



تورج محمدی

دانشکده مهندسی شیمی، نفت و گاز- قطب علمی ساخت غشاها و طراحی، راهبری و نگه داری فرآیندهای غشایی- دانشگاه علم و صنعت ایران

Email: torajmohammadi@iust.ac.ir

سوابق تحصیلی

مقطع کارشناسی (۱۳۶۲-۱۳۶۶): رشته مهندسی شیمی دانشگاه صنعت نفت - اهواز - ایران
مقطع کارشناسی ارشد (۱۳۶۷-۱۳۶۹): رشته مهندسی شیمی دانشگاه تهران - تهران - ایران
مقطع دکتری (۱۳۷۲-۱۳۷۵): رشته مهندسی شیمی دانشگاه NSW سیدنی - استرالیا
عنوان پروژه دکتری: ساخت غشاهای مرکب برای استفاده در باطری وانادیم

سوابق شغلی

پژوهشگر	۱۳۶۷-۱۳۶۹	مجتمع صنعتی شهید همت
استادیار	۱۳۷۵	دانشگاه علم و صنعت ایران
۱۳۸۱	۱۳۷۷	مدیر گروه طراحی فرآیندهای صنایع نفت
۱۳۸۴	۱۳۸۱	مدیر گروه صنایع شیمیایی معدنی
۱۳۸۲	۱۳۷۸	مدیر کل امور فرهنگی و فوق برنامه و تربیت بدنی
دانشیار	۱۳۸۰	دانشگاه علم و صنعت ایران
۱۳۸۴	۱۳۸۲	مدیر کل امور پژوهش و فناوری وزارت نفت
استاد	۱۳۸۴	دانشگاه علم و صنعت ایران
۱۳۸۸	۱۳۸۵	رئیس دانشکده مهندسی شیمی
۱۳۹۹	۱۳۹۴	معاون پژوهش و فناوری
استاد ممتاز	۱۳۹۶	دانشگاه علم و صنعت ایران
تاکنون	۱۳۹۷	عضو کارگروه کرسی و گرنت بنیاد علم ایران
تاکنون	۱۳۹۸	مدیر قطب علمی ساخت غشاها و طراحی، راهبری و نگه داری فرآیندهای غشایی
استاد نمونه	۱۴۰۰	وزارت علوم تحقیقات و فناوری
تاکنون	۱۴۰۲	عضو شاخه مهندسی شیمی گروه علوم مهندسی فرهنگستان علوم جمهوری اسلامی ایران

سوابق آموزشی و پژوهشی

تجربیات آموزشی

- (۱) مکانیک سیالات ۱
- (۲) مکانیک سیالات دوفازی
- (۳) مکانیک سیالات پیشرفته
- (۴) رئولوژی پیشرفته
- (۵) انتقال حرارت کاربردی
- (۶) فرایندهای جداسازی غشایی
- (۷) روش های خاص جداسازی

تجربیات پژوهشی

- (۱) ساخت غشاهای مختلف
- (۲) بهینه سازی فرایندهای غشایی مختلف
- (۳) طراحی فرایندهای غشایی مختلف
- (۴) روش های جلوگیری از آلودگی های محیط زیست
- (۵) تصفیه پساب های صنعتی
- (۶) نمک زدایی آب های شور
- (۷) ساخت زخم پوش های مختلف

تعداد پایان نامه های هدایت شده

- | | |
|---------------|-----------|
| کارشناسی ارشد | دکتر |
| بیش از ۲۰۰ | بیش از ۲۰ |
| پسا دکتر | |
| | بیش از ۵ |

افتخارات

- انتخاب رساله دکتری به عنوان رساله ممتاز (۱۹۹۶)
- انتخاب به عنوان دانش آموخته ممتاز و دریافت جایزه از مقام محترم ریاست جمهوری (۱۳۷۷)
- انتخاب به عنوان استاد راهنمای برتر ایران (پانزدهمین دوره پایان نامه سال دانشجویی ۱۳۹۱)
- انتخاب به عنوان پژوهشگر برتر گروه فنی و مهندسی (چهاردهمین جشنواره ملی تجلیل از پژوهشگران و فناوران کشور ۱۳۹۲)
- انتخاب به عنوان **استاد ممتاز** دانشگاه علم و صنعت ایران (۱۳۹۶)
- اخذ کرسی پژوهشی "بکار گیری فناوری های غشایی (تصفیه آب و پساب) بنیاد علم ایران (۱۳۹۶)
- انتخاب به عنوان سرآمد علمی از طرف فدراسیون سرآمدان علمی ایران (۱۴۰۰)
- انتخاب به عنوان **استاد نمونه** کشوری (۱۴۰۰)
- انتخاب به عنوان سرآمد علمی از طرف فدراسیون سرآمدان علمی ایران (۱۴۰۱)
- انتخاب به عنوان **استاد برجسته مهندسی شیمی** گروه علوم مهندسی فرهنگستان علوم جمهوری اسلامی ایران (۱۴۰۱)
- انتخاب به عنوان فناور برگزیده جایزه البرز (۱۴۰۲)
- انتخاب به عنوان **استاد مهندسی شیمی برجسته** از طرف انجمن مهندسی شیمی ایران (۱۴۰۲)
- اخذ کرسی پژوهشی "توسعه فرایندهای غشایی تصفیه آب و پساب شهری" بنیاد علم ایران (۱۴۰۳)

شناسه های پژوهشی

Researcher ID = R-6407-2017
ORCID = 0000-0003-0455-3254
Author ID = 7003866970

کتاب منتشر شده

- 1- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Carbon nanotubes membranes, Nanomaterials and Nanotechnology, One Central Press, 2016.
- 2- Toraj Mohammadi, Maryam Tavakolmoghadam, Applications of Membrane Processes in Wastewater Treatment, Environmental Science and Engineering, One Central Press, 2016.
- 3- Toraj Mohammadi, Mashallah Rezakazemi, Mohtada Sadrzadeh, Takeshi Matsuura, Methods for the Preparation of Organic-Inorganic Nanocomposite Polymer Electrolyte Membranes for Fuel Cells, Organic-Inorganic Composite Polymer Electrolyte Membranes, Springer International Publishing, 2017.
- 4- Toraj Mohammadi, Mashallah Rezakazemi, Mohtada Sadrzadeh, Fundamentals and measurement techniques for gas transport in polymers, Transport Properties of Polymeric Membranes, Elsevier, 2018.

- 5- Toraj Mohammadi, Mashallah Rezakazemi, Mohtada Sadrzadeh, Separation via pervaporation techniques through polymer membranes, *Transport Properties of Polymeric Membranes*, Elsevier, 2018.
- 6- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Antifouling properties of polyethersulfone membranes containing graphene oxide, *Membrane Bioreactors and fouling: A Review and Directions for Reaserch*, Nova Science Publishers, 2018.
- 7- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Barrier, Diffusion, and Transport Properties of Rubber Nanocomposites Containing Carbon Nanofillers, *Carbon-Based Nanofillers and their Rubber Nanocomposites: Fundamentals and Applications*, Elsevier, 2019.
- 8- Toraj Mohammadi, Mohtada Sadrzadeh, **Editors, Nanocomposite Membranes for Water and Gas Separation**, Elsevier, 2019.
- 9- Toraj Mohammadi, Samaneh Khanlari, Maryam Ahmadzadeh Tofighy, Nanocomposite Membranes for Water and Gas Separation, *Transport phenomena through nanocomposite membranes*, Elsevier, 2019.
- 10- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Samaneh Khanlari, Nanocomposite Membranes for Water and Gas Separation, *Development of advanced nanocomposite membranes by carbon-based nanomaterials (GO, CNT, and CNC)*, Elsevier, 2019.
- 11- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Polymer Nanocomposite Membranes for Pervaporation, *Carbon nanotubes-polymer nanocomposite membranes for pervaporation*, Elsevier, 2019.
- 12- Toraj Mohammadi, Zahra Shabani, Soheil Zarghami, Nanotechnology in the Beverage Industry: Fundamentals and Applications, *Nanomaterials for fouling-resistant RO membranes*, Elsevier, 2020.
- 13- Toraj Mohammadi, Rozita M Moattari, Nanotechnology in the Beverage Industry: Fundamentals and Applications, *Nanostructured membranes for water treatments*, Elsevier, 2020.
- 14- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Modeling in Membranes and Membrane-Based Processes, *Application of Molecular Dynamics Simulation to Study the Transport Properties of Carbon Nanotubes-Based Membranes*, Wiley-Scrivener press, 2020.
- 15- Toraj Mohammadi, Rozita M Moattari, Green Adsorbents to Remove Metals, Dyes and Boron from Polluted Water, *Hybrid adsorbents for dye removal from wastewater*, Springer, 2020.
- 16- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Sustainable Materials and System for Water Desalination, *Membrane fouling in desalination*, Springer, 2020.
- 17- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Advanced carbon nanomaterials as adsorbents, *Advanced nanomaterials, Advances in Material Research and Technology*, Springer, 2020.
- 18- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Soha Habibi, Polymer Matrix Composites Containing Carbon Nanomaterials for Medical Applications: *Encyclopedia of Materials: Composites*, Volume 1, Elsevier, 2021.
- 19- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Polymer Matrix Composites Materials for Water and Wastewater Treatment Applications: *Encyclopedia of Materials: Composites*, Volume 1, Elsevier, 2021.
- 20- Toraj Mohammadi, Saeed Seraj, Mohammad Sheikhi, Maryam Ahmadzadeh Tofighy, Membrane materials for forward osmosis and membrane distillation in oily wastewater treatment: *Materials for Oil/Water Separation: Principles and Design*, ACS Books, 2022.
- 21- Toraj Mohammadi, Soheil Zarghami, Mohtada Sadrzadeh, Superhydrophobic/superhydrophilic polymeric membranes for oil/water separation: *Materials for Oil/Water Separation: Principles and Design*, ACS Books, 2022.
- 22- Toraj Mohammadi, Saeed Seraj, Maryam Ahmadzadeh Tofighy, Polymer nanocomposite films and coatings for antifouling applications: *Polymer Nanocomposite Films & Coatings*, Elsevier, 2023.

- 23- Toraj Mohammadi, Romina Shirazi, Maryam Ahmadzadeh Tofighy, Polymer nanocomposite films and coatings for drug delivery applications: Polymer Nanocomposite Films & Coatings, Elsevier, 2023.
- 24- Toraj Mohammadi, Maryam Ahmadzadeh Tofighy, Helium removal from natural gas by membrane technologies: Adv. in Nat. Gas Vol. 5 - Natural Gas Impurities and Condensate Removal, Elsevier, 2023.
- 25- Toraj Mohammadi, Roshanak Pishbin, Mohammad Hosein Moghadasin, Maryam Ahmadzadeh Tofighy, Gravity-driven membrane separation for water treatment: Green Membrane Technology Towards Environmental Sustainability, Elsevier, 2023.
- 26- Toraj Mohammadi, Mohammad Sadegh Nabavi, Fariba Sadat Kamelian, Zeolite membranes for pervaporation, Low cost ceramic membranes: Materials and Fabrication Processes, Materials Horizons: From Nature to Nanomaterials, Springer, 2023.
- 27- Toraj Mohammadi, Fariba Sadat Kamelian, Mohammad Sadegh Nabavi, Oily wastewater treatment using mullite and mullite-alumina membranes, Low cost ceramic membranes: Materials and Fabrication Processes, Materials Horizons: From Nature to Nanomaterials, Springer, 2023.
- 28- Toraj Mohammadi, Sara Pirayandeh, Mohammad Sadegh Fattahi, Mohsen Akbarzade, Maryam Ahmadzadeh Tofighy, Nanofillers in Membrane Industry: Handbook of Nanofillers, Springer, 2023.
- 29- Toraj Mohammadi, Fatemeh Gholamzadeh Moghadam, Sara Pirayandeh, Maryam Ahmadzadeh Tofighy, Nanocomposite of PVC with CNT: Poly(vinyl chloride) based composites and nanocomposites, Springer, 2024.
- 30- Toraj Mohammadi, Faez Roshanzamir, Naser Babajani, Polymeric membranes in membrane bioreactors for wastewater reclamation: Comprehensive Polymer Science 2nd Edition, Elsevier, 2024.
- 31- Toraj Mohammadi, Mona Deghankar, Romina HMT Shirazi, Preparation techniques and characterizations of metal organic framework-based membranes: Comprehensive Polymer Science 2nd Edition, Elsevier, 2024.
- 32- Toraj Mohammadi, Milad Ein Marjani, Romina HMT Shirazi, Polymer based electrospun materials for environmental remediation: Comprehensive Polymer Science 2nd Edition, Elsevier, 2024.
- 33- Toraj Mohammadi, Mostafa Mahinroosta, Rozita M Moattari, Fabrication and application of superabsorbent hydrogels (SAHs) for wastewater treatment: Comprehensive Polymer Science 2nd Edition, Elsevier, 2024.
- 34- Toraj Mohammadi, Soheil Zarghami, Exploration of 2D Nanomaterials in Membrane Distillation for Water Purification: Exploration of 2D Nanomaterials in Membrane Distillation for Water Purification, Elsevier, 2025.

مقالات منتشر شده در مجلات ملی و بین‌المللی

- 1- T. Mohammadi, M. Skyllas Kazacos, Characterization of a novel composite membrane for redox flow battery applications, Journal of Membrane Science, 98, 77, 1995.
- 2- T. Mohammadi, M. Skyllas Kazacoz, Preparation of sulfonated composite membranes for vanadium redox flow battery applications, Journal of Membrane Science, 107, 35, 1995.
- 3- T. Mohammadi, M. Skyllas Kazacoz, Use of polyelectrolytes for incorporation of ion exchange groups in composite membranes for vanadium redox flow battery applications, Journal Power Source, 56, 91, 1995.
- 4- T. Mohammadi, V. Haddadi- Asl, Effect of processing methods and conditions on properties of conductive carbon- polyolefins composites, Iranian Journal of Polymer Science and Technology, 5, 153, 1996.
- 5- T. Mohammadi, M. Skyllas Kazacoz, Evaluation of chemical stability of some membranes in the vanadium solution, Journal Applied Electrochemistry, Vol. 27, No. 2, 153, 1997.

- 6- T. Mohammadi, V. Haddadi- Asl, Modification of a composite membrane for redox flow battery applications, *Iranian Journal of Polymer Science and Technology*, 6, 43, 1997.
- 7- T. Mohammadi, S. C. Cheing, M. Skylas Kazacoz, Water transport study across commercial ion exchange membranes in vanadium redox flow battery, *Journal of Membrane Science*, 133, 151, 1997.
- 8- T. Mohammadi, Modification of anion exchange membranes for vanadium redox flow battery applications, *International Journal of Engineering Science*, Vol. 10, No. 5, 19, 1999.
- 9- T. Mohammadi, S. S. Madaeni, M. Kazemimoghadam, Chemical cleaning of reverse osmosis membranes, *Desalination*, 134, 77, 2001.
- 10- T. Mohammadi, M. Kazemimoghadam, S. S. Madaeni, Chemical cleaning of a polyamide membrane, *Desalination*, 139, 381, 2001.
- 11- T. Mohammadi, S. S. Madaeni, M. Taghipur, Recovery of UF membranes fouled in milk industries, *International Journal of Engineering Science*, Vol. 13, No. 2, 145, 2002.
- 12- T. Mohammadi, M. Mahdyarfar, Effect of operation condition on membrane fouling during ultrafiltration of gelatin solution, *International Journal of Engineering Science*, Vol. 13, No. 4, 2002.
- 13- T. Mohammadi, A. Pak, Making zeolite A membrane from kaolin by electrophoresis, *Microporous and Mesoporous Materials*, Vol. 56, No. 1, 81, 2002.
- 14- T. Mohammadi, S. S. Madaeni, M. Kazemimoghadam, Investigation of membrane fouling, *Desalination*, 153, 155, 2002.
- 15- T. Mohammadi, M. Kazemimoghadam, S.S. Madaeni, Hydrodynamic factors affecting flux and fouling during reverse osmosis of seawater, *Desalination*, 151, 239, 2002.
- 16- T. Mohammadi, M. A. Alaei, M. Kazemimoghadam, Pervaporation separation of water - acetic acid mixtures, *International Journal of Engineering Science*, Vol. 13, No. 5, 151, 2002.
- 17- T. Mohammadi, A. Pak, Effect of calcination temperature of kaolin as a support for zeolite membranes, *Separation and Purification Science*, 30, 241, 2003.
- 18- T. Mohammadi, M. Kazemimoghadam, M Saadabadi, Modeling of membrane fouling and flux decline in reverse osmosis during separation of oil in water emulsions, *Desalination*, 157, 369, 2003.
- 19- T. Mohammadi, A. Kaviani, Water shortage and seawater desalination by electrodialysis, *Desalination*, 158, 267, 2003.
- 20- T. Mohammadi, M. Kazemimoghadam, S. S. Madaeni, Cleaning of RO membranes, *International Journal of Engineering Science*, Vol. 14, No. 4, 175, 2003.
- 21- T. Mohammadi, S. S. Madaeni, M. Mahdyarfar, M. Kazemimoghadam, Effect of operating conditions and chemicals on ultrafiltration membrane fouling, *Iranian Journal of Science and Technology, Transaction B*, Vol. 27, No. B2, 2003.
- 22- T. Mohammadi, Desalination is being essential for many Arab countries, *AWWM*, May/June, 48, 2003.
- 23- T. Mohammadi, M. Kazemimoghadam, A. Pak, Dehydration of water/1-1-dimethylhydrazine mixtures by zeolite membranes, *Microporous and Mesoporous Materials*, 70, 127, 2004.
- 24- T. Mohammadi, A. Esmaeilifar, Wastewater treatment of a vegetable oil factory by ultrafiltration, *Desalination*, 166, 329, 2004.
- 25- T. Mohammadi, A. Razmi, M. Sadrzadeh, Effect of operating parameters on Pb^{2+} separation from wastewater using electrodialysis, *Desalination*, 167, 379, 2004.
- 26- T. Mohammadi, A. Pak, Mehrdad Karbassian and Masoud Golshan, Effect of operating conditions on microfiltration of oil-water emulsion by a kaolin membrane, *Desalination*, 168, 201, 2004.
- 27- T. Mohammadi, A. Moheb, M. Sadrzadeh, A. Razmi, Separation of copper ions by electrodialysis using Taguchi experimental design, *Desalination*, 169, 21, 2004.
- 28- T. Mohammadi, A. Moheb, M. Sadrzadeh, A. Razmi, Modeling of metal ion removal from wastewater by electrodialysis, *Separation and Purification Technology*, Vol. 41, No. 1, 73, 2005.

