

Paper Code	Title / Authors
Separation Process	
1026	Green Modification of Pebax Membranes Using Natural Compound-Based for Efficient CO₂ Separation A. Rezaei Khenari, R. Abedini*, H. Hassanzadeh
1034	Molecular Study of Benzoic Acid Incorporation in PEBA Membranes for CO₂ Separation M. Elyasi Kojabadi*, M. Moharrami
1071	Carbothermal reduction of red mud by coke for treatment of wastewater contaminated with cationic dye M.H. Kholghi Kalajahi, A. Salem*
1095	Molecular Simulation Screening of Zn-Based MOFs for CO₂ Adsorption under Flue Gas Conditions M. Malek Mahmoudi, M. Khosravi-Nikou*, A. Shariati
1109	Fabrication, evaluation, and characterization of PVC/PDA polymer membrane for wastewater treatment containing pharmaceuticals using a membrane bioreactor R.Abdollahi, H.Hazrati*, Y. Jafarzadeh
1116	Performance Evaluation of Reverse Osmosis Membrane System for Nitrate Removal using Response Surface Methodology A. Eslami-Majandeh, A. Nematollahzadeh*
1131	g-C₃N₄-Based Photocatalytic Membrane: A Dual-Function Platform for Doxorubicin Degradation and Self-Cleaning Fouling Control Under Visible Light M. Hajheidari, M. Homayoonfal*, F. Davar, F. Ebrahimi
1179	Phosphate Removal Using a Negatively Charged PAN Ultrafiltration Membrane H. Hashemi gazar, M. Sabzekar*, P. Fatemi
1181	Machine Learning-Assisted Multi Objective Optimization of a Dividing Wall Column A. Barzkar, M. Karimi*, M. Panahi
1193	Synergistic Effects of TiO₂, Functionalized CNTs, and Tannic Acid on PVDF Membrane Performance and Fouling Resistance M. Esmaeili*, S. Ghaemy, S. Rasam, M. R. Alizadehfard
1209	Fabrication of Hydrophobic Polyvinylidene Fluoride Membranes Reinforced with Stearic Acid for Enhanced Carbon Dioxide Capture from Gas Mixtures M. Mohammadi, M. Homayoonfal *, F.Tahmasebi, F.S. Hosseini Semnani
1210	Integrated Waste Heat Recovery and Adsorption System for SO₂ Removal from Flue Gas A. R. Charoughchi, M. Yazdani, Sh. Fatemi*, M. Fakhroleslam
1212	Evaluation of the Effects of Aluminum Oxide Nanoparticles and Ultrasonic Irradiation on Enhancing the Filtration Performance of Polyacrylonitrile (PAN) Membranes N. Ghalani, M. Homayoonfal*, F. Tahmasebi Sefiddashti, A. Solaimany Nazar, M. Farhadian
1237	UV-Assisted fabrication of crosslinked PCL/PEGDA membranes for CO₂ separation A.R.Bahrami, A.R.Raisi*
1239	Hybrid Sono-Electrocoagulation with Aluminum Electrodes: Response-Surface Modeling of Methylene Blue Decolorization M. seifi, K. keynejad*, Z. Nasrollahi, H. Azizpour
1241	Forecasting industrial energy consumption with a cascade-forward neural network: a high-accuracy modeling approach utilizing temporal features F. Normandipour, H. Bagheri*, H. Hashemipour
1262	HOF-MOF hybrids for the Efficient Removal of Ofloxacin from Wastewater Z. Torki, H. Molavi*, M. S. Salimi
1274	Molecular Dynamics Simulation of Water Purification Membranes Based on Hydrazone- Linked Covalent Organic Frameworks S. Aghazadeh, F. Parvizian*, E. Jodaki, S. Bandeh Ali

Paper Code	Title / Authors
Separation Process	
1282	Visible-Light-Driven Photocatalytic Functionalized Membranes with g-C₃N₄ and Ionic Liquids for Efficient Removal of Organic Dyes and Cr(VI) A. Lari, A. Bayandori Moghaddam, M-H. Sarrafzadeh*
1285	Hydrothermal conversion of natural zeolite into hydroxysodalite for treatment of Tannery wastewater S. Parviznia, A. Salem*
