

Farzaneh Sangi, Abo-Saeed Rashidi, Mehdi Kamali Dolatabadi, Ramin Khajavi, Mohammad Esmail Yazdanshenas (pp.5-64)

Predictive Models for Mechanical Properties of Polymeric Composites Reinforced with Particles and Fibers: A Comprehensive Review and Comparative Analysis

Gulnar Atakishiyeva, Sevinc Mukhtarova, Sima Musayeva, Ulviyya Askerova, Khatira Garazade, Samira Miriyeva, Nurana Gurbanova, Namiq Shikhaliyev, Abel Maharramov (pp.65-85)

Computational Assessment and Molecular Docking of Arylhydrazone Ester Derivatives as SARS-CoV-2 Main Protease Inhibitors

Thu Minh Thi Tong, Thi Minh Thi Nguyen, Thuy Thanh Thi Pham (pp.86-104)

A Study on the Recycling of Waste Polystyrene and Rice Husk into Bio-Based Composites via Organic Solvent-Induced Polymer Gelation

Alisher Eshimbetov, Abdusamat Rasulov, Narbek Palvanov, Aygul Kudiyarova, Jamshid Ashurov, Bakhtiyar Ibragimov (pp.105-120)

Molecular Docking and Molecular Dynamics Analysis of Selected Anticholinesterase Inhibitors from the Zinc Database

Umarbek Matchanov, Khulkar Saydullaeva, Rakhmat Esanov, Fotima Sobirova, Bobur Raxmonov, Quzijon Baratov, Nigora Tagayalieva, Alimjan Matchanov, Alisher Eshimbetov, Togaev Ulugbek, (pp.121-137)

Preparation and Biological Activity of Molecular Complexes Based on Secondary Metabolites of *Glycyrrhiza glabra* L. and *Sophora japonica* L.

F.M. Abdullayeva, A.M. Maharramov, E.Z. Huseyinov, Z.N. Pashayeva, A.S. Safarova (pp.138-150)

Medicinal and Therapeutic Applications of Pyrimidine Derivatives

Sarah Adnan Abdulridha, Mouayed Yousif Kadhum (pp.151-164)

Synthesis, Identification and Study of the Biological Activity for some New Azomethine Complexes Based on 1,8-Diaminonaphthalene

N.M. Jafarova, G.I. Bayramov, F.M. Chiragov, A.A. Samadova, S.Z. Akhmadova, H.F. Hajiyeva (pp.165-174)

Analysis of Solid Waste Generated in Metallurgical Enterprises with Modern XRF Technology

Guzal Davronova, Mingnikul Kurbanov, Lobar Bozorova, Matluba Safarova, Shaxnoza Mamatova, Mirhojiddin Salayev (pp.175-185)

Separation of Organic Sulphur Compounds from the Heavy Oil Fraction in the Participation of Sulfuric Acid

Asem S.A. Albotani, Kawakib A. Aziz, Samaa A. Raof, Shakir M. Saied, Mohanad Y. Saleh (pp.186-199)

Synthesis, Characterization and Antimicrobial Activity of Some Novel Transition Metals (II) Complexes of Tartaric Acid (Tar) and 4-Aminoantipyrine (4-AAP) Mixed Ligands

Bekzod Bekchanov, Munavvar Dzhandullaeva, Bahrom Kucharov, Aktam Erkaev, Mashkhurakhon Yulbarsova (pp.200-208)

Study of Sulfuric Acid Processing of Serpentinites from the Karakalpak Deposit

A.A. Qurbanov, E.J. Ahmadov, S.R. Mammadova, Z.T. Hasanova, I.J. Alverdiyev (pp.209-222)

Solid-Phase Equilibria in the $\text{Bi}_2\text{S}_3\text{-Bi}_2\text{Se}_3\text{-BiI}_3$ System and Thermodynamic Properties of Solid Solutions Based on $\text{Bi}_{19}\text{S}_{27}\text{I}_3$

T.R. Gurbanova, Z.I. Ismailov, Z.T. Hasanova, S.G. Sultanova, G.M. Shukurova, R.J. Mirzayeva, B.F. Alizade, R.H. Fatullazade, I.I. Aliyev (pp.223-232)

Characterization of Chemical Interactions in the PbSe-MnSe System

Sarah Ali Mohammed Reda, Ibtehaj Raheem Ali (pp.233-250)

Cloud Point Extraction Spectrophotometric Determination and Removal of Cadmium (II) Using a Novel Azo Reagent (A.P.A.M.P.)