- 29- T. Mohammadi, A. Aroujalian, A. Bakhshi, Pervaporation of dilute alcoholic mixtures using PDMS membrane, *Chemical Engineering Science*, 60, 1875, 2005.
- 30- T. Mohammadi, M. Akbarabadi, Separation of ethylene glycol solution by vacuum membrane distillation (VMD), *Desalination*, 181, 35, 2005.
- 31- T. Mohammadi, M. Kazemimoghadam, Separation of water/UDMH mixtures using hydroxysodalite zeolite membranes, *Desalination*, 181, 1, 2005.
- 32- T. Mohammadi, A. Esmaeilifar, Wastewater treatment of a vegetable oil factory by a hybrid ultrafiltration-activated carbon process, *Journal of Membrane Science*, 254, 129, 2005.
- 33- T. Mohammadi, A. Kohpeyma, M. Sadrzadeh, Mathematical modeling of flux decline in ultrafiltration, *Desalination*, 184, 367, 2005.
- 34- T. Mohammadi, A. Pak, Z. Nourian, M. Taherkhani, Experimental design in Mullite microfilter preparation, *Desalination*, 184, 57, 2005.
- 35- T. Mohammadi, A. Ezzati, E. Gorouhi, Separation of water in oil emulsions using microfiltration, *Desalination*, 185, 371, 2005.
- 36- T. Mohammadi, A. Aroujalian, A. Bakhshi, Pervaporation of dilute alcoholic mixtures using PDMS membrane, *Chemical Engineering Science*, 60, 1875, 2005.
- 37- T. Mohammadi, O. Ghaffari Nik, A. Bakhshi, Effect of Operating Conditions on Pervaporation of Methanol-Water Mixtures, *Membrane Technology*, Part 1, November, 2006.
- 38- T. Mohammadi, O. Ghaffari Nik, A. Bakhshi, Effect of Operating Conditions on Pervaporation of Methanol-Water Mixtures, *Membrane Technology*, Part 2, December, 2006.
- 39- T. Mohammadi, M. Kazemimoghadam, Preparation of NaA zeolite membranes for separation of water/UDMH mixtures, *Separation and Purification Technology*, Vol. 47, No. 3, 173, 2006.
- 40- T. Mohammadi, A. Pak, Zeolite NaA membrane synthesis, *Desalination*, 200, 68, 2006.
- 41- T. Mohammadi, E. Gorouhi, M. Sadrzadeh, Microfiltration of oily wastewater using PP hydrophobic membrane, *Desalination*, 200, 319, 2006.
- 42- T. Mohammadi, O. Bakhteyari, Concentration of L-Lysine Monohydrochloride (L-Lysine-HCl) Syrup Using Vacuum Membrane Distillation (VMD), *Desalination*, 200, 591, 2006.
- 43- T. Mohammadi, A. Madandar, Effect of permeate pressure on pervaporation of methyl tert-butyl ether/methanol mixtures, *Desalination*, 200, 390, 2006.
- 44- T. Mohammadi, S. M. Mirfendereski, Synthesis and characterization of T-type zeolite membrane, *Desalination*, 200, 77, 2006.
- 45- T. Mohammadi, A. Moheb, O. G. Nik, Separation of Ethylene glycol/Water mixtures using NaA zeolite membrane, *Chemical Engineering and Technology*, 29, 1340, 2006.
- 46- T. Mohammadi, M. Kazemimoghadam, Synthesis of MFI zeolite membranes for water Desalination, *Desalination*, 206, 547, 2007.
- 47- T. Mohammadi, M. Kazemimoghadam, Chemical Cleaning of Ultrafiltration Membranes in Milk Industries, *Desalination*, 204, 213, 2007.
- 48- T. Mohammadi, M. Sadrzadeh, A. Kaviani, Mathematical Modeling of Desalination by Electrodialysis, *Desalination*, 206, 538, 2007.
- 49- T. Mohammadi, M. Sadrzadeh, A. Razmi, Separation of monovalent, divalent and trivalent ions from wastewater at various operating conditions using electrodialysis, *Desalination*, 205, 53, 2007.
- 50- T. Mohammadi, A. Mosadeghkhah, M. A. Alaei, Effect of sintering temperature and dwell time and pressing pressure on Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} perovskite-type membranes, *Materials and Design*, 206, 538, 2007.
- 51- T. Mohammadi, M. Sadrzadeh, A. Razmi, Separation of different ions from wastewater at various operating conditions using electrodialysis, *Separation and Purification Technology*, 54, 147, 2007.
- 52- T. Mohammadi, M. Sadrzadeh, R. Nikbakht, Effect of operating parameters on concentration of citric acid using electrodialysis, *Journal of Food Engineering*, 83, 596, 2007.

- 53- T. Mohammadi, M. Peer, M. Mahdyarfar, S. M. Kamali, Separation of Hydrogen from Carbon Monoxide Using a Hollow Fiber Polyimide Membrane: Experimental and Simulation, *Chemical Engineering and Technology*, 30, 1418, 2007.
- 54- T. Mohammadi, M. Asghari, R. F. Alamdari, F. Agand, Preparation and Characterization of a Thin Continuous Faujasite Membrane on Tubular Porous Mullite Support, *Desalination*, 220, 65, 2008.
- 55- T. Mohammadi, M. Sadrzadeh, Sea Water Desalination Using Electrodialysis, *Desalination*, 221, 440, 2008.
- 56- T. Mohammadi, A. Pak, Wastewater Treatment of Desalting Units, *Desalination*, 222, 249, 2008.
- 57- T. Mohammadi, A. Pak, S. M. Hosseinalipour, V. Allahdini, CFD Modeling of Porous Membranes, *Desalination*, 222, 482, 2008.
- 58- T. Mohammadi, A. Aroujalian, A. Bakhshi, Pervaporation Separation of Binary and Ternary Mixtures with Polydimethylsiloxane Membranes, *Journal of Applied Polymer Science*, 107, 1777, 2008.
- 59- T. Mohammadi, T. Kikhavandi, M. R. Moghbeli, Synthesis and Characterization of Poly (ether block amide) Membranes for Pervaporation of Organic/Aqueous Mixtures, *Journal of Applied Polymer Science*, 107, 1917, 2008.
- 60- T. Mohammadi, T. Kikhavandi, M. R. Moghbeli, Synthesis and Characterization of Poly(ether-block-amide) Membranes, *Macromolecular Symposia*, 264, 127, 2008.
- 61- T. Mohammadi, M. Sadrzadeh, S. M. Mirfendereski, T. Mazaheri, CO₂ and CH₄ permeation through T-type zeolite membranes: effect of synthesis parameters and feed pressure, *Separation and Purification Technology*, 61, 317, 2008.
- 62- T. Mohammadi, M. Peivasti Rezaeian, A. Maadandar, Effect of operating conditions on pervaporation of methanol/methyl tert-butyl ether mixtures, *Chemical Engineering and Processing*, 47, 1069, 2008.
- 63- T. Mohammadi, M. Asghari, R. F. Alamdari, F. Agand, Thin-layer Template-free Polycrystalline Layer of Mordenite Membranes on Cylindrical Mullite Supports, *Microporous and Mesoporous Materials*, 114, 148, 2008.
- 64- T. Mohammadi, M. Asghari, A. Samimi, M. Fouladi, R. F. Alamdari, F. Agand, Ion-Exchanged Zeolite X Membranes: Synthesis and Characterization, *Membrane Technology*, March, 2008.
- 65- T. Mohammadi, M. Sadrzadeh, J. Ivakpour, N. Kasiri, Separation of lead ions from wastewater using electrodialysis: Comparing mathematical and neural network modeling, *Chemical Engineering Journal*, 144, 431, 2008.
- 66- T. Mohammadi, S. M. Mirfendereski, M. Sadrzadeh, Effect of synthesis parameters on single gas permeation through T-type zeolite membranes, *International Journal of Greenhouse Gas Control*, Vol. 2, No. 4, 531, 2008.
- 67- T. Mohammadi, M. Peer, M. Mahdyarfar, Evaluation of a mathematical model using experimental data and Artificial Neural Network for prediction of gas separation, *Journal of Natural Gas Chemistry*, 17, 135, 2008.
- 68- T. Mohammadi, M. Tavakol Moghadam, M. Saeidi, M. Mahdyarfar, Acid Gas Permeation Behavior Through Poly (ester urethane urea) Membrane, *Industrial and Engineering Chemistry Research*, 47, 7361, 2008.
- 69- T. Mohammadi, O. Bakhteyari, L-Lysine monohydrochloride (L-Lysine-HCl) syrup concentration using a membrane hybrid process of ultrafiltration and vacuum membrane distillation, *Chemical Engineering and Technology*, 31, 1569, 2008.
- 70- T. Mohammadi, E. Saljoughi, M. Amirilargani, Effect of Poly (vinyl pyrrolidone) concentration and coagulation bath temperature on the morphology, permeability and thermal stability of asymmetric cellulose acetate membranes, *Journal of Applied Polymer Science*, 111, 2537, 2009.
- 71- T. Mohammadi, M. Peer, M. Mahdyarfar, Investigation of syngas ratio adjustment using a polyimide membrane, *Chemical Engineering and Processing*, 48, 755, 2009.

- 72- T. Mohammadi, M. Sadrzadeh, E. Saljoughi, Effect of synthesis parameters on morphology and pure water permeation flux through asymmetric cellulose acetate membranes, *Journal of Membrane Science*, 326, 627, 2009.
- 73- T. Mohammadi, M. Peivasti Rezaeian, Separation of Isomeric Xylenes: Experimental and Modeling, *Separation Science and Technology*, 44, 817, 2009.
- 74- T. Mohammadi, M. A. Alaei, Preparation and Characterization of $\text{Ba}_{0.8}\text{Sr}_{0.2}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ perovskite-type membranes, *Membrane Technology*, Part 1, February, 2009.
- 75- T. Mohammadi, M. A. Alaei, Preparation and Characterization of $\text{Ba}_{0.8}\text{Sr}_{0.2}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ perovskite-type membranes, *Membrane Technology*, Part 2, March, 2009.
- 76- T. Mohammadi, M. Sadrzadeh, Treatment of sea water using electrodialysis: current efficiency evaluation, *Desalination*, 249, 279, 2009.
- 77- T. Mohammadi, S. M. A. Safavi, High salinity water desalination using membrane distillation, *Chemical Engineering Journal*, 149, 191, 2009.
- 78- T. Mohammadi, E. Saljoughi, Cellulose acetate (CA)/Polyvinylpyrrolidone (PVP) blend asymmetric membranes: Preparation, morphology and performance, *Desalination*, 249, 850, 2009.
- 79- T. Mohammadi, E. Saljoughi, Effect of production conditions on morphology and permeability of asymmetric cellulose acetate membranes, *Desalination*, 243, 1, 2009.
- 80- T. Mohammadi, M. Amirilargani, Preparation and characterization of asymmetric polyethersulfone (PES) membranes, *Polymers for Advanced Technologies*, 20, 993, 2009.
- 81- T. Mohammadi, M. Amirilargani, E. Saljoughi, Effects of Tween 80 concentration as a surfactant additive on morphology and permeability of flat sheet polyethersulfone (PES) membranes, *Desalination*, 249, 837, 2009.
- 82- T. Mohammadi, S. M. A. Safavi, Application of Taguchi method in optimization of desalination by vacuum membrane distillation, *Desalination*, 249, 83, 2009.
- 83- T. Mohammadi, A. Salahi, A. Rahmat Pour, F. Rekabdar, Oily wastewater treatment using ultrafiltration, *Desalination and Water Treatment*, 6, 289, 2012.
- 84- T. Mohammadi, M. Sadrzadeh, M. Amirilargani, K. Shahidi, Gas permeation through a synthesized composite PDMS/PES membrane, *Journal of Membrane Science*, 342, 236, 2009.
- 85- T. Mohammadi, M. Sadrzadeh, J. Ivakpour, N. Kasiri, Neural network modeling of Pb^{2+} removal from wastewater using electrodialysis, *Chemical Engineering and Processing*, 48, 1371, 2009.
- 86- T. Mohammadi, M. Sadrzadeh, K. Shahidi, Effect of operating parameters on pure and mixed gas permeation properties of a synthesized composite PDMS/PA membrane, *Journal of Membrane Science*, 342, 327, 2009.
- 87- T. Mohammadi, M. Sadrzadeh, A. Ghadimi, K. Shahidi, Ternary gas permeation through a synthesized PDMS membrane: experimental and modeling, *Journal of Membrane Science*, 344, 225, 2009.
- 88- T. Mohammadi, M. A. Alaei, M. M. Movahednia, Effect of Ba content on oxygen permeation performance of $\text{Ba}_{0.8}\text{Sr}_{0.2}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ ($x=0.2, 0.5$ and 0.8) perovskite-type membrane, *Journal of Chemical and Engineering Data*, 54, 3082, 2009.
- 89- T. Mohammadi, M. Ahmadzadeh Tofighy, A. Pak, Synthesis of carbon nanotubes on macroporous kaolin substrate via a new simple CVD method, *International Journal of Chemical Reactor Engineering*, 7, A79, 2009.
- 90- T. Mohammadi, M. Amirilargani, Effects of PEG on morphology and permeation properties of polyethersulfone membranes, *Separation Science and Technology*, 44, 16, 3854, 2009.
- 91- T. Mohammadi, M. Amirilargani, E. Saljoughi, Improvement of permeation performance of polyethersulfone (PES) ultrafiltration membranes via addition of Tween-20, *Journal of Applied Polymer Science*, 115, 504, 2009.
- 92- T. Mohammadi, M. Sadrzadeh, A. Ghadimi, Coupling a mathematical and a fuzzy logic-based model for prediction of zinc ions separation from wastewater using electrodialysis, *Chemical Engineering Journal*, 151, 262, 2009.

- 93- T. Mohammadi, M. Tavakol Moghadam, M. Saeidi, M. Mahdizarfar, Gas permeation properties of Seragel membrane, *Asia Pacific Journal of Chemical Engineering*, 2009.
- 94- T. Mohammadi, M. Sadrzadeh, E. Saljoughi, K. Shahidi, Preparation and characterization of a composite PDMS membrane on CA support, *Polymers for Advanced Technologies*, 2009.
- 95- T. Mohammadi, M. Sadrzadeh, M. Amirilargani, K. Shahidi, Pure and mixed gas permeation through a composite polydimethylsiloxane membrane, *Polymers for Advanced Technologies*, 2009.
- 96- T. Mohammadi, M. Sadrzadeh, M. Amirilargani, Synthesis and characterization of polyethersulfone membranes, *Journal of Polymer Research*, 2009.
- 97- T. Mohammadi, M. A. Alaei, A. Ghadimi, Reinvestigation of the Permeation Behaviour of a $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ Perovskite-type Membrane, *High Temperature Materials and Processes*, 28, 3, 181, 2009.
- 98- T. Mohammadi, M. Amirilargani, Synthesis and characterization of asymmetric polyethersulfone membranes: effects of concentration and polarity of nonsolvent additives on morphology and performance of the membranes, *Polymers for Advanced Technologies*, 2009.
- 99- T. Mohammadi, M. Sadrzadeh, M. Shokrian, C_3H_8 separation from CH_4 and H_2 using a synthesized PDMS membrane: experimental and neural network modeling, *Journal of Membrane Science*, 346, 59, 2010.
- 100- T. Mohammadi, A. Salahi, M. Abbasi, Permeate flux decline during UF of oily wastewater: experimental and modeling, *Desalination*, 251, 153, 2010.
- 101- T. Mohammadi, A. Salahi, M. Abbasi, S. M. Mirfendereski, A. Pak, Dimensional analysis of permeation flux for microfiltration of oily wastewaters using mullite ceramic membranes, *Desalination*, 252, 113, 2010.
- 102- T. Mohammadi, M. Amirilargani, E. Saljoughi, Asymmetric cellulose acetate dialysis membranes: Synthesis, characterization and performance, *Journal of Applied Polymer Science*, 116, 2251, 2010.
- 103- T. Mohammadi, M. Amirilargani, E. Saljoughi, M. R. Moghbeli, Effects of coagulation bath temperature and Polyvinylpyrrolidone content on flat sheet asymmetric polyethersulfone membranes, *Polymer Engineering and Science*, 2010.
- 104- T. Mohammadi, M. Sadrzadeh, K. Shahidi, Synthesis and gas permeation properties of a single layer PDMS membrane, *Journal of Applied Polymer Science*, 117, 33, 2010.
- 105- T. Mohammadi, M. Sadrzadeh, K. Shahidi, Preparation and C_3H_8 /gas separation properties of a synthesized single layer PDMS membrane, *Separation Science and Technology*, 45, 592, 2010.
- 106- T. Mohammadi, M. Kazemimoghadam, The pilot-scale pervaporation plant using tubular-type module with nano pore zeolite membrane, *Desalination*, 255, 196, 2010.
- 107- T. Mohammadi, A. Sabetghadam, PVA–APTEOS/TEOS hybrid sol-gel pervaporation membrane for dehydration of ethanol, *Composite Interfaces*, 17, 223, 2010.
- 108- T. Mohammadi, M. Ahmadzadeh Tofighy, Salty water desalination using carbon nanotube sheets, *Desalination*, 258, 182, 2010.
- 109- T. Mohammadi, M. Abbasi, S. M. Mirfendereski, M. Nikbakht, M. Golshenas, Performance study of mullite and mullite-alumina ceramic MF membranes for oily wastewaters treatment, *Desalination*, 259, 169, 2010.
- 110- T. Mohammadi, M. Sadrzadeh, A. Ghadimi, Prediction of ternary gas permeation through synthesized PDMS membranes by using Principal Component Analysis (PCA) and Fuzzy Logic (FL), *Journal of Membrane Science*, 360, 509, 2010.
- 111- T. Mohammadi, M. Kazemimoghadam, Preparation of mordenite membranes for dehydration of water – UDMH, *Desalination*, 260, 276, 2010.
- 112- T. Mohammadi, A. Sabetghadam, Tuning nanocomposite membranes for separating liquid mixtures, *Plastic Research Online*, July, 2010.
- 113- T. Mohammadi, A. Salahi, Experimental investigation of oily wastewater treatment using combined membrane systems, *Water Science and Technology*, 62.2, 245, 2010.

