği arttırlılmış TiO₂ fotokatalizörleri ile çevre dostu koşullarda vitamin B3 sentezi**
YURDAKAL S., Çetinkaya S., Yanar Ş. Ö., Augugliaro V., Garlisi C., Palmisano G., Soria J.
29. Ulusal Kimya Kongresi, Ankara, Turkey, 10 - 14 September 2017
- II. **Çevre Dostu Koşullarda Pt Katkılı TiO₂'lerle Fotokatalitik Vitamin B3 Sentezi**
YURDAKAL S., Yanar Ş. Ö., Çetinkaya S., ALAGÖZ O., Yalçın P., ÖZCAN L.
6. Fiziksel Kimya Kongresi, Turkey, 15 - 18 May 2017
- III. **Nanotüp Yapılı TiO₂ Fotoanotlar Kullanılarak Parakuatın Fotoelektrokatalitik Bozundurulması**
ÖZCAN L., Mutlu T., YURDAKAL S.
6. Fiziksel Kimya Kongresi, Turkey, 15 - 18 May 2017
- IV. **Laboratuvar Sentezi Azot Katkılı Anataz Rutil bifazik TiO₂ Fotokatalizörler ile p Anisaldehitin Çevre dostu Koşullarda Sentezi**
YURDAKAL S., Tek B. S., ÖZCAN L., Augugliaro V., Loddo V., Palmisano G.
5. Fiziksel Kimya Kongresi, Turkey, 16 - 19 May 2015
- V. **Heterogeneous photocatalysis a promising tool for green organic syntheses**
Palmisano L., Augugliaro V., Bellardita M., Di Paola A., Camera Roda G., Garcia Lopez E. I., Loddo V., Marci G., Palmisano G., Parrino F., et al.
Avagadro Colloquia 2015- Chemistry and Light, Consiglio Nazionale delle Ricerche, roma, 22 May 2015
- VI. **N doped anatase rutile for photocatalytic synthesis of aromatic aldehydes synthesis under UV and solar irradiation**
Tek B. S., YURDAKAL S., ÖZCAN L., Augugliaro V., Loddo V., Palmisano G.
Finecat 2015, Symposium on heterogeneos catalysis for fine chemicals, 8 - 09 April 2015
- VII. **Polistiren Anataz TiO₂ Kolloidal Partiküllerinin Hazırlanması ve Bu Partiküllerin Oksidasyon Fotokatalizörü Olarak Kullanımı**
KARABACAK R. B., ERDEM M., YURDAKAL S., ÇİMEN Y., TÜRK H.
4. Fiziksel Kimya Kongresi, Denizli, Turkey, 5 - 08 June 2014
- VIII. **Removal of Intermediate Compounds in a Photocatalytic Process**
Roda G. C., Santarelli F., Augugliaro V., Loddo V., Pahnisano G., Palmisano L., YURDAKAL S.
6th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA6), Prague, Czech Republic, 13 - 16 June 2010, pp.343-344
- IX. **Glycerol Partial Oxidation in Aqueous Solution by Home Prepared TiO₂ Photocatalyst**
Palmisano L., Loddo V., Mele A., Palmisano G., YURDAKAL S., Augugliaro V.
6th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA6), Prague, Czech Republic, 13 - 16 June 2010, pp.136-137

Supported Projects

Yurdakal S., Özcan L., Khamidov G., Çetinkaya S., Project Supported by Higher Education Institutions, Nanotüp yapılı TiO₂ nanoparçacıklar ile gliserolin ve 3-piridinmetanolün seçici fotokatalitik yükselgenmesi, 2020 - 2021
Yurdakal S., Özcan L., TUBITAK Project, Farklı Nanoyapılı TiO₂ Fotoanotlarla Seçici Fotoelektrokatalitik Gliserol Yukseltgenmesi, 2019 - 2021

Activities in Scientific Journals

ACS SUSTAINABLE CHEMISTRY AND ENGINEERING, Committee Member, 2023 - Continues
Editor, 2019 - Continues
JOURNAL OF CHEMISTRY, Committee Member, 2011 - Continues

CATALYSIS TODAY, Special Issue Editor, 2020 - 2021

CATALYSIS TODAY, Special Issue Editor, 2016 - 2017

Scientific Refereeing

ARABIAN JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, July 2023

PHOTOCHEMICAL AND PHOTOBIOLOGICAL SCIENCES, Journal Indexed in SCI-E, July 2023

CHEMCATCHEM, Journal Indexed in SCI-E, July 2023

JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, Journal Indexed in SCI-E, February 2023

PHYSICAL CHEMISTRY CHEMICAL PHYSICS, Journal Indexed in SCI-E, February 2023

JOURNAL OF PHYSICAL CHEMISTRY C, Journal Indexed in SCI-E, November 2022

CHEMICAL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2022

CHEMSUSCHEM, Journal Indexed in SCI-E, June 2022

APPLIED SURFACE SCIENCE, Journal Indexed in SCI-E, June 2022

ACS CATALYSIS, Journal Indexed in SCI-E, November 2021

JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, Journal Indexed in SCI-E, September 2021

INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, Journal Indexed in SCI-E, June 2021

APPLIED CATALYSIS B: ENVIRONMENTAL, Journal Indexed in SCI-E, May 2021

APPLIED CATALYSIS A: GENERAL, Journal Indexed in SCI-E, April 2021

JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, Journal Indexed in SCI-E, January 2021

Hittite Journal of Science and Engineering, National Scientific Refreed Journal, October 2020

