Mohammad Reaza Rahimpour

List of Publications by Citations

452 papers	10,552 citations	47 h-index	74 g-index
469 ext. papers	12,171 ext. citations	5.4 avg, IF	7.03 L-index

#	Paper	IF	Citations
452	Upgrading of lignin-derived bio-oils by catalytic hydrodeoxygenation. *Energy and Environmental Science*, **2014**, 7, 103-129	35.4	627
451	Hydrogenation of CO2 to value-added products—A review and potential future developments. *Journal of CO2 Utilization*, **2014**, 5, 66-81	7.6	551
450	Dimethyl ether: A review of technologies and production challenges. *Chemical Engineering and Processing: Process Intensification*, **2014**, 82, 150-172	3.7	296
449	Progress in catalytic naphtha reforming process: A review. *Applied Energy*, **2013**, 109, 79-93	10.7	128
448	Palladium membranes applications in reaction systems for hydrogen separation and purification: A review. *Chemical Engineering and Processing: Process Intensification*, **2017**, 121, 24-49	3.7	115
447	Hydrogen production via chemical looping steam methane reforming process: Effect of cerium and calcium promoters on the performance of Fe2O3/Al2O3 oxygen carrier. *Applied Energy*, **2016**, 165, 685-694	10.7	108
446	A comparison of homogeneous and heterogeneous dynamic models for industrial methanol reactors in the presence of catalyst deactivation. *Chemical Engineering and Processing: Process Intensification*, **2005**, 44, 911-921	3.7	102
445	Assessment and comparison of different catalytic coupling exothermic and endothermic reactions: A review. *Applied Energy*, **2012**, 99, 496-512	10.7	92
444	Expert representation chemical looping reforming: A comparative study of Fe, Mn, Co and Cu as oxygen carriers supported on Al 2 O 3. *Journal of Industrial and Engineering Chemistry*, **2015**, 21, 900-911	6.3	86
443	Efficient demulsification of water-in-oil emulsion by a novel nano-titania modified chemical demulsifier. *Chemical Engineering Research and Design*, **2015**, 94, 164-172	5.5	82
442	Optimization of methanol synthesis and cyclohexane dehydrogenation in a thermally coupled reactor using differential evolution (DE) method. *International Journal of Hydrogen Energy*, **2009**, 34, 6930-6944	6.7	78
441	Tetracycline antibiotic removal from aqueous solutions by MOF-5: Adsorption isotherm, kinetic and thermodynamic studies. *Journal of Environmental Chemical Engineering*, **2018**, 6, 6118-6130	6.8	77
440	Synthesis of fluorinated nano-silica and its application in wettability alteration near-wellbore region in gas condensate reservoirs. *Applied Surface Science*, **2013**, 273, 205-214	6.7	74
439	Direct dimethyl ether (DME) synthesis through a thermally coupled heat exchanger reactor. *Applied Energy*, **2011**, 88, 1211-1223	10.7	73
438	Differential evolution (DE) strategy for optimization of hydrogen production, cyclohexane dehydrogenation and methanol synthesis in a hydrogen-permselective membrane thermally coupled reactor. *International Journal of Hydrogen Energy*, **2010**, 35, 1936-1950	6.7	72
437	Enhancing biosurfactant production from an indigenous strain of Bacillus mycoides by optimizing the growth conditions using a response surface methodology. *Chemical Engineering Journal*, **2010**, 163, 188-194	14.7	72
436	Theoretical Investigation of a Pd-membrane Reactor for Methanol Synthesis. *Chemical Engineering and Technology*, **2003**, 26, 902-907	2	72

435	Optimization of tri-reformer reactor to produce synthesis gas for methanol production using differential evolution (DE) method. *Applied Energy*, **2011**, 88, 2691-2701	10.7	70
434	Experimental investigation of a multi-effect active solar still: The effect of the number of stages. *Applied Energy*, **2015**, 137, 46-55	10.7	69
433	A novel configuration for hydrogen production from coupling of methanol and benzene synthesis in a hydrogen-permselective membrane reactor. *International Journal of Hydrogen Energy*, **2009**, 34, 5091-5107	6.7	69
432	A two-stage catalyst bed concept for conversion of carbon dioxide into methanol. *Fuel Processing Technology*, **2008**, 89, 556-566	7.2	69
431	A comparative study of combination of Fischer–Tropsch synthesis reactors with hydrogen-permselective membrane in GTL technology. *Fuel Processing Technology*, **2009**, 90, 747-761	7.2	67
430	Naphtha cracking through a pulsed DBD plasma reactor: Effect of applied voltage, pulse repetition frequency and electrode material. *Chemical Engineering Journal*, **2012**, 191, 416-425	14.7	66
429	Hydrogen production through plasma cracking of hydrocarbons: Effect of carrier gas and hydrocarbon type. *Chemical Engineering Journal*, **2013**, 226, 384-392	14.7	66
428	Comparison the capability of artificial neural network (ANN) and EOS for prediction of solid solubilities in supercritical carbon dioxide. *Fluid Phase Equilibria*, **2011**, 308, 35-43	2.5	65
427	High purity hydrogen production via sorption enhanced chemical looping reforming: Application of 22Fe2O3/MgAl2O4 and 22Fe2O3/Al2O3 as oxygen carriers and cerium promoted CaO as CO2 sorbent. *Applied Energy*, **2016**, 169, 629-641	10.7	65
426	A comparative study of three different methods for flare gas recovery of Asalooye Gas Refinery. *Journal of Natural Gas Science and Engineering*, **2012**, 4, 17-28	4.6	64
425	Investigation of ethylene production in naphtha thermal cracking plant in presence of steam and carbon dioxide. *Chemical Engineering Journal*, **2013**, 228, 1158-1167	14.7	60
424	Effect of a Different Formulation of Demulsifiers on the Efficiency of Chemical Demulsification of Heavy Crude Oil. *Journal of Chemical & Engineering Data*, **2011**, 56, 2936-2945	2.8	60
423	Demulsification of water in oil emulsion using ionic liquids: Statistical modeling and optimization. *Fuel*, **2016**, 184, 325-333	7.1	57
422	MOF assistance synthesis of nanoporous double-shelled CuCoO hollow spheres for hybrid supercapacitors. *Journal of Colloid and Interface Science*, **2019**, 556, 83-91	9.3	55
421	Enhancement of gasoline production in a novel hydrogen-permselective membrane reactor in Fischer–Tropsch synthesis of GTL technology. *International Journal of Hydrogen Energy*, **2009**, 34, 3965-3976	6.7	54
420	Investigation of Low-Salinity Waterflooding in Secondary and Tertiary Enhanced Oil Recovery in Limestone Reservoirs. *Energy & Fuels*, **2015**, 29, 7781-7792	4.1	53
419	A novel water perm-selective membrane dual-type reactor concept for Fischer–Tropsch synthesis of GTL (gas to liquid) technology. *Energy*, **2011**, 36, 1223-1235	7.9	53
418	Enhanced carbon dioxide removal by promoted hot potassium carbonate in a split-flow absorber. *Chemical Engineering and Processing: Process Intensification*, **2004**, 43, 857-865	3.7	53

417	Enhancement of CO conversion in a novel Pd-Ag membrane reactor for methanol synthesis. *Chemical Engineering and Processing: Process Intensification*, **2004**, 43, 1181-1188	3.7	53
416	Kinetics of magnesium hydroxide precipitation from sea bittern. *Chemical Engineering and Processing: Process Intensification*, **2008**, 47, 215-221	3.7	52
415	Hydrogen production by chemical looping steam reforming of methane over Mg promoted iron oxygen carrier: Optimization using design of experiments. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 62, 140-149	5.3	51
414	Calcium promoted Fe/Al2O3 oxygen carrier for hydrogen production via cyclic chemical looping steam methane reforming process. *International Journal of Hydrogen Energy*, **2015**, 40, 16159-16168	6.7	51
413	Experimental investigation of hydrogen production through heavy naphtha cracking in pulsed DBD reactor. *Applied Energy*, **2012**, 98, 3-10	10.7	51
412	Decomposition of methane to hydrogen using nanosecond pulsed plasma reactor with different active volumes, voltages and frequencies. *Applied Energy*, **2016**, 169, 585-596	10.7	50
411	Interactive optimization of biosurfactant production by Paenibacillus alvei ARN63 isolated from an Iranian oil well. *Colloids and Surfaces B: Biointerfaces*, **2011**, 82, 33-9	6	50
410	Syngas production in a novel methane dry reformer by utilizing of tri-reforming process for energy supplying: Modeling and simulation. *Journal of Natural Gas Science and Engineering*, **2014**, 20, 132-146	4.6	49
409	Recent advances in reactors for low-temperature Fischer-Tropsch synthesis: process intensification perspective. *Reviews in Chemical Engineering*, **2015**, 31,	5	49
408	Methane Steam Reforming Thermally Coupled with Fuel Combustion: Application of Chemical Looping Concept as a Novel Technology. *Energy & Fuels*, **2013**, 27, 2351-2362	4.1	49
407	Feasibility of flare gas reformation to practical energy in Farashband gas refinery: no gas flaring. *Journal of Hazardous Materials*, **2012**, 209-210, 204-17	12.8	48
406	Wettability alteration of gas condensate reservoir rocks to gas wetness by sol-gel process using fluoroalkylsilane. *Journal of Applied Polymer Science*, **2013**, 128, 4077-4085	2.9	48
405	The ability of artificial neural network in prediction of the acid gases solubility in different ionic liquids. *Journal of CO2 Utilization*, **2015**, 9, 39-47	7.6	47
404	Enhancement of hydrogen production in a novel fluidized-bed membrane reactor for naphtha reforming. *International Journal of Hydrogen Energy*, **2009**, 34, 2235-2251	6.7	47
403	Enhancement of methanol production in a novel cascading fluidized-bed hydrogen permselective membrane methanol reactor. *Chemical Engineering Journal*, **2010**, 157, 520-529	14.7	47
402	Modeling and simulation of ammonia removal from purge gases of ammonia plants using a catalytic Pd-Ag membrane reactor. *Journal of Hazardous Materials*, **2008**, 153, 557-65	12.8	47
401	Combination of non-thermal plasma and heterogeneous catalysis for methane and hexadecane co-cracking: Effect of voltage and catalyst configuration. *Chemical Engineering Journal*, **2013**, 219, 245-253	14.7	46
400	Dynamic modeling and optimization of a novel methanol synthesis loop with hydrogen-permselective membrane reactor. *International Journal of Hydrogen Energy*, **2009**, 34, 3717-3733	6.7	46

