

## Dr. Majid Amidpour

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### Education

**PhD** in Process Integration & Energy Conservation, UMIST, Manchester, UK, 1994-1997

**MSc** in Process Integration & Energy Conservation, UMIST, Manchester, UK, 1992-1994

**BSc** in Chemical Engineering, Tehran University, Tehran, Iran, 1984-1988

### Work experience

- 1) Professor, K.N.T. University of Technology, Tehran.
- 2) Head of energy & process optimization Department in IR. R&D.
- 3) Research deputy in Iranian research and developing center for chemical industry.
- 4) Head of IR.R&D for chemical industry.
- 5) Research consultant in ministry of industry (Innovation and energy saving).
- 6) Member of editorial board and managing direct of Iranian journal chemistry and chemical engineering.
- 7) Education deputy in mechanical engineering Faculty.
- 8) Head of Energy system Engineering.
- 9) Consultant Oil and Energy Ministries Company's in Iran.
- 10) Consultant Power plant optimization in Iran power stations.
- 11) Refeer of Three International Journals.
- 12) Head of Chemical Engineering Department in Azad university science- Research Unit.
- 13) Director of MSc Joint program with Kingston University and Manchester University.
- 14) Vice-Dean of Education of faculty of Mechanical Engineering K.N. Toosi University of Technology.
- 15) Managing Board of Iran Energy Association.
- 16) Board of research in oil distribution Iranian company.

### Teaching Experience

- 1) Process engineering M.Sc. course
- 2) Process integration M.Sc. course
- 3) Unit operation (I) & (II) BSc course
- 4) Pinch technology MSc. course
- 5) Thermodynamic, BSc course
- 6) Fluid Mechanics (I) BSc. Mechanical Engineering
- 7) Oil Refinery Engineering
- 8) Heat Transfer (I) BSc Chemical Engineering
- 9) CHP (Cogeneration Heat and Power) M.Sc course
- 10) Energy system Analysis

## Research Activities

1. Comprehensive planning and established management of production and consumption of oil until 2034.
2. Affect of using heater without chimney on quality of room conditions.
3. Optimization of strategy development and technical and economical study on electrical hybrid car production.
4. Optimization and analyzing of fuel consumption in selected villages of Iran.
5. Debottlenecking and capacity improvement of 4 and 5 phase of South Pars based on heat transfer improvement techniques.
6. Simulation and design of desalination system based of heat recovery from Khalije Fars gas turbines to improve the efficiency.
7. Consultant in review on energy management structure in Iran.
8. Energy saving in Equipments, kettle...
9. Water management in food industry.
10. Modify Solvay process.
11. Energy saving in sugar industry.
12. Production of Strontium and Barium carbonate.
13. Consultant of paint industry.
14. Consultant of purification of Phosphoric acid.
15. Pilot plant of  $H_2O_2$ .
16. Consultant of purification of salt.
17. Consultant production of Potassium compounds.
18. Developing software about thermal cracking and heat exchanger design.
19. HD desalination pilot plant.
20. Khuzestan Province Natural gas demand model development by 2026.
21. Three dimensional Gas Refinery Model for phase 2-3 South Pars gas reserve.
22. Energy saving in Oil & Gas Industry (Gas refinery and petrochemical Industry).

## Scientific Seminars

1. Innovation and energy saving in industries (Ministry of industry).
2. Principle of pinch technology (International office for energy-oil ministry).
3. New concepts in pinch technology (Sharif University).
4. Role of pilot plants in R&D (Sharif University).
5. Productivity in Research Center (University of Tehran, Management Department).
6. About Fourty presentation in International Conferences.

## Books

- 1) Pinch Technology, M.Amidpour, M.Gougol, Jahad University, 2002.
- 2) Exergy, Analysis, M.Amidpour, A.Sajadi, K.N.Toosi University of Technology, 2009.
- 3) Clean development mechanism in China, World Bank, M.Amidpour, M.Moradi,IFCO, 2010.
- 4) Engineering Mathematics, M.Amidpour, E.Mahdavi, M.A.A.Zeinali Danalu, Jahad University, 2009.