ANALYST, THE, Journal Indexed in SCI-E, September 2020

INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, Journal Indexed in SCI-E, August 2020

TOPICS IN CATALYSIS, Journal Indexed in SCI-E, July 2020

DESALINATION AND WATER TREATMENT, Journal Indexed in SCI-E, July 2020

JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, Journal Indexed in SCI-E, June 2020

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, Journal Indexed in SCI-E, April 2020

RSC ADVANCES, Journal Indexed in SCI-E, April 2020

JOURNAL OF PHYSICAL CHEMISTRY C, Journal Indexed in SCI-E, December 2019

CHEMISTRYSELECT, Journal Indexed in SCI-E, December 2019

RSC ADVANCES, Journal Indexed in SCI-E, October 2019

CATALYSIS TODAY, Journal Indexed in SCI-E, September 2019

INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, Journal Indexed in SCI-E, September 2019

ENERGY AND FUELS, Journal Indexed in SCI-E, July 2019

International Journal of Environmental Health Engineering, Journal Indexed in SCI-E, April 2019

ACS CATALYSIS, Journal Indexed in SCI-E, March 2019

ADVANCES IN MATERIALS SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, February 2019

CHEMISTRYSELECT, Journal Indexed in SCI-E, February 2019

CHEMISTRYSELECT, Journal Indexed in SCI-E, January 2019

CHEMISTRYSELECT, Journal Indexed in SCI-E, November 2018

TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, October 2018

Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, October 2018

ORGANIC PROCESS RESEARCH & DEVELOPMENT, Journal Indexed in SCI-E, October 2018

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A: CHEMISTRY, Journal Indexed in SCI-E, October 2018

PHOTOCHEMICAL AND PHOTOBIOLOGICAL SCIENCES, Journal Indexed in SCI-E, April 2018

CATALYSIS TODAY, Journal Indexed in SCI-E, February 2018

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, Journal Indexed in SCI-E,

February 2018

JOURNAL OF PHYSICAL CHEMISTRY C, Journal Indexed in SCI-E, February 2018

CATALYSIS TODAY, Journal Indexed in SCI-E, December 2017

CATALYSIS TODAY, Journal Indexed in SCI-E, December 2017
APPLIED CATALYSIS B: ENVIRONMENTAL, Journal Indexed in SCI-E, October 2017
JOURNAL OF NANOMATERIALS, Journal Indexed in SCI-E, September 2017
CHEMISTRYSELECT, Journal Indexed in SCI-E, September 2017
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, June 2017
TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, June 2017
JOURNAL OF HAZARDOUS MATERIALS, Journal Indexed in SCI-E, February 2017
ARABIAN JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, January 2017
ADVANCES IN MATERIALS SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, January 2017
APPLIED CATALYSIS B: ENVIRONMENTAL, Journal Indexed in SCI-E, December 2016
APPLIED CATALYSIS B: ENVIRONMENTAL, Journal Indexed in SCI-E, December 2016
RESEARCH ON CHEMICAL INTERMEDIATES, Journal Indexed in SCI-E, November 2016
CHEMISTRYSELECT, Journal Indexed in SCI-E, October 2016
CATALYSIS TODAY, Journal Indexed in SCI-E, August 2016
TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, March 2016
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, February 2016
ADVANCES IN PHYSICAL CHEMISTRY, Other Indexed Journal, September 2015
JOURNAL OF PHYSICAL CHEMISTRY C, Journal Indexed in SCI-E, August 2015
TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, August 2015
APPLIED PHYSICS A: MATERIALS SCIENCE AND PROCESSING, Journal Indexed in SCI-E, August 2015
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, April 2015
ENVIRONMENTAL SCIENCE: PROCESSES AND IMPACTS, Journal Indexed in SCI-E, January 2015
ARABIAN JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, November 2014
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, January 2014
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, December 2013
SYNTHESIS (Stuttgart), Journal Indexed in SCI-E, September 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, August 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, July 2013
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A: CHEMISTRY, Journal Indexed in SCI-E, July 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, May 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, April 2013
CURRENT ORGANIC CHEMISTRY, Journal Indexed in SCI-E, April 2013
CURRENT ORGANIC CHEMISTRY, Journal Indexed in SCI-E, March 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, February 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, January 2013
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, January 2013
TOPICS IN CATALYSIS, Journal Indexed in SCI-E, October 2012
ADVANCES IN PHYSICAL CHEMISTRY, Other Indexed Journal, October 2012
INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING, Journal Indexed in SCI-E, October 2012
ADVANCES IN PHYSICAL CHEMISTRY, Other Indexed Journal, August 2012
REACTION KINETICS, MECHANISMS AND CATALYSIS, Journal Indexed in SCI-E, January 2012
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, December 2011
WATER RESEARCH, Journal Indexed in SCI-E, November 2011
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, August 2011
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, Journal Indexed in SCI-E, June 2011
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, March 2011
INTERNATIONAL JOURNAL OF PHOTOENERGY, Journal Indexed in SCI-E, January 2011
CHEMCATCHEM, Journal Indexed in SCI-E, December 2010
ACS APPLIED MATERIALS & INTERFACES, Journal Indexed in SCI-E, December 2010
CHEMCATCHEM, Journal Indexed in SCI-E, November 2010
CHEMCATCHEM, Journal Indexed in SCI-E, October 2010

CHEMCATCHEM, Journal Indexed in SCI-E, September 2010

CATALYSIS TODAY, SCI Journal, November 2008

CATALYSIS TODAY, SCI Journal, October 2008

CATALYSIS TODAY, SCI Journal, October 2008

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