399	Production of hydrogen from purge gases of ammonia plants in a catalytic hydrogen-permselective membrane reactor. *International Journal of Hydrogen Energy*, **2009**, 34, 5795-5802	6.7	46
398	The major sources of gas flaring and air contamination in the natural gas processing plants: A case study. *Journal of Natural Gas Science and Engineering*, **2013**, 13, 7-19	4.6	44
397	Enhancement of Methanol Production in a Membrane Dual-Type Reactor. *Chemical Engineering and Technology*, **2007**, 30, 1062-1076	2	44
396	Experimental Study of Chemical-Looping Reforming in a Fixed-Bed Reactor: Performance Investigation of Different Oxygen Carriers on Al2O3 and TiO2 Support. *Energy & Fuels*, **2014**, 28, 2811-2820	4.1	43
395	Application of hydrogen-permselective Pd-based membrane in an industrial single-type methanol reactor in the presence of catalyst deactivation. *Fuel Processing Technology*, **2008**, 89, 1396-1408	7.2	43
394	Enhancement of carbon dioxide removal in a hydrogen-permselective methanol synthesis reactor. *International Journal of Hydrogen Energy*, **2009**, 34, 1349-1362	6.7	42
393	A comparison of co-current and counter-current modes of operation for a dual-type industrial methanol reactor. *Chemical Engineering and Processing: Process Intensification*, **2008**, 47, 1819-1830	3.7	42
392	DME synthesis and cyclohexane dehydrogenation reaction in an optimized thermally coupled reactor. *Chemical Engineering and Processing: Process Intensification*, **2011**, 50, 113-123	3.7	41
391	A membrane catalytic bed concept for naphtha reforming in the presence of catalyst deactivation. *Chemical Engineering and Processing: Process Intensification*, **2009**, 48, 683-694	3.7	41
390	Enhancement of simultaneous hydrogen production and methanol synthesis in thermally coupled double-membrane reactor. *International Journal of Hydrogen Energy*, **2011**, 36, 284-298	6.7	41
389	Production of hydrogen-rich syngas using Zr modified Ca-Co bifunctional catalyst-sorbent in chemical looping steam methane reforming. *Applied Energy*, **2017**, 206, 51-62	10.7	40
388	Optimization of a novel combination of fixed and fluidized-bed hydrogen-permselective membrane reactors for Fischer–Tropsch synthesis in GTL technology. *Chemical Engineering Journal*, **2009**, 152, 543-555	14.7	40
387	A novel integrated thermally coupled configuration for methane-steam reforming and hydrogenation of nitrobenzene to aniline. *International Journal of Hydrogen Energy*, **2011**, 36, 2960-2968	6.7	40
386	A comparison of conventional and optimized thermally coupled reactors for Fischer–Tropsch synthesis in GTL technology. *Chemical Engineering Science*, **2010**, 65, 6206-6214	4.4	40
385	A Review of Carbon Capture and Sequestration in Iran: Microalgal Biofixation Potential in Iran. *Renewable and Sustainable Energy Reviews*, **2014**, 35, 73-100	16.2	39
384	Dynamic optimization of a novel radial-flow, spherical-bed methanol synthesis reactor in the presence of catalyst deactivation using Differential Evolution (DE) algorithm. *International Journal of Hydrogen Energy*, **2009**, 34, 6221-6230	6.7	38
383	Vapor–liquid Equilibria of Water + Triethylene Glycol (TEG) and Water + TEG + Toluene at 85 kPa. *Journal of Chemical & Engineering Data*, **2009**, 54, 876-881	2.8	38
382	Selective kinetic deactivation model for methanol synthesis from simultaneous reaction of CO2 and CO with H2 on a commercial copper/zinc oxide catalyst. *Canadian Journal of Chemical Engineering*, **1998**, 76, 753-761	2.3	38

381	A non-ideal rate-based model for industrial urea thermal hydrolyser. *Chemical Engineering and Processing: Process Intensification*, **2004**, 43, 1299-1307	3.7	38
380	Performance of biodegradable cellulose based agents for demulsification of crude oil: Dehydration capacity and rate. *Separation and Purification Technology*, **2017**, 179, 291-296	8.3	37
379	Water and Wastewater Treatment Systems by Novel Integrated Membrane Distillation (MD). *ChemEngineering*, **2019**, 3, 8	2.6	37
378	Wettability alteration in gas-condensate carbonate reservoir using anionic fluorinated treatment. *Chemical Engineering Research and Design*, **2015**, 93, 554-564	5.5	37
377	Extra pure hydrogen production through methane decomposition using nanosecond pulsed plasma and Pt-Re catalyst. *Chemical Engineering Journal*, **2016**, 294, 132-145	14.7	36
376	Modeling and optimization of Fischer-Tropsch synthesis in the presence of Co (III)/Al2O3 catalyst using artificial neural networks and genetic algorithm. *Journal of Natural Gas Science and Engineering*, **2013**, 10, 14-24	4.6	36
375	A novel dynamic radial-flow, spherical-bed reactor concept for naphtha reforming in the presence of catalyst deactivation. *International Journal of Hydrogen Energy*, **2010**, 35, 6261-6275	6.7	36
374	Diazinon removal from aqueous media by mesoporous MIL-101(Cr) in a continuous fixed-bed system. *Journal of Environmental Chemical Engineering*, **2018**, 6, 4653-4664	6.8	36
373	Enhancement of synthesis gas and methanol production by flare gas recovery utilizing a membrane based separation process. *Fuel Processing Technology*, **2017**, 166, 186-201	7.2	35
372	Synthesis gas production in a novel hydrogen and oxygen perm-selective membranes tri-reformer for methanol production. *Journal of Natural Gas Science and Engineering*, **2012**, 9, 149-159	4.6	35
371	Dynamic optimization of a multi-stage spherical, radial flow reactor for the naphtha reforming process in the presence of catalyst deactivation using differential evolution (DE) method. *International Journal of Hydrogen Energy*, **2010**, 35, 7498-7511	6.7	35
370	Kinetics of Upgrading of Anisole with Hydrogen Catalyzed by Platinum Supported on Alumina. *Energy & Fuels*, **2015**, 29, 4990-4997	4.1	34
369	Simulation, optimization, and sensitivity analysis of a natural gas dehydration unit. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 159-169	4.6	34
368	Simulation and optimization of a six-effect evaporator in a desalination process. *Chemical Engineering and Processing: Process Intensification*, **2009**, 48, 339-347	3.7	34
367	Mathematical modeling of a multi-stage naphtha reforming process using novel thermally coupled recuperative reactors to enhance aromatic production. *International Journal of Hydrogen Energy*, **2010**, 35, 10984-10993	6.7	34
366	Operability of an Industrial Methanol Synthesis Reactor with Mixtures of Fresh and Partially Deactivated Catalyst. *Chemical Engineering and Technology*, **2005**, 28, 226-234	2	34
365	Modeling of naphtha reforming unit applying detailed description of kinetic in continuous catalytic regeneration process. *Chemical Engineering Research and Design*, **2014**, 92, 1704-1727	5.5	33
364	Upgrading of Anisole in a Dielectric Barrier Discharge Plasma Reactor. *Energy & Fuels*, **2014**, 28, 4545-4553	4.1	33

363	Co-current and Countercurrent Configurations for a Membrane Dual Type Methanol Reactor. *Chemical Engineering and Technology*, **2008**, 31, 38-57	2	33
362	Experimental and theoretical study of crude oil pretreatment using low-frequency ultrasonic waves. *Ultrasonics Sonochemistry*, **2018**, 48, 383-395	8.9	33
361	Modeling of ethane pyrolysis process: A study on effects of steam and carbon dioxide on ethylene and hydrogen productions. *Chemical Engineering Journal*, **2013**, 215-216, 550-560	14.7	32
360	Upgrading of Lignin-Derived Bio-oil Components Catalyzed by Pt/γ-Al2O3: Kinetics and Reaction Pathways Characterizing Conversion of Cyclohexanone with H2. *Energy & Fuels*, **2015**, 29, 191-199	4.1	32
359	Enhancement of methanol production in a novel fluidized-bed hydrogen-permselective membrane reactor in the presence of catalyst deactivation. *International Journal of Hydrogen Energy*, **2009**, 34, 2208-2223	6.7	32
358	Dynamic simulation of a cascade fluidized-bed membrane reactor in the presence of long-term catalyst deactivation for methanol synthesis. *Chemical Engineering Science*, **2010**, 65, 4239-4249	4.4	32
357	Application of zirconium modified Cu-based oxygen carrier in chemical looping reforming. *Journal of CO2 Utilization*, **2016**, 14, 112-121	7.6	32
356	Noncatalytic Upgrading of Anisole in an Atmospheric DBD Plasma Reactor: Effect of Carrier Gas Type, Voltage, and Frequency. *Energy & Fuels*, **2014**, 28, 2535-2543	4.1	31
355	A novel configuration for Pd/Ag/γ-Al2O3 catalyst regeneration in the acetylene hydrogenation reactor of a multi feed cracker. *Chemical Engineering Journal*, **2012**, 198-199, 491-502	14.7	31
354	Optimization of hydrogen production via coupling of the Fischer–Tropsch synthesis reaction and dehydrogenation of cyclohexane in GTL technology. *Applied Energy*, **2011**, 88, 2027-2036	10.7	31
353	Syngas production in chemical looping reforming process over ZrO2 promoted Mn-based catalyst. *Journal of CO2 Utilization*, **2018**, 23, 105-116	7.6	30
352	Application of solid oxide fuel cell for flare gas recovery as a new approach; a case study for Asalouyeh gas processing plant, Iran. *Journal of Natural Gas Science and Engineering*, **2014**, 17, 13-25	4.6	30
351	A novel slurry bubble column membrane reactor concept for Fischer–Tropsch synthesis in GTL technology. *Chemical Engineering Research and Design*, **2012**, 90, 383-396	5.5	30
350	Utilizing differential evolution (DE) technique to optimize operating conditions of an integrated thermally coupled direct DME synthesis reactor. *Chemical Engineering Journal*, **2011**, 168, 321-332	14.7	30
349	Differential evolution (DE) strategy for optimization of hydrogen production and utilization in a thermally coupled membrane reactor for decalin dehydrogenation and Fischer–Tropsch synthesis in GTL technology. *International Journal of Hydrogen Energy*, **2011**, 36, 4917-4933	6.7	30
348	Simultaneous utilization of two different membranes for intensification of ultrapure hydrogen production from recuperative coupling autothermal multitubular reactor. *International Journal of Hydrogen Energy*, **2011**, 36, 7310-7325	6.7	30
347	Hydrogen Production from Cyclic Chemical Looping Steam Methane Reforming over Yttrium Promoted Ni/SBA-16 Oxygen Carrier. *Catalysts*, **2017**, 7, 286	4	29
346	Enhancement of Hydrogen Production and Carbon Dioxide Capturing in a Novel Methane Steam Reformer Coupled with Chemical Looping Combustion and Assisted by Hydrogen Perm-Selective Membranes. *Energy & Fuels*, **2013**, 27, 5359-5372	4.1	29