1312	Surrogate-Assisted Multi-Objective Optimization of VPSA for CO₂ Capture from Steam Methane Reforming Flue Gas M. Yazdani, A. R. Charoughchi, Sh. Fatemi*, M. Fakhroleslam
1316	Synthesis, Characterization, and H₂ Response of Zinc Oxide Thick Film Gas Sensors R. Soleimani, B. Khoshandam*
1321	Fabrication and Modification of Ultrafiltration Membranes Using Ti₄AlN₃ MAX Phase E. Khodaverdyzadeh, M. Safarpour*, A.R. Khataee
1330	Performance evaluation of neat PVC membranes in air-gap membrane distillation process F. Soleimani, Gh. Bakeri*
1352	Covalently Engineered PES/TiO₂-Aniline Oligomer (AO) Membrane for Highly Efficient and Stable Removal of Methylene Blue M. Shakerbigi, F. Parvizian*, S. M. Hosseini
1355	Application of Membrane Technology for Light to Heavy gas Components Adjustment among Petrochemical Companies M. Esmaeili*, F. Bahadorani, S. Rasam, A. H. Taheri, N. Mohaghegh
1362	Effective Pb(II) Uptake by a Novel Composite : Kinetic Study F. Dehghani, M. M. Pourghazi*, T. Yousefi, R. Yavari, H. R. Moazami
1383	pH-Responsive TiO₂@P4VP-Modified Membranes for Enhanced Doxorubicin Removal: Overcoming the Flux-Rejection Trade-Off N. Heidaran, M. Homayoonfal*, A. Karimi Dehkordi
1390	ZnFe₂O₄ Photocatalytic Membranes for Efficient Tetracycline Degradation and Antifouling in water Treatment F. Ebrahimi, M. Farhadian*, A. R. Solaimany Nazar*, M. Homayoonfal, M. Hajheidari
1414	Kinetic study of cerium adsorption by Padina Sp. Algae M.H. Khani, A.A. Ghorbanpour Khamseh*
1417	Evaluation of the Performance of (Ce-Sn-Zr-Molybdate)Fe₃O₄-Chitosan Composite as an Adsorbent for the Removal of Cs⁺ ions from Aqueous Solutions F. Dehghani, M. M. Pourghazi*, T. Yousefi, R. Yavari, H. R. Moazami
1418	Equilibrium and thermodynamics study of cerium biosorption by Padina sp. Algae A.A. Ghorbanpour Khamseh*, M.H. Khani
1427	Investigation of the Effectiveness of Aminopropyl Morpholine (APM) and Ammonia (NH₃) as Solvents for CO₂ Absorption at Atmospheric Pressure M. Jamshidi, H. Pahlavanzadeh*
1429	Effect of TBP Concentration on Lithium Extraction Efficiency and Overall Mass Transfer Coefficient in a Y-Shaped Microchannel Using Anisole as a Novel Diluent M. M. Bahadori, M. Outokesh, S. Ammari Allahyari*, P. Zaheri
1431	Flow Rate Impact on Lithium Solvent Extraction in Hollow Fiber Supported Liquid Membrane A. Mirzaei, S. Movahhedi Rad, S. Ammari Allahyari*, A. Charkhi
1451	Activated carbon-reinforced sodium alginate hydrogel for adsorption of citric acid from aqueous solutions O. Mohseni, P. Hejazi*
1463	Synergistic Effects of Choline Chloride and Ethylene Glycol as DES combined with Fe₃O₄ nanoparticles on CO₂ Capture S. Maghami*, S. Hamid Esmaeili-Faraj, B. Molavian

Paper Code	Title / Authors
Separation Process	
1466	Energy Consumption Optimization of an Olefin Production Unit Using Exergy Analysis, Diagnosis, and the Artificial Hummingbird Algorithm J. Mansouri Habib Abadi , M. Beheshti*
1491	Time-Dependent Performance of Square Cascades for Krypton Isotope Separation M. M.Shadman*, F. Mansourzadeh, Y. Amini
1496	Comparative Study of the Taper and Square Cascades in Multicomponent Isotope Separation F.Mansourzadeh, Y.Amini, M.M.Shadman*
1515	Experimental Breakthrough Analysis of N₂/O₂ Adsorption on Zeolite LiX A. Memari, S. A. Elahi, S. A. H. Hejazi*
1520	Removal of oily contaminants from aqueous environments using modified superhydrophobic nanosorbents F. Yousefi, S. S. Ashraf Talesh*, R. Mahdavi