## Conducted Thesis (Selected)

### ❖ PhD

1. Mixed material construction in HEN pinch method.
2. Exergy and pinch analysis in cryogenic processes.

3. Optimal refrigeration system in petrochemical industry.
4. Entropy generation and driving force relation.
5. Modelling and Optimization HD Desalination System.
6. Optimization of distillation sequence by pinch & Exergy.
7. Optimization of desalination configuration with turbine cycle. (MED & RO)

#### ❖ MSc

1. Energy saving in Bandar Abbas power station.
2. Dealing piping constraints in pinch technology.
3. Setting boundaries in process integration.
4. Structural changes in process integration.
5. Developing pinch technology software by visual C++.
6. Energy saving in batch processes.
7. Mixed material construction in HEN.
8. Match constraints in HEN design.
9. Energy saving using heat pump in process context.
10. Drink water production with cleanest energy.
11. Evaporator optimization for sugar industry.
12. Decomposition in waste minimization.
13. Process simulation of special solvent in refineries.
14. Thermodynamic and hydraulic simulation and modeling of distillation columns based an entropy generation and exergy analysis.
15. Exergeoconime modeling and optimization of water – ethanol distillation column.

#### ❖ BSc

More than **100** B.Sc. Design project conducted

### Awards

- 1) Best researcher in K.N.Toosi university of Technology, 2009
- 2) Best lecturer in K.N.Toosi university of Technology, 2010
- 3) Best M.SC. Thesis in Mechanical Engineering in Iran, 2009
- 4) Best PhD thesis in Mechanical Engineering in Iran, 2010

### Journal Papers

- 1) Baniassadi A., Sajadi B., Amidpour M., Noori N. "Economic optimization of PCM and insulation layer thickness in residential buildings". Sustainable energy technologies and assessments 14 (2016), pp. 92-94.
- 2) Hasanzadeh Lashkajani K., Ghorbani B., Amidpour M. "Superstructure optimization of olefin separation system by harmony search and genetic algorithms". Energy 99 (2016), pp. 286-303.
- 3) Poyan Rad M., Khoshgoftar Manesh M.H., Rosen M.A., Amidpour M. "New procedure for design and exergoeconomic optimization of site utility system considering reliability". Applied thermal engineering 94(2016), pp. 478-490.
- 4) Baniassadi A., Momen M., Shirinbakhsh M., Amidpour M. "Application of R-curve analysis in evaluating the effect of integrating renewable energies in cogeneration systems". Applied thermal engineering 93(2016), pp. 297-307.
- 5) Kamalinejad M., Amidpour M., Mousavi Naeynian S.M. "Thermodynamic design of a cascade refrigeration system of liquefied natural gas by applying mixed integer non-linear programming". Chinese journal of chemical engineering 23 (2015) 998-1008.