345	Upgrading Process of 4-Methylanisole as a Lignin-Derived Bio-Oil Catalyzed by Pt/Al2O3: Kinetic Investigation and Reaction Network Development. *Energy & Fuels*, **2015**, 29, 3335-3344	4.1	29
344	Production of ultrapure hydrogen via utilizing fluidization concept from coupling of methanol and benzene synthesis in a hydrogen-permselective membrane reactor. *International Journal of Hydrogen Energy*, **2011**, 36, 6616-6627	6.7	29
343	Hydrogen production from urea wastewater using a combination of urea thermal hydrolyser–desorber loop and a hydrogen-permselective membrane reactor. *Fuel Processing Technology*, **2010**, 91, 600-612	7.2	29
342	Modeling of an axial flow, spherical packed-bed reactor for naphtha reforming process in the presence of the catalyst deactivation. *International Journal of Hydrogen Energy*, **2010**, 35, 12784-12799	6.7	29
341	Incorporation of Flexibility in the Design of a Methanol Synthesis Loop in the Presence of Catalyst Deactivation. *Chemical Engineering and Technology*, **2003**, 26, 672-678	2	29
340	Green methanol synthesis process from carbon dioxide via reverse water gas shift reaction in a membrane reactor. *Chemical Engineering Research and Design*, **2018**, 140, 44-67	5.5	29
339	Synthesis and characterization of cerium promoted Ni/SBA-16 oxygen carrier in cyclic chemical looping steam methane reforming. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 76, 73-82	5.3	28
338	Experimental Investigation on Upgrading of Lignin-Derived Bio-Oils: Kinetic Analysis of Anisole Conversion on Sulfided CoMo/Al2O3 Catalyst. *International Journal of Chemical Kinetics*, **2016**, 48, 702-713	1.4	28
337	Experimental investigation of upgrading of lignin-derived bio-oil component anisole catalyzed by carbon nanotube-supported molybdenum. *RSC Advances*, **2017**, 7, 10545-10556	3.7	27
336	The impact of monovalent and divalent ions on wettability alteration in oil/low salinity brine/limestone systems. *Journal of Molecular Liquids*, **2017**, 248, 1003-1013	6	27
335	Experimental investigation of an active thermosyphon solar still with enhanced condenser. *Renewable Energy*, **2019**, 143, 328-334	8.1	27
334	Membrane/sorption-enhanced methanol synthesis process: Dynamic simulation and optimization. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 3256-3269	6.3	27
333	Progress in Reactors for High-Temperature Fischer–Tropsch Process: Determination Place of Intensifier Reactor Perspective. *International Journal of Chemical Reactor Engineering*, **2014**, 12, 639-664	1.2	27
332	Dynamic optimization of membrane dual-type methanol reactor in the presence of catalyst deactivation using genetic algorithm. *Fuel Processing Technology*, **2009**, 90, 279-291	7.2	27
331	Synthesis, characterization and application of Ni-based oxygen carrier supported on novel yttrium-incorporated SBA-16 for efficient hydrogen production via chemical looping steam methane reforming. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 89, 129-139	5.3	27
330	Plasma upgrading of 4methylanisole: A novel approach for hydrodeoxygenation of bio oil without using a hydrogen source. *Chemical Engineering Research and Design*, **2017**, 121, 113-124	5.5	26
329	Removal of carbon dioxide by aqueous amino acid salts using hollow fiber membrane contactors. *Journal of CO2 Utilization*, **2016**, 16, 42-49	7.6	26
328	Improving thermal efficiency and increasing production rate in the double moving beds thermally coupled reactors by using differential evolution (DE) technique. *Applied Thermal Engineering*, **2016**, 94, 543-558	5.8	26

327	A comparative study between a fluidized-bed and a fixed-bed water perm-selective membrane reactor with in situ H2O removal for Fischer‐Tropsch synthesis of GTL technology. *Journal of Natural Gas Science and Engineering*, **2011**, 3, 484-495	4.6	26
326	A comparison of hydrogen and methanol production in a thermally coupled membrane reactor for co-current and counter-current flows. *International Journal of Energy Research*, **2011**, 35, 863-882	4.5	26
325	Comparison of two different flow types on CO removal along a two-stage hydrogen permselective membrane reactor for methanol synthesis. *Applied Energy*, **2011**, 88, 41-51	10.7	26
324	Catalytic hydrodeoxygenation of anisole over nickel supported on plasma treated alumina‐silica mixed oxides. *RSC Advances*, **2017**, 7, 30990-30998	3.7	25
323	Modeling of synthesis gas and hydrogen production in a thermally coupling of steam and tri-reforming of methane with membranes. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 1779-1792	6.3	25
322	The optimal operating conditions of a thermally double coupled, dual membrane reactor for simultaneous methanol synthesis, methanol dehydration and methyl cyclohexane dehydrogenation. *Journal of Natural Gas Science and Engineering*, **2014**, 19, 175-189	4.6	25
321	Simultaneous hydrogen injection and in-situ H2O removal in a novel thermally coupled two-membrane reactor concept for Fischer‐Tropsch synthesis in GTL technology. *Journal of Natural Gas Science and Engineering*, **2012**, 9, 73-85	4.6	25
320	A comparative study of two different configurations for exothermic‐endothermic heat exchanger reactor. *Chemical Engineering and Processing: Process Intensification*, **2012**, 52, 63-73	3.7	25
319	Hexadecane Cracking in a Hybrid Catalytic Pulsed Dielectric Barrier Discharge Plasma Reactor. *Industrial & Engineering Chemistry Research*, **2013**, 52, 4443-4449	3.9	25
318	Enhancement of hydrogen production via coupling of MCH dehydrogenation reaction and methanol synthesis process by using thermally coupled heat exchanger reactor. *International Journal of Hydrogen Energy*, **2011**, 36, 3371-3383	6.7	25
317	Characterization and catalytic properties of molybdenum supported on nano gamma Al2O3 for upgrading of anisole model compound. *Chemical Engineering Journal*, **2017**, 319, 143-154	14.7	24
316	Simultaneous production of dimethyl ether (DME), methyl formate (MF) and hydrogen from methanol in an integrated thermally coupled membrane reactor. *Journal of Natural Gas Science and Engineering*, **2015**, 26, 595-607	4.6	24
315	Mathematical modeling and optimization of DME synthesis in two spherical reactors connected in series. *Journal of Natural Gas Science and Engineering*, **2014**, 17, 33-41	4.6	24
314	Methanol synthesis via sorption-enhanced reaction process: Modeling and multi-objective optimization. *Journal of the Taiwan Institute of Chemical Engineers*, **2014**, 45, 481-494	5.3	24
313	Effect of a Cationic Surfactant as a Chemical Destabilization of Crude Oil Based Emulsions and Asphaltene Stabilized. *Journal of Chemical & Engineering Data*, **2012**, 57, 1689-1699	2.8	24
312	The aromatic enhancement in the axial-flow spherical packed-bed membrane naphtha reformers in the presence of catalyst deactivation. *AICHE Journal*, **2011**, 57, 3182-3198	3.6	24
311	Incorporation of Dynamic Flexibility in the Design of a Methanol Synthesis Loop in the Presence of Catalyst Deactivation. *Chemical Engineering and Technology*, **2008**, 31, 116-132	2	24
310	Investigation of coil outlet temperature effect on the performance of naphtha cracking furnace. *Chemical Engineering Research and Design*, **2015**, 94, 307-316	5.5	23

309	Construction of hierarchical nanoporous bimetallic copper-cobalt selenide hollow spheres for hybrid supercapacitor. *Journal of Electroanalytical Chemistry*, **2020**, 871, 114295	4.1	23
308	Development of an Efficient Methanol Production Process for Direct CO2 Hydrogenation over a Cu/ZnO/Al2O3 Catalyst. *Catalysts*, **2017**, 7, 332	4	23
307	Hydroprocessing of 4-methylanisole as a representative of lignin-derived bio-oils catalyzed by sulphided CoMo/Al2O3: A semi-quantitative reaction network. *Canadian Journal of Chemical Engineering*, **2016**, 94, 1524-1532	2.3	23
306	Improvement of natural gas dehydration performance by optimization of operating conditions: A case study in Sarkhun gas processing plant. *Journal of Natural Gas Science and Engineering*, **2013**, 15, 118-126	4.6	23
305	Investigating the performance of dehydration unit with Coldfinger technology in gas processing plant. *Journal of Natural Gas Science and Engineering*, **2013**, 12, 1-12	4.6	23
304	Hydrogen/methanol production in a novel multifunctional reactor with in situ adsorption: modeling and optimization. *International Journal of Energy Research*, **2014**, 38, 978-994	4.5	23
303	Simultaneous hydrogen production and utilization via coupling of Fischer Tropsch synthesis and decalin dehydrogenation reactions in GTL technology. *International Journal of Hydrogen Energy*, **2011**, 36, 2992-3006	6.7	23
302	Dynamic Simulation and Optimization of a Dual-Type Methanol Reactor Using Genetic Algorithms. *Chemical Engineering and Technology*, **2008**, 31, 513-524	2	23
301	A Novel Fluidized-Bed Membrane Dual-Type Reactor Concept for Methanol Synthesis. *Chemical Engineering and Technology*, **2008**, 31, 1775-1789	2	23
300	Supported Pd-Au Membrane Reactor for Hydrogen Production: Membrane Preparation, Characterization and Testing. *Molecules*, **2016**, 21,	4.8	23
299	Experimental investigation of improved calcium-based CO2 sorbent and Co3O4/SiO2 oxygen carrier for clean production of hydrogen in sorption-enhanced chemical looping reforming. *International Journal of Hydrogen Energy*, **2019**, 44, 17863-17877	6.7	22
298	Upgrading of 4-methylanisole in a catalytic reactor with electric discharges: A novel approach to O-removal from bio-oils. *Chemical Engineering Journal*, **2015**, 281, 227-235	14.7	22
297	Modeling and simulation of crude oil desalting in an industrial plant considering mixing valve and electrostatic drum. *Chemical Engineering and Processing: Process Intensification*, **2015**, 95, 383-389	3.7	22
296	Investigation of natural gas sweetening process in corrugated packed bed column using computational fluid dynamics (CFD) model. *Journal of Natural Gas Science and Engineering*, **2013**, 15, 127-137	4.6	22
295	Methanol treatment in gas condensate reservoirs: A modeling and experimental study. *Chemical Engineering Research and Design*, **2014**, 92, 876-890	5.5	22
294	A novel axial-flow spherical packed-bed membrane reactor for dimethyl ether synthesis: Simulation and optimization. *Journal of Natural Gas Science and Engineering*, **2013**, 13, 42-51	4.6	22
293	Novel Recuperative Configuration for Coupling of Methanol Dehydration to Dimethyl Ether with Cyclohexane Dehydrogenation to Benzene. *Industrial & Engineering Chemistry Research*, **2010**, 49, 4633-4643	3.9	22
292	Treatment of wastewater polluted with urea by counter-current thermal hydrolysis in an industrial urea plant. *Separation and Purification Technology*, **2009**, 66, 492-503	8.3	22