1567	Environmental Analysis of Seven Heat-Integrated Processes in Distillation Systems : LCA-Based Evaluation A. Khadem, M. Ahmadi, Z. Mokhtari*, F. Shirmohammadi, Y. Akbarinia
1597	Effect of g-C₃N₄ nanosheets incorporated into a polymeric membrane matrix on CO₂ separation performance S.S. Zarei, R. Abedini*
1604	Separation of Antibiotic Drug Cefixime from Synthetic Wastewater Using the Photocatalytic pH-Sensitive Polysulfone Membrane A.R. Karimi Dehkordi, M.Homayoonfal*, N.Heidaran
1611	The Impact of Sterilization on Hemodialysis Membrane Performance: A Comparative Study of Ethylene Oxide vs. Electron Beam Irradiation M. Arab Khazaeli, H. Salimi-Kenari*, H. Adeli
1612	Effect of Acid Treatment on Enhancing the Oil Adsorption Capacity of Clinoptilolite Zeolite F. Bagheri, R. Norouzbeigi, E. Velayi*
1622	Industrial approach for ethane purification from carbon dioxide by metal-organic frameworks Z. Feli, J. Behin*, E. Ganji Babakhani*
1654	Industrial Evaluation of Anionic and Nonionic Flocculants in Copper Leaching Thickeners: A Case Study from NFA Company R. Ebadi Aghmiuni*, A. Alizadegan, H. Ojaghi Shirmard, A. Ahmadi Binahri, A. Malekzadeh Dirin
1660	Investigation of the Effect of Various Process Parameters on the Solvent Extraction of Thorium Using Cyanex 921 A. shahroodi, M. jahangiri, A.R Keshtkar *
1667	Equilibrium, Thermodynamic, and Stoichiometry of the Solvent Extraction Reaction of Thorium by Cyanex 921 A. shahroodi, M. jahangiri, A.R Keshtkar*
1668	The Effect of the Addition of Copper Nanoparticles into the Support and Top Layers on the Reverse Osmosis Performance of Thin Film Composite Membranes F. Gharibi, F. Joveini, A. Sharif*, A. Bahramian
1681	CO₂/CH₄ separation using prepared poly (ether-block-amide) and ethylene-vinyl acetate /MCM-41mixed matrix membranes E. Basiri, M. R. Sheybani, M. Vatani*
1688	Nonlinear model of cryogenic distillation for 13C isotope separation Younes Amini*, Fatemeh Mansourzadeh, Mohammad Mahdi shaman
1700	Investigation of the effect of intermediate reboiler on Oxygen-Argon cryogenic distillation towers: Simulation Study Y. Amini*, M.M. shadman , F. Mansourzadeh
1719	Improved CO₂/CH₄ Selectivity and Permeability Using UiO-66/PU Nanocomposite Membranes Sh. Hassanajili*, A. Abbaspour, M. Salehzadeh

Paper Code	Title / Authors
Separation Process	
1747	Exergy Analysis of Distillation Processes for the Separation of Ternary Mixtures and Comparison with Shortcut Methods M.H. Khodabande*, S. ShaghghiAfzali, H. Moeinfard, M.S. Ahmadzadeh
1752	Performance of Neat and Mixed Matrix Pebax Membranes for Air Separation F. Shafeei, M.A. Aroon*, M.H. Rouhbakhsh
1759	Adsorption of the Heavy metal lead by Nettle Stem H. Pahlavanzadeh*, K. Asadi, M. Mirshekar
1771	Effect of Different Coagulation Baths on the Morphology of Porous Poly(ethylene terephthalate glycol) Membranes S.Masjed Soleyman Zadeh, A.Roozitalab, A.Kargari*, M.Soleimani
1784	Investigation of coating the polyester nonwoven fabrics modified with graphene oxide nanosheets by a polyamide layer N. Derikvandnia, Y. Mansourpanah*
1792	Enhancing Exergy Efficiency, Economic Performance, and Environmental Sustainability of Azeotropic Water–Ethanol Separation through Advanced Heat Integration J.Zarkesh, E.Fatehi, Sh.Taleghani*
1798	Efficient Hydrothermal Conversion of Sugarcane Bagasse Ash into Zeolite NaA for Adsorption Applications M. Asadollahzadeh, R. Torkaman*, M. Torab-Mostaedi