- 114- T. Mohammadi, A. Salahi, A. Gheshlaghi, S. S. Madaeni, Experimental performance evaluation of polymeric membranes for treatment of an industrial oily wastewater, *Desalination*, 262, 235, 2010.
- 115- T. Mohammadi, M. Kazemimoghadam, Mechanisms and experimental results of aqueous mixtures pervaporation using nanopore HS zeolite membranes, *Desalination*, 262, 273, 2010.
- 116- T. Mohammadi, M. Amirilargani, E. Saljoughi, Effect of PEG additive and coagulation bath temperature on the morphology, permeability and thermal/chemical stability of asymmetric CA membranes, *Desalination*, 262, 72, 2010.
- 117- T. Mohammadi, A. Sabetghadam, Effects of annealing temperature and time on structure and performance of Poly(vinyl)alcohol nanocomposite membranes, *Polymer Engineering and Science*, 2010.
- 118- T. Mohammadi, A. Salahi, F. Rekabdar, Reverse osmosis of refinery oily wastewater effluents, *Iranian Journal of Environmental Health Science and Engineering*, Vol. 7, No. 5, 413, 2010.
- 119- T. Mohammadi, A. Salahi, M. Abbasi, F. Rekabdar, Chemical cleaning of ultrafiltration membrane after treatment of oily wastewater, *Iranian Journal of Chemical Engineering*, Vol. 7, No. 3, 17, 2010.
- 120- T. Mohammadi, S. Rezaei Hosein Abadi, M. R. Sebzari, M. Hemati, F. Rekabdar, Ceramic membrane performance in microfiltration of oily wastewater, *Desalination*, 265, 222, 2011.
- 121- T. Mohammadi, M. Ahmadzadeh Tofighy, Adsorption of divalent heavy metal ions from water using carbon nanotube sheets, *Journal of Hazardous Materials*, 185, 140, 2011.
- 122- T. Mohammadi, S. M. Mirfendereski, Investigation of Synthesis Parameters on Characteristics of T type Zeolite Crystal Structure, *Powder Technology*, 206, 345, 2011.
- 123- T. Mohammadi, M. Ahmadzadeh Tofighy, Permanent hard water softening using carbon nanotube sheets, *Desalination*, 268, 208, 2011.
- 124- T. Mohammadi, A. Salimi, O. Bakhtiari, M. K. Moghaddam, Mixed Matrix Membrane Performance Prediction for Gas Separation using Modified Models, *Journal of Applied Membrane Science and Technology*, 13, 11, 2011.
- 125- T. Mohammadi, P. M. Shehni, A. E. Amooghin, A. Ghadimi, M. Sadrzadeh, Modeling of unsteady-state permeation of gas mixtures through a self-synthesized PDMS membrane, *Separation and Purification Technology*, 76, 385, 2011.
- 126- T. Mohammadi, S. Razavi, A. Sabetghadam, Dehydration of isopropanol by PVA-APTEOS/TEOS nanocomposite membranes, *Chemical Engineering Research and Design*, 89, 148, 2011.
- 127- T. Mohammadi, M. A. Alaei, A. Ghadimi, A. A. Asadi, A. Behrouzifar, Oxygen permeation of $\text{Ba}_{0.8}\text{Sr}_{0.2}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ perovskite-type membrane: experimental and modeling, *Desalination*, 270, 64, 2011.
- 128- T. Mohammadi, O. Bakhtiari, S. Mosleh, T. Khosravi, Preparation, Characterization and Gas Permeation of Polyimide Mixed Matrix Membranes, *Journal of Membrane Science and Technology*, 1, 1, 2011.
- 129- T. Mohammadi, O. Bakhtiari, S. Mosleh, T. Khosravi, Morphological Study of Polyimide Mixed Matrix Membranes, *Journal of Applied Membrane Science and Technology*, 13, 53, 2011.
- 130- T. Mohammadi, M. Kazemimoghadam, Preparation of Nano Pore Mordenite Membranes, *Iranian Journal of Materials Science and Engineering*, Vol. 8, No. 1, 12, 2011.
- 131- T. Mohammadi, M. Rezakazemi, M. Shahverdi, S. Shirazian, A. Pak, CFD Simulation of Water Removal from Water/Ethylene glycol Mixtures by Pervaporation, *Chemical Engineering Journal*, 168, 60, 2011.
- 132- T. Mohammadi, M. Ahmadzadeh Tofighy, Salty water desalination using carbon nanotubes membrane, *Chemical Engineering Journal*, 168, 1064, 2011.
- 133- T. Mohammadi, M. Rezakazemi, Z. Niazi, S. M. Mirfendereski, S. Shirazian, A. Pak, CFD Simulation of Natural Gas Sweetening in a Gas-Liquid Hollow-Fiber Membrane Contactor, *Chemical Engineering Journal*, 168, 1217, 2011.

- 134- T. Mohammadi, A. Salahi, Oily wastewater treatment by ultrafiltration using Taguchi experimental design, *Water Science and Technology*, 63.7, 1476, 2011.
- 135- T. Mohammadi, Y. Shirazi M. Ahmadzadeh Tofighy, A. Pak, Effects of different carbon precursors on synthesis of multiwall carbon nanotubes: Purification and Functionalization, *Applied Surface Science*, 257, 7359, 2011.
- 136- T. Mohammadi, Y. Shirazi, M. Ahmadzadeh Tofighy, Synthesis and characterization of carbon nanotubes/poly vinyl alcohol nanocomposite membranes for dehydration of isopropanol, *Journal of Membrane Science*, 378, 551, 2011.
- 137- T. Mohammadi, M. Rezakazemi, S. Razavi, A. Ghafari Nazari, Simulation and Determination of Optimum Conditions of Pervaporative Dehydration of Isopropanol Process Using Synthesized PVA-APTEOS/TEOS Nanocomposite Membranes by Means of Expert Systems, *Journal of Membrane Science*, 379, 224, 2011.
- 138- T. Mohammadi, A. Salahi, H. Shokrkar, N. Kasiri, Mullite ceramic membranes for industrial oily wastewater treatment: Experimental and neural network modeling, *Water Science and Technology*, 64.3, 670, 2011.
- 139- T. Mohammadi, A. Salimi, O. Bakhtiari, M. K. Moghaddam, Morphological study of polyimide mixed matrix membranes, *Journal of Applied Membrane Science and Technology*, 13, 53, 2011.
- 140- T. Mohammadi, M. Amirilargani, A. Sabetghadam, Polyethersulfone (PES)/Polyacrylonitrile (PAN) blend ultrafiltration membranes with different molecular weight of polyethylene glycol (PEG): Preparation, morphology and antifouling properties, *Polymers for Advanced Technologies*, 2011.
- 141- T. Mohammadi, A. Ghadimi, S. Norouzbahari, M. Sadrzadeh, Improvement in gas separation properties of a polymeric membrane through the incorporation of inorganic nano-particles, *Polymers for Advanced Technologies*, 2011.
- 142- T. Mohammadi, M. Kazemimoghadam, Preparation of nano pore hydroxysodalite zeolite membranes using kaolin clay and chemical sources, *Desalination*, 278, 438, 2011.
- 143- T. Mohammadi, N. Kasiri, M. Iravaninia, F. Farshad, J. Ivakpour, Separation of Toluene/n-Heptane Mixtures; Experimental, Modeling and Optimization, *Chemical Engineering Journal*, 173, 11, 2011.
- 144- T. Mohammadi, N. Kasiri, A. Ghadimi, E. Farno, Separation of heavy gases from light gases using synthesized PDMS nanocomposite membranes: Experimental and neural network modeling, *Separation and Purification Technology*, 81, 400, 2011.
- 145- T. Mohammadi, H. Maghsoodloorad, Effects of Gel Parameters on Synthesis and Characteristics of W type Zeolite nano Crystals, *Clays and Clay Minerals*, Vol. 59, No. 3, 328, 2011.
- 146- T. Mohammadi, M. Shahverdi, A. Pak, Separation of Ethylene Glycol/Water Mixtures using Composite poly (vinyl alcohol)–poly (propylene) membranes, *Journal of Applied Polymer Science*, 119, 1704, 2011.
- 147- T. Mohammadi, M. Abbasi, A. Salahi, R. Badrnezhad, F. Rekabdar, Oily wastewater treatment using a hybrid UF/RO system, *Desalination and Water Treatment*, 28, 75, 2011.
- 148- T. Mohammadi, Mohsen Abbasi, Mohammad Reza Sebzari, Enhancement of oily wastewaters treatment by MF ceramic membranes using PAC, *Chemical Engineering and Technology*, 34, 1252, 2011.
- 149- T. Mohammadi, O. Bakhteyari, S. Mosleh, T. Khosravi, Synthesis and characterization of polyimide mixed matrix membranes, *Separation Science and Technology*, 46, 2138, 2011.
- 150- T. Mohammadi, M. Abbasi, M. R. Sebzari, A. Salahi, S. Abbasi, Flux decline and membrane fouling in cross-flow microfiltration of oil-in-water emulsions, *Desalination and Water Treatment*, 28, 1, 2012.
- 151- T. Mohammadi, M. Samei, H. Taghikarimi, O. Bakhtiari, Preparation and characterization of mullite tubular membranes, *Desalination and Water Treatment*, 36, 210, 2012.

- 152- T. Mohammadi, A. Mirzaie, Effect of ultrasonic waves on flux enhancement in microfiltration of milk, *Journal of Food Engineering*, 108, 77, 2012.
- 153- T. Mohammadi, M. Hemmati, F. Rekabdar, M. Abbasi, A. Salahi, M. Mirfendereski, Oily wastewaters treatment using mullite ceramic membranes, *Desalination and Water Treatment*, 37, 21, 2012.
- 154- T. Mohammadi, Y. Shirazi, A. Ghadimi, Recovery of alcohols from water using PDMS-silica nanocomposite membranes: characterization and PV performance, *Journal of Applied Polymer Science*, 124-4, 2871, 2012.
- 155- T. Mohammadi, M. Iravaninia, S. M. Mirfendereski, Pervaporation separation of toluene/n-heptane mixtures using a MSE-modified membrane: effects of operating conditions, *Chemical Engineering Research and Design*, 90, 397, 2012.
- 156- T. Mohammadi, S. Mosleh, T. Khosravi, O. Bakhtiari, Zeolite filled polyimide membranes for dehydration of isopropanol through pervaporation process, *Chemical Engineering Research and Design*, 90, 433, 2012.
- 157- T. Mohammadi, M. Hemmati, F. Rekabdar, A. Gheshlaghi, A. Salahi, Effects of air sparging, cross flow velocity and pressure on permeation flux enhancement in industrial oily wastewater treatment using microfiltration, *Desalination and Water Treatment*, 39, 33, 2012.
- 158- T. Mohammadi, A. R. Hemmati, M. Maghami Dolatabadi, F. Naeimpoor, A. Pak, Effect of Hydraulic Retention Time and Temperature on Submerged Membrane Bioreactor (SMBR) Performance, *Korean Journal of Chemical Engineering*, 29, 369, 2012.
- 159- T. Mohammadi, S. Mosleh, T. Khosravi, O. Bakhtiari, Mixed matrix membranes for pervaporation separation of isopropanol/water mixtures, *Desalination and Water Treatment*, 41, 45, 2012.
- 160- T. Mohammadi, A. Pak, A. A. Asadi, A. Behrouzifar, Experimental investigation and mathematical modeling of oxygen permeation through dense $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ (BSCF) perovskite-type ceramic membranes, *Ceramics International*, 38, 4797, 2012.
- 161- T. Mohammadi, A. Pak, A. A. Asadi, A. Behrouzifar, Effects of nano powder synthesis methods, shaping and sintering conditions on microstructure and oxygen permeation of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ (LSCF) perovskite-type membranes, *High Temperature Materials and Processes*, 31, 47, 2012.
- 162- T. Mohammadi, N. Kasiri, A. Salahi, M. Abbasi, CFD simulation of baffle arrangement for gelatin-water ultrafiltration in rectangular channel, *Desalination*, 284, 288, 2012.
- 163- T. Mohammadi, A. Salahi, H. Shokrkari, N. Kasiri, Prediction of permeation flux decline during MF of oily wastewater using genetic programming, *Chemical Engineering Research and Design*, 90, 846, 2012.
- 164- T. Mohammadi, Y. Shirazi, E. Farno, H. Shad Majareh, M. Sadrzade, N. Kasiri, Effect of operating conditions on PV performance of PVA membranes: Experimental and Neural Network modeling, *Separation Science and Technology*, 47, 1472, 2012.
- 165- T. Mohammadi, A. Pak, A. A. Asadi, A. Behrouzifar, M. Iravaninia, Preparation and oxygen permeation of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ (LSCF) perovskite-type membranes: experimental study and mathematical modeling, *Industrial and Engineering Chemistry Research*, 51, 3069, 2012.
- 166- T. Mohammadi, M. Ahmadzadeh Tofighy, Application of Taguchi experimental design in optimization of salty water desalination using purified carbon nanotubes as adsorbent, *Materials Research Bulletin*, 47, 2389, 2012.
- 167- T. Mohammadi, M. Rezakazemi, K. Shahidi, Hydrogen separation and purification using crosslinkable PDMS/zeolite A nanoparticles mixed matrix membranes, *International Journal of Hydrogen Energy*, 37, 14576, 2012.
- 168- T. Mohammadi, M. Rezakazemi, K. Shahidi, Sorption properties of hydrogen-selective PDMS/zeolite 4A mixed matrix membrane, *International Journal of Hydrogen Energy*, 37, 17275, 2012.

- 169- T. Mohammadi, M. Ahmadzadeh Tofighy, Nitrate removal from water using functionalized carbon nanotube sheets, *Chemical Engineering Research and Design*, 90, 1815, 2012.
- 170- T. Mohammadi, A. Salahi, M. Nikbakht Fini, M. Golshenas, I. Noshadi, Purification of biologically treated Tehran refinery oily wastewater using reverse osmosis, *Desalination and Water Treatment*, 48, 27, 2012.
- 171- T. Mohammadi, O. Bakhteyari, S. Mosleh, T. Khosravi, Mixed matrix membranes of Matrimid 5218 loaded with zeolite 4A for pervaporation separation of water-isopropanol mixtures, *Chemical Engineering Research and Design*, 90, 2353, 2012.
- 172- T. Mohammadi, A. Nouri, M. Jafari, M. Kazemimoghadam, Effects of Hydrothermal Parameters on Synthesis of Nano Crystal Zeolite NaY, *Clays and Clay Minerals*, Vol. 60, No. 6, 610, 2012.
- 173- T. Mohammadi, M. Abbasi, M. R. Sebzari, Effect of metallic coagulant agents on oily wastewater treatment performance using Mullite ceramic MF membranes, *Separation Science and Technology*, 47, 2290, 2012.
- 174- T. Mohammadi, M. Abbasi, M. Mirfendereski, A. Salahi, M. Hemmati, F. Rekabdar, Oily wastewater treatment using mullite ceramic membrane, *Desalination and Water Treatment*, 37, 21, 2012.
- 175- T. Mohammadi, S. Asarehpour, M. Samei, Effects of synthesis temperature and support material on CO₂ and CH₄ permeation through SAPO-34 membranes, *Separation Science and Technology*, 47, 2320, 2012.
- 176- T. Mohammadi, M. A. Alaei, M. M. Movahednia, A. Behrouzifar, Oxygen Permeation Performance of Ba_{0.2}Sr_{0.8}Co_{0.8}Fe_{0.2}O_{3-δ} perovskite-type membrane, *High Temperature Material Processes*, 16, 25, 2012.
- 177- T. Mohammadi, A. Salahi, M. Abbasi Monfared, N. Kasiri, Modeling Ultrafiltration of Gelatin-Water Suspension by Computational Fluid Dynamics, *Chemical Engineering Research and Design*, 90, 1098, 2012.
- 178- T. Mohammadi, I. Noshadi, A. Salahi, M. Hemmati, F. Rekabdar, Experimental and ANFIS modeling for fouling analysis of oily wastewater treatment using ultrafiltration, *Asia-Pacific Journal of Chemical Engineering*, 8, 527, 2013.
- 179- T. Mohammadi, K. M. Gheimasi, O. Bakhtiari, Modification of ideal MMMs permeation prediction models: effects of partial pore blockage and polymer chain rigidification, *Journal of Membrane Science*, 427, 399, 2013.
- 180- T. Mohammadi, M. Rezakazemi, M. Rostamizadeh, K. Shahidi, Gas permeation through H₂-selective mixed matrix membranes: Experimental and neural network modeling, *International Journal of Hydrogen Energy*, 38, 1128, 2013.
- 181- T. Mohammadi, M. Peydayesh, G. R. Esfandyari, E. Keshavarz Alamdari, Pertraction of Cadmium and Zinc ions using a supported liquid membrane impregnated with different carriers, *Chemical Papers*, 67, 389, 2013.
- 182- T. Mohammadi, Y. Shirazi, Effects of CNTs content on physicochemical and pervaporation separation properties of PVA membranes, *Separation Science and Technology*, 48, 716, 2013.
- 183- T. Mohammadi, P. M. Shehni, A. E. Amooghin, A. Ghadimi, M. Sadrzadeh, Mathematical Modeling of Mass Transfer in Multicomponent Gas Mixture across the Synthesized Composite Polymeric Membrane, *Journal of Industrial and Engineering Chemistry*, 19, 870, 2013.
- 184- T. Mohammadi, H. Maghsoodloorad, Synthesis and Characterization of Ceramic membranes (W-type Zeolite Membranes), *International Journal of Applied Ceramic Technology*, 10, 365, 2013.
- 185- T. Mohammadi, M. Jafari, A. Nouri, M. Kazemimoghadam, Investigations on hydrothermal synthesis parameters in preparation of nano particles of LTA zeolite with the aid of TMAOH, *Powder Technology*, 237, 442, 2013.
- 186- T. Mohammadi, V. Tajer kajinebaf, H. Sarpoolaky, Synthesis of Nanostructured Anatase Mesoporous Membranes with Photocatalytic and Separation Capabilities for Water Ultrafiltration Process, *International Journal of Photoenergy*, 2013.