291	A novel integrated, thermally coupled fluidized bed configuration for catalytic naphtha reforming to enhance aromatic and hydrogen productions in refineries. *International Journal of Hydrogen Energy*, **2011**, 36, 2979-2991	6.7	22
290	A comparison of two different flow types on performance of a thermally coupled recuperative reactor containing naphtha reforming process and hydrogenation of nitrobenzene. *International Journal of Hydrogen Energy*, **2011**, 36, 3483-3495	6.7	22
289	Green Methanol Production Process from Indirect CO2 Conversion: RWGS Reactor versus RWGS Membrane Reactor. *Journal of Environmental Chemical Engineering*, **2019**, 7, 102813	6.8	22
288	Upgrading of lignin-derived bio-oil in non-catalytic plasma reactor: Effects of operating parameters on 4-methylanisole conversion. *Chemical Engineering Research and Design*, **2015**, 104, 296-305	5.5	21
287	Mathematical modeling of carbon dioxide removal using amine-promoted hot potassium carbonate in a hollow fiber membrane contactor. *Journal of Natural Gas Science and Engineering*, **2014**, 18, 274-285	4.6	21
286	Mitigation of BTEX emission from gas dehydration unit by application of Drizo process: A case study in Farashband gas processing plant; Iran. *Journal of Natural Gas Science and Engineering*, **2014**, 19, 32-45	4.6	21
285	Enhancement of CO conversion in a novel slurry bubble column reactor for methanol synthesis. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 170-183	4.6	21
284	Dynamic multi-objective optimization of industrial radial-flow fixed-bed reactor of heavy paraffin dehydrogenation in LAB plant using NSGA-II method. *Journal of the Taiwan Institute of Chemical Engineers*, **2014**, 45, 1474-1484	5.3	21
283	Investigation of Paenibacillus alvei ARN63 ability for biodemulsifier production: medium optimization to break heavy crude oil emulsion. *Colloids and Surfaces B: Biointerfaces*, **2013**, 109, 244-52	6	21
282	Upgrading of Anisole in a Catalytic Pulsed Dielectric Barrier Discharge Plasma Reactor. *Energy & Fuels*, **2013**, 27, 7424-7431	4.1	21
281	Genetic algorithm strategy (GA) for optimization of a novel dual-stage slurry bubble column membrane configuration for Fischer□Tropsch synthesis in gas to liquid (GTL) technology. *Journal of Natural Gas Science and Engineering*, **2011**, 3, 555-570	4.6	21
280	Experimental investigation of sorption enhanced chemical looping reforming for high purity hydrogen production using CeO 2 □CaO CO 2 sorbent and 15Fe□Ca/Al 2 O 3 oxygen carrier. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 65, 185-196	5.3	21
279	Investigation of thermally double coupled double membrane heat exchanger reactor to produce dimethyl ether and methyl formate. *Journal of Natural Gas Science and Engineering*, **2016**, 32, 185-197	4.6	21
278	A CFD modeling to investigate the impact of flow mal-distribution on the performance of industrial methanol synthesis reactor. *Applied Thermal Engineering*, **2018**, 128, 64-78	5.8	20
277	Synthesis and Application of Cerium-Incorporated SBA-16 Supported Ni-Based Oxygen Carrier in Cyclic Chemical Looping Steam Methane Reforming. *Catalysts*, **2018**, 8, 18	4	20
276	Enhancement of methanol, DME and hydrogen production via employing hydrogen permselective membranes in a novel integrated thermally double-coupled two-membrane reactor. *Journal of Natural Gas Science and Engineering*, **2013**, 14, 158-173	4.6	20
275	Incorporating differential evolution (DE) optimization strategy to boost hydrogen and DME production rate through a membrane assisted single-step DME heat exchanger reactor. *Journal of Natural Gas Science and Engineering*, **2012**, 9, 28-38	4.6	20
274	Differential Evolution Strategy for Optimization of Hydrogen Production via Coupling of Methylcyclohexane Dehydrogenation Reaction and Methanol Synthesis Process in a Thermally Coupled Double Membrane Reactor. *Industrial & Engineering Chemistry Research*, **2013**, 52, 1508-1522	3.9	20

273	A dynamic membrane reactor concept for naphtha reforming, considering radial-flow patterns for both sweeping gas and reacting materials. *Chemical Engineering Journal*, **2011**, 178, 264-275	14.7	20
272	Optimal conditions for hydrogen production from coupling of dimethyl ether and benzene synthesis. *International Journal of Hydrogen Energy*, **2011**, 36, 299-310	6.7	20
271	Modeling electrostatic separation for dehydration and desalination of crude oil in an industrial two-stage desalting plant. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 58, 141-147	5.3	19
270	Synthesis of supported nanocatalysts via novel non-thermal plasma methods and its application in catalytic processes. *Plasma Processes and Polymers*, **2017**, 14, 1600204	3.4	19
269	Application of a novel magnetic nanoparticle as demulsifier for dewatering in crude oil emulsion. *Separation Science and Technology*, **2018**, 53, 551-558	2.5	19
268	Optimal conditions in converting methanol to dimethyl ether, methyl formate, and hydrogen utilizing a double membrane heat exchanger reactor. *Journal of Natural Gas Science and Engineering* , **2016**, 28, 31-45	4.6	19
267	Modeling and operability analysis of water separation from crude oil in an industrial gravitational coalescer. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 60, 76-82	5.3	19
266	Sorption-enhanced Fischer–Tropsch synthesis with continuous adsorbent regeneration in GTL technology: Modeling and optimization. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 858-869	6.3	19
265	The concept of integrated thermally double coupled reactor for simultaneous production of methanol, hydrogen and gasoline via differential evolution method. *Journal of Natural Gas Science and Engineering*, **2013**, 14, 144-157	4.6	19
264	Utilizing DE optimization approach to boost hydrogen and octane number in a novel radial-flow assisted membrane naphtha reactor. *Chemical Engineering Science*, **2012**, 68, 236-249	4.4	19
263	Modeling and Simulation of an Industrial Ethylene Oxide (EO) Reactor Using Artificial Neural Networks (ANN). *Industrial & Engineering Chemistry Research*, **2011**, 50, 6044-6052	3.9	19
262	Energy and exergy analysis and optimization of biomass gasification process for hydrogen production (based on air, steam and air/steam gasifying agents). *International Journal of Hydrogen Energy*, **2020**, 45, 33185-33197	6.7	19
261	Improving the CO2 solubility in aqueous mixture of MDEA and different polyamine promoters: The effects of primary and secondary functional groups. *Journal of Molecular Liquids*, **2020**, 297, 111803	6	19
260	Applying ultrasonic fields to separate water contained in medium-gravity crude oil emulsions and determining crude oil adhesion coefficients. *Ultrasonics Sonochemistry*, **2021**, 70, 105303	8.9	19
259	Mal-distribution of temperature in an industrial dual-bed reactor for conversion of CO 2 to methanol. *Applied Thermal Engineering*, **2015**, 91, 1059-1070	5.8	18
258	Application of the response surface methodology for modeling demulsification of crude oil emulsion using a demulsifier. *Journal of Dispersion Science and Technology*, **2018**, 39, 700-710	1.5	18
257	Purge gas recovery of ammonia synthesis plant by integrated configuration of catalytic hydrogen-permselective membrane reactor and solid oxide fuel cell as a novel technology. *Journal of Power Sources*, **2014**, 267, 104-116	8.9	18
256	A novel cascade membrane reactor concept for methanol synthesis in the presence of long-term catalyst deactivation. *International Journal of Energy Research*, **2010**, 34, 1356-1371	4.5	18

255	A comparison of co-current and counter-current modes of operation for a novel hydrogen-permselective membrane dual-type FTS reactor in GTL technology. *Fuel Processing Technology*, **2010**, 91, 33-44	7.2	18
254	Simulation and feasibility analysis of structured packing replacement in absorption column of natural gas dehydration process: A case study for Farashband gas processing plant, Iran. *Journal of Natural Gas Science and Engineering*, **2014**, 18, 336-350	4.6	17
253	The enhancement of hydrogen recovery in PSA unit of domestic petrochemical plant. *Chemical Engineering Journal*, **2013**, 226, 444-459	14.7	17
252	Sorption-enhanced methanol synthesis: Dynamic modeling and optimization. *Journal of the Taiwan Institute of Chemical Engineers*, **2014**, 45, 1490-1500	5.3	17
251	Theoretical investigation of aromatics production enhancement in thermal coupling of naphtha reforming and hydrodealkylation of toluene. *Chemical Engineering and Processing: Process Intensification*, **2011**, 50, 893-903	3.7	17
250	A comparative study for simultaneous removal of urea, ammonia and carbon dioxide from industrial wastewater using a thermal hydrolyser. *Chemical Engineering Journal*, **2010**, 164, 155-167	14.7	17
249	Contribution to emission reduction of CO2 by a fluidized-bed membrane dual-type reactor in methanol synthesis process. *Chemical Engineering and Processing: Process Intensification*, **2010**, 49, 589-598	3.7	17
248	Cobalt-molybdenum catalysts for the hydrodeoxygenation of cyclohexanone. *Renewable Energy*, **2020**, 150, 443-455	8.1	17
247	Modeling and optimization of an industrial Claus process: Thermal and catalytic section. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 76, 1-9	5.3	16
246	Degradation of crystal violet in water solution using post discharge DBD plasma treatment: Factorial design experiment and modeling. *Chemosphere*, **2019**, 232, 213-223	8.4	16
245	Upgrading of cyclohexanone to hydrocarbons by hydrodeoxygenation over nickel-molybdenum catalysts. *International Journal of Hydrogen Energy*, **2020**, 45, 11062-11076	6.7	16
244	A novel integrated thermally double coupled configuration for methane steam reforming, methane oxidation and dehydrogenation of propane. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 134-146	4.6	16
243	Well productivity in an Iranian gas-condensate reservoir: A case study. *Journal of Natural Gas Science and Engineering*, **2013**, 14, 66-76	4.6	16
242	A novel dynamic membrane reactor concept with radial-flow pattern for reacting material and axial-flow pattern for sweeping gas in catalytic naphtha reformers. *AICHE Journal*, **2012**, 58, 1230-1247	3.6	16
241	Production of hydrogen and methanol enhancement via a novel optimized thermally coupled two-membrane reactor. *International Journal of Energy Research*, **2013**, 37, 105-120	4.5	16
240	Simultaneous Removal of Urea, Ammonia, and Carbon Dioxide from Industrial Wastewater Using a Thermal Hydrolyzer−Separator Loop. *Industrial & Engineering Chemistry Research*, **2009**, 48, 10037-10046	3.9	16
239	A DUAL-CATALYST BED CONCEPT FOR INDUSTRIAL METHANOL SYNTHESIS. *Chemical Engineering Communications*, **2007**, 194, 1638-1653	2.2	16
238	Operability of an Industrial Catalytic Naphtha Reformer in the Presence of Catalyst Deactivation. *Chemical Engineering and Technology*, **2006**, 29, 616-624	2	16