- 6) Amidpour M., Hamed M.H. , Mafi M., Ghorbani B., Shirmohammadi R. "Sensitivity analysis, economic optimization, and configuration design of mixed refrigerant cycles by NLP techniques". *Journal of natural gas science and engineering* 24 (2015) 144-155.
- 7) Sotoodeh A.F., Amidpour M., Ghazi M. "Developing of constructal theory concept for plate-fin heat exchanger modelling, design and optimization". *Int.J. Exergy*, Vol.18, No. 1, 2015.
- 8) Zanan M., Amidpour M., Rezakhani N. "Theoretical experimental investigation of humidification process in supersaturated state". *Desalination* 369 (2015) 165-174.
- 9) Ebrahimi A., Neratizaman M., Akbarpour reyhani H., Pourali O. "Energetic, exergetic and economic assessment of oxygen production from two columns cryogenic separation unit". *Energy* 90 (2015) 1298-1316.
- 10) Baniassadi A., Momen M., Amidpour m. "A new method of solar heat integration and solar fraction targeting in low temperature process industries". *Energy* 90 (2015) 1674-1681.
- 11) Karami Gh., Amidpour M., Heidari Sheibani B., Salehi G.R. "Distillation column controllability analysis through heat pump integration". *Chemical engineering and Processing* 97 (2015), pp. 23-37.
- 12) Meratizaman M., Monadizadeh S., Ebrahimi A., Akbarpour H., Amidpour M. "Science analysis of gasification process application in electrical energy-freshwater generation from heavy fuel oil, thermodynamic, economic and environmental assessment". *Int. journal of Hydrogen* 40 (2015), pp. 2578-2600.
- 13) Meratizaman M., Monadizadeh, S., Pourali, O., & Amidpour, M. (2015). High efficient-low emission power production from low BTU gas extracted from heavy fuel oil gasification, introduction of IGCC-SOFC process. *Journal of Natural Gas Science and Engineering*, 23, 1-15.
- 14) Kamalinejad M., Amidpour M., Mousavi Naeynian S.M. "Thermodynamic design of a cascade refrigeration system of liquefied natural gas by applying mixed integer non-linear programming". *Chinese Journal of Chemical Engineering* (2015).
- 15) Meratizaman M., Monadizadeh S., Ebrahimi A., Akbarpour H., Amidpour M. "Scenario analysis of gasification process application in electrical energy-freshwater generation from heavy fuel oil, thermodynamic, economic and environmental assessment". *International Journal of Hydrogen Energy*, (2015).
- 16) Meratizaman M., Monadizadeh S., Amidpour M. "Simulation and economic evaluation of small-scale SOFC-GT-MED". *Desalination and Water Treatment ahead-of-print* (2015): 1-22.
- 17) Janalizadeh H., Khoshgoftar Manesh M.H., Amidpour M. "Exergoeconomic and exergoenvironmental evaluation of Integration of desalinations with a total site utility system". *Clean Technologies and Environmental Policy* 17.1 (2015): 103-117.
- 18) Ghorbani B., Mafi M., Shirmohammadi R., Hamed M. H., Amidpour M. (2014). "Optimization of operation parameters of refrigeration cycle using particle swarm and NLP techniques". *Journal of Natural Gas Science and Engineering*, 21, 779-790.
- 19) Meratizaman M., Monadizadeh S., Amidpour M. "Techno-economic assessment of high efficient energy production (SOFC-GT) for residential application from natural gas". *Journal of Natural Gas Science and Engineering* 21 (2014): 118-133.
- 20) Meratizaman M., Monadizadeh S., Amidpour M. "Introduction of an efficient small-scale freshwater-power generation cycle (SOFC-GT-MED), simulation, parametric study and economic assessment". *Desalination* 351 (2014): 43-58.
- 21) Ghorbani B., Ziabasharhagh M., Amidpour M. "A hybrid artificial neural network and genetic algorithm for predicting viscosity of Iranian crude oils". *Journal of Natural Gas Science and Engineering* 18 (2014): 312-323.
- 22) Soltani R., Mohammadzadeh Keleshteryb P., Vahdati M., KhoshgoftarManesh M.H. , Rosena M.A., Amidpour M. "Multi-objective optimization of a solar-hybrid cogeneration cycle: application to CGAM problem". *Energy Conversion and Management* 81 (2014): 60-71.
- 23) Abadi S. K., Manesh, M. H. K., Rosen, M. A., Amidpour, M., & Hamed, M. H. (2014). "Integration of a Gas Fired Steam Power Plant with a Total Site Utility Using a New Cogeneration Targeting Procedure". *Chinese Journal of Chemical Engineering*, 22(4), 455-468.
- 24) Rahimi, S., Meratizaman, M., Monadizadeh, S., & Amidpour, M. "Techno-economic analysis of wind turbine-PEM (polymer electrolyte membrane) fuel cell hybrid system in standalone area". *Energy*, 67, 381-396; (2014).