- 187- T. Mohammadi, M. Abbasi, S. Rezaei Hosein Abadi, M. R. Sebzari, M. Hemati, Integrated membrane pilot plant for refinery wastewater treatment in order to produce boiler feed water, *Desalination and Water Treatment*, 51, 2543, 2013.
- 188- T. Mohammadi, M. Mahdyarfar, A. Mohajeri, Gas separation performance of carbon materials produced from phenolic resin: Effects of carbonization temperature and ozone post treatment, *New Carbon Materials*, Vol. 28, No. 1, 2013.
- 189- T. Mohammadi, T. Kikhavandi, Pervaporation Separation of Ethyl butyrate/Water mixtures: Experimental and Mass Transfer investigation, *Journal of Petroleum Science Research*, Vol. 2, No. 2, 2013.
- 190- T. Mohammadi, P. Kazemi, M. Peydayesh, A. Bandegi, O. Bakhtiari, Pertraction of methylene blue by a supported liquid membrane using a mixture of D2EHPA/M2EHPA and sesame oil as liquid membrane, *Chemical Papers*, 67, 722, 2013.
- 191- T. Mohammadi, M. Jafari, A. Nouri, S. F. Mousavi, M. Kazemimoghadam, Optimization of synthesis conditions for preparation of ceramic (A-type zeolite) membranes in dehydration of ethylene glycol, *Ceramics International*, 39, 6971, 2013.
- 192- T. Mohammadi, S. F. Mousavi, M. Jafari, M. Kazemimoghadam, Template free crystallization of zeolite Rho via hydrothermal synthesis: effects of synthesis time, synthesis temperature, water content and alkalinity, *Ceramics International*, 39, 7149, 2013.
- 193- T. Mohammadi, P. Kazemi, Taguchi optimization approach for phenolic wastewater treatment by vacuum membrane distillation, *Desalination and Water Treatment*, 52, 1341, 2013.
- 194- T. Mohammadi, M. Ahmadzadeh Tofighy, Methylene blue adsorption onto granular activated carbon prepared from Harmal seeds residue, *Desalination and Water Treatment*, 52, 2643, 2013.
- 195- T. Mohammadi, M. Rezakazemi, M. Iravaninia, S. Shirazian, Transient Computational fluid dynamics (CFD) Modeling of Pervaporation Separation of Aromatic/Aliphatic Hydrocarbon Mixtures Using Polymer Composite Membrane, *Polymer Engineering and Science*, Vol 53, Issue 7, 1494, 2013.
- 196- T. Mohammadi, M. Rezakazemi, M. Shahverdi, B. Baheri, E. Motaee, Pervaporation study of ethylene glycol dehydration through (PVA-4A)/polypropylene mixed matrix composite membranes, *Polymer Engineering and Science*, Vol 53, Issue 7, 1487, 2013.
- 197- T. Mohammadi, M. Peydayesh, S. Asarehpour, O. Bakhtiari, Preparation and characterization of SAPO-34 - Matrimid® 5218 mixed matrix membranes for CO₂/CH₄ separation, *Chemical Engineering Research and Design*, Vol 91, Issue 7, 1335, 2013.
- 198- T. Mohammadi, M. Kazemimoghadam, Evaluation of pervaporation condition and synthesis gels for NaA zeolite membranes, *Desalination and Water Treatment*, 52, 2966, 2013.
- 199- T. Mohammadi, M. Amirilargani, A. Ghadimi, M. Ahmadzadeh Tofighy, Effects of poly (allylamine hydrochloride) as a new functionalization agent for preparation of poly vinyl alcohol/multiwalled carbon nanotubes membranes, *Journal of Membrane Science*, 447, 315, 2013.
- 200- T. Mohammadi, A. Salahi, I. Noshadi, R. Badrnezhad, B. Kanjilal, Nano-porous membrane process for oily wastewater treatment: Optimization using response surface methodology, *Journal of Environmental Chemical Engineering*, 1, 218, 2013.
- 201- T. Mohammadi, M. Rezakazemi, Gas sorption in H₂-selective mixed matrix membranes: Experimental and neural network modeling, *International Journal of Hydrogen Energy*, 38, 14035, 2013.
- 202- T. Mohammadi, K. Shafiei, S. Ghanbari pakdehi, M. Kazemimoghadam, An investigation on manufacturing of alumina microfiltration membranes, *Desalination and Water Treatment*, 53, 2429, 2013.
- 203- T. Mohammadi, M. Samei, A. A. Asadi, Tubular Composite PVA Ceramic Supported Membrane for Bio-Ethanol Production, *Chemical Engineering Research and Design*, 91, 2703, 2013.

- 204- T. Mohammadi, M. Jafari, A. Bayat, M. Kazemimoghadam, Dehydration of ethylene glycol by pervaporation using gamma alumina/NaA zeolite composite membrane, *Chemical Engineering Research and Design*, 91, 2412, 2013.
- 205- T. Mohammadi, E. Farno, M. Reza kazemi, N. Kasiri, Ternary Gas Permeation through Synthesized PDMS Membranes: Experimental and CFD Simulation Based on Sorption Dependent System Using Neural Network Model, *Polymer Engineering and Science*, Vol 54, Issue 1, 215, 2013.
- 206- T. Mohammadi, M. Mahdyarfar, A. Mohajeri, Defect formation and prevention during preparation of supported carbon membranes, *New Carbon Materials*, 28, 369, 2013.
- 207- T. Mohammadi, N. Gilani, J. Towfighi, A. Rashidi, M. R. Omidkhah, A. Sadeghian, Investigation of H₂S separation from H₂S/CH₄ mixtures using functionalized and non-functionalized vertically aligned carbon nano tube membranes, *Applied Surface Science*, 270, 115, 2013.
- 208- T. Mohammadi, V. Tajer kajinebaf, H. Sarpoolaky, Comparative study on properties of nano structured titania synthesized by colloidal and polymeric sol-gel routes, *Iranian Journal of Materials Science and Engineering*, 10, 28, 2013.
- 209- T. Mohammadi, M. Asghari, A. Hassanvand, Fabrication and characterization of highly crystalline mordenite membranes on α -alumina disks via a seeded in situ template-free hydrothermal treatment, *Adsorption*, 19, 903, 2013.
- 210- T. Mohammadi, K. Shafiei, S. Ghanbari pakdehi, M. Kazemimoghadam, Hydrothermal synthesis of nano sized zeolite T crystals, *Particulate Science and Technology*, 32, 8, 2014.
- 211- T. Mohammadi, M. Peydayesh, P. Kazemi, A. Bandegi, O. Bakhtiari, Stability and extraction study of phenolic wastewater treatment by supported liquid membrane using Tributyl phosphate and sesame oil as liquid membrane, *Chemical Engineering Research and Design*, 92, 375, 2014.
- 212- T. Mohammadi, R. Mahmoodi, M. Kazemimoghadam, Separation of Cd(II) and Ni(II) ions by a supported liquid membrane using D2EHPA/M2EHPA as a mobile carrier, *Chemical Papers*, 68, 751, 2014.
- 213- T. Mohammadi, V. Tajer kajinebaf, H. Sarpoolaky, Sol-gel synthesis of nanostructured titania-silica mesoporous membranes with photo-degradation and physical separation capacities for water purification, *Ceramics International*, 40, 1747, 2014.
- 214- T. Mohammadi, S. Zarghami, M. Kazemimoghadam, Cu (II) removal enhancement from aqueous solutions using ion imprinted membrane technique, *Chemical Papers*, 68, 809, 2014.
- 215- T. Mohammadi, A. Nouri, M. Jafari, M. Kazemimoghadam, Potential separation of SF₆ from air using chabazite zeolite membranes, *Chemical Engineering and Technology*, 37, 317, 2014.
- 216- T. Mohammadi, B. Rafiei, F. Naeimpoor, Bio-film and bio-entrapped hybrid membrane bioreactors in wastewater treatment: comparison of membrane fouling and removal efficiency, *Desalination*, 337, 16, 2014.
- 217- T. Mohammadi, A. Ghadimi, M. Amirilargani, N. Kasiri, B. Sadatnia, Preparation of alloyed poly (ether block amid) / poly (ethylene glycol diacrylate) membranes for separation of CO₂/H₂ (Syngas application), *Journal of Membrane Science*, 458, 14, 2014.
- 218- T. Mohammadi, K. Shahidi, M. Reza kazemi, Synthetic PDMS composite membranes for pervaporation dehydration of ethanol, *Desalination and Water Treatment*, 54, 1542, 2014.
- 219- T. Mohammadi, M. S. Nabavi, M. Kazemimoghadam, Hydrothermal Synthesis of hydroxy sodalite zeolite membrane: separation of H₂/CH₄, *Ceramics International*, 40, 5889, 2014.
- 220- T. Mohammadi, K. M. Gheimasi, M. Peydayesh, O. Bakhtiari, Prediction of CO₂/CH₄ permeability through Sigma-1 - Matrimid®5218 MMMs using the Maxwell model, *Journal of Membrane Science*, 466, 265, 2014.
- 221- T. Mohammadi, F. Faridirad, Z. Zourmand, N. Kasiri, M. Kazemimoghadam, Modeling of suspension fouling in nanofiltration, *Desalination*, 346, 80, 2014.
- 222- T. Mohammadi, M. Jafari, M. Kazemimoghadam, Synthesis and characterization of ultrafine sub-micron Na-LTA zeolite particles prepared via hydrothermal template-free method, *Ceramics International*, 40, 12075, 2014.

- 223- T. Mohammadi, M. Peydayesh, P. Kazemi, M. S. Nabavi, Phenolic wastewater treatment by supported liquid membrane using different cooking oils as liquid membrane, *Chemical Engineering Communications*, 201, 1593, 2014.
- 224- T. Mohammadi, H. Hayer, O. Bakhtiari, Analysis of heat and mass transfer in vacuum membrane distillation for water desalination using computational fluid dynamics (CFD), *Desalination and Water Treatment*, 55, 39, 2014.
- 225- T. Mohammadi, P. Moghaddam Kamrani, P. Kazemi, O. Bakhtiari, Theoretical modeling of direct contact membrane distillation (DCMD): effects of operation parameters on flux, *Desalination and Water Treatment*, 56, 2013, 2014.
- 226- T. Mohammadi, P. Kazemi, M. Peydayesh, Optimization of Vacuum Membrane Distillation parameters for water desalination using Box–Behnken design, *Desalination and Water Treatment*, 56, 2306, 2014.
- 227- T. Mohammadi, M. Tavakolmoghadam, M. Hemmati, F. Naeimpour, Surface modification of PVDF membranes by sputtered TiO₂: Fouling reduction potential in membrane bioreactors, *Desalination and Water Treatment*, 57, 3328, 2014.
- 228- T. Mohammadi, S. Zarghami, M. Kazemimoghadam, Diffusive transport of Cu (II) ions across thin ion imprinted polymeric membranes, *Chemical Papers*, 68, 1325, 2014.
- 229- T. Mohammadi, K. Shafiei, S. Ghanbari pakdehi, M. Kazemimoghadam, Improvement of zeolite T membrane via clear solution gel in dehydration of methanol, ethanol and 2-propanol, *Separation Science and Technology*, 49, 797, 2014.
- 230- T. Mohammadi, M. Amirilargani, M. Ahmadzadeh Tofighy, B. Sadatnia, Novel poly (vinyl alcohol)/multiwalled carbon nanotubes nanocomposite membranes for pervaporation dehydration of isopropanol: poly (sodium 4-styrenesulfonate) as a functionalization agent, *Industrial and Engineering Chemistry Research*, 53, 12819, 2014.
- 231- T. Mohammadi, A. Ghadimi, N. Kasiri, A novel chemical surface modification for the fabrication of PEBA/SiO₂ nanocomposite membranes to separate CO₂ from syngas and natural gas streams, *Industrial and Engineering Chemistry Research*, 53, 17476, 2014.
- 232- T. Mohammadi, B. Baheri, M. Shahverdi, M. Rezakazemi, E. Motaei, Performance of PVA/NaA mixed matrix membrane for removal of water from ethylene glycol solutions by pervaporation, *Chemical Engineering Communications*, 202, 316, 2015.
- 233- T. Mohammadi, S. Zarghami, M. Kazemimoghadam, Adsorption behavior of Cu(II) ions on crosslinked chitosan/polyvinyl alcohol ion imprinted membrane, *Journal of Dispersion Science and Technology*, 36, 190, 2015.
- 234- T. Mohammadi, H. Hayer, O. Bakhtiari, Simulation of momentum, heat and mass transfer in direct contact membrane distillation; a computational fluid dynamics approach, *Journal of Industrial and Engineering Chemistry*, 21, 1379, 2015.
- 235- T. Mohammadi, K. Shafiei, S. Ghanbari pakdehi, M. Kazemimoghadam, Synthesis of NaA and NaX zeolite membranes by fumed silica via clear solution gel, *Separation Science and Technology*, 50, 136, 2015.
- 236- T. Mohammadi, M. Ahmadzadeh Tofighy, Nickel ions removal from water by two different morphologies of induced CNTs in mullite pore channels as adsorptive membrane, *Ceramics International*, 41, 5464, 2015.
- 237- T. Mohammadi, M. Ahmadzadeh Tofighy, Synthesis and characterization of ceramic/CNTs composite adsorptive membrane for copper ions removal from water, *Korean Journal of Chemical Engineering*, 32, 292, 2015.
- 238- T. Mohammadi, M. Tavakolmoghadam, G. Lesage, J. Mericq, J. Mendret, M. Heran, C. Faur, S. Brosillon, M. Hemati, F. Naeimpour, Improved antifouling properties of TiO₂/PVDF nanocomposite membranes in UV coupled ultrafiltration, *Journal of Applied Polymer Science*, 132, 41731, 2015.

- 239- T. Mohammadi, M. Ahmadzadeh Tofighy, Copper ions removal from water using functionalized carbon nanotubes-mullite composite as adsorbent, *Materials Research Bulletin*, 68, 54, 2015.
- 240- T. Mohammadi, M. Peydayesh, M. Isanejad, S. M. R. Seyed Jafari, Assessment of *Urtica* as a low-cost adsorbent for methylene blue removal: kinetic, equilibrium and thermodynamic studies, *Chemical Papers*, 69, 930, 2015.
- 241- T. Mohammadi, A. Salahi, H. Adib, M. R. Sheikhi-Kouhsar, S. H. Ajili, Experimental and Computational Investigation of Polyacrylonitrile Ultrafiltration Membrane for Industrial Oily Wastewater Treatment, *Korean Journal of Chemical Engineering*, 32, 159, 2015.
- 242- T. Mohammadi, R. Seifollahy Astarace, N. Kasiri, Analysis of BSA, dextran and humic acid fouling during microfiltration, *Experimental and Modeling, Food and Bioproducts Processing*, 94, 331, 2015.
- 243- T. Mohammadi, P. Zaheri, H. Abolghasemi, M. Ghannadi Maraghe, Dysprosium pertraction through facilitated supported liquid membrane using D2EHPA as carrier, *Chemical Papers*, 69, 279, 2015.
- 244- T. Mohammadi, A. Salahi, R. M. Behbahani, M. Hemmati, Experimental investigation and modeling of industrial oily wastewater treatment using modified polyethersulfone ultrafiltration hollow fiber membranes, *Korean Journal of Chemical Engineering*, 32, 1101, 2015.
- 245- T. Mohammadi, A. Ghadimi, H. Rabiee, Gas transport properties of reverse-selective poly(ether-b-amide6)/ [Emim][BF₄] gel membranes for CO₂/light gases separation, *Journal of Membrane Science*, 476, 286, 2015.
- 246- T. Mohammadi, A. Salahi, R. M. Behbahani, M. Hemmati, Asymmetric polyethersulfone ultrafiltration membranes for oily wastewater treatment: Synthesis, characterization, ANFIS modeling, and performance, *Journal of Environmental Chemical Engineering*, 3, 170, 2015.
- 247- T. Mohammadi, N. Kasiri, Z. Zourmand, F. Faridirad, Mass Transfer Modeling of Desalination through an Electrodialysis Cell, *Desalination*, 359, 41, 2015.
- 248- T. Mohammadi, P. Zaheri, H. Abolghasemi, M. Ghannadi Maraghe, Intensification of Europium extraction through a supported liquid membrane using mixture of D2EHPA and Cyanex272 as carrier, *Chemical Engineering and Processing: Process Intensification*, 92, 18, 2015.
- 249- T. Mohammadi, A. Ghadimi, H. Rabiee, S. Abbasi, CO₂ Separation Performance of Poly(ether-b-amide6)/PTMEG Blended Membranes: Permeation and Sorption properties, *Chemical Engineering Research and Design*, 98, 96, 2015.
- 250- T. Mohammadi, P. Zaheri, H. Abolghasemi, M. Ghannadi Maraghe, Supported liquid membrane incorporated with carbon nanotubes for the extraction of Europium using Cyanex272 as carrier, *Chemical Engineering Research and Design*, 100, 81, 2015.
- 251- T. Mohammadi, S. Zarghami, M. Ahmadzadeh Tofighy, Adsorption of zinc and lead ions from aqueous solutions using chitosan/polyvinyl alcohol membrane incorporated via acid functionalized carbon nanotubes, *Journal of Dispersion Science and Technology*, 36, 1793, 2015.
- 252- T. Mohammadi, M. Naseri, S. F. Mousavi O. Bakhteyari, Synthesis and gas transport performance of MIL-101/Matrimid mixed matrix membranes, *Journal of Industrial and Engineering Chemistry*, 29, 249, 2015.
- 253- T. Mohammadi, M. Ahmadzadeh Tofighy, Copper ions removal from aqueous solutions using acid-chitosan functionalized carbon nanotubes sheets, *Desalination and Water Treatment*, 1-13, 2015.
- 254- T. Mohammadi, K. M. Gheimasi, O. Bakhtiari, Using a new model for prediction of gas permeability through MMMs: considering effects of particles shape, polymer chain rigidification, partial pore blockage and void formation, *Separation Science and Technology*, 50, 2384, 2015.
- 255- T. Mohammadi, A. Vatani, M. Rezakazemi, Synergistic interaction between POSS and fumed silica on the properties of crosslinked PDMS nanocomposite membranes, *RSC Advances*, 5, 82460, 2015.