237	Sorption enhanced process by integrated heat-exchanger reactor assisted by fluidization concept for methanol synthesis. *Chemical Engineering and Processing: Process Intensification*, **2016**, 110, 30-43	3.7	16
236	Effect of current frequency on crude oil dehydration in an industrial electrostatic coalescer. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 67, 1-10	5.3	16
235	Modification of a tri-reforming reactor based on the feeding policy to couple with methanol and GTL units. *Chemical Engineering Research and Design*, **2019**, 144, 107-114	5.5	15
234	Investigation and recovery of purge gas streams to enhance synthesis gas production in a mega methanol complex. *Journal of CO2 Utilization*, **2016**, 16, 157-168	7.6	15
233	Reducing environmental problems and increasing saving energy by proposing new configuration for moving bed thermally coupled reactors. *Journal of Natural Gas Science and Engineering*, **2014**, 17, 136-150	4.6	15
232	Simultaneous dimethyl ether synthesis and decalin dehydrogenation in an optimized thermally coupled dual membrane reactor. *Journal of Natural Gas Science and Engineering*, **2013**, 14, 77-90	4.6	15
231	Optimal design of a radial-flow membrane reactor as a novel configuration for continuous catalytic regenerative naphtha reforming process considering a detailed kinetic model. *International Journal of Hydrogen Energy*, **2013**, 38, 8384-8399	6.7	15
230	Comparative Study of Two Different Hydrogen Redistribution Strategies along a Fluidized-Bed Hydrogen Permselective Membrane Reactor for Methanol Synthesis. *Industrial & Engineering Chemistry Research*, **2010**, 49, 472-480	3.9	15
229	A comparative study on a novel combination of spherical and membrane tubular reactors of the catalytic naphtha reforming process. *International Journal of Hydrogen Energy*, **2011**, 36, 505-517	6.7	15
228	A Novel Radial-Flow, Spherical-Bed Reactor Concept for Methanol Synthesis in the Presence of Catalyst Deactivation. *Chemical Engineering and Technology*, **2008**, 31, 1615-1629	2	15
227	Development of a green process for DME production based on the methane tri-reforming. *Journal of the Taiwan Institute of Chemical Engineers*, **2020**, 106, 9-19	5.3	15
226	High pressure viscosity modeling of pure alcohols based on classical and advanced equations of state. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 58, 57-70	5.3	14
225	Development of a detailed reaction network for industrial upgrading of heavy reformates to xylenes using differential evolution technique. *Journal of the Taiwan Institute of Chemical Engineers*, **2015**, 48, 56-72	5.3	14
224	Application of response surface methodology for optimization of an industrial methylacetylene and propadiene hydrogenation reactor. *Journal of the Taiwan Institute of Chemical Engineers*, **2015**, 46, 51-64	5.3	14
223	The Biodiesel of Microalgae as a Solution for Diesel Demand in Iran. *Energies*, **2018**, 11, 950	3.1	14
222	Mathematical modeling and optimization of multi-stage spherical reactor configurations for large scale dimethyl ether production. *Fuel Processing Technology*, **2014**, 126, 207-214	7.2	14
221	Applying new kinetic and deactivation models in simulation of a novel thermally coupled reactor in continuous catalytic regenerative naphtha process. *Chemical Engineering Journal*, **2013**, 229, 153-176	14.7	14
220	A Comparative Study on Droplet Coalescence in Heavy Crude Oil Emulsions Subjected to Microwave and Ultrasonic Fields. *Separation Science and Technology*, **2013**, 48, 1591-1601	2.5	14

219	Optimal operating conditions of radial flow moving-bed reactors for isobutane dehydrogenation. *Journal of Energy Chemistry*, **2013**, 22, 633-638	12	14
218	Comparative Study on Simultaneous Production of Methanol, Hydrogen, and DME Using a Novel Integrated Thermally Double-Coupled Reactor. *Energy & Fuels*, **2013**, 27, 1982-1993	4.1	14
217	A comparative simulation of a novel gas to liquid (GTL) conversion loop as an alternative to a certain refinery gas flare. *Journal of Natural Gas Science and Engineering*, **2013**, 11, 23-38	4.6	14
216	Modeling and Simulation of a Novel Membrane Reactor in a Continuous Catalytic Regenerative Naphtha Reformer Accompanied with a Detailed Description of Kinetics. *Energy & Fuels*, **2013**, 27, 4048-4070	4.1	14
215	Enhancement in Triethylene Glycol (TEG) Purity via Hydrocarbon Solvent Injection to a TEG + Water System in a Batch Distillation Column. *Energy & Fuels*, **2011**, 25, 5126-5137	4.1	14
214	Pure Hydrogen Production in Membrane Reactor with Mixed Reforming Reaction by Utilizing Waste Gas: A Case Study. *Processes*, **2016**, 4, 33	2.9	14
213	Simulation‐based optimization of operating parameters for methanol synthesis process: Application of response surface methodology for statistical analysis. *Journal of Natural Gas Science and Engineering*, **2016**, 34, 439-448	4.6	14
212	Catalytic hydrodeoxygenation of bio-oil using in situ generated hydrogen in plasma reactor: Effects of allumina supported catalysts and plasma parameters. *Chemical Engineering Research and Design*, **2019**, 121, 221-228	5.5	14
211	A membrane-assisted hydrogen and carbon oxides separation from flare gas and recovery to a commercial methanol reactor. *International Journal of Hydrogen Energy*, **2020**, 45, 7386-7400	6.7	14
210	Post-discharge DBD plasma treatment for degradation of organic dye in water: A comparison with different plasma operation methods. *Journal of Environmental Chemical Engineering*, **2019**, 7, 103220	6.8	13
209	Modeling and optimization of an industrial hydrogen unit in a crude oil refinery. *International Journal of Hydrogen Energy*, **2019**, 44, 10415-10426	6.7	13
208	Sorption-enhanced reaction process in Fischer‐Tropsch synthesis for production of gasoline and hydrogen: Mathematical modeling. *Journal of Natural Gas Science and Engineering*, **2013**, 14, 225-237	4.6	13
207	Hydrogen looping approach in optimized methanol thermally coupled membrane reactor. *International Journal of Hydrogen Energy*, **2012**, 37, 235-249	6.7	13
206	Effect of different types of nanofluids on free convection heat transfer around spherical mini-reactor. *Superlattices and Microstructures*, **2013**, 58, 205-217	2.8	13
205	Methanol synthesis in a novel axial-flow, spherical packed bed reactor in the presence of catalyst deactivation. *Chemical Engineering Research and Design*, **2011**, 89, 2457-2469	5.5	13
204	The effect of flow type patterns in a novel thermally coupled reactor for simultaneous direct dimethyl ether (DME) and hydrogen production. *International Journal of Hydrogen Energy*, **2011**, 36, 4354-4365	6.7	13
203	Hydrogen as an energy carrier: A comparative study between decalin and cyclohexane in thermally coupled membrane reactors in gas-to-liquid technology. *International Journal of Hydrogen Energy*, **2011**, 36, 6970-6984	6.7	13
202	A comparison of auto-thermal and conventional methanol synthesis reactor in the presence of catalyst deactivation. *Chemical Engineering and Processing: Process Intensification*, **2008**, 47, 2121-2130	3.7	13

201	Estimation of the saturation pressure of pure ionic liquids using MLP artificial neural networks and the revised isofugacity criterion. *Journal of Molecular Liquids*, **2017**, 230, 85-95	6	12
200	CO2 emission and air pollution (volatile organic compounds, etc.)Related problems causing climate change **2020**, 1-30		12
199	Upgrading of anisole using in situ generated hydrogen in pin to plate pulsed corona discharge. *RSC Advances*, **2016**, 6, 98369-98380	3.7	12
198	Combining continuous catalytic regenerative naphtha reformer with thermally coupled concept for improving the process yield. *International Journal of Hydrogen Energy*, **2013**, 38, 10327-10344	6.7	12
197	Promotion of Ca-Co Bifunctional Catalyst/Sorbent with Yttrium for Hydrogen Production in Modified Chemical Looping Steam Methane Reforming Process. *Catalysts*, **2017**, 7, 270	4	12
196	Nanofluid concept for enhancement of hydrogen utilization and gasoline production in fixed bed reactor FischerTropsch synthesis of GTL (gas to liquid) technology. *Journal of Natural Gas Science and Engineering*, **2012**, 9, 172-183	4.6	12
195	A comparative study of two different membranes applied for auto-thermal methanol synthesis process. *Journal of Natural Gas Science and Engineering*, **2012**, 7, 60-74	4.6	12
194	Conversion of refinery natural purge gases to liquid hydrocarbons in GTL loop with hydrogen-permselective membranes: An alternative to gas flaring. *Journal of Natural Gas Science and Engineering*, **2011**, 3, 461-475	4.6	12
193	Promoted NickelCobalt Bimetallic Catalysts for Biogas Reforming. *Topics in Catalysis*,1	2.3	12
192	Carbon dioxide absorption into aqueous potassium salt solutions of glutamine amino acid. *Journal of Molecular Liquids*, **2020**, 301, 111743	6	12
191	Modeling and assessment of novel configurations to enhance methanol production in industrial mega-methanol synthesis plant. *Journal of the Taiwan Institute of Chemical Engineers*, **2019**, 104, 40-53	5.3	11
190	Preparation of the modified limestone possessing higher permeability of gas well based on fluorinated silica: Effect of catalyst. *Journal of Fluorine Chemistry*, **2015**, 173, 35-46	2.1	11
189	Inhibiting FeAl Spinel Formation on a Narrowed Mesopore-Sized MgAl2O4 Support as a Novel Catalyst for H2 Production in Chemical Looping Technology. *Catalysts*, **2018**, 8, 27	4	11
188	Comparison and modification of models in production of biosurfactant for Paenibacillus alvei and Bacillus mycoides and its effect on MEOR efficiency. *Journal of Petroleum Science and Engineering*, **2015**, 128, 177-183	4.4	11
187	Evaluation of maximum gasoline production of FischerTropsch synthesis reactions in GTL technology: A discretized approach. *Journal of Natural Gas Science and Engineering*, **2012**, 9, 209-219	4.6	11
186	Simultaneous production and utilization of methanol for methyl formate synthesis in a looped heat exchanger reactor configuration. *Journal of Natural Gas Chemistry*, **2012**, 21, 661-672		11
185	A new fast technique for calculation of gas condensate well productivity by using pseudopressure method. *Journal of Natural Gas Science and Engineering*, **2012**, 4, 35-43	4.6	11
184	Simultaneous hydrogen and aromatics enhancement by obtaining optimum temperature profile and hydrogen removal in naphtha reforming process; a novel theoretical study. *International Journal of Hydrogen Energy*, **2011**, 36, 8316-8326	6.7	11