1801	Comparative Performance of 1-Allyl-3-Methylimidazolium Tetrafluoroborate in Extractive and Oxidative-Extractive Desulfurization: Optimization of Sulfur Removal Efficiency using RSM S.Ahmadiyan, M.Lashkarbolooki, F. Aali
1803	Study the Effect of Time and Power of Applied Ultrasonic Waves on the Synthesis and Hydrophilic/Hydrophobic Properties of Sigma-2 Zeolite Powder M.J. Vaezi*, M. Kheiri
1804	Synergistic dual tailoring of PEI-based membranes for improved CO₂/N₂ and CO₂/CH₄ gas separation performance: Incorporation of Al₂O₃ nanoparticles into a PEI/SPEEK blend matrix A. Adhami, A. Kargari*
1817	Facile Synthesis of a NiO @ Bentonite Nanocomposite and Its Adsorption Capability toward Methylene Blue and Eriochrome Black T M. H. Gholami, M. Honarmand*, A. Aryafar
1819	Tuning Interlayer Spacing of Graphene Oxide Membranes with Chitosan for Improved Dye Separation E. Bashiri, M. ManteghiaN*, A. Sharif, A. Jafari
1826	Design of a Flare Gas Recovery System for Emission Reduction in a Urea Plant Z. Soleimani pargoo, A. Ahmadpour, A. Bozorgian*, S. Ghamari
1828	Photocatalytic Degradation of the Pharmaceutical Pollutant Tetracycline Using a Solar-Activated Nanocatalyst M. Honarmand*, S. S. Rezaei, A. Aryafar, M. H. Gholami
1835	Enhancing BPA Rejection in PVDF Membranes via Synergistic Modification with PVA and Carboxylated Carbon Nanotubes M. Rabiei, A.H. Navarchian*, M. Farhadian, A. Solaimany Nazar
1840	Breaking the Back-Pressure Barrier: A Dynamic Magnetic-In-Tube SPME Configuration for Clog-Free Monitoring of Organic Water Pollutants S. Pakizeh, Y. Yamini*
1851	Towards Sustainable Rare-Earth Element Recovery: Statistical Optimization of Dysprosium Extraction with Magnetic Nanozeolite M. Asadollahzadeh, R. Torkaman*, M. Torab-Mostaedi
1875	Mass Transfer Analysis of a Novel Asymmetric Rotating Impeller Contactor (ARIC) with U-Shaped Blades for Rare Earth Elements Extraction N. Rezakhani, E. Kashi*, R. Habibpour, M. H. Eikani
1897	A Comprehensive Study on Alum Synthesis from Kaolin F. Ahmadi, S. Yarmohammad Toski, A. Rahmanifard, A. Fazli, S. Habibzadeh*

Paper Code	Title / Authors
Separation Process	
1912	Optimization of Thorium Solvent Extraction Using Trioctylamine by Response Surface Methodology A.R.Safarpour, A.Haghighi asl, A.R.Keshtkar*
1915	Congo Red removal using PES NF membranes containing PVP, PEG, and TEG A. Alipour, E. Bonyadi, F. Zokaee Ashtiani *
1916	Synthesis of Mesoporous Na-A Zeolite Powder by Black Carbon via Hydrothermal Method M. J. Vaezi*, M. S. Yousefi
1994	Experimental Evaluation of a Six-Step Pressure Swing Adsorption Process for Oxygen Purification A. Ghavami , A. Memari , S. A. H. Hejazi*
1998	Proton Exchange Membranes for Hydrogen Fuel Cells: Challenges, and Recent Advances F. Eskandari Ehda, A. Ghezi*, H. Maleki
2010	Studying separation of acetylene from ethylene using adsorption method by molecular simulation A. Ghorbanian, M.Pourafshari Chenar*, M. R. Khosravi-Nikou, S. Abbasi
2030	Humic acid removal from water using PET derived UF membrane S. Hosseini, M. Pakizeh* , M. Behroozi
2048	Investigation of heavy metal removal from Shahid Tondgooyan Petrochemical Company wastewater using zeolite A. Ahmadpour, M. Abbasi, A. Bozorgian*, M. Hasanzadeh Maghsam
2050	Isotherm Study of Pb(II) Adsorption onto Graphene Oxide H. Pahlavanzadeh*, M. Mirshekar, K. Asadi