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International Researcher IDs

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Publons / Web Of Science ResearcherID: Q-4493-2019

ScopusID: 55123116900

Yoksis Researcher ID: 169738



Supported Projects

1. Umut E., Şahiner N., Sağbaş Suner S., Şahiner M., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Grafitik karbon nitrür (g-C₃N₄) ve Karbon kuantum nokta (CQ-dot) katkılı Hyaluronik asit-Gd(III) ve Hyaluronik asit-Fe (III) kompozit partiküllerinin tıbbi görüntüleme ve tedavi uygulamalarının araştırılması, 2023 - 2025
2. Umut E., Öztop H. M., Yamalı C., Project Supported by Higher Education Institutions, Low Field NMR for BioTech Pharmaceuticals (LF-NMR4BP), 2022 - 2025
3. Umut E., Doğanay Ö., Öztürk Y., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), NMR Spektroskopi ve düşük manyetik alanlı MRG prototip teknolojilerinin geliştirilmesi, 2022 - 2024
4. KOÇTÜRK A. S., AKAN P., KIZILDAĞ S., UMUT E., ÇAVDAR Z., URAL ÖZKAN C., Project Supported by Higher Education Institutions, DOKUZ EYLÜL ÜNİVERSİTESİ TIP FAKÜLTESİ ARAŞTIRMA LABORATUVARININ ARAŞTIRMA-GELİŞTİRME VE İNOVASYON KÜLTÜRÜNE UYUMLANDIRILMASI, 2020 - 2024
5. Kruk D., Öztop H. M., EU Supported Other Project, Nuclear Magnetic Resonance Relaxometry for Dairy Products - IG15209, 2021 - 2022
6. Umut E., Metin A. Ü., Erdem Ü., Project Supported by Higher Education Institutions, Polyvinylpyrrolidone (PVP) Kaplı Süperparamanyetik SiO₂-Fe₃O₄ Nanoparçacıkların Antikanser Ajan Olarak Kullanılabilirliğinin Araştırılması, 2020 - 2021
7. Umut E., Kruk D., Kruk D., TÜBİTAK - AB COST Project, European Network on NMR Relaxometry, 2016 - 2021
8. Umut E., Scharfetter H., Scharfetter H., H2020 Project, Contrast by Quadrupole Enhanced Relaxation (CONQUER), 2015 - 2018

Jury Memberships

Doctoral Examination, Doctoral Examination, Ege Üniversitesi, December, 2022

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, September, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ege Üniversitesi, June, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Fluorescent Graphitic Carbon Nitride (g-C₃N₄)-Embedded Hyaluronic Acid Microgel Composites for Bioimaging and Cancer-Cell Targetability as Viable Theragnostic**
Suner S. S., Sahiner M., Demirci S., Umut E., Sahiner N.
PHARMACEUTICALS, vol.17, no.160, pp.1-20, 2024 (SCI-Expanded)
2. **Water Dynamics in Dextran-Based Hydrogel Micro/Nanoparticles Studied by NMR Diffusometry and Relaxometry**

Umut E., Beira M. J., Öztop H. M., Şahiner N., Sebastiao P. J., Kruk D.

JOURNAL OF PHYSICAL CHEMISTRY B, vol.127, no.41, pp.8950-8960, 2023 (SCI-Expanded)

