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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Chemistry, Türkiye 2005 - 2012

Yüksek Lisans, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Chemistry Program, Türkiye 2004 - 2005

Lisans, İhsan Doğramacı Bilkent Üniversitesi, Fen Fakültesi, Chemistry, Türkiye 1998 - 2003

Yabancı Diller

İngilizce, C2 Yeterlilik

Sertifika, Kurs ve Eğitimler

Diğer, Reviewer Methods and Ethics Certificate, ACS Publications, 2018

Yaptığı Tezler

Doktora, Molecular Dynamics Simulation Studies on the Physical Properties of Polyethylene-Organoclay Nanocomposite Materials, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Chemistry, 2012

Yüksek Lisans, ACCURATE DETERMINATION OF THE POTENTIAL ENERGY SURFACES AND THE MOLECULAR PROPERTIES FOR MHe⁺ (M=Li, Na, K) COMPLEXES USING QUANTUM MECHANICAL TECHNIQUES, İstanbul Teknik Üniversitesi, INSTITUTE OF SCIENCE AND TECHNOLOGY, 2005

Araştırma Alanları

Kimya

Akademik Unvanlar / Görevler

Dr.Öğr.Üyesi, Orta Doğu Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2019 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- **Effect of substituents in sulfoxides on the enhancement of thermoelectric properties of PEDOT:PSS: experimental and modelling evidence**
Zhu Q., Yıldırım E., Wang X., Kyaw A. K. K. , Tang T., Soo X. Y. D. , Wong Z. M. , Wu G., Yang S., Xu J.
MOLECULAR SYSTEMS DESIGN & ENGINEERING, cilt.5, ss.976-984, 2020 (SCI İndekslerine Giren Dergi)
- **The Role of Electrostatic Interaction between Free Charge Carriers and Counterions in Thermoelectric Power Factor of Conducting Polymers: From Crystalline to Polycrystalline Domains**
Shi W., Yıldırım E., Wu G., Wong Z. M. , Deng T., Wang J., Xu J., Yang S.

ADVANCED THEORY AND SIMULATIONS, 2020 (SCI İndekslerine Giren Dergi)

- **Correlating charge and thermoelectric transport to paracrystallinity in conducting polymers.**
Abutaha A., Kumar P., Yildirim E., Shi W., Yang S., Wu G., Hippalgaonkar K.
Nature communications, cilt.11, ss.1737, 2020 (SCI Expanded İndekslerine Giren Dergi)
- **The impact of [1,2,5]chalcogenazolo[3,4-f]-benzo[1,2,3]triazole structure on the optoelectronic properties of conjugated polymers**
Alkan E. A. , GÖKER S., Sarigul H., YILDIRIM E., Udum Y. A. , Toppare L.
JOURNAL OF POLYMER SCIENCE, cilt.58, ss.956-968, 2020 (SCI İndekslerine Giren Dergi)
- **Physical Characterization of Inclusion Complexes of Triphenyl Phosphate and Cyclodextrins in Solution.**
Zhang N., Zane C., Chen Y., Yildirim E., Hinks D., Tonelli A., Vinueza N., Pasquinelli M.
The journal of physical chemistry. B, cilt.124, ss.404-412, 2020 (SCI İndekslerine Giren Dergi)
- **Improved Alignment of PEDOT:PSS Induced by γ -in-situ γ ; Crystallization of "Green" Dimethylsulfone Molecules to Enhance the Polymer Thermoelectric Performance.**
Zhu Q., Yildirim E., Wang X., Soo X., Zheng Y., Tan T., Wu G., Yang S., Xu J.
Frontiers in chemistry, cilt.7, ss.783, 2019 (SCI İndekslerine Giren Dergi)