- 25) Khoshgoftar Manesh M. H., Janalizadeh H., Blanco Marigorta A. M., Amidpour M., Hamed M. H.. "Optimal design of integrated total site utility–multi-stage flash desalination plant". *Desalination and Water Treatment*, 52(7-9), 1287-1298; (2014).
- 26) Meratizaman M., Monadzadeh S., Amidpour M. "Simulation, economic and environmental evaluations of green solar parking (refueling station) for fuel cell vehicle". *International Journal of Hydrogen Energy* 39.5 (2014): 2359-2373.
- 27) Kamalinejad M., Amidpour M., Mousavi Naeenian S.M. "Optimal Synthesis of Cascade Refrigeration in Liquefied Natural Gas Cycles by Pinch-Exergy". *Journal of Oil, Gas and Petrochemical Technology* 1 (2014): 29-41.
- 28) Manesh M.K., Navid P., Baghestani M., Abadi S. K., Rosen M. A., Blanco A. M., Amidpour M. "Exergoeconomic and exergoenvironmental evaluation of the coupling of a gas fired steam power plant with a total site utility system". *Energy Conversion and Management*, 77, 469-483; (2014).
- 29) Niroomand N., Zamen M., Amidpour M. "Theoretical investigation of using a direct contact dehumidifier in humidification–dehumidification desalination unit based on an open air cycle". *Desalination and Water Treatment ahead-of-print* (2014): 1-11.
- 30) Zamen M., Soufari S. M., Vahdat S. A., Amidpour M., Zeinali M. A., Izanloo H., Aghababaie H. "Experimental investigation of a two-stage solar humidification–dehumidification desalination process". *Desalination*, 332(1), 1-6; (2014).
- 31) Golchoobian H., Behbahania A., Amidpour M., Pourali O. "Dynamic Exergy Analysis of a Solar Ejector Refrigeration System with Hot Water Storage Tank". *Journal of Sustainable Energy Technologies: Generating Renewable Energy* (pp. 327-337); Springer International Publishing; (2014).
- 32) Golchoobian, H., Taheri, M. H., Amidpour, M., & Pourali, O. (2014). "Theoretical and Experimental Study of a Novel Film Evaporation Cooling System". *Journal of Sustainable Energy Technologies Vol II* (pp. 547-555). Springer International Publishing.
- 33) Jafari Nas M.R., Amidpour M., Khodaei M. "AN OPTIMIZATION APPROACH TO REFINERY STEAM MANAGEMENT WITH CONSIDERATION OF CO<sub>2</sub> EMISSION". *Journal of Petroleum Science and Technology* 4.1 (2014): 73-84.
- 34) Niroomand N., Amidpour M. "New combination of solar chimney for power generation and seawater desalination". *Desalination and Water Treatment* 51.40-42 (2013): 7401-7411.
- 35) Ghorbani B., Ziabasharhagh M., Amidpour M. "A hybrid artificial neural network and genetic algorithm for predicting viscosity of Iranian crude oils". *Journal of Natural Gas Science and Engineering* 18 (2014): 312-323.
- 36) Manesh M. K., Navid P., Amidpour M., Hamed M. H. "New procedure for optimal design of cogeneration system with considering environmental impacts and total cost". *Clean Technologies and Environmental Policy*, 15(6), 893-919; (2013).
- 37) Esmaili A., Keshavarz M., Shakib S. E., Amidpour M. "Applying different optimization approaches to achieve optimal configuration of a dual pressure heat recovery steam generator". *International Journal of Energy Research*, 37(12), 1440-1452; (2013).
- 38) Manesh M. K., Navid P., Marigorta A. B., Amidpour M., Hamed M. H. "New procedure for optimal design and evaluation of cogeneration system based on advanced exergoeconomic and exergoenvironmental analyses". *Energy*, 59, 314-333; (2013).
- 39) Maafi M., Ghorbani B., Amidpour M., Naynian, S. M. "Design of mixed refrigerant cycle for low temperature processes using a thermodynamic approach". (2013).
- 40) Zamen M., Amidpour M., Rezaei Firoozjaei M. "A novel integrated system for fresh water production in greenhouse: Dynamic simulation". *Desalination* 322 (2013): 52-59.
- 41) Manesh M. K., Abadi S. K., Amidpour M., Hamed M. H. "A new targeting method for estimation of cogeneration potential and total annualized cost in process industries". *Chemical Engineering Research and Design*, 91(6), 1039-1049; (2013).
- 42) Manesh M. K., Amidpour M., Abadi S. K., Hamed M. H. "A new cogeneration targeting procedure for total site utility system". *Applied Thermal Engineering*, 54(1), 272-280; (2013).
- 43) Manesh M. K., Ghalami H., Amidpour M., Hamed M. H. (2013). "Optimal coupling of site utility steam network with MED-RO desalination through total site analysis and exergoeconomic optimization". *Desalination*, 316, 42-52; (2013).
- 44) Ghorbani B., Maleki M., Salehi A., Salehi G. R., Amidpour M. "Optimization of Distillation Column Operation by Simulated Annealing". *Gas Processing Journal*, 1(2), 49-63; (2013).