183	Evaluation of Optimum Design Parameters and Operating Conditions of Axial- and Radial-Flow Tubular Naphtha Reforming Reactors, Using the Differential Evolution Method, Considering Catalyst Deactivation. *Energy & Fuels*, **2011**, 25, 762-772	4.1	11
182	Reduction in CO emissions along a two-stage hydrogen-permselective membrane reactor in methanol synthesis process. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 198-207	6.3	11
181	Prediction of CO2 solubility in ionic liquids with QM and UNIQUAC models. *Journal of Molecular Liquids*, **2016**, 222, 195-200	6	11
180	Supporting the propane dehydrogenation reactors by hydrogen permselective membrane modules to produce ultra-pure hydrogen and increasing propane conversion: Process modeling and optimization. *International Journal of Hydrogen Energy*, **2020**, 45, 7364-7373	6.7	11
179	Phase stability analysis on green methanol synthesis process from CO2 hydrogenation in water cooled, gas cooled and double cooled tubular reactors. *Fuel Processing Technology*, **2018**, 181, 375-387	7.2	11
178	Introducing a novel process to enhance the syngas conversion to methanol over Cu/ZnO/Al2O3 catalyst. *Fuel Processing Technology*, **2019**, 193, 159-179	7.2	10
177	A Novel Modeling and Experimental Study of Crude Oil Desalting using Microwave. *Separation Science and Technology*, **2014**, 49, 1029-1044	2.5	10
176	Sorption-enhanced methanol synthesis in a dual-bed reactor: Dynamic modeling and simulation. *Journal of the Taiwan Institute of Chemical Engineers*, **2014**, 45, 2307-2318	5.3	10
175	Differential evolution (DE) strategy for optimization of methane steam reforming and hydrogenation of nitrobenzene in a hydrogen perm-selective membrane thermally coupled reactor. *International Journal of Energy Research*, **2013**, 37, 868-878	4.5	10
174	Simultaneous syngas production with different H2/CO ratio in a multi-tubular methane steam and dry reformer by utilizing of CLC. *Journal of Energy Chemistry*, **2015**, 24, 54-64	12	10
173	Enhancement in Research Octane Number and Hydrogen Production via Dynamic Optimization of a Novel Spherical Axial-Flow Membrane Naphtha Reformer. *Industrial & Engineering Chemistry Research*, **2012**, 51, 398-409	3.9	10
172	A COMPARISON OF A NOVEL RECUPERATIVE CONFIGURATION AND CONVENTIONAL METHANOL SYNTHESIS REACTOR. *Chemical Engineering Communications*, **2012**, 199, 889-911	2.2	10
171	Modeling and Optimization of Two Stage AC Electrostatic Desalter. *Separation Science and Technology*, **2012**, 47, 30-42	2.5	10
170	Steady state modeling and simulation of the Oleflex process for isobutane dehydrogenation considering reaction network. *Asia-Pacific Journal of Chemical Engineering*, **2013**, 8, 862-869	1.3	10
169	Utilizing DE optimization approach to boost hydrogen and octane number, through a combination of radial-flow spherical and tubular membrane reactors in catalytic naphtha reformers. *Fuel*, **2013**, 111, 1-11	7.1	10
168	Wax formation assessment of condensate in South Pars gas processing plant sea pipeline (a case study). *Journal of Natural Gas Science and Engineering*, **2013**, 10, 25-40	4.6	10
167	Enhancement of aromatic production in naphtha reforming process by simultaneous operation of isothermal and adiabatic reactors. *International Journal of Hydrogen Energy*, **2011**, 36, 2076-2085	6.7	10
166	Simulation of a Urea Thermal Hydrolysis Reactor. *Chemical Engineering Communications*, **2005**, 192, 155-167	1.7	10

165	Plasma upgrading of guaiacol as lignin pyrolytic-oil model compound through a combination of hydrogen production and hydrodeoxygenation reaction. *Journal of Analytical and Applied Pyrolysis*, **2018**, 135, 422-430	6	10
164	Conversion enhancement of heavy reformates into xylenes by optimal design of a novel radial flow packed bed reactor, applying a detailed kinetic model. *Chemical Engineering Research and Design*, **2015**, 95, 317-336	5.5	9
163	Inhibition effect of CeO2 promoted SiO2 coating on coke growth during steam cracking of ethane. *Chemical Engineering Research and Design*, **2018**, 136, 271-281	5.5	9
162	CFD modelling of flow mal-distribution in an industrial ammonia oxidation reactor: A case study. *Applied Thermal Engineering*, **2014**, 67, 223-229	5.8	9
161	Performance enhancement of thermally coupling of methanol synthesis, DME synthesis and cyclohexane dehydrogenation processes: Employment of water and hydrogen perm-selective membranes via different recycle streams. *Chemical Engineering and Processing: Process Intensification*, **2014**, 85, 24-37	3.7	9
160	A new configuration for decoking process in series reactors. *Chemical Engineering Journal*, **2013**, 215-216, 418-431	14.7	9
159	Investigation of propane addition to the feed stream of a commercial ethane thermal cracker as supplementary feedstock. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 81, 1-13	5.3	9
158	Dynamic optimal design of an industrial ethylene oxide (EO) reactor via differential evolution algorithm. *Journal of Natural Gas Science and Engineering*, **2013**, 12, 56-64	4.6	9
157	Enhancement of urea, ammonia and carbon dioxide removal from industrial wastewater using a cascade of hydrolyser□desorber loops. *Chemical Engineering Journal*, **2010**, 160, 594-606	14.7	9
156	Membrane Reactors **2020**, 307-324		9
155	Simultaneous methanol production and separation in the methanol synthesis reactor to increase methanol production. *Chemical Engineering and Processing: Process Intensification*, **2020**, 158, 108176	3.7	9
154	Carbon nanotube supported nickel catalysts for anisole and cyclohexanone conversion in the presence of hydrogen and synthesis gas: Effect of plasma, acid, and thermal functionalization. *Fuel*, **2021**, 288, 119698	7.1	9
153	Membrane reactors for biodiesel production and processing **2015**, 289-312		8
152	Optimal conditions of isobutane dehydrogenation in radial flow moving bed hydrogen-permselective membrane reactors to enhance isobutene and hydrogen production. *Chemical Engineering and Processing: Process Intensification*, **2014**, 75, 126-133	3.7	8
151	Simultaneous production of methanol, DME and hydrogen in a thermally double coupled reactor with different endothermic reactions: Application of cyclohexane, methylcyclohexane and decalin dehydrogenation reactions. *Journal of Natural Gas Science and Engineering*, **2014**, 19, 324-336	4.6	8
150	Simultaneous production of two types of synthesis gas by steam and tri-reforming of methane using an integrated thermally coupled reactor: mathematical modeling. *International Journal of Energy Research*, **2014**, 38, 1260-1277	4.5	8
149	Boosting the gasoline octane number in thermally coupled naphtha reforming heat exchanger reactor using de optimization technique. *Fuel*, **2012**, 97, 109-118	7.1	8
148	A novel configuration of decalin and hydrogen loop in optimized thermally coupled reactors in GTL technology via differential evolution method. *Journal of Industrial and Engineering Chemistry*, **2013**, 19, 508-522	6.3	8

147	Start-up and Dynamic Analysis of a Novel Thermally Coupled Reactor for the Simultaneous Production of Methanol and Benzene. *Industrial & Engineering Chemistry Research*, **2011**, 50, 12092-12102	3.9	8
146	Evaluation of orthogonal collocation and orthogonal collocation on finite element method using genetic algorithm in the pressure profile prediction in petroleum reservoirs. *Journal of Petroleum Science and Engineering*, **2010**, 74, 41-50	4.4	8
145	A Grade Transition Strategy for the Prevention of Melting and Agglomeration of Particles in an Ethylene Polymerization Reactor. *Chemical Engineering and Technology*, **2005**, 28, 831-841	2	8
144	Synthesis and application of nanoporous triple-shelled CuAl2O4 hollow sphere catalyst for atmospheric chemical fixation of carbon dioxide. *Journal of the Taiwan Institute of Chemical Engineers*, **2020**, 114, 81-90	5.3	8
143	Conversion of ethane to ethylene and hydrogen by utilizing carbon dioxide: Screening catalysts. *International Journal of Hydrogen Energy*, **2021**, 46, 19717-19730	6.7	8
142	Determination of SO2 solubility in ionic liquids: COSMO-RS and modified Sanchez-Lacombe EOS. *Journal of Molecular Liquids*, **2018**, 272, 878-884	6	8
141	On improving the hydrogen and methanol production using an auto-thermal double-membrane reactor: Model prediction and optimisation. *Computers and Chemical Engineering*, **2018**, 119, 258-269	4	8
140	Mutual diffusion in concentrated liquid solutions: A new model based on cluster theory. *Journal of Molecular Liquids*, **2017**, 232, 516-521	6	7
139	Modeling and simulation of an industrial three phase trickle bed reactor responsible for the hydrogenation of 1,3-butadiene: A case study. *Chemical Engineering Journal*, **2015**, 275, 391-404	14.7	7
138	Experimental study of alcoholic retarded acid systems for high temperature gas wells acidizing process. *Chemical Engineering Research and Design*, **2015**, 93, 576-583	5.5	7
137	Dimethyl ether synthesis in a gas□solid□solid trickle flow reactor with continuous adsorbent regeneration. *Journal of the Taiwan Institute of Chemical Engineers*, **2015**, 47, 105-112	5.3	7
136	The utilization of synthesis gas for the deoxygenation of cyclohexanone over alumina-supported catalysts: Screening catalysts. *Asia-Pacific Journal of Chemical Engineering*, **2020**, 15, e2425	1.3	7
135	A sensitivity analysis and multi-objective optimization to enhance ethylene production by oxidative dehydrogenation of ethane in a membrane-assisted reactor. *Chinese Journal of Chemical Engineering*, **2018**, 26, 1879-1895	3.2	7
134	Simultaneous production of ultrapure hydrogen and gasoline in a novel thermally coupled double-membrane reactor. *International Journal of Energy Research*, **2013**, 37, 35-48	4.5	7
133	Integration of microalgae into an existing biofuel industry **2017**, 481-519		7
132	Simultaneous isobutane dehydrogenation and hydrogen production in a hydrogen-permselective membrane fixed bed reactor. *Theoretical Foundations of Chemical Engineering*, **2014**, 48, 799-805	0.9	7
131	Simultaneous synthesis gas and styrene production in the optimized thermally coupled reactor. *Journal of Natural Gas Science and Engineering*, **2014**, 16, 18-30	4.6	7
130	Optimal operating condition of membrane reactors to enhance isobutene production, selectivity and hydrogen production. *Journal of Industrial and Engineering Chemistry*, **2012**, 18, 1676-1682	6.3	7