- **Proquinoidal-Conjugated Polymer as an Effective Strategy for the Enhancement of Electrical Conductivity and Thermoelectric Properties**
Tam T. L. D. , Ng C. K. , Lim S. L. , Yildirim E., Ko J., Leong W. L. , Yang S., Xu J.
CHEMISTRY OF MATERIALS, cilt.31, ss.8543-8550, 2019 (SCI İndekslerine Giren Dergi)
- **Theoretical design of high-mobility bithiophene imide (BTI) derivative polymeric semiconductors**
Sutay B., Onaran G., Yildirim E., Yurtsever M.
COMPUTATIONAL MATERIALS SCIENCE, cilt.166, ss.162-169, 2019 (SCI İndekslerine Giren Dergi)
- **Influence of UV stabilizers on the weathering of PETG and PCTT films**
Arangdad K., Yildirim E., Detwiler A., Cleven C. D. , Burk C., Shamey R., Pasquinelli M. A. , Freeman H. S. , El-Shafei A.
JOURNAL OF APPLIED POLYMER SCIENCE, cilt.136, 2019 (SCI İndekslerine Giren Dergi)
- **Role of Local Polymer Conformations on the Diverging Glass Transition Temperatures and Dynamic Fragilities of Isotactic-, Syndiotactic-, and Atactic-Poly(methyl methacrylate)s**
Shen J., Yildirim E., Li S., Caydamli Y., Pasquinelli M. A. , Tonelli A. E.
MACROMOLECULES, cilt.52, ss.3897-3908, 2019 (SCI İndekslerine Giren Dergi)
- **Self-Organization of PEDOT:PSS Induced by Green and Water-Soluble Organic Molecules**
Yildirim E., Zhu Q., Wu G., Tan T. L. , Xu J., Yang S.
JOURNAL OF PHYSICAL CHEMISTRY C, cilt.123, ss.9745-9755, 2019 (SCI İndekslerine Giren Dergi)
- **An experimental and computational approach to pH-dependent self-aggregation of poly(2-isopropyl-2-oxazoline)**
Çağlı E., Yildirim E., Yang S., Erel Göktepe İ.
JOURNAL OF POLYMER SCIENCE PART B-POLYMER PHYSICS, cilt.57, ss.210-221, 2019 (SCI İndekslerine Giren Dergi)
- **Polymer morphology and interfacial charge transfer dominate over energy-dependent scattering in organic-inorganic thermoelectrics**
Kumar P., Zaia E. W. , Yildirim E., Repaka D. V. M. , Yang S., Urban J. J. , Hippalgaonkar K.
NATURE COMMUNICATIONS, cilt.9, 2018 (SCI İndekslerine Giren Dergi)
- **CoFe₂O₄ Nanocrystals Mediated Crystallization Strategy for Magnetic Functioned ZSM-5 Catalysts**
Li B., Yildirim E., Li W., Qi D., Yu J., Wei J., Liu Z., Sun Z., Liu Y., Kong B., et al.
ADVANCED FUNCTIONAL MATERIALS, cilt.28, 2018 (SCI İndekslerine Giren Dergi)
- **A theoretical mechanistic study on electrical conductivity enhancement of DMSO treated PEDOT:PSS**
Yildirim E., Wu G., Yong X., Tan T. L. , Zhu Q., Xu J., Ouyang J., Wang J., Yang S.
JOURNAL OF MATERIALS CHEMISTRY C, cilt.6, ss.5122-5131, 2018 (SCI İndekslerine Giren Dergi)
- **Experimental and MD simulation study on the physical and mechanical properties of organically modified montmorillonite clay and compatibilized linear low density polyethylene nanocomposites**
Yildirim E., Yurtsever M., Eriman B., Uyanik N.
JOURNAL OF APPLIED POLYMER SCIENCE, cilt.135, 2018 (SCI İndekslerine Giren Dergi)
- **Nanoscale considerations responsible for diverse macroscopic phase behavior in monosubstituted**