- 256- T. Mohammadi, R. Ghahremani, B. Baheri, M. Peydayesh, S. Asarehpour, Novel crosslinked and zeolite-filled poly vinyl alcohol membrane adsorbents for dye removal, *Research on Chemical Intermediates*, 41, 9845, 2015.
- 257- T. Mohammadi, A. Salahi, R. M. Behbahani, M. Hemmati, PES and PES/PAN blend ultrafiltration hollow fiber membranes for oily wastewater treatment: Preparation, experimental investigation, fouling and modeling, *Advances in Polymer Technology*, 34, 21494, 2015.
- 258- T. Mohammadi, M. Peydayesh, P. Kazemi, A. Bandegi, O. Bakhtiari, Treatment of bentazon herbicide solutions by vacuum membrane distillation, *Journal of Water Process Engineering*, 8, 17, 2015.
- 259- T. Mohammadi, P. Zaheri, H. Abolghasemi, M. Ghannadi Maraghe, Synergistic extraction and separation of Dysprosium and Europium by supported liquid membrane, *Korean Journal of Chemical Engineering*, 32, 1642, 2015.
- 260- T. Mohammadi, A. Ghadimi, N. Kasiri, Gas permeation, sorption and diffusion through PEBA/SiO₂ nanocomposite membranes (Chemical surface modification of nanoparticles), *International Journal of Hydrogen Energy*, 40, 9723, 2015.
- 261- T. Mohammadi, A. Vatani, M. Rezakazemi, Synthesis and gas transport properties of crosslinked poly(dimethylsiloxane) nanocomposite membranes using octatrimethylsiloxy POSS nanoparticles, *Journal of Natural Gas Science and Engineering*, 30, 10, 2016.
- 262- T. Mohammadi, A. Jomekian, R. M. Behbahani, A. Kargari, Utilization of Pebax 1657 as structure directing agent in fabrication of ultra-porous ZIF-8, *Journal of Solid State Chemistry*, 235, 212, 2016.
- 263- T. Mohammadi, M. Arzani, H. R. Mahdavi, O. Bakhtiari, Preparation of mullite ceramic microfilter membranes using response surface methodology based on central composite design, *Ceramics International*, 42, 8155, 2016.
- 264- T. Mohammadi, S. Ebrahimi, S. Mollaiy-Berneti, H. Asadi, M. Peydayesh, F. Akhlaghian, Polyethersulfone/amine-functional graphene oxide mixed matrix membranes for CO₂/CH₄ Separation: Experimental and modeling, *Chemical Engineering Research and Design*, 109, 647, 2016.
- 265- T. Mohammadi, A. Jomekian, R. M. Behbahani, A. Kargari, CO₂/CH₄ separation by high performance co-casted ZIF-8/Pebax 1657/PES mixed matrix membrane, *Journal of Natural Gas Science and Engineering*, 31, 562, 2016.
- 266- T. Mohammadi, B. Baheri, R. Ghahremani, M. Peydayesh, M. Shahverdi, Dye removal using 4A-zeolite/Polyvinyl alcohol mixed matrix membrane adsorbents: Preparation, characterization, adsorption, kinetics and thermodynamics, *Research on Chemical Intermediates*, 42, 5309, 2016.
- 267- T. Mohammadi, H. R. Mahdavi, M. Arzani, M. Peydayesh, Pertraction of L-lysine by supported liquid membrane using D2EHPA/M2EHPA, *Chemical Engineering and Processing: Process Intensification*, 50, 106, 2016.
- 268- T. Mohammadi, A. Jomekian, R. M. Behbahani, A. Kargari, Innovative layer by layer and continuous growth methods for synthesis of ZIF-8 membrane on porous polymeric support using poly(ether-block-amide) as structure directing agent for gas separation, *Microporous and Mesoporous Materials*, 43, 234, 2016.
- 269- T. Mohammadi, A. Ghadimi, N. Kasiri, Mathematical modeling of gas transport through PEBAX/(nonporous silica) nanocomposite membranes: Development based on Van Amerongen and Van Krevelen relations, *Separation and Purification Technology*, 170, 280, 2016.
- 270- T. Mohammadi, M. Abbasi Monfared, N. Kasiri, Microscopic modeling of critical pressure of permeation in oily waste water treatment: Via membrane filtration, *RSC Advances*, 6, 71744, 2016.
- 271- T. Mohammadi, M. Tavakolmoghadam, M. Hemmati, Preparation and characterization of PVDF/TiO₂ composite ultrafiltration membranes using mixed solvents, *Membrane water treatment*, 7, 377, 2016.

- 272- T. Mohammadi, M. Tavakolmoghadam, M. Hemmati, F. Rekabdar, Poly (vinylidene fluoride) membrane preparation and characterization: Effects of mixed solvents and PEG molecular weight, *Journal of Petroleum Science and Technology*, 6, 11, 2016.
- 273- T. Mohammadi, O. Jahanmahin, M. M. Montazer Rahmati, J. Babaei, A. Khosravi, Chromium (VI) ion metal removal from synthesized wastewater by a synergistic supported liquid membrane, *Chemical Papers*, 70, 913, 2016.
- 274- T. Mohammadi, A. Bayat, H. R. Mahdavi, M. Kazemimoghadam, Preparation and characterization of γ -alumina ceramic ultrafiltration membranes for pretreatment of oily wastewater, *Desalination and Water Treatment*, 57, 24322, 2016.
- 275- T. Mohammadi, M. Samei, M. Irvaninia, A. A. Asadi, Solution Diffusion Modeling of a Composite PVA/Fumed Silica Ceramic Supported Membrane, *Chemical Engineering and Processing: Process Intensification*, 109, 11, 2016.
- 276- T. Mohammadi, M. R. Azarshab, F. Mohammadi, H. Maghsoodloorad, Ceramic membrane synthesis based on alkali activated blast furnace slag for separation of water from ethanol, *Ceramics International*, 42, 15568, 2016.
- 277- T. Mohammadi, N. Azizi, R. Mosayebi Behbahani, Comparison of permeability performance of PEBAX-1074/TiO₂, PEBAX-1074/SiO₂ and PEBAX-1074/Al₂O₃ nanocomposite membranes for CO₂/CH₄ Separation, *Chemical Engineering Research and Design*, 117, 177, 2017.
- 278- T. Mohammadi, M. Isanejad, M. Arzani, H. R. Mahdavi, Novel amine modification of ZIF-8 for improving simultaneous removal of cationic dyes from aqueous solutions using supported liquid membrane, *Journal of Molecular Liquids*, 225, 800, 2017.
- 279- T. Mohammadi, M. Peydayesh, M. Bagheri, O. Bakhtiari, Fabrication optimization of Polyethersulfone (PES) / Polyvinylpyrrolidone (PVP) nanofiltration membranes using Box–Behnken response surface method, *RSC Advances*, 7, 24995, 2017.
- 280- T. Mohammadi, P. Zaheri, H. Abolghasemi, M. Ghannadi Maraghe, Facilitated transport of Europium through supported liquid membrane using Cyanex272 as carrier and Mass transfer modeling, *Canadian Journal of Chemical Engineering*, 95, 524, 2017.
- 281- T. Mohammadi, A. Vatani, A. Hosseinzadeh, M. Hosseinzadeh, Mathematical modeling for the simultaneous absorption of CO₂ and SO₂ using MEA in hollow fiber membrane contactors, *Chemical Engineering and Processing: Process Intensification*, 11, 35, 2017.
- 282- T. Mohammadi, S. Fazlifard, O. Bakhtiari, Chitosan/ZIF-8 mixed matrix membranes for pervaporation dehydration of Isopropanol, *Chemical Engineering and Technology*, 40, 648, 2017.
- 283- T. Mohammadi, B. Baheri, Sorption, diffusion and pervaporation study of thiophene/n-heptane mixture through self-support PU/PEG blend membrane, *Separation and Purification Technology*, 185, 112, 2017.
- 284- T. Mohammadi, N. Azizi, R. Mosayebi Behbahani, Synthesis of a new nanocomposite membrane (PEBAX-1074/PEG-400/TiO₂) in order to separate CO₂ from CH₄, *Journal of Natural Gas Science and Engineering*, 37, 39, 2017.
- 285- T. Mohammadi, N. Azizi, R. Mosayebi Behbahani, Synthesis of a PEBAX-1074/ZnO nanocomposite membrane with improved CO₂ separation performance, *Journal of Energy Chemistry*, 26, 454, 2017.
- 286- T. Mohammadi, A. Djavanrouh, O. Bakhtiari, Fouling behavior investigation of thermally modified RO membrane, *Desalination and Water Treatment*, 76, 121, 2017.
- 287- T. Mohammadi, P. Bahrami Moghim, Simulation of carbon dioxide removal by three amine mixture of diethanolamine, methyl-diethanolamine, and 2-amino- 2-methyl-1-propanol in a hollow fiber membrane contactor using computational fluid dynamics, *Periodica Polytechnica Chemical Engineering*, 61, 227, 2017.
- 288- T. Mohammadi, H. R. Mahdavi, N. Azizi, M. Arzani, Improved CO₂/CH₄ separation using a nanocomposite ionic liquid gel membrane, *Journal of Natural Gas Science & Engineering*, 46, 275, 2017.

- 289- T. Mohammadi, F. Mohammadi, Optimal conditions of porous ceramic membrane synthesis based on alkali activated blast furnace slag using Taguchi method, *Ceramics International*, 43, 14369, 2017.
- 290- T. Mohammadi, M. Gholami, S. Mosleh, M. Hemati, CO₂/CH₄ separation using mixed matrix membrane-based polyurethane incorporated with ZIF-8 nanoparticles, *Chemical papers*, 71, 1839, 2017.
- 291- T. Mohammadi, N. Ghobadi, N. Kasiri, M. Kazemimoghadam, Modified poly(vinyl alcohol)/chitosan blended membranes for isopropanol dehydration via pervaporation: synthesis optimization and modelling by response surface methodology, *Journal of Applied Polymer Science*, 134, 44587, 2017.
- 292- T. Mohammadi, M. Isanejad, N. Azizi, PEBAX membrane for CO₂/CH₄ separation: Effect of various solvents on morphology and performance, *Journal of Applied Polymer Science*, 134, 44531, 2017.
- 293- T. Mohammadi, A. Ghadimi, S. Norouzbahari, Heat of Sorption of Gases in Glassy Polymers: Prediction via Applying Physical Properties of the Penetrants and Polymers, *Journal of Chemical & Engineering Data*, 62, 1433, 2017.
- 294- T. Mohammadi, H. R. Mahdavi, N. Azizi, Performance evaluation of a synthesized and characterized Pebax1657/PEG1000/ γ -Al₂O₃ membrane for CO₂/CH₄ separation using response surface methodology, *Journal of Polymer Research*, 24, 5, 1, 2017.
- 295- T. Mohammadi, A. Khosravi, A. Vatani, Application of polyhedral oligomeric silsesquioxane in stabilization and performance enhancement of poly(4-methyl-2-pentyne) nanocomposite membranes for natural gas conditioning, *Journal of Applied Polymer Science*, 134, 45158, 2017.
- 296- T. Mohammadi, S. Fazlifard, N. Allahgholi, O. Bakhtiari, P84/ZIF-8 mixed matrix membranes for pervaporation dehydration of Isopropanol, *Desalination and Water Treatment*, 78, 282, 2017.
- 297- T. Mohammadi, M. Abbasi Monfared, N. Kasiri, A CFD model for prediction of critical electric potential preventing membrane fouling in oily waste water treatment, *Journal of Membrane Science*, 539, 320, 2017.
- 298- T. Mohammadi, N. Azizi, M. Arzani, H. R. Mahdavi, Synthesis and characterization of poly (ether-block-amide) copolymers/multi-walled carbon nanotube nanocomposite membranes for CO₂/CH₄ separation, *Korean Journal of Chemical Engineering*, 34, 2459, 2017.
- 299- T. Mohammadi, N. Azizi, H. R. Mahdavi, M. Isanejad, Effects of low and high molecular mass PEGs incorporation into different types of poly (ether-b-amide) copolymers on permeation properties of CO₂ and CH₄, *Journal of Polymer Research*, 24, 141, 1, 2017.
- 300- T. Mohammadi, S. M. Mirfendereski, Investigation of H₂S and CO₂ Removal from Gas Streams Using Hollow Fiber Membrane Gas-liquid Contactors, *Chemical and Biochemical Engineering Quarterly*, 31, 139, 2017.
- 301- T. Mohammadi, M. Peydayesh, O. Bakhtiari, Effective Hydrogen purification from Methane via Polyimide Matrimid® 5218- Deca-dodecasil 3R zeolite mixed matrix membrane, *Energy*, 141, 2100, 2017.
- 302- T. Mohammadi, M. Isanejad, Effect of amine modification on morphology and performance of poly (ether-block-amide)/ fumed silica nanocomposite membranes for CO₂/CH₄ separation, *Materials Chemistry and Physics*, 205, 303, 2018.
- 303- T. Mohammadi, M. Peydayesh, O. Bakhtiari, Effective Treatment of Dye Wastewater via Positively Charged TETA-MWCNT/PES Hybrid Nanofiltration Membranes, *Separation and Purification Technology*, 194, 488, 2018.
- 304- T. Mohammadi, H. Rajati, O. Bakhtiari, Molecular modeling of the gaseous penetrants permeabilities through 4A, DDR and silicalite-1 zeolites incorporated in mixed matrix membranes, *Separation Science and Technology*, 53, 910, 2018.
- 305- T. Mohammadi, A. Taghvaie Nakhjiri, A. Heydarinasab, O. Bakhtiari, Modeling and simulation of CO₂ separation from CO₂/CH₄ gaseous mixture using potassium glycinate, potassium

argininate and sodium hydroxide liquid absorbents in the hollow fiber membrane contactor, *Journal of Environmental Chemical Engineering*, 6, 1500, 2018.

- 306- T. Mohammadi, H. R. Mahdavi, M. Arzani, Synthesis, characterization and performance evaluation of an optimized ceramic membrane with physical separation and photocatalytic degradation capabilities, *Ceramics International*, 44, 10281, 2018.
- 307- T. Mohammadi, H. R. Mahdavi, M. Arzani, M. Isanejad, Effect of hydrophobic and hydrophilic nanoparticles loaded in D2EHPA/M2EHPA - PTFE supported liquid membrane for simultaneous cationic dyes pertraction, *Journal of Environmental Management*, 213, 288, 2018.
- 308- T. Mohammadi, M. Bayat, M. S. Nabavi, An experimental study for finding the best condition for PHI zeolite synthesis using Taguchi method for gas separation, *Chemical Papers*, 72, 1139, 2018.
- 309- T. Mohammadi, M. Arzani, H. R. Mahdavi, M. Sheikhi, Ceramic monolith as microfiltration membrane: preparation, characterization and performance evaluation, *Applied Clay Science*, 161, 456, 2018.
- 310- T. Mohammadi, A. Taghvaie Nakhjiri, A. Heydarinasab, O. Bakhtiari, Influence of non-wetting, partial wetting and complete wetting modes of operation on hydrogen sulfide removal utilizing monoethanolamine absorbent in hollow fiber membrane contactor, *Sustainable Environment Research*, 28, 186, 2018.
- 311- T. Mohammadi, A. Taghvaie Nakhjiri, A. Heydarinasab, O. Bakhtiari, Experimental investigation and mathematical modeling of CO₂ sequestration from CO₂/CH₄ gaseous mixture using MEA and TEA aqueous absorbents through polypropylene hollow fiber membrane contactor, *Journal of Membrane Science*, 565, 1, 2018.
- 312- T. Mohammadi, M. Abbasi Monfared, M. Sheikhi, N. Kasiri, Experimental investigation of oil-in-water microfiltration assisted by Dielectrophoresis: Operational condition optimization, *Chemical Engineering Research and Design*, 137, 421, 2018.
- 313- T. Mohammadi, M. Zahed, P. S. Parsamehr, M. Ahmadzadeh Tofighy Synthesis and functionalization of graphene oxide (GO) for salty water desalination as adsorbent, *Chemical Engineering Research and Design*, 138, 358, 2018.
- 314- T. Mohammadi, A. Taghvaie Nakhjiri, A. Heydarinasab, O. Bakhtiari, The effect of membrane pores wettability on CO₂ removal from CO₂/CH₄ gaseous mixture using NaOH, MEA and TEA liquid absorbents in hollow fiber membrane contactor, *Chinese Journal of Chemical Engineering*, 26, 1845, 2018.
- 315- T. Mohammadi, M. Rezakazemi, M. Maghami, Wastewaters treatment containing phenol and ammonium using aerobic submerged membrane bioreactor, *Chemistry Central Journal*, 12, 79, 2018.
- 316- T. Mohammadi, M. Rezakazemi, M. Maghami, High Loaded Synthetic Hazardous Wastewater Treatment Using Lab- Scale Submerged Ceramic Membrane Bioreactor, *Periodica Polytechnica Chemical Engineering*, 62, 299, 2018.
- 317- T. Mohammadi, M. Enayatzadeh, N. Fallah, Morphology and performance of poly (vinylidene fluoride) flat sheet membranes: thermodynamic and kinetic aspects, *Journal of Applied Polymer Science*, 135, 46419, 2018.
- 318- T. Mohammadi, J. Zyaie, M. Sheikhi, J. Baniasadi, S. Sahebi, Assessment of thermally modified Cellulose acetate forward osmosis membrane using response surface methodology based on Box-Behnken design, *Chemical Engineering and Technology*, 41, 1706, 2018.
- 319- T. Mohammadi, R. Kardani, M. Asghari, M. Afsari, Effects of nanofillers on the characteristics and performance of PEBA-based mixed matrix membranes, *Reviews in Chemical Engineering*, 34, 797, 2018.
- 320- T. Mohammadi, M. Peydayesh, O. Bakhtiari, Water Desalination via Novel Positively Charged Hybrid Nanofiltration Membranes Filled with Hyperbranched Polyethyleneimine Modified MWCNT, *Journal of Industrial and Engineering Chemistry*, 69, 127, 2019.