- 45) Ghorbani B., Mafi M., Amidpour M., Nayenian M., Salehi G. R. "Mathematical Method and Thermodynamic Approaches to Design Multi-Component Refrigeration Used in Cryogenic Process Part I: Optimal Operating Conditions". *Gas Processing Journal*, 1(2), 13-21; (2013).
- 46) Manesh, M. H. K., Abadi, S. K., Amidpour, M., Ghalami, H., & Hamed, M. H. "New emissions targeting strategy for site utility of process industries". *Korean Journal of Chemical Engineering*, 30(4), 796-812; (2013).
- 47) Farshi L. G., Mahmoudi S. M. S., Rosen M. A., Yari M., Amidpour M. "Exergoeconomic analysis of double effect absorption refrigeration systems". *Energy Conversion and Management*, 65, 13-25; (2013).
- 48) Soltani R., Keleshtery P. M., Vahdaty M., Rahbar M., Amidpour M. "Theoretical Utilization of High Temperature Solar Power Tower Technology in a 30 MW Cogeneration Cycle". *Journal of Clean Energy Technologies*, 1(1); (2013).
- 49) Lashkajani, K. H., Ghorbani, B., Salehi, G. R., & Amidpour, M. "The Design of the Best Heat Integrated Separation Systems Using Harmony Search Algorithm". *Gas processing journal*, Vol. 1, No. 1, PP.51-68; (2013)
- 50) Ashrafizadeh S.A., Amidpour M., Abolmashadi M. "Exergy Analysis of Distillation Column Using Concept of Driving Forces". *Journal of chemical engineering of Japan* 46.7 (2013): 434-443.
- 51) Engarnevis A., Amidpour M., Jafari H. "Replacing of mechanical compressors by gas ejectors in flare gas recovery systems". *International Journal of Oil, Gas and Coal Technology* 6.4 (2013): 422-448.
- 52) Salarian H., Ghorbani B., Amidpour M., Salehi G. "Performance study on the dehumidifier of a packed bed liquid desiccant system". *Scientia Iranica, International journal of Science and Technology*, Vol. 21, No. 1, PP. 222-228; 2013.
- 53) Manesh M. K., Ghalami H., Amidpour M., Hamed M. H. "A new targeting method for combined heat, power and desalinated water production in total site". *Desalination*, 307, 51-60; (2012). ; (2012).
- 54) Norouzi E., Amidpour M. "Optimal thermodynamic and economic volume of a heat recovery steam generator by constructal design". *International Communications in Heat and Mass Transfer* 39.8 (2012): 1286-1292.
- 55) Ghorbani B., Salehi G. R., Ghaemmaleki H., Amidpour M., Hamed M. H. "Simulation and optimization of refrigeration cycle in NGL recovery plants with exergy-pinch analysis". *Journal of Natural Gas Science and Engineering*, 7, 35-43 ; (2012).
- 56) Norouzi E., Amidpour M. "Optimal thermodynamic & economic volume of a heat recovery steam generator by constructal design" «International communications in heat & mass transfer». Vol39-(2012) pp1286-1292.
- 57) Esmaili A., Keshavarz P., Shakib S.E., Amidpour M. "Applying different optimization approaches to achieve optimal configuration of a dual pressure HRSG". *International journal of energy research*, (2012).
- 58) Mehrgoo M., Amidpour M. "Constructal Design and Optimization of a Direct contact Humidification – Dehumidification Desalination Unit". *Desalination*. Vols293- (2012), pp. 69-77.
- 59) Amidpour M., Jafari H., Engarnevis A. "Replacing of mechanical compressors by gas ejectors in flare gas recovery systems". *Refereeing Decision IJOGCT\_ 34188*; (2012).
- 60) Khalili S., Khalili S.M.R., Amidpour M. "Numerical analysis on impact behavior of composite sandwich plates as energy harvesting structures". *Mechanics & Materials*, Vol.s 110-116 (2012) pp1296-1304.
- 61) Ghorbani B., Salehi G., Ghaemmaleki H., Amidpour M., Hamed M. H. "Simulation and optimization of Refrigeration cycle in NGL recovery plants with combined exergy-pinch analysis". *Journal of Natural Gas Science and Engineering*, Vol. 7 (2012), pp35-43.
- 62) Ghorbani B., Salehi G., Amidpour M., Hamed M. H. "Exergy and Exergoeconomic evaluation of gas separation process". *Journal of Natural Gas Science and Engineering*, JNGSE.
- 63) Ghorbani B., Salehi G., Esnaashry P., Amidpour M. "Design and optimization of heat integrated distillation". *Energy science and Technology Vols3 No.2 May31, 2012*.
- 64) Salehi G.R., Salehi A., Ghorbani B., Amidpour M., Maleki M., Kimiaghdam F. "A Pareto front approach to bi-objective of distillation column operation using genetic algorithm". *Energy science and Technology Vols3 No.2 May 31, 2012*.
- 65) Salehi G.R., Amidpour M., Hassanzadeh K., Omidkhan M.R. "Controllability analysis of heat integrated distillation system for a multicomponent stream". *Computers & Chemical engineering Vols36 January 2012 pp282-293*.
- 66) Shakib S.E., Hossieni S.R., Amidpour M., Aghanajafi C. "Multi-objective optimization of a cogeneration plant for supplying given amount of power and fresh water". *Desalination*, Vols286 (2012) pp225-234.
- 67) Karimkashi S., Amidpour M. "Total site energy improvement using R-Curve concept". *Energy Vols40 (2012) pp329-340*.