3. **Physically Crosslinked Chondroitin Sulfate (CS)–Metal Ion (M: Fe(III), Gd(III), Zn(II), and Cu(II)) Particles for Versatile Applications and Their Biosafety**
Suner S. S., Sahiner M., Umut E., Ayyala R. S., Sahiner N.
PHARMACEUTICALS, vol.16, no.4, pp.1-15, 2023 (SCI-Expanded)
4. **Hyaluronic acid HA-Gd(III) and HA-Fe(III) microgels as MRI contrast enhancing agents**
Şahiner N., Umut E., Sağbaş Suner S., Şahiner M., Çulha M., Ayyala R.
CARBOHYDRATE POLYMERS, pp.1-8, 2021 (SCI-Expanded)
5. **Spin Canting in Silica-Coated Nickel Ferrite (NiFe₂O₄@SiO₂) Nanoparticles: a Mossbauer Spectroscopy Study**
Umut E., Coskun M., Güngüneş H., Dupuis V., Kamzin A. S.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.34, no.3, pp.913-924, 2021 (SCI-Expanded)
6. **A comparative study on the AC/DC conductivity, dielectric and optical properties of polystyrene/graphene nanoplatelets (PS/GNP) and multi-walled carbon nanotube (PS/MWCNT) nanocomposites**
MERGEN Ö. B., UMUT E., ARDA E., KARA S.
POLYMER TESTING, vol.90, 2020 (SCI-Expanded)
7. **Sn-based Alloys Synthesized in an Ionic Liquid at Room Temperature: Cu₆Sn₅ as a Case Study**
Soulmi N., Porras Gutierrez A. G., Rizzi C., Sirieix-Plenet J., Gaillon L., Groult H., Rollet A., Umut E., Kruk D., Duttine M., et al.
CHEMNANOMAT, vol.6, no.4, pp.639-647, 2020 (SCI-Expanded)
8. **Nickel ferrite nanoparticles for simultaneous use in magnetic resonance imaging and magnetic fluid hyperthermia**
UMUT E., Coskun M., Pineider F., Berti D., GÜNGÜNEŞ H.
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.550, pp.199-209, 2019 (SCI-Expanded)
9. **Estimation of the magnitude of quadrupole relaxation enhancement in the context of magnetic resonance imaging contrast**
Kruk D., Masiewicz E., Umut E., Petrovic A., Kargl R., Scharfetter H.
JOURNAL OF CHEMICAL PHYSICS, vol.150, no.18, 2019 (SCI-Expanded)
10. **Multi-quantum quadrupole relaxation enhancement effects in Bi-209 compounds**
Kruk D., Umut E., Masiewicz E., Fischer R., Scharfetter H.
JOURNAL OF CHEMICAL PHYSICS, vol.150, no.18, 2019 (SCI-Expanded)
11. **H-1 spin-lattice relaxation in water solution of Bi-209 counterparts of Gd(3+)contrast agents**
Kruk D., Umut E., Masiewicz E., Hermann P., Scharfetter H.
MOLECULAR PHYSICS, vol.117, no.7-8, pp.927-934, 2019 (SCI-Expanded)
12. **Quadrupole relaxation enhancement and polarisation transfer in DMSO solution of [Bi(NO₃)(3)(H₂O)(3)]*18-crown-6 in solid state**
Kruk D., Masiewicz E., Umut E., Schloegl M., Fischer R., Scharfetter H.
MOLECULAR PHYSICS, vol.117, no.7-8, pp.944-951, 2019 (SCI-Expanded)
13. **Aspects of structural order in Bi-209-containing particles for potential MRI contrast agents based on quadrupole enhanced relaxation**
Scharfetter H., Goesweiner C., Krassnig P. J., Sampl C., Thonhofer M., Fischer R., Spirk S., Kargl R., Stana-Kleinschek K., Umut E., et al.
MOLECULAR PHYSICS, vol.117, no.7-8, pp.935-943, 2019 (SCI-Expanded)
14. **H-1 relaxation and dynamics of triphenylbismuth in deuterated solvents**
Kruk D., Masiewicz E., Umut E., Scharfetter H.
MOLECULAR PHYSICS, vol.117, no.7-8, pp.921-926, 2019 (SCI-Expanded)
15. **Predicting quadrupole relaxation enhancement peaks in proton R-1-NMRD profiles in solid Bi-aryl compounds from NQR parameters**
Goesweiner C., Kruk D., Umut E., Masiewicz E., Boedenler M., Scharfetter H.

MOLECULAR PHYSICS, vol.117, no.7-8, pp.910-920, 2019 (SCI-Expanded)