- 321- T. Mohammadi, M. Arzani, H. R. Mahdavi, S. Azizi, Performance evaluation of mullite ceramic membrane for oily wastewater treatment using response surface methodology based on Box-Behnken design, *Journal of Oil, Gas and Petrochemical Technology*, 5, 25, 2019.
- 322- T. Mohammadi, M. Tavakolmoghadam, Application of colloidal precipitation method using sodium polymethacrylate as dispersant for TiO₂/PVDF membrane preparation and its antifouling properties in membrane bioreactors, *Polymer Engineering and Science*, 59, E422, 2019.
- 323- T. Mohammadi, M. Kahrizi; S. Zhao, N. Kasiri, Introducing sorption coefficient through extended UNIQUAC and Flory-Huggins models for improved flux prediction in forward osmosis, *Chemical Engineering Science*, 198, 33, 2019.
- 324- T. Mohammadi, S. Abdolbaghi, H. R. Mahdavi, Simulation of heat and mass transport for ethylene glycol solution separation using a vacuum membrane distillation process, *Desalination and Water Treatment*, 148, 30, 2019.
- 325- T. Mohammadi, M. Peydayesh, S. Bolisetty, R. Mezzenga, Assessing the Binding Performance of Amyloid–Carbon Membranes Toward Heavy Metal Ions, *Langmuir*, 35, 4161, 2019.
- 326- T. Mohammadi, E. Shekarian, M. R. Jafari Nasr, O. Bakhtiari, M. Javanbakht, Preparation of 4A zeolite coated polypropylene membrane for lithium ion batteries separator, *Journal of Applied Polymer Science*, 136, 47841, 2019.
- 327- T. Mohammadi, S. S. Hossaini Zahed, S. Khanlari, Hydrous metal oxide incorporated polyacrylonitrile-based nanocomposite membranes for Cu(II) ions removal, *Separation and Purification Technology*, 213, 151, 2019.
- 328- T. Mohammadi, M. Asghari, S. Rahil Mousavi, A comprehensive comparative study on morphology and pervaporative performance of porous-supported mesoporous zeolitic membranes, *Microporous and Mesoporous Materials*, 280, 174, 2019.
- 329- T. Mohammadi, A. Atash Jameh, O. Bakhtiari, M. Mahdiyarfar, Synthesis and modification of Zeolitic Imidazolate Framework (ZIF-8) nanoparticles as highly efficient adsorbent for H₂S and CO₂ removal from natural gas, *Journal of Environmental Chemical Engineering*, 7, 103058, 2019.
- 330- T. Mohammadi, S. Zarghami, M. Sadrzadeh, Preparation, characterization and fouling analysis of in-air hydrophilic/underwater oleophobic bio-inspired polydopamine coated PES membranes for oily wastewater treatment, *Journal of Membrane Science*, 582, 402, 2019.
- 331- T. Mohammadi, S. M. Mirfendereski, Z. Niazi, Selective removal of H₂S from gas streams containing high CO₂ concentration using hollow fiber membrane contractors, *Chemical Engineering and Technology*, 42, 196, 2019.
- 332- T. Mohammadi, A.H. Behroozi, N. Kasiri, Empirical modeling coupled with pore blocking for predicting cake formation of electric field effects on oily waste water cross-flow microfiltration, *Journal of Membrane Science*, 584, 120, 2019.
- 333- T. Mohammadi, P. S. Parsamehr, M. Zahed, M. Ahmadzadeh Tofighy, M. Rezakazemi, Preparation of novel cross-linked graphene oxide membrane for desalination applications using (EDC and NHS)-activated graphene oxide and PEI, *Desalination*, 468, 114079, 2019.
- 334- T. Mohammadi, F. S. Kamelian, F. Naeimpoor, Fast, facile and scalable fabrication of novel microporous silicalite-1/PDMS mixed matrix membranes for efficient ethanol separation by pervaporation, *Separation and Purification Technology*, 229, 115820, 2019.
- 335- T. Mohammadi, M. Sheikhi, M. Arzani, H. R. Mahdavi, Kaolinitic Clay-Based Ceramic Microfiltration Membrane for Oily Wastewater Treatment: Assessment of Coagulant Addition, *Ceramics International*, 45, 17826, 2019.
- 336- T. Mohammadi, S. Ghiasi, A. Behboudi, S. Khanlari, Effect of Surface Charge and Roughness on Ultrafiltration Membranes Performance and Polyelectrolyte Nanofiltration Layer Assembly, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 580, 123753, 2019.
- 337- T. Mohammadi, F. Zareia, R. Moattaria, S. Rajabzadeh, M. Bagheri, A. Taghizadeh, H. Matsuyama, Preparation of thin film composite nano-filtration membranes for brackish water

softening based on the reaction between functionalized UF membranes and polyethyleneimine, *Journal of Membrane Science*, 588, 117207, 2019.

- 338- T. Mohammadi, S. Zarghami, M. Sadrzadeh, B. Van der Bruggen, Superhydrophilic and underwater superoleophobic membranes- A review of synthesis methods, *Progress in Polymer Science*, 98, 101166, 2019.
- 339- T. Mohammadi, A.H. Behroozi, N. Kasiri, Multi-phenomenal macroscopic investigation of cross-flow membrane flux in microfiltration of oil-in-water emulsion, experimental & computational, *Journal of Water Process Engineering*, 32, 100962, 2019.
- 340- T. Mohammadi, A.H. Behroozi, M. Sheikhi, N. Kasiri, Experimental and simulation study of cross-flow microfiltration process of oil-in-water emulsion using cellulose acetate membrane, *Petroleum Research*, 29, 107, 29, 2019.
- 341- T. Mohammadi, M. Enayatzadeh, N. Fallah, Influence of TiO₂ nanoparticles loading on permeability and antifouling properties of nanocomposite polymeric membranes: experimental and statistical analysis, *Journal of Polymer Research*, 26, 240, 2019.
- 342- T. Mohammadi, N. Azizi, M. Isanejad, R. Mosayebi Behbahani, Effect of TiO₂ loading on morphology and CO₂/CH₄ separation performance of PEBAX based membranes, *Frontiers of Chemical Science and Engineering*, 13, 517, 2019.
- 343- T. Mohammadi, S. Sahebi, N. Fadaie, L. Mirshekar, B. Kamarehie, Assessing biomimetic aquaporin membrane for forward osmosis desalination process: A dataset, *Data in Brief*, 26, 104482, 2019.
- 344- T. Mohammadi, E. Shekarian, M. R. Jafari Nasr, O. Bakhtiari, M. Javanbakht, Enhanced wettability and electrolyte uptake of coated commercial polypropylene separators with inorganic nanopowders for application in lithium-ion battery, *Journal of Nanostructures*, 9, 736, 2019.
- 345- T. Mohammadi, M. Ahmadzadeh Tofighy, Divalent heavy metal ions removal from contaminated water using positively charged membrane prepared from a new carbon nanomaterial and HPEI, *Chemical Engineering Journal*, 388, 124192, 2020.
- 346- T. Mohammadi, A. Atash Jameh, O. Bakhtiari, Preparation of PEBAX-1074/modified ZIF-8 nanoparticles mixed matrix membranes for CO₂ removal from natural gas, *Separation and Purification Technology*, 231, 115900, 2020.
- 347- T. Mohammadi, S. Zarghami, M. Sadrzadeh, B. Van der Bruggen, Bio-inspired anchoring of amino-functionalized multi-wall carbon nanotubes (N-MWCNTs) onto PES membrane using polydopamine for oily wastewater treatment, *Science of the Total Environment*, 711, 134951, 2020.
- 348- T. Mohammadi, M. Pourazar, M. R. Jafari Nasr, O. Bakhtiari, M. Javanbakht, Preparation of 13X zeolite powder and membrane: investigation of synthesis parameters impacts using experimental design, *Materials Research Express*, 7, 035004, 2020.
- 349- T. Mohammadi, M. Bagheri, S. Rajabzadeh, M. R. Elmaghany, R. M. Moattari, O. Bakhtiari, A. Inada, H. Matsuyama, Preparation of a positively charged NF membrane by evaporation deposition and the reaction of PEI on the surface of the C-PES/PES blend UF membrane, *Progress in Organic Coatings*, 141, 105570, 2020.
- 350- T. Mohammadi, E. Valamohammadi, F. Behdarvand, M. Ahmadzadeh Tofighy, Preparation of positively charged thin-film nanocomposite membranes based on the reaction between hydrolyzed polyacrylonitrile containing carbon nanomaterials and HPEI for water treatment application, *Separation and Purification Technology*, 242, 116826, 2020.
- 351- T. Mohammadi, M. H. Sadeghi, M. Ahmadzadeh Tofighy, One-dimensional graphene for efficient aqueous heavy metal adsorption: rapid removal of arsenic and mercury ions by graphene oxide nanoribbons (GONRs), *Chemosphere*, 253, 126647, 2020.
- 352- T. Mohammadi, S. Sahebi, M. Sheikhi, B. Ramavandi, M. Ahmadi, S. Zhao, A. S. Adeleye, Z. Shabani, Sustainable management of saline oily wastewater via forward osmosis using aquaporin membrane, *Process Safety and Environmental Protection*, 138, 199, 2020.

- 353- T. Mohammadi, P. Jalilvand, A. Rahbar-Kelishami, H. Shayesteh, Optimizing of malachite green extraction from aqueous solutions using hydrophilic and hydrophobic nanoparticles, *Journal of Molecular Liquids*, 308, 113014, 2020.
- 354- T. Mohammadi, M. Peydayesh, S. Kordmirza Nikouzad, A Positively Charged Composite Loose Nanofiltration Membrane for water purification from heavy metals, *Journal of Membrane Science*, 611, 118205, 2020.
- 355- T. Mohammadi, S. Sahebi, M. Sheikhi, B. Ramavandi, Sh. Zhao, J. Baniasadi, N. Fadaie, Developing novel thin film composite membrane on a permeate spacer backing fabric for forward osmosis, *Chemical Engineering Research and Design*, 160, 326, 2020.
- 356- T. Mohammadi, A. Taghvaie Nakhjiri, A. Heydarinasab, O. Bakhtiari, Numerical simulation of CO₂ / H₂S simultaneous removal from natural gas using potassium carbonate aqueous solution in hollow fiber membrane contactor, *Journal of Environmental Chemical Engineering*, 8, 104130, 2020.
- 357- T. Mohammadi, S. Ghiasi, A. Behboudi, M. Ulbricht, High-Performance Positively Charged Hollow Fiber Nanofiltration Membranes Fabricated via Green Approach towards Polyethyleneimine Layer Assembly, *Separation and Purification Technology*, 251, 117313, 2020.
- 358- T. Mohammadi, Sh. Rajabi, F. Khodadadi, M. Tavakolmoghadam, Morphology control in PVDF membranes using PEG/PVP additives and mixed solvents, *Membrane and Water Treatment, An International Journal*, 11, 4, 237, 2020.
- 359- T. Mohammadi, I. Tavakol, S. Hadadpour, Z. Shabani, M. Ahmadzadeh Tofighy, S. Sahebi, Synthesis of novel thin film composite (TFC) forward osmosis (FO) membranes incorporated with carboxylated carbon nanofibers (CNFs), *Journal of Environmental Chemical Engineering*, 8, 104614, 2020.
- 360- T. Mohammadi, M. Pourazar, M. R. Jafari Nasr, O. Bakhtiari, M. Javanbakht, Preparation and characterization of PVDF-13X zeolite mixed matrix membranes for lithium ion batteries' separator with enhanced performance, *Journal of Applied Polymer Science*, 137, 49367, 2020.
- 361- T. Mohammadi, F. S. Kamelian, F. Naeimpoor, Mika Sillanpää, One-step and low-cost designing of two-layered active layer superhydrophobic (TALS) silicalite-1/PDMS membrane for simultaneously superior bioethanol pervaporation and fouling/biofouling resistance, *Applied Materials & Interfaces*, 12, 50, 2020.
- 362- T. Mohammadi, S. M. R. Miraboutalebi, M. Peydayesh, M. Bagheri, Polyacrylonitrile/ α -Fe₂O₃ hybrid photocatalytic composite adsorbents for enhanced dye removal, *Chemical Engineering and Technology*, 43, 1214, 2020.
- 363- T. Mohammadi, M. Managheb, S. Zarghami, A. A. Asadi, S. Sahebi, Enhanced dynamic Cu(II) ion removal using hot-pressed chitosan / poly (vinyl alcohol) electrospun nanofibrous affinity membrane (ENAM), *Process Safety and Environmental Protection*, 146, 329, 2021.
- 364- T. Mohammadi, M. Ahmadzadeh Tofighy, M. H. Sadeghi, High-flux PVDF/PVP nanocomposite ultrafiltration membrane incorporated with graphene oxide nanoribbons with improved antifouling properties, *Journal of Applied Polymer Science*, 138, 49718, 2021.
- 365- T. Mohammadi, E. Abdollahi, A. Heidari, A. A. Asadi, M. Ahmadzadeh Tofighy, Application of Mg-Al LDH nanoparticles to enhance flux, hydrophilicity and antifouling properties of PVDF ultrafiltration membrane, *Separation and Purification Technology*, 257, 117931, 2021.
- 366- T. Mohammadi, S. Hadadpour, I. Tavakol, Z. Shabani, M. Ahmadzadeh Tofighy, S. Sahebi, Synthesis and characterization of novel thin film composite forward osmosis membrane using charcoal-based carbon nanomaterials for desalination application, *Journal of Environmental Chemical Engineering*, 9, 104880, 2021.
- 367- T. Mohammadi, M. Dehghankar, M. Tavakol Moghadam, M. Ahmadzadeh Tofighy, Metal-organic framework/zeolite nanocrystal/poly (vinylidene fluoride) composite ultrafiltration membranes with flux/antifouling advantages, *Materials Chemistry and Physics*, 260, 124128, 2021.

- 368- T. Mohammadi, S. M. A. Ahmadi, N. Azizi, Effect of HNTs incorporation on morphology and CO₂/CH₄ separation performance of Pebax-based membranes, *Korean Journal of Chemical Engineering*, 38, 104, 2021.
- 369- T. Mohammadi, M. Bahmani, S. Zarghami, A. A. Asadi, S. Khanlari, PES electrospun fibrous membrane for oily wastewater treatment: Fabrication condition optimization using response surface methodology (RSM), *Polymers for Advanced Technologies*, 32, 886, 2021.
- 370- T. Mohammadi, Z. Ahmadi Pouya, M. Ahmadzadeh Tofighy, Synthesis and characterization of polytetrafluoroethylene/oleic acid-functionalized carbon nanotubes composite membrane for desalination by vacuum membrane distillation, *Desalination*, 503, 114931, 2021.
- 371- T. Mohammadi, Z. Shabani, M. Kahrizi, N. Kasiri, S. Sahebi, A novel Thin film composite forward osmosis membrane using bio-inspired polydopamine coated polyvinyl chloride substrate: Experimental and computational fluid dynamics modelling, *Process Safety and Environmental Protection*, 147, 756, 2021.
- 372- T. Mohammadi, F. Behdarvand, E. Valamohammadi, M. Ahmadzadeh Tofighy, Polyvinyl alcohol/polyethersulfone thin-film nanocomposite membranes with carbon nanomaterials incorporated in substrate for water treatment, *Journal of Environmental Chemical Engineering*, 9, 104650, 2021.
- 373- T. Mohammadi, S. Tahazadeh, H. Karimi, H. B. Motejadded, M. Ahmadzadeh Tofighy, Fabrication of biodegradable cellulose acetate/MOF-derived porous carbon nanocomposite adsorbent for methylene blue removal from aqueous solutions, *Journal of Solid State Chemistry*, 299, 122180, 2021.
- 374- T. Mohammadi, A. Behboudi, S. Ghiasi, M. Ulbricht, Preparation and characterization of asymmetric hollow fiber polyvinyl chloride (PVC) membrane for forward osmosis application, *Separation and Purification Technology*, 270, 118801, 2021.
- 375- T. Mohammadi, A. Heidari, E. Abdollahi, A. A. Asadi, Improving permeability, hydrophilicity and antifouling characteristic of PES hollow fiber UF membrane using carboxylic PES A promising substrate to fabricate NF layer, *Separation and Purification Technology*, 270, 118811, 2021.
- 376- T. Mohammadi, S. M. A. Ahmadi, N. Azizi, Superior Pebax-1657/amine-modified HNTs mixed matrix membranes to improve the CO₂/CH₄ separation efficiency, *Journal of Applied Polymer Science*, 138, 50749, 2021.
- 377- T. Mohammadi, M. Mirzaei, N. Kasiri, M. Ahmadzadeh Tofighy, Fabrication of magnetic field induced mixed matrix membranes containing GO/Fe₃O₄ nanohybrids with enhanced antifouling properties for wastewater treatment applications, *Journal of Environmental Chemical Engineering*, 9, 105675, 2021.
- 378- T. Mohammadi, N. Fadaie, M. Sheikhi, M. Ahmadzadeh Tofighy, S. Rajabzadeh, S. Sahebi, Novel Plasma Functionalized Graphene Nanoplatelets (GNPs) incorporated in forward osmosis substrate with improved performance and tensile strength, *Journal of Environmental Chemical Engineering*, 9, 105708, 2021.
- 379- T. Mohammadi, R. M. Moattari, S. Rajabzadeh, H. Dabiryan, H. Matsuyama, Reinforced hollow fiber membranes: A comprehensive review, *Journal of the Taiwan Institute of Chemical Engineers*, 122, 284, 2021.
- 380- T. Mohammadi, S. Tahazadeh, M. Ahmadzadeh Tofighy, S. Khanlari, H. Karimi, H. B. Motejadded, Development of cellulose acetate/metal-organic framework derived porous carbon adsorptive membranes for dye removal applications, *Journal of Membrane Science*, 638, 119692, 2021.
- 381- T. Mohammadi, M. Dehghankar, M. Tavakol Moghadam, M. Ahmadzadeh Tofighy, Polyvinylidene fluoride/nanoclays (Cloisite 30B and Palygorskite) mixed matrix membranes with improved performance and antifouling properties, *Industrial and Engineering Chemistry Research*, 60, 12078, 2021.