- 68) Shakib S.E., Amidpour M., Aghanajafi C. "Simulation and optimization of multi effect desalination coupled to a gas turbine plant with HRSG consideration". *Desalination*, Vols 285 (2012) pp366-376.
- 69) Ghazi M., Amidpour M., Sotoodeh A.F. "Modling & optimiaztion of aWATER-ETHANOL distalination column based on exergoeconomic analysis". *International Journal of Exergy*, 2012, in press.
- 70) Arghandeh R., Amidpour M., Ghaffari A. "Modeling and Simulation of Steam Production and Distribution in South Pars Gas Refinery". *International Journal of Engineering*, Tehran University, Iran.
- 71) Ashrafizadeh S.A., Amidpour M., Allahverdi A. "Exergetic and environmental performance improvement in cement production process by driving force distribution". *Korean journal of chemical Eng*, Vol.29, pp 606-613; 2012.
- 72) Ashrafizadeh S.A., Amidpour M. "Exergy analysis of distillation column using driving forces concept". *Desalination*, Vol.285, 2012, pp. 108–116.
- 73) Ashrafizadeh S.A., Amidpour M. "Exergy analysis of humidification- dehumidification desalination systems using driving forces concept". *Desalination*, 2012.
- 74) Ashrafizadeh S.A., Amidpour M., Allahverdi A. "Green house gases emission reduction in cement production process by driving force distribution". *International geoinformatics research and development journal*.Vols2 (2011) pp1-10.
- 75) Hosseini S.R., Amidpour M., Shakib S.E. "Cost optimization of a combined power and water desalination plant with exergetic, environment and reliability consideration". *Desalination*, 2011.
- 76) Salehi R., Amidpour M. "Controllability Analysis of Heat Integrated Distillation Systems for a Multicomponent Stream, *Computers and Chemical Engineering*". *Computers and Chemical Engineering*, 2011.
- 77) Sangi R., Amidpour M. "Modeling and numerical simulation of solar chimney". *Journal of Power plants solar energy*, Vol. 85, pp829-838; 2011.
- 78) Hosseini S.R., Amidpour M., Behbahaninia A. "Thermoeconomic analysis with reliability consideration of a combined power and multi stage flash desalination plant". *Desalination*, Vol. 278, pp 424-433; 2011.
- 79) Zamen M., Soufari S.M., Amidpour M. "Improvement of solar humidification-dehumidification desalination using multi-stage process". *Chemical Engineering Transactions*, Vol. 25, 2011.
- 80) Ansari K., Sayyadi H., Amidpour M. "A comprehensive approach in optimization of a dual nuclear power and desalination system". *Desalination*, Vol. 269, pp 25-34; 2011.
- 81) Mehrgoo M., Amidpour M. "Derivation of optimal geometry of a multi-effect humidification-dehumidification desalination unit: A constructal design". *Desalination*, Vol. 281, pp 234-242; 2011.
- 82) Ghaebi H., Amidpour M., Karimkashi Sh., Rezayan O. "Energy, Exergy and Thermoeconomic Analysis of a Combined Cooling, Heating and Power (CCHP) System with Gas turbine Prime Mover". *International Journal of Energy Research*, vol. 35, pp 697-709; 2011.
- 83) Shakib S.E., Amidpour M., Aghanajafi C. "A new approach for process optimization of a METVC desalination system". *Desalination & water treatment*, Vol. 37, 2011.
- 84) Vahdat Azad A., Amidpour M. "Economic optimization of shell and tube heat exchanger based on constructal theory". *Energy*, Vol. 36, pp 1087-1096; 2011.
- 85) Mehrgoo M., Amidpour M. "Constructal design humidification-dehumidification desalination unit architecture". *Desalination*, Vol. 271, pp 62-71; 2011.
- 86) Vahdat Azad A., Amidpour M. "Novel graphical approach as fouling pinch for increasing fowling formation period in heat exchanger network (HEN)". *Energy conversion and Management*, January 2011.
- 87) Mahdavi, Mosavi Mamashhadi, Amidpour M. "Analysis of stress intensity factor and crack propagation for alloy X-750 pressure vessel with a blunting crack". *Scientific*, Vol.s 303-304, pp63-83; 2010.
- 88) Meratizaman M., Amidpour M. "Energy and exergy analyses of urban waste incineration cycle coupled with a cycle of changing LNG pipeline gas". *Journal of natural gas science and engineering*, Vol. 2, pp 217-221; 2010.
- 89) Karimkashi Sh., Amidpour M. "Studying Influence of Changing Fuel on the Operation and Total Annual Cost of the Total Site Using R-curve". *Elsevier Proceedings of the 2nd Annual Gas Processing Symposium*, pp 409-418; 2010.
- 90) Ansari K., Sayyadi H., Amidpour M. "Thermoeconomic Optimization of a Hybrid Pressurized Water reactor (PWR) coupled to a multi effect". *Energy*, Vol. 35, pp 1-16; 2010.
- 91) Mazahri V., Khoshgoftar Manesh M.H., Hamed M.H., Amidpour M. "Evaluation of GE, Siemens and Alsom Gas Turbine in Power and steam Production of Iran LNG Projects". *Chemical engineering transaction*, 2009, pp 947-952.