isobutyl-POSS/poly(ethylene oxide) blends

Caydamli Y., Yildirim E., Shen J., Fang X., Pasquinelli M. A. , Spontak R. J. , Tonelli A. E.

SOFT MATTER, cilt.13, ss.8672-8677, 2017 (SCI İndekslerine Giren Dergi)

- **Structure-property relationships: Influence of number of anchoring groups in triphenylamine-carbazole motifs on light harvesting and photovoltaic performance for dye-sensitized solar cells**
Elsherbiny D., Yildirim E., El-Essawy F., Abdel-Megied A., El-Shafei A.
DYES AND PIGMENTS, cilt.147, ss.491-504, 2017 (SCI İndekslerine Giren Dergi)
- **A comparative study of the influence of N, N '-dialkyl vs. N, N '-diaryl-based electron donor ancillary ligands on photocurrent and photovoltage in dye-sensitized solar cells (DSSCs)**
Ashraf S., Yildirim E., Akhtar J., Siddiqi H. M. , El-Shafei A.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, cilt.19, ss.20847-20860, 2017 (SCI İndekslerine Giren Dergi)
- **Synthetic Design of Polyester Electrolytes Guided by Hydrophobicity Calculations**
Yildirim E., Dakshinamoorthy D., Peretic M. J. , Pasquinelli M. A. , Mathers R. T.
MACROMOLECULES, cilt.49, ss.7868-7876, 2016 (SCI İndekslerine Giren Dergi)
- **Effect of intersegmental interactions on the morphology of segmented polyurethanes with mixed soft segments: A coarse-grained simulation study**
Yildirim E., Yurtsever M., Wilkes G. L. , Yilgor I.
POLYMER, cilt.90, ss.204-214, 2016 (SCI İndekslerine Giren Dergi)
- **Hierarchical multi-component nanofiber separators for lithium polysulfide capture in lithium-sulfur batteries: an experimental and molecular modeling study**
Zhu J., Yildirim E., Aly K., Shen J., Chen C., Lu Y., Jiang M., Kim D., Tonelli A. E. , Pasquinelli M. A. , et al.
JOURNAL OF MATERIALS CHEMISTRY A, cilt.4, ss.13572-13581, 2016 (SCI İndekslerine Giren Dergi)
- **Thermal Transitions in Polyelectrolyte Assemblies Occur via a Dehydration Mechanism**
Yildirim E., Zhang Y., Lutkenhaus J. L. , Sammalkorpi M.
ACS MACRO LETTERS, cilt.4, ss.1017-1021, 2015 (SCI İndekslerine Giren Dergi)
- **The influence of ionic strength and mixing ratio on the colloidal stability of PDAC/PSS polyelectrolyte complexes**
Zhang Y., Yildirim E., Antila H. S. , Valenzuela L. D. , Sammalkorpi M., Lutkenhaus J. L.
SOFT MATTER, cilt.11, ss.7392-7401, 2015 (SCI İndekslerine Giren Dergi)
- **Understanding the influence of hydrogen bonding and diisocyanate symmetry on the morphology and properties of segmented polyurethanes and polyureas: Computational and experimental study**
Sami S., Yildirim E., Yurtsever M., Yurtsever E., Yilgor E., Yilgor I., Wilkes G. L.
POLYMER, cilt.55, ss.4563-4576, 2014 (SCI İndekslerine Giren Dergi)
- **The role of diisocyanate and soft segment on the intersegmental interactions in urethane and urea based segmented copolymers: A DFT study**
Yildirim E., Yurtsever M.
COMPUTATIONAL AND THEORETICAL CHEMISTRY, cilt.1035, ss.28-38, 2014 (SCI İndekslerine Giren Dergi)
- **Theoretical approach to the structural, electronic, and morphological properties of poly(E >- caprolactone) grafted polypyrroles**
Yildirim E., Erciyes G., Yurtsever M.
MACROMOLECULAR RESEARCH, cilt.21, ss.949-957, 2013 (SCI İndekslerine Giren Dergi)
- **MORPHOLOGICAL PROPERTIES OF PYRROLE AND PHENYLENE ROD-COIL DIBLOCK COPOLYMERS BY DISSIPATIVE PARTICLE DYNAMICS**
Yildirim E., Yurtsever M.
JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY, cilt.12, 2013 (SCI İndekslerine Giren Dergi)
- **Silver-Sodium Ion Exchange Dynamics in LTA Zeolite Membranes**
Salmas R. E. , Demir B., Yildirim E., Sirkecioğlu A., Yurtsever M., Ahunbay M. G.
JOURNAL OF PHYSICAL CHEMISTRY C, cilt.117, ss.1663-1671, 2013 (SCI İndekslerine Giren Dergi)
- **Multiscale Modeling of the Morphology and Properties of Segmented Silicone-Urea Copolymers**
Yildirim E., Yurtsever M., Yurtsever E., Yilgor I., Yilgor E.
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, cilt.22, ss.604-616, 2012 (SCI İndekslerine Giren Dergi)
- **A comparative study on the efficiencies of polyethylene compatibilizers by using theoretical methods**

Yildirim E., Yurtsever M.

JOURNAL OF POLYMER RESEARCH, cilt.19, 2012 (SCI İndekslerine Giren Dergi)

- **Microphase Separation of Phenylene Oligomers with Polymeric Side Chains: A Dissipative Particle Dynamics Study**

Yildirim E., Yurtsever M., Kenarli B., Demirel A. L.

MACROMOLECULAR THEORY AND SIMULATIONS, cilt.20, ss.340-349, 2011 (SCI İndekslerine Giren Dergi)

- **A QSPR Study on the Physical Properties of Substituted Polypyrroles and Poly(paraphenylenes)**

Yildirim E., Aksoy D., Tuzun N. S. , Yurtsever M.

DESIGNED MONOMERS AND POLYMERS, cilt.14, ss.79-93, 2011 (SCI İndekslerine Giren Dergi)

- **Bosonic helium clusters doped by alkali metal cations: interaction forces and analysis of their most stable structures**

Marinetti F., Coccia E., Bodo E., Gianturco F. A. , Yurtsever E., Yurtsever M., Yildirim E.

THEORETICAL CHEMISTRY ACCOUNTS, cilt.118, ss.53-65, 2007 (SCI İndekslerine Giren Dergi)

- **Solvation of K⁺ in helium droplets**

Yurtsever E., Yildirim E., Yurtsever M., Bodo E., Gianturco F. A.

EUROPEAN PHYSICAL JOURNAL D, cilt.43, ss.105-108, 2007 (SCI İndekslerine Giren Dergi)

- **Bosonic helium droplets with cationic impurities: Onset of electrostriction and snowball effects from quantum calculations**

Coccia E., Bodo E., Marinetti F., Gianturco F. A. , Yildirim E., Yurtsever M., Yurtsever E.

JOURNAL OF CHEMICAL PHYSICS, cilt.126, 2007 (SCI İndekslerine Giren Dergi)

Diğer Dergilerde Yayınlanan Makaleler

- **Improved Eco-Friendliness of a Common Flame Retardant through Inclusion Complexation with Cyclodextrins**

Zhang N., Yildirim E., Zane C. P. , Shen J., Vinueza N., Hinks D., Tonelli A. E. , Pasquinelli M. A.

ACS APPLIED POLYMER MATERIALS, cilt.1, ss.2768-2777, 2019 (ESCI İndekslerine Giren Dergi)

Atıflar

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