129	CFD simulation of CO2 removal from hydrogen rich stream in a microchannel. *International Journal of Hydrogen Energy*, **2021**, 46, 19749-19757	6.7	7
128	Polyurethane foam: A novel support for metal oxide packing used in the non-thermal plasma decomposition of CO2. *Journal of CO2 Utilization*, **2021**, 44, 101398	7.6	7
127	CFD Simulation of CO2 Capture in a Microchannel by Aqueous Mixtures of MEA and [Bmim]BF4 Modified with TiO2 Nanoparticles. *International Journal of Thermophysics*, **2021**, 42, 1	2.1	7
126	Enhanced BTX Production in Refineries with Sulfur Dioxide Oxidation by Thermal Integrated Model. *Chemical Engineering and Technology*, **2018**, 41, 1746-1758	2	7
125	An Experimental Approach on Industrial Pd-Ag Supported Al2O3 Catalyst Used in Acetylene Hydrogenation Process: Mechanism, Kinetic and Catalyst Decay. *Processes*, **2019**, 7, 136	2.9	6
124	DE Approach in Development of a Detailed Reaction Network for Liquid Phase Selective Hydrogenation of Methylacetylene and Propadiene in a Trickle Bed Reactor. *Industrial & Engineering Chemistry Research*, **2015**, 54, 117-129	3.9	6
123	Prediction of the solubility of carbon dioxide in imidazolium based ionic liquids using the modified scaled particle theory. *Journal of Molecular Liquids*, **2018**, 255, 135-147	6	6
122	A numerical investigation on the heat and fluid flow of various nanofluids on a stretching sheet. *Heat Transfer - Asian Research*, **2018**, 47, 347-365	2.8	6
121	Methane dry reformer by application of chemical looping combustion via Mn-based oxygen carrier for heat supplying and carbon dioxide providing. *Chemical Engineering and Processing: Process Intensification*, **2014**, 79, 69-79	3.7	6
120	An investigation on simultaneous effects of several parameters on the demulsification efficiency of various crude oils. *Asia-Pacific Journal of Chemical Engineering*, **2017**, 12, 1012-1022	1.3	6
119	Light olefins/bio-gasoline production from biomass **2017**, 87-148		6
118	Simultaneous hydrogen and methanol enhancement through a recuperative two-zone thermally coupled membrane reactor. *Energy Systems*, **2012**, 3, 401-420	1.7	6
117	Decalin Loop in an Optimized Thermally Coupled Dual Methanol Reactor Using Differential Evolution (DE) Strategy. *Energy & Fuels*, **2012**, 26, 5858-5871	4.1	6
116	Incorporating multi-membrane tubes for simultaneous management of H2/HC and hydrogenation of nitrobenzene to aniline in naphtha heat exchanger reactor. *Chemical Engineering Journal*, **2012**, 184, 286-297	14.7	6
115	A novel cascade fluidized-bed reactor assisted by hydrogen permselective membrane concept for improving gasoline productivity and selectivity in Fischer Tropsch synthesis: A simulation study. *Journal of Natural Gas Science and Engineering*, **2013**, 13, 20-29	4.6	6
114	Dynamic optimal analysis of a novel cascade membrane methanol reactor by using genetic algorithm (GA) method. *Energy Systems*, **2013**, 4, 137-164	1.7	6
113	A comparative study of two H2-redistribution strategies along the FT reactor using H2-permselective membrane. *International Journal of Energy Research*, **2011**, 35, 321-335	4.5	6
112	Enhancement in NGL production and improvement in water dew point temperature by optimization of slug catchers pressures in water dew point adjustment unit. *Journal of Natural Gas Science and Engineering*, **2011**, 3, 326-333	4.6	6

111	Experimental investigation of improved graphene oxide as an efficient catalyst for the sustainable chemical fixation of CO2 with epoxides. *Journal of Environmental Chemical Engineering*, **2020**, 8, 104568	6.8	6
110	Development of porous nanocomposite membranes for gas separation by identifying the effective fabrication parameters with PlackettBurman experimental design. *Journal of Porous Materials*, **2016**, 23, 1279-1295	2.4	6
109	Application of response surface methodology for optimization of purge gas recycling to an industrial reactor for conversion of CO 2 to methanol. *Chinese Journal of Chemical Engineering*, **2017**, 25, 676-687	3.2	5
108	Process intensification and environmental consideration of sodium bicarbonate production in an industrial soda ash bubble column reactor by CO2 recycling. *Journal of CO2 Utilization*, **2017**, 20, 318-327	7.6	5
107	Membrane technology for brewery wastewater treatment **2020**, 289-303		5
106	Optimization of regeneration protocol for Pd/Ag/Al2O3 catalyst of the acetylene hydrogenation process using response surface methodology. *Journal of Natural Gas Science and Engineering*, **2016**, 34, 1382-1391	4.6	5
105	A new configuration in the tail-end acetylene hydrogenation reactor to enhance catalyst lifetime and performance. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 65, 8-21	5.3	5
104	Reduction of gas emission via optimization of purified purge gas recycle ratio for conversion of CO 2 to methanol. *Journal of Environmental Chemical Engineering*, **2016**, 4, 1348-1358	6.8	5
103	Enhanced olefin production via a novel radial-flow membrane reactor of heavy paraffin dehydrogenation in LAB plant. *Journal of the Taiwan Institute of Chemical Engineers*, **2014**, 45, 2906-2919	5.3	5
102	Optimal design of a thermally coupled fluidised bed heat exchanger reactor for hydrogen production and octane improvement in the catalytic naphtha reformers. *Canadian Journal of Chemical Engineering*, **2013**, 91, 54-65	2.3	5
101	Boosting the gasoline production via a novel multifunctional FischerTropsch reactor: Simulation and optimization. *Journal of Natural Gas Science and Engineering*, **2013**, 11, 52-64	4.6	5
100	Experimental study of iron-control agents selection for high temperature sour gas and oil wells acidizing process. *Chemical Engineering Research and Design*, **2012**, 90, 1823-1833	5.5	5
99	A Multistage Well-Mixed Model for Urea Removal from Industrial Wastewater. *Engineering in Life Sciences*, **2003**, 3, 335-340	3.4	5
98	Pure Hydrogen Production via Ethanol Steam Reforming Reaction over a Novel Pt-Co Based Catalyst in a Dense Pd-Ag Membrane Reactor (An Experimental Study). *International Journal of Membrane Science and Technology*, **2015**, 2, 5-14	0.5	5
97	Effect of cracking feedstock on carburization mechanism of cracking furnace tubes. *Engineering Failure Analysis*, **2020**, 107, 104216	3.2	5
96	Low energy phase change CO2 absorption using water-lean mixtures of glycine amino acid: Effect of co-solvent. *Journal of Molecular Liquids*, **2021**, 336, 116286	6	5
95	Dehydration of bio-alcohols in an enhanced membrane-assisted reactor: A rigorous sensitivity analysis and multi-objective optimization. *Renewable Energy*, **2021**, 177, 519-543	8.1	5
94	Biofuel production from microalgae and process enhancement by metabolic engineering and ultrasound **2021**, 209-230		5

93	Ultrapure Hydrogen Production via Dehydrogenation of Heavy Paraffin in a Linear Alkyl Benzenes Plant: Dynamic Modeling Study. *Energy & Fuels*, **2014**, 28, 7097-7108	4.1	4
92	Dynamic mathematical modeling of a novel dual-type industrial ethylene oxide (EO) reactor. *Chemical Engineering Research and Design*, **2013**, 91, 1123-1132	5.5	4
91	Hydrogen production in an environmental-friendly process by application of chemical looping combustion via Ni- and Fe-Based oxygen carriers. *Theoretical Foundations of Chemical Engineering*, **2015**, 49, 884-900	0.9	4
90	A dynamic kinetic model for methanol synthesis on deactivated catalyst. *Computers and Chemical Engineering*, **1998**, 22, S675-S678	4	4
89	Comparison of Separation Performance of a Structured Packed Column with a Tray-Type Column for H2S and CO2. *Oil and Gas Science and Technology*, **2009**, 64, 179-190	1.9	4
88	Low-Temperature CO2 Splitting in a Noncatalytic Dielectric-Barrier Discharge Plasma: Effect of Operational Parameters with a New Strategy of Experimentation. *Energy & Fuels*, **2020**, 34, 14321-14332	4.1	4
87	Converting Cyclohexanone to Liquid Fuel-Grade Products: A Characterization and Comparison Study of Hydrotreating Molybdenum Catalysts. *Catalysis Letters*, **2021**, 151, 3343-3360	2.8	4
86	Simultaneous production of ethylene and hydrogen through carbon-dioxide-assisted conversion of ethane over cobalt-molybdenum catalysts. *Journal of CO2 Utilization*, **2021**, 47, 101499	7.6	4
85	Hydrogen Production Through Pyrolysis **2019**, 947-973		4
84	Water Treatment by Renewable Energy-Driven Membrane Distillation **2019**, 179-211		4
83	Physico-chemical characterization of shaped mesoporous silica prepared by pseudomorphic transformation as catalyst support in methane steam reforming. *Reaction Kinetics, Mechanisms and Catalysis*, **2018**, 124, 229-245	1.6	4
82	Rotating liquid sheet contactor: A new gas-liquid contactor system in CO2 absorption by nanofluids. *Chemical Engineering and Processing: Process Intensification*, **2021**, 165, 108447	3.7	4
81	An environmentally friendly configuration for reduction of toxic products in a thermally coupled reactor of styrene and tri-reformer of methane. *Journal of Environmental Chemical Engineering*, **2017**, 5, 1048-1059	6.8	3
80	Simultaneous production of xylenes and hydrogen in an optimized membrane-assisted thermally coupled reactor using an elaborate reaction network. *Chemical Engineering and Processing: Process Intensification*, **2017**, 119, 113-130	3.7	3
79	A Feasibility Study for Synthesis Gas Production by Considering Carbon Dioxide Capturing in an Industrial-Scale Methanol Synthesis Plant. *Arabian Journal for Science and Engineering*, **2015**, 40, 1255-1268		3
78	Performance improvement and efficiency enhancement of a debutanizer column (a case study in South Pars gas field). *Journal of Natural Gas Science and Engineering*, **2015**, 22, 49-61	4.6	3
77	Two-dimensional modeling investigation of the modern methanol plate reactors. *Chemical Engineering Research and Design*, **2020**, 162, 212-227	5.5	3
76	Hydrogen production via catalytic pulsed plasma conversion of methane: Effect of NiK2O/Al2O3 loading, applied voltage, and argon flow rate. *International Journal of Hydrogen Energy*, **2020**, 45, 13899-13910	6.7	3