- 382- T. Mohammadi, B. Rahmaniyan, M. Ahmadzadeh Tofighy, Development of high flux PVDF/modified TNTs membrane with improved properties for desalination by vacuum membrane distillation, *Journal of Environmental Chemical Engineering*, 9, 106730, 2021.
- 383- T. Mohammadi, J. Baniasadi, Z. Shabani, S. Sahebi, Enhanced performance and fouling resistance of cellulose acetate forward osmosis membrane with the spatial distribution of TiO_2 and Al_2O_3 nanoparticles, *Journal of Chemical Technology & Biotechnology*, 96, 147, 2021.
- 384- T. Mohammadi, M. Rahmati, S. Rajabzadeh, A. Abdelrasoul, Y. Kawabata, T. Yoshioka, H. Matsuyama, Molecular Dynamics Simulation for Investigating and Assessing Reaction Conditions between Carboxylated Polyethersulfone and Polyethyleneimine, *Journal of applied polymer science*, 138, 51304, 2021.
- 385- T. Mohammadi, Z. Shabani, N. Kasiri, S. Sahebi, Development of high-performance thin-film composite FO membrane by tailoring co-deposition of dopamine and m-phenylenediamine for the Caspian seawater desalination, *Desalination*, 527, 115577, 2022.
- 386- T. Mohammadi, R. Shirazi, A. A. Asadi, Incorporation of amine-grafted halloysite nanotube (HNT) to electrospun nanofibrous membranes (ENM) of Chitosan/Poly (vinyl alcohol) for Cd (II) and Pb(II) removal, *Applied Clay Science*, 220, 106460, 2022.
- 387- T. Mohammadi, S.S. Hossaini-Zahed, S. Khanlari, O. Bakhtiari, M. Ahmadzadeh Tofighy, Soheil Hadadpour, S. Rajabzadeh, P. Zhang, H. Matsuyama, Evaluation of Process Condition on Metal Ion Removal from Water Using Goethite Incorporated Nanocomposite Ultrafiltration Adsorptive Membranes, *Water Science and Technology*, 85, 1053, 2022.
- 388- T. Mohammadi, R. Shirazi, A. A. Asadi, M. Ahmadzadeh Tofighy, Electrospun nanofiber affinity membranes for water treatment applications: A review, *Journal of Water Process Engineering*, 47, 102795, 2022.
- 389- T. Mohammadi, J. Baniasadi, S. Zarghami, F. S. Kamelian, R. Nikbakht, Fabrication of asymmetric cellulose acetate/pluronic F-127 forward osmosis membrane: minimization of internal concentration polarization via control thickness and porosity, *Polymer Bulletin*, 79, 569, 2022.
- 390- T. Mohammadi, M. Ahmadzadeh Tofighy, Functional charcoal based nanomaterial with excellent colloidal property for fabrication of polyethersulfone ultrafiltration membrane with improved flux and fouling resistance, *Materials Chemistry and Physics*, 285, 126167, 2022.
- 391- S. Seraj, T. Mohammadi, M. Ahmadzadeh Tofighy, Graphene-based membranes for membrane distillation applications: A review, *Journal of Environmental Chemical Engineering*, 10, 107974, 2022.
- 392- S. Ghiasi, T. Mohammadi, M. Ahmadzadeh Tofighy, Hybrid nanofiltration thin film hollow fiber membranes with adsorptive supports containing bentonite and LDH nanoclays for boron removal, *Journal of Membrane Science*, 655, 120576, 2022.
- 393- M. Bahrami Eynolghasi, T. Mohammadi, M. Ahmadzadeh Tofighy, Fabrication of polystyrene (PS)/cyclohexanol-based carbon nanotubes (CNTs) mixed matrix membranes for vacuum membrane distillation application, *Journal of Environmental Chemical Engineering*, 10, 108175, 2022.
- 394- Z. Shabani, T. Mohammadi, N. Kasiri, S. Sahebi, Thin-film nanocomposite forward osmosis membranes prepared on PVC substrates with polydopamine functionalized Zr-based metal organic frameworks, *Industrial and Engineering Chemistry Research*, 61, 7067, 2022.
- 395- A. Behboudi, T. Mohammadi, M. Ulbricht, Fabrication and characterization of inner selective antibiofouling forward osmosis hollow fiber membranes for simultaneous wastewater treatment and desalination, *Separation and Purification Technology*, 300, 121795, 2022.
- 396- F. Dolatkah, T. Mohammadi, M. Ahmadzadeh Tofighy, Polysulfone hollow fiber membrane containing charcoal-carbon nanomaterial for wastewater treatment in membrane bioreactor, *Journal of Water Process Engineering*, 50, 103222, 2022.

- 397- S. Ghiasi, T. Mohammadi, M. Ahmadzadeh Tofighy, Hybrid adsorptive nanofiltration hollow fiber membranes with charge-patterned UiO-66 incorporated thin-film nanocomposite selective layer for enhanced boron removal, *Journal of Membrane Science*, 664, 121116, 2022.
- 398- A. M. Garehbagh, S. Rajabzadeh, M. A. Shouman, M. R. Elmarghany, M. S. Salem, N. Arahman, T. Mohammadi and H. Matsuyama, Simulation Assessment of Inlet Parameters and Membrane-Surface-Structure Effects on CO₂ Absorption Flux in Membrane Contactors, *Sustainability*, 14, 14527, 2022.
- 399- A. Behboudi, T. Mohammadi, M. Ulbricht, High performance antibiofouling hollow fiber polyethersulfone nanocomposite membranes incorporated with novel surface-modified silver nanoparticles suitable for membrane bioreactor application, *Journal of Industrial and Engineering Chemistry*, 119, 298, 2023.
- 400- M. Ostadi, F. S. Kamelian, T. Mohammadi, Superhydrophilic micro/nano hierarchical functionalized-CuO/PVDF nanocomposite membranes with ultra-low fouling/biofouling performance for acetate wastewater treatment: MBR application, *Journal of Membrane Science*, 676, 121591, 2023.
- 401- S. Habibi, T. Mohammadi, R. HMTShirazi, F. Atyabi, M. Kiani, A. A. Asadi, A bilayer mupirocin/bupivacaine-loaded wound dressing based on chitosan /Poly (vinyl alcohol) nanofibrous mat: preparation, characterization, and controlled drug release, *International Journal of Biological Macromolecules*, 240, 124399, 2023.
- 402- M. Dehghankar, R. HMTShirazi, T. Mohammadi, M. Ahmadzadeh Tofighy, Synthesis and modification methods of metal-organic frameworks and their application in modification of polymeric ultrafiltration membranes: A review, *Journal of Environmental Chemical Engineering*, 11, 109954, 2023.
- 403- R. Pishbin, T. Mohammadi, M. Ahmadzadeh Tofighy, PVDF ultrafiltration membranes containing copper oxide-charcoal based graphene oxide nanohybrids with enhanced performance and antifouling properties, *Process Safety and Environmental Protection*, 176, 180, 2023.
- 404- R. HMTShirazi, A. Heidari, T. Mohammadi, Fabrication of high-performance MeI/and/HPEI assembled PES/CPES hollow-fiber nanofiltration membranes with high positive charges for efficient removal of salt/heavy metal ions, *Desalination*, 565, 116877, 2023.
- 405- S. Karimzadeh, R. HMTShirazi, T. Mohammadi, A. A. Asadi, Polyacrylonitrile (PAN) /Freeze-dried Chitosan (FCS)-NaY zeolite triple layer nanostructure fibrous adsorptive membrane (PAN/FCS-NaY TNAM) for Cu (II) and Pb (II) ions removal from aqueous solutions, *Separation and Purification Technology*, 327, 124885, 2023.
- 406- E. Valamohammadi, F. Behdarvand, T. Mohammadi, M. Ahmadzadeh Tofighy, Z. Moghiseh, Effects of carbon nanotubes on structure, performance and properties of polymer nanocomposite membranes for water/wastewater treatment applications: A comprehensive review, *Polymer Bulletin*, 80, 11589, 2023.
- 407- Z. Rezaee, T. Mohammadi, O. Bakhtiari, Preparation of organic-filled compatible nanocomposite membranes for enhanced CO₂ permselectivity, *Journal of Industrial and Engineering Chemistry*, 126, 145, 2023.
- 408- H. R. Mahdavi, M. Arzani, H. Faramarzi, O. Bakhtiari, T. Mohammadi, Stabilization of [BMIM][PF₆] ionic liquid membrane in structurally optimized multilayer ceramic support through aqueous DEA solution for CO₂/CH₄ separation, *Journal of Industrial and Engineering Chemistry*, 127, 125, 2023.
- 409- S. Seraj, T. Mohammadi, M. Ahmadzadeh Tofighy, Incorporation of 3-dimensional Lycopodium with hydrophobic nature and interconnected nano-channels into polyvinylidene fluoride membranes for desalination applications by vacuum membrane distillation, *Frontiers of Chemical Science and Engineering*, 17, 1162, 2023.
- 410- H. Faramarzi, M. Arzani, A. Khosravanian, H. R. Mahdavi, O. Bakhtiari, T. Mohammadi, An overview of practical aspects of the design and application of polymeric/ceramic supports in

supported liquid membranes for gas separation, *Industrial and Engineering Chemistry Research*, 62, 12443, 2023.

- 411- M. H. Moghadasin, T. Mohammadi, M. Ahmadzadeh Tofighy, Synthesis and characterization of PVA mixed matrix membrane containing NaP zeolite/charcoal-based graphene oxide nanohybrid for dehydration of isopropanol by pervaporation, *Industrial and Engineering Chemistry Research*, 62, 20360, 2023.
- 412- S. M. Mirfendereski, T. Mohammadi, Pervaporation separation of real industrial aromatic/alicyclic/aliphatic/alcoholic multicomponent mixtures using MSE polymeric membranes, *Separation and Purification Technology*, 330, 125512, 2024.
- 413- S. Habibi, T. Mohammadi, A. A. Asadi, Tailoring Polyethylene Oxide-Modified Cross-Linked Chitosan/PVA Nanofibrous Membranes: Burn Dressing Scaffold Developed for Mupirocin Release, *International Journal of Biological Macromolecules*, 258, 128983, 2024.
- 414- N. Asadi Arbabi, M. Ostadi, F. S. Kamelian, T. Mohammadi, S. Zarghami, M. Dehghankar, Evaluation of antifouling/biofouling ability of a novel MIL101(Cr)/PES composite membrane for acetate wastewater treatment in MBR application, *Polymer Bulletin*, 81, 491, 2024.
- 415- Z. Zangeneh, T. Mohammadi, S. Zarghami, M. Ahmadzadeh Tofighy, Fabrication optimization of polyethersulfone adsorptive mixed- matrix membrane for enhanced dynamic methylene blue removal: response surface methodology approach, *Polymer Engineering and Science*, 64, 1858, 2024.
- 416- M. Ein Marjani, R. HMTShirazi, T. Mohammadi, CDI Crosslinked Chitosan/Poly (vinyl alcohol) Electrospun Nanofibers Loaded with Achillea millefolium and Viola extract: A Promising Wound Dressing, *Carbohydrate Polymers*, 336, 122117, 2024.
- 417- F. Gholamzadeh Moghadam, T. Mohammadi, A. A. Asadi, Optimizing Dual-Layer Composite Membranes with Functionalized CNT Loading Using Response Surface Methodology, *Water Science and Technology*, 90, 1520, 2024.
- 418- M. Rouhollahi, T. Mohammadi, M. Mohammadi, M. Ahmadzadeh Tofighy, Fabrication of nanocomposite membranes containing Ag/GO nanohybrid for phycocyanin concentration, *Scientific Reports*, 22538, 14, 2024.
- 419- F. S. Kamelian, F. Naeimpoor, T. Mohammadi, Effect of *Zymomonas mobilis* and *Pichia stipitis* presence/absence strategies in a two-stage process on bioethanol production from glucose-xylose mixture, *Biomass Conversion and Biorefinery*, 14, 3409, 2024.
- 420- R. M. Moattari, T. Mohammadi, S. Rajabzadeh, H. Dabiryan, Enhancement of bursting pressure resistance of braid-reinforced polyether sulfone hollow fiber composites, *Polymer Bulletin*, 81, 12499, 2024.
- 421- M. Jafari, A. Vatani, T. Mohammadi, CFD Modeling of Braid-Reinforced Hollow Fiber Membranes for Efficient Water and Bovine Serum Albumin (BSA) Separation, *Journal of Water Process Engineering*, 65, 105746, 2024.
- 422- R. M. Moattari, H. Dabiryan, Z. S. Mazloomi, T. Mohammadi, S. Rajabzadeh, Numerical and experimental study of bursting behavior of braid-reinforced polyether sulfone hollow fibrous-structured composites, *Polymer Composites*, 81, 12499, 2024.
- 423- S. Habibi, T. Mohammadi, K. Jahromi Hossein, A. A. Asadi, Design of hyaluronic acid-based scaffold containing human endometrial mesenchymal stem cells (hEnMSCs)-derived extracellular vesicles for bone tissue engineering: in-vivo and vitro studies, *BioNanoScience*, 92, 15, 2025.
- 424- M. Bahrami Eynolghasi, F. Khodadadi, T. Mohammadi, M. Ahmadzadeh Tofighy, Incorporation of OA-APTES-MWCNTs into PS/PVP membranes for VMD desalination: Membrane composition optimization via Box–Behnken Method, *Journal of Industrial and Engineering Chemistry*, 142, 686, 2025.

- 425- M. Mesbahi Babaei, S. Hadadpour, T. Mohammadi, S. Sahebi, Fabrication of a Support Modified with Charcoal-based Carbon Nanomaterials and Fe_3O_4 for Thin-Film Composite Forward Osmosis Membranes, *Journal of Environmental Chemical Engineering*, 13, 115837, 2025.
- 426- S. Zarghami, T. Mohammadi, Recent advances on carbon-based nanocomposite membranes in water and wastewater applications, *Current Opinion in Green and Sustainable Chemistry*, 53, 101026, 2025.
- 427- S. Soroush, T. Mohammadi, O. Bakhtiari, Dynamic simulation of sulfur aroma compound extraction from dilute solutions using membrane-based solvent extraction, *Food and Bioproducts Processing*, 152, 12, 2025.
- 428- T. Mohammadi, A. Atash Jameh, O. Bakhtiari, A novel methanol medium modification of ZIF-8 nanoparticles and their incorporation into the Pebax 1074 membranes for simultaneous CO_2 and H_2S removal from natural gas, *Chemical Engineering Research and Design*, 218, 682, 2025.
- 429- R. Alaei, T. Mohammadi, M. Mahinroosta, pH-Responsive Xanthan-Glycerol Hydrogel: An Effective Wound Dressing for Controlled Amoxicillin Delivery, *International Journal of Biological Macromolecules*, 318, 145112, 2025.
- 430- R. Shirazi, T. Mohammadi, E. Koupaie, K. De France, Chemically Crosslinked Electrospun Chitosan / Poly (Vinyl Alcohol) Membranes with Encapsulated Zeolite for Organic Dye Removal, *Journal of Water Process Engineering*, 77, 108413, 2025.
- 431- F. Roshanzamir, N. Babajani, T. Mohammadi, S. Zarghami, M. Mirzababei, Pivotal role of chitosan in developing nanodiamond-enabled hollow fiber membranes with enhanced antibiofouling properties: A study on wastewater treatment via membrane bioreactor systems, *Chemical Engineering Journal*, 525, 169970, 2025.
- 432- H. H. Mohammadi, Z. Zangeneh, T. Mohammadi, A. Akbarzadeh, Layered Double Hydroxides in Nanofiltration as a New Approach to Nitrate Removal, *Scientific Reports*, 36386, 15, 2025.
- 433- S. Pirayandeh, R. Shirazi, T. Mohammadi, M. Ahmadzadeh Tofighy, Polyvinylidene Fluoride Mixed Matrix Membranes with Ionic Liquid-Functionalized Carbon Nanotubes: Enhanced Desalination via Vacuum Membrane Distillation, *Industrial and Engineering Chemistry Research*, 64, 12200, 2025.
- 434- K. Kamali, T. Mohammadi, S. Zarghami, Thin film composite nanofiltration membrane mediated by MOF interlayer with novel MOF templating technique for water treatment, *Industrial and Engineering Chemistry Research*, 64, 16299, 2025.
- 435- S. Seraj, T. Mohammadi, S. M. Hashemianzadeh, Molecular dynamics simulation of PVDF-based blends for enhanced desalination performance in membrane distillation, *Desalination*, 617, 119398, 2026.
- 436- Y. Golabkesh, M. S. Fattahi, T. Mohammadi, A Study on Effect of Stearic Acid-Modified Cellulose Nanocrystals on Morphology and Performance of PVDF Membranes in Vacuum Membrane Distillation, *Separation and Purification Technology*, 382, 135961, 2026.