- 92) Khoshgoftar manesh M.H., Amidpour M. "Multi-objective thermoeconomic optimization of coupling MSF desalination with PWR nuclear power plant through evolutionary algorithms". DESALINATION, 2009, pp 1332-1344.
- 93) Khoshgoftar M.H., Mazhari V., Amidpour M. "Power Plant Optimization Study in Iran LNG Project through MINLP Method". Chemical engineering transaction, 2009, pages 935-940.
- 94) Hamlehदार, Amidpour. "Thermodynamic Investigation of Iran LNG Cogeneration Power Plant". Chemical engineering transaction, 2009, pages 797-802.
- 95) Arghandeh, Amidpour M., Khodaei. "Steam Network Modeling and Simulation in Gas refinery by Considering Pinch Technology". Proceedings of the IEEE southeastcon, 2009, pages428-433.
- 96) Khoshgoftar Manesh, Amidpour. "Multi-objective thermodynamic Optimization of Coupling MSF desalination with PWR Nuclear". DESALINATION 2009 pages 1332-1344.
- 97) Khoshgoftar Manesh, Amidpour, Mazhari. "Optimization of Steam Network through MINLP method: Application to Utility of Khark Island NGL". Chemical engineering transaction 2009-pages 225-230.
- 98) Soufari, Zamen, Amidpour. "Experimental Validation of an Optimized solar humidification-de humidification Desalination unit". DESALINATION WATER TREATMENT, 2009, pages 244-251.
- 99) Me-Miansarii, Sedighi, Amidpour, Alizadeh, Mo-Miansari. "Experimental and Thermodynamic Approach on Proton Exchange membrane fuel cell performance". J POWER SOURCES, 2009, pages 356-361.
- 100) Khoshgoftar Manesh, Amidpour, Hamedi. "Optimization of Coupling pressurized Water under Nuclear Reactors and Multi Stage Flash desalination plant". INT J ENERG RES, 2009, pages77-99.
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