16. **Model - free approach to quadrupole spin relaxation in solid Bi-209-aryl compounds**
Kruk D., Goesweiner C., Masiewicz E., Umut E., Sampl C., Scharfetter H.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.36, pp.23414-23423, 2018 (SCI-Expanded)
17. **Tuning Nuclear Quadrupole Resonance: A Novel Approach for the Design of Frequency-Selective MRI Contrast Agents**
Goesweiner C., Lantto P., Fischer R., Sampl C., Umut E., Westlund P., Kruk D., Boedenler M., Spirk S., Petrovic A., et al.
PHYSICAL REVIEW X, vol.8, no.2, 2018 (SCI-Expanded)
18. **R-1 dispersion contrast at high field with fast field-cycling MRI**
Boedenler M., Basini M., Casula M. F., Umut E., Goesweiner C., Petrovic A., Kruk D., Scharfetter H.
JOURNAL OF MAGNETIC RESONANCE, vol.290, pp.68-75, 2018 (SCI-Expanded)
19. **Bi-209 quadrupole relaxation enhancement in solids as a step towards new contrast mechanisms in magnetic resonance imaging**
Kruk D., Umut E., Masiewicz E., Sampl C., Fischer R., Spirk S., Goesweiner C., Scharfetter H.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.18, pp.12710-12718, 2018 (SCI-Expanded)
20. **Spin Dynamics in Hybrid Iron Oxide-Gold Nanostructures**
Orlando T., Capozzi A., Umut E., Bordonali L., Mariani M., Galinetto P., Pineider F., Innocenti C., Masala P., Tabak F., et al.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.119, no.2, pp.1224-1233, 2015 (SCI-Expanded)
21. **Magnetic, optical and relaxometric properties of organically coated gold-magnetite (Au-Fe₃O₄) hybrid nanoparticles for potential use in biomedical applications**
Umut E., Pineider F., Arosio P., Sangregorio C., Corti M., Tabak F., Lascialfari A., Ghigna P.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.324, no.15, pp.2373-2379, 2012 (SCI-Expanded)

Articles Published in Other Journals

1. **Magnetic properties of manganese ferrite (MnFe₂O₄) nanoparticles synthesized by co-precipitation method**
Umut E.
Hittite Journal of Science and Engineering, vol.6, no.4, pp.243-249, 2019 (Peer-Reviewed Journal)

Books & Book Chapters

1. **Surface Properties of Polysaccharides**
Umut E.
in: Polysaccharides of Microbial Origin: Biomedical Applications, Joaquim Oliveira, Hajer Radhouani, Rui L. Reis, Editor, Springer-Verlag, New York, pp.1-26, 2021
2. **Functionalized Magnetic Nanoparticles for Solid-Phase Extraction**
Umut E.
in: Analytical Applications of Functionalized Magnetic Nanoparticles, Chaudhery Mustansar Hussain, Editor, Royal Society of Chemistry, London, pp.217-236, 2021
3. **Surface Modification of Nanoparticles Used in Biomedical Applications**
Umut E.
in: Modern Surface Engineering Treatments, Mahmood Aliofkhazraei, Editor, IntechOpen Publishing, Rijeka, pp.185-208, 2013

Courses

ODY1101 Fizik, Associate Degree, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
TGT1166 Tıbbi Görüntüleme II, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
TGT2234 Örnek Olay Analizi, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
TGT1127 Fizik, Associate Degree, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
RYT1175 Tıbbi Görüntüleme I, Associate Degree, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
TGT2238 Tıbbi Görüntüleme IV, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
TGT2247 Tıbbi Görüntüleme III, Associate Degree, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
RYT1178 Tıbbi Görüntüleme II, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Scientific Refereeing

JOURNAL OF MICROENCAPSULATION, SCI Journal, December 2022
BIOMEDICAL PHYSICS & ENGINEERING EXPRESS, SCI Journal, December 2022
APPLIED SCIENCES, SCI Journal, August 2022
LANGMUIR, SCI Journal, June 2022
JOURNAL OF PHYSICS D - APPLIED PHYSICS, SCI Journal, October 2021
JOURNAL OF PHYSICS D - APPLIED PHYSICS, SCI Journal, June 2021
MATERIALS LETTERS, SCI Journal, January 2021
BIOMEDICAL MATERIALS (BRISTOL, ENGLAND), SCI Journal, December 2020
JOURNAL OF COLLOID AND INTERFACE SCIENCE, SCI Journal, June 2020
TUBITAK Project, 2232 - Dormitory Research Scholarship Program, Erciyes University, Turkey, April 2020
JOURNAL OF NANOPARTICLE RESEARCH, SCI Journal, August 2016
CURRENT PHARMACEUTICAL DESIGN, SCI Journal, June 2016
JOURNAL OF NANOPARTICLE RESEARCH, SCI Journal, May 2016
CURRENT PHARMACEUTICAL DESIGN, SCI Journal, January 2016
CHEMICAL ENGINEERING JOURNAL, SCI Journal, September 2014
MATERIALS LETTERS, SCI Journal, March 2014
MATERIALS LETTERS, SCI Journal, November 2013