- ۱- تورج محمدی، اصلاح یک غشا مرکب جهت بکارگیری در باطری‌های جدید، *مجله بین‌المللی علوم مهندسی*، جلد ۱۰، شماره ۴، صفحه ۷۸، ۱۰۳.
- ۲- تورج محمدی، افشین پاک، سید مهبد بصیر، تاثیر ماده جاذب بر بازدهی فتو کاتالیزوری دی‌اکسید تیتانیوم، *نشریه شیمی و مهندسی شیمی ایران*، سال بیست و یکم شماره یک و دو ۸۱.
- ۳- تورج محمدی، احسان سلجوقی، بررسی غشاها و فرایندهای غشایی مورد استفاده در تصفیه خون، *مجله مهندسی شیمی ایران*، سال هفتم شماره سی و سه ۸۷.
- ۴- تورج محمدی، فاطمه رکابدار، عبدالحمید صلاحی، علی قشلاقی، کاربرد فرایند فیلتراسیون غشایی در تصفیه پساب نفتی واحد پالایش نفت، *مجله پژوهش نفت*، سال بیستم شماره شصت و سه ۵۷.
- ۵- تورج محمدی، منصور کاظمی مقدم، مقایسه و ارزیابی جداسازی غشاها و زئولیتی نانوحفره ای، *مجله علمی پژوهشی مواد پرنرژي*، زمستان ۱۳۹۰.

- ۶- تورج محمدی، افشین پاک، معصومه تکبیری، جداسازی ترکیبات گوگردی از بنزین توسط فرایند تراوش تبخیری، نشریه شیمی و مهندسی شیمی ایران، دوره ۳۱ سال ۹۱.
- ۷- تورج محمدی، منصور کاظمی مقدم، سیاوش مداینی، راهبرد های نوین در شستشوی غشاهای UF مورد استفاده در صنایع شیر ایران، مجله مهندسی شیمی ایران، سال یازدهم شماره شصت و دو ۲۱.
- ۸- تورج محمدی، شهرام قنبری، کورش شفیع، منصور کاظمی مقدم، بررسی استفاده از غشاهای زئولیتی برای آبدایی از سوخت DMAZ ، مجله علمی پژوهشی مواد پرانرژی، پاییز ۱۳۹۲.
- ۹- تورج محمدی، محمد مهدیار فر، علی مهاجری، بررسی تجربی ساخت غشا کربنی بر روی پایه های سرامیکی با استفاده از رزین فنلی بعنوان ماده پیشتاز، مجله پژوهش نفت، سال بیستم و دوم شماره هفتاد و دو ۱۳۲.
- ۱۰- تورج محمدی، نور ا... کثیری، هانیه شکرکار، بررسی تاثیر عوامل مختلف عملیاتی بر لایه قطبش غلظتی در غشاهای سرامیکی، مجله مهندسی شیمی ایران، سال یازدهم شماره شصت و هفت ۱۸.
- ۱۱- تورج محمدی، سپیده سروش، امید بختیاری، مدل سازی بازیافت مواد خوش بو از جریان های در بر گیرنده آنها با تماس دهنده های غشایی، نشریه شیمی و مهندسی شیمی ایران، دوره ۳۳ سال ۹۳.
- ۱۲- تورج محمدی، نور ا... کثیری، هانیه شکرکار، مدلسازی غشای میکروفیلتراسیون جهت تصفیه فاضلاب نفتی با استفاده از مدل هرمیا و شبکه عصبی، مجله مهندسی شیمی ایران، سال سیزدهم شماره هفتاد و شش ۴.
- ۱۳- تورج محمدی، جعفر توفیقی، علیمراد رشیدی، مژگان داودی، مروری بر روش های ساخت غشاهای نانولوله کربنی، مجله مهندسی شیمی ایران، سال چهاردهم شماره هشتاد و دوم ۶.
- ۱۴- تورج محمدی، نوراله کثیری، امیرحسین بهروزی، محمد شیخی، بررسی آزمایشگاهی و شبیه سازی فرآیند میکروفیلتراسیون جریان متقاطع امولسیون نفت در آب با غشای سلولز استات، مجله پژوهش نفت، شماره ۱۰۷، مهر و آبان، ۱۱۱.
- ۱۵- تورج محمدی، مونا دهقانکار، مریم توکل مقدم، فاطمه رکابدار، پیش بینی عملکرد غشای اولترافیلتراسیون بر مبنای گرانروی محلول پلیمری، نشریه پژوهش های کاربردی در شیمی، سال چهاردهم شماره چهارم ۲۵.
- ۱۶- تورج محمدی، سعید سراج، مریم احمدزاده توفیقی، ساخت غشای پلی وینیلیدن فلوراید/گرافن اکساید کاهش یافته سنتز شده با روش سبز به منظور استفاده در نمک زدایی به روش تقطیر غشایی، نشریه علمی فرایند نو، شماره ۷۰، تابستان ۹۹، ۱۶.
- ۱۷- محمد سلطانی، رهبر رحیمی، تورج محمدی، سید نظام الدین اشرفی زاده، سهیل ضرغامی، مروری بر آموزش مهندسی شیمی: گذشته، حال و جهت گیری های آینده در ایران و جهان، فصلنامه آموزش مهندسی ایران، سال ۲۶، شماره ۱۰۳، پاییز ۱۴۰۳.

شرکت های دانش بنیان ثبت شده

1- شتاب دهنده حیات اکسیر مهر آب

2- شرکت آوین پویان پالا آب

مقالات ارایه شده در کنفرانسهای ملی و بین المللی

بیش از ۲۰۰ مورد

پروژه های صنعتی و پژوهشی اجرا شده

- ۱- بررسی پدیده ایجاد پلیمر در برج Caustic washing واحد الفین - مجتمع پتروشیمی اراک
- ۲- بررسی علمی روش های جلوگیری از Fouling غشاهای RO - مجتمع پتروشیمی رازی
- ۳- مطالعه و ارائه بهترین روش رفع گرفتگی (Fouling) غشا UF - سازمان صنایع شیر ایران
- ۴- استفاده از فتوکاتالیست ها در حذف آلودگی - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۵- بررسی روش های تمیز کردن غشاهای صنعتی - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۶- بررسی انواع غربال های مولکولی در صنایع پتروشیمی - تحقیق و توسعه پتروشیمی

- ۷- تهیه آزمایشگاهی غربال‌های مولکولی - وزارت صنایع
- ۸- الکترودیالیز (مقدمه) - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۹- الکترودیالیز (کاربرد) - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۱۰- تهیه آزمایشگاهی غشا ژئولیتی - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۱۱- استفاده از فن‌آوری الکترودیالیز به منظور تهیه آب - طرح تعاون بین دانشگاهی
- ۱۲- تهیه غشا سرامیکی میکروفیلتراسیون - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۱۳- بررسی امکان استفاده از غشا در صنایع نفت - مهندسی توسعه نفت
- ۱۴- بررسی امکان استفاده از فرایندهای غشایی در جداسازی مخلوط‌های مختلف - معاونت پژوهشی دانشگاه علم و صنعت ایران
- ۱۵- تهیه غشا ژئولیتی - سازمان گسترش و نوسازی صنایع
- ۱۶- تغلیظ آزمایشگاهی لیزین به روش UF - سازمان گسترش و نوسازی صنایع
- ۱۷- امکان استفاده از تکنولوژی غشا بمنظور بازیابی LPG در پالایشگاه شیراز - پالایشگاه شیراز
- ۱۸- بررسی فرایندهای غشایی در صنایع گاز و امکان سنجی تهیه آزمایشگاهی غشا - شرکت ملی گاز ایران
- ۱۹- بررسی آزمایشگاهی فرآیند جداسازی هیدروژن به روش غشایی و مقایسه این فرآیند با فرایندهای PSA و Cryogenic - پژوهشگاه صنعت نفت
- ۲۰- ارزیابی عملکرد یک راکتور غشایی به منظور افزایش گزینش‌پذیری دی‌متیل آمین در مقیاس آزمایشگاهی - سازمان صنایع دفاع
- ۲۱- تهیه و ارزیابی غشا پلیمری بمنظور بررسی امکان جداسازی LPG از جریان گازی در مقیاس آزمایشگاهی - پالایشگاه شیراز
- ۲۲- تهیه و ارزیابی عملکرد یک راکتور غشایی به منظور تولید گاز سنتز در مقیاس آزمایشگاهی - تحقیق و توسعه پتروشیمی
- ۲۳- سنتز غشا پلیمری لاستیکی جهت جداسازی هیدروکربن‌های سنگین از گازهای سبک - صندوق حمایت از پژوهشگران کشور
- ۲۴- ساخت و ارزیابی یک نمونه غشا سرامیکی به منظور شیرین‌سازی گاز طبیعی - شرکت ملی گاز ایران
- ۲۵- استفاده از فرایند ترکیبی غشا - جذب در مقیاس آزمایشگاهی به منظور شیرین‌سازی گاز طبیعی - شرکت نفت و گاز پارس
- ۲۶- تدوین دانش فنی استحصال مواد آروماتیک از باقیمانده‌های واحدهای آروماتیک زدایی با استفاده از روش تراوش تبخیری در مقیاس نیمه صنعتی با ظرفیت ۱۰۰۰ لیتر در روز - سازمان گسترش و نوسازی صنایع
- ۲۷- ساخت نمونه آزمایشگاهی غشا سرامیکی به منظور خالص‌سازی گاز SF₆ - شرکت برق منطقه ای باختر
- ۲۸- طراحی و ساخت پایلوت غشایی تراوش تبخیری چند منظوره جهت خالص‌سازی حلال‌های آلی به ظرفیت ۵۰۰ لیتر حلال خالص در روز - سازمان گسترش و نوسازی صنایع
- ۲۹- تدوین دانش فنی و ساخت غشا سرامیکی هدایتگر همزمان یون و الکترون برای جداسازی اکسیژن از هوا - طرح‌های صنایع نوین
- ۳۰- ساخت غشاهای ماتریس آمیخته برای جداسازی دی‌اکسید کربن / متان - صندوق حمایت از پژوهشگران کشور
- ۳۱- پوشش دهی غشاهای سرامیکی برای آب زدایی از اتانول با فرایند تراوش تبخیری - صندوق حمایت از پژوهشگران کشور
- ۳۲- ساخت پایلوت غشایی خالص‌سازی اتانول - دبیرخانه بند الف ماده ۱۷ قانون برنامه پنجم توسعه کشور
- ۳۳- تدوین دانش فنی ساخت مدول و غشا های میکروفیلتر سرامیکی مونولیتی به طول ۳۰ cm جهت تصفیه پساب - طرح‌های صنایع نوین
- ۳۴- تدوین دانش فنی ساخت و ارزیابی غشاهای نانوفیلتراسیون الیاف تو خالی به منظور شیرین‌سازی آب - طرح‌های صنایع نوین
- ۳۵- تولید غشاهای الیاف توخالی مورد استفاده در واحدهای تصفیه آب و پساب، صندوق سرمایه‌گذاری پژوهش و فناوری علم و صنعت
- ۳۶- احداث آب‌شیرین‌کن‌های اقتصادی برای تولید آب آبیاری توسط فناوری نانوفیلتراسیون، صندوق سرمایه‌گذاری پژوهش و فناوری علم و صنعت

پروژه‌های صنعتی و پژوهشی در دست اجرا

- ۱- ساخت و بررسی عملکرد غشای نانوفیلتراسیون مرکب لایه نازک برای جداسازی انتخابی Mg^{2+}/Li^{+}
- ۲- توسعه آب شیرین کن های اقتصادی برای تولید آب (مورد نیاز کشاورزی و دامداری) توسط فناوری نانوفیلتراسیون با استفاده از غشاهای مستعمل اسمز معکوس
- ۳- طراحی و ساخت جاذب طبیعی ارزان قیمت برپایه گل قرمز جهت حذف آرسنیک از منابع آب آشامیدنی

فناوری های تایید شده

- ۴- تولید غشاهای الیاف توخالی (Hollow fiber)
- ۵- غشاهای نانوفیلتراسیون الیاف توخالی بار مثبت
- ۶- ساخت غشای مرکب لایه نازک در فرآیند اسمز مستقیم

اختراعات ثبت و تایید شده

- ۱- طرح غشاهای صفحه ای میکرو فیلتراسیون پلی اترسولفون، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۲- طرح لوله های میکرو حفره سرامیک مولیت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۳- طرح غشا سرامیکی نوع فوژاسیت بر روی پایه لوله ای مولیت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۴- طرح غشا سرامیکی مورد نیت بر روی پایه لوله ای مولیت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۵- طرح کریستالهای نانو حفره ژئولیتی نوع مورد نیت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۶- طرح کریستالهای کروی نانو حفره ژئولیت نوع X، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۷- طرح کریستالهای نانو حفره ژئولیت نوع فوژاسیت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۸- غشاهای غیر متخلخل تک لایه پلی دی متیل سیلوکسان (PDMS)، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۹- غشاهای غیر متخلخل کامپوزیت پلی دی متیل سیلوکسان (PDMS) بر پایه پلیمر آب گریز پلی تترا فلورو اتیلن (PTFE)، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۱۰- غشاهای غشاهای کامپوزیت پلی دی متیل سیلوکسان (PDMS) بر پایه پلیمر آب دوست سلولز استات (CA) به روش ریخته گری بر روی شیشه، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۱۱- غشاهای کامپوزیت پلی دی متیل سیلوکسان (PDMS) بر پایه پلیمر آب دوست پلی آمید (PA) به روش ریخته گری بر روی آب، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۱۲- جداسازی ایزوپروپانول از آب با استفاده از غشا کامپوزیت کو پلیمر پلی اتر بلوک امید، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۱۳- غشا کامپوزیت کو پلیمر پلی اتر بلوک امید بر پایه پلی سولفون، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۱۴- جداسازی اتیل بوتیرات از آب با استفاده از غشا کامپوزیت کو پلیمر پلی اتر بلوک امید، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۶
- ۱۵- جداسازی آب از اتانول با استفاده از غشا ژئولیت T، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۷
- ۱۶- کریستالهای نانو حفره ژئولیت نوع T، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۷
- ۱۷- غشا نانو حفره ژئولیت T روی پایه لوله ای مولایت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۷
- ۱۸- جداسازی آب از ایزوپروپانول با استفاده از غشا ژئولیت T، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۷
- ۱۹- ایجاد لایه ای از نانو لوله های کربنی مرتب شده (دارای نظم عمودی) بر سطح پایه درشت حفره الفا الومینا، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۸
- ۲۰- طراحی یک سیستم ساده CVD به منظور تولید نانو لوله های کربنی، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۸
- ۲۱- طراحی و ساخت بیو راکتور غشایی به منظور تصفیه پساب، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۹
- ۲۲- افزایش اندازه غشاهای میکروفیلتر به اندازه صنعتی (۵۰ cm)، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۸۹
- ۲۳- ساخت ژئولیت نانو حفره سیگما ۱ با استفاده از سیلیکا فوم، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۲۴- ساخت غشا ژئولیتی W برای خالص سازی گاز SF_6 ، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱

- ۲۵- ساخت غشا کامپوزیت پلی وینیل الکل (PVA) بر روی پایه پلی پروپیلن (PP)، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۲۶- ساخت غشا ماتریس آمیخته پلی دی متیل سیلوکسان (PDMS) پر شده از نانو ذرات زئولیت 4A، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۲۷- سنتز نانو زئولیت Rho با کنترل شرایط عملیاتی، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۲۸- سنتز نانو زئولیت NaA با کنترل شرایط عملیاتی، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۲۹- ساخت غشا نانو کریستال NaA برای جداسازی آب و ایزوپروپانول، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۳۰- سنتز نانو زئولیت NaA با استفاده از تترا متیل آمونیم هیدروکساید (مورد استفاده در صنایع نفتی)، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۳۱- سنتز زئولیت نانو حفره کابازیت، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۳۲- سنتز زئولیت نانو کریستال NaY بدون استفاده از قالب های آلی، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۳۳- ساخت غشا کامپوزیت ماتریس آمیخته پلی وینیل الکل (PVA) پر شده از نانو ذرات زئولیتی 4A بر روی پایه پلی پروپیلن (PP)، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۱
- ۳۴- ساخت غشا های مرکب پلی یورتان / پلی اتیلن گلایکول در دو نوع تک لایه و با پایه سرامیکی، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۳
- ۳۵- ساخت دستگاه جدید تولید غشای الیاف توخالی با هدف تهیه غشا های با میزان گرفتگی کمتر، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۹
- ۳۶- ساخت غشاهای نانوفیلتراسیون الیاف توخالی دارای بار سطحی مثبت به منظور حذف نمک، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۳۹۹
- ۳۷- ساخت غشاهای نانوفیلتراسیون بار مثبت فشار پایین برای زدایش یون های دو و چند ظرفیتی از آب های سطحی و کاهش مصرف انرژی و تمایل رسوب گذاری غشاهای اسمز معکوس، اداره کل ثبت شرکت ها و مالکیت صنعتی، ۱۴۰۰