Metrics

Publication: 49
Citation (WoS): 270
Citation (Scopus): 121
H-Index (WoS): 8
H-Index (Scopus): 4

Congress and Symposium Activities

Gevher Nesibe 11. Uluslararası Sağlık Bilimleri Kongresi, Attendee, Ankara, Turkey, 2023
Practicing protocols of dairy product analysis from "A to Z" for industry members, COST Action: IG15209, Attendee, Cesena, Italy, 2022
System for NMR relaxometry for dairy products analysis (COST Action: IG15209), Attendee, Olsztyn, Poland, 2022
Principles of NMR relaxometry for non-specialist (COST Innovation Grant CIG15209), Attendee, Lisbon, Portugal, 2022
Conference on Achievements and Perspectives of NMR Relaxometry (COST Action CA15209 – Eurelax), Attendee, Lisbon, Portugal, 2021
5th International Conference on Material Science and Technology in Capadocia (IMSTEC2020), Attendee, Nevşehir, Turkey, 2020

3rd Workshop on NMR and MRI relaxometry in chemistry and bio-medicine (COST Action CA15209 – Eurelax), Attendee, Tallinn, Estonia, 2020

15th Nanoscience and Nanotechnology Conference (NANOTR-15), Attendee, Antalya, Turkey, 2019

21th International Conference on Materials, Methods and Technologies, Attendee, Burgas, Bulgaria, 2019

2nd International Conference on Physical Chemistry and Functional Materials, Attendee, Nevşehir, Turkey, 2019

2nd Workshop of Nuclear Magnetic Resonance Relaxometry ((COST Action CA15209 - Eurelax), Attendee, Praha, Czech Republic, 2019

Ampere NMR School-2018, Attendee, Krakow, Poland, 2018

EMBO Workshop: Challenges for Magnetic Resonance Imaging in Life Sciences, Attendee, Rome, Italy, 2018

Conference on NMR Relaxometry and Related Methods (COST Action CA15209 - Eurelax), Attendee, Turin, Italy, 2018

10th Conference on Fast Field Cycling NMR Relaxometry, Attendee, Warmińsko-Mazurskie, Poland, 2017

1st Workshop of Nuclear Magnetic Resonance Relaxometry ((COST Action CA15209 - Eurelax), Attendee, Olsztyn, Poland, 2017

4th International Conference Nanotechnology in Medicine (NANOMED), Attendee, Warszawa, Poland, 2016

International Baltic Conference on Magnetism (IBCM-2015): Focus on Biomedical Aspects, Attendee, Kaliningrad, Russia, 2015

Ampere NMR School 2015 and 5th Summer Symposium on Nanomaterials and their application to Biology and Medicine, Attendee, Krakow, Poland, 2015

Nanobiotechnology Days 2015, Attendee, İstanbul, Turkey, 2015

Joint European Magnetic Symposia (JEMS) 2012, Attendee, Parma, Italy, 2012

8th Nanoscience and Nanotechnology Congress (NANOTR-8), Attendee, Ankara, Turkey, 2012

7th Nanoscience and Nanotechnology Congress (NANOTR-7), Attendee, İstanbul, Turkey, 2011

Advances in Applied Physics and Materials Science Congress (APMAS-2011), Attendee, Antalya, Turkey, 2011

2nd International Conference on Multifunctional, Hybrid and Nanomaterials (HYMA 2011), Audience, Strasbourg, France, 2011

Worldwide Magnetic Resonance Conference, EUROMAR 2010 and 17th ISMAR, Audience, Florence, Italy, 2010

Invited Talks

Implementation of surface modified magnetic nanoparticles in biomedical applications , Seminar, Amirkabir University of Technology (AUT) , Iran, March 2022

Organik kaplı metalferrit nanoparçacıklarla MR görünüleme ve manyetik akışkan hipertermi uygulamaları, Workshop, Gebze Teknik Üniversitesi, Turkey, September 2021

Training School on NMR in Food Science, Workshop, Orta Doğu Teknik Üniversitesi, Turkey, July 2019