75	Simulation and Dynamic Optimization of an Industrial Naphtha Thermal Cracking Furnace Based on Time Variant Feeding Policy. *Chemical Product and Process Modeling*, **2018**, 13,	1.1	3
74	A Theoretical and Experimental Study for Screening Inhibitors for Styrene Polymerization. *Processes*, **2019**, 7, 677	2.9	3
73	Investigation of using different thermodynamic models on prediction ability of mutual diffusion coefficient model. *Journal of Molecular Liquids*, **2017**, 243, 781-789	6	3
72	Optimal dynamic trajectory of feed temperature and steam injection rate in ethylbenzene dehydrogenation process during process run time. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 81, 77-86	5.3	3
71	Synthesis gas production with simultaneous CO2 capturing and consuming: Application of chemical looping combustion by employing Fe45-Al2O3 and Mn40/Mg□rO2 oxygen carriers. *Canadian Journal of Chemical Engineering*, **2015**, 93, 2124-2134	2.3	3
70	Utilization of cyclohexanol dehydrogenation in a novel thermally coupled reactor for Fischer□ropsch synthesis in gas to liquid technology. *Journal of Natural Gas Science and Engineering*, **2012**, 9, 138-148	4.6	3
69	Comparative Study of Cocurrent and Countercurrent Modes of Operation for a Thermal Hydrolyzer in an Industrial Urea Wastewater Treatment Loop. *Industrial & Engineering Chemistry Research*, **2010**, 49, 9289-9299	3.9	3
68	A New Model for the Calculation of Height Equivalent to Theoretical Plate in High Pressure Columns Equipped with Structured Packing foriC4/nC4 Separation. *Industrial & Engineering Chemistry Research*, **2011**, 50, 6886-6897	3.9	3
67	Novel gas-liquid contactors for CO2 capture: Mini- and micro-channels, and rotating packed beds **2020**, 151-170		3
66	Simulation and multi-objective optimization of a radial flow gas-cooled membrane reactor, considering reduction of CO2 emissions in methanol synthesis. *Journal of Environmental Chemical Engineering*, **2021**, 9, 104910	6.8	3
65	Thermochemical routes for hydrogen production from biomass **2021**, 193-208		3
64	Hydrogen Production through Thermal Decomposition of Hydrogen Sulfide: Modification of the Sulfur Recovery Unit To Produce Ultrapure Hydrogen. *Industrial & Engineering Chemistry Research*, **2018**, 57, 14114-14123	3.9	3
63	Butene oligomerization, phenol synthesis from benzene, butane partial oxidation, and other reactions carried out in□membrane reactors **2015**, 641-660		2
62	Pb Acid Batteries **2020**, 17-39		2
61	Heat exchanger application for environmental problem-reducing in flare systems of an oil refinery and a petrochemical plant: Two case studies. *Applied Thermal Engineering*, **2016**, 106, 796-810	5.8	2
60	Modeling and optimal control of conversion section of styrene plant to overcome effect of catalyst deactivation on production capacity. *Chemical Engineering Research and Design*, **2018**, 137, 350-359	5.5	2
59	Development of Two Novel Processes for Hydrogenation of CO2 to Methanol over Cu/ZnO/Al2O3 Catalyst to Improve the Performance of Conventional Dual Type Methanol Synthesis Reactor. *Catalysts*, **2018**, 8, 255	4	2
58	Dehydration of crude oil by cellulose-based demulsifiers: statistical modeling, sensitivity analysis and optimization. *Petroleum Science and Technology*, **2019**, 37, 2134-2141	1.4	2

57	Fine-Tuning Synthesis and Characterization of Mono-Sized H-Beta Zeolite-Supported Palladium-Iridium Nanoparticles and Application in the Selective Hydrogenation of Acetylene. *Catalysts*, **2017**, 7, 343	4	2
56	Reducing NO(x) emissions from a nitric acid plant of domestic petrochemical complex: enhanced conversion in conventional radial-flow reactor of selective catalytic reduction process. *Environmental Technology (United Kingdom)*, **2013**, 34, 2867-79	2.6	2
55	Incorporation of EulerianEulerian CFD framework in mathematical modeling of chemical absorption of acid gases into methyl diethanol amine on sieve trays. *Chemical Engineering Journal*, **2009**, 151, 286-294	14.7	2
54	A new hybrid approach in the estimation of end-states of a tubular plug-flow reactor by Kalman filter. *Chemical Engineering and Processing: Process Intensification*, **2008**, 47, 770-779	3.7	2
53	Simultaneous Increase of H2 and Gasoline Production by Optimizing Thermally Coupled Methanol Steam Reforming with Fischer-Tropsch Synthesis. *Chemical Product and Process Modeling*, **2018**, 13,	1.1	2
52	Cryogenic CO2 Capture. *Sustainable Agriculture Reviews*, **2019**, 251-277	1.3	2
51	Industrial Applications of Green Solvents for Sustainable Development of Technologies in Organic Synthesis. *Nanotechnology in the Life Sciences*, **2020**, 435-455	1.1	2
50	Biofuel reforming in membrane reactors **2020**, 351-366		2
49	Solar reformers coupled with PEMFCs for residential cogeneration and trigeneration applications **2020**, 241-258		2
48	Potential and Challenges of Carbon Sequestration in Soils **2021**, 1-21		2
47	Dynamic optimization of methanol synthesis section in the dual type configuration to increase methanol production. *Oil and Gas Science and Technology*, **2019**, 74, 90	1.9	2
46	Vapor Phase Conversion of Furfural to Valuable Biofuel and Chemicals Over Alumina-Supported Catalysts: Screening Catalysts. *Topics in Catalysis*,1	2.3	2
45	Application of Differential Evolution in Chemical Reaction Engineering. *Advances in Process Systems Engineering*, **2017**, 70-90		1
44	Development of a rigorous two-dimensional mathematical model for a novel thermally coupled reactor for simultaneous production of xylenes, hydrogen, and toluene. *Chemical Engineering Research and Design*, **2017**, 127, 126-145	5.5	1
43	Isothermal vapor-liquid equilibrium of binary and ternary systems of anisole, hexane, and toluene and ternary system of methyl tert-butyl ether, hexane, and toluene. *Thermochimica Acta*, **2019**, 682, 178413	2.9	1
42	A step toward saving energy using thermal modification of crude oil preheat network: A case study. *Journal of the Taiwan Institute of Chemical Engineers*, **2015**, 51, 79-87	5.3	1
41	Performance Study of a Thermally Double Coupled Multi-Tubular Reactor by Considering the Effect of Flow Type Patterns. *International Journal of Chemical Reactor Engineering*, **2016**, 14, 63-78	1.2	1
40	Applying a new method to solve diffusivity equation for gas reservoirs. *Journal of Petroleum Science and Engineering*, **2014**, 124, 293-300	4.4	1

39	Introduction: Inorganic Membranes Roles in the Industrial Applications **2017**, xvii-xxix		1
38	A comparative study on optimised and non-optimised axial flow, spherical reactors in naphtha reforming process. *Canadian Journal of Chemical Engineering*, **2012**, 90, 1102-1111	2.3	1
37	Kinetic Modeling of Biomass Gasification in the Reduction Zone Using Various Gasification Agents. *Chemical Engineering and Technology*,	2	1
36	Experimental Investigation of Facile and Template-Free Synthesis of Zeolite Y for the Alkylation of Benzene. *Topics in Catalysis*,1	2.3	1
35	Modeling and optimization of ammonia process: Effect of hydrogen unit performance on the ammonia yield. *International Journal of Hydrogen Energy*, **2021**, 46, 39011-39011	6.7	1
34	Methane solubility in ionic liquids: Comparison of cubic-plus-association and modified Sanchez-Lacombe equation of states. *Chemical Physics Letters*, **2020**, 738, 136903	2.5	1
33	Impact assessment of exhaust gas emissions from cogeneration PEMFC systems **2020**, 49-64		1
32	CO2 separation with ionic liquid membranes **2020**, 291-309		1
31	Synthesis and Application of Double-Shelled CuCo2O4 Hollow Sphere Catalyst for Chemical Fixation of CO2. *Topics in Catalysis*,1	2.3	1
30	Three-Phase Reactor Model for Simulation of Methylacetylene and Propadiene Selective Hydrogenation Process. *Chemical Product and Process Modeling*, **2019**, 14,	1.1	1
29	Integrating Pressure-Retarded Osmosis and Membrane Distillation **2019**, 385-402		1
28	Multi Objective Optimization of a Methane Steam Reforming Reaction in a Membrane Reactor: Considering the Potential Catalyst Deactivation due to the Hydrogen Removal. *International Journal of Chemical Reactor Engineering*, **2018**, 16,	1.2	1
27	Cleaner production of liquid fuels and chemicals by synthesis-gas-assisted hydroprocessing of lignin compounds as biomass-derivates. *Journal of Cleaner Production*, **2021**, 316, 128331	10.3	1
26	Investigation of anti-condensation strategies in the methanol synthesis reactor using computational fluid dynamics. *Korean Journal of Chemical Engineering*, **2021**, 38, 2020-2033	2.8	1
25	CO2 utilization in methane reforming using La-doped SBA-16 catalysts prepared via pH adjustment method. *Fuel*, **2022**, 322, 124248	7.1	1
24	Optimization of crude oil dehydration in an industrial spiral-type gravitational coalescer. *Separation Science and Technology*, **2016**, 51, 2297-2306	2.5	0
23	Simulation study of an auto-thermal double-membrane reactor for the simultaneous production of hydrogen and methanol: comparison of two different hydrogen redistribution strategies along the reactor. *Polish Journal of Chemical Technology*, **2017**, 19, 115-124	1	0
22	A Feasibility Study of the Conversion of Petrochemical Off-Gas Streams to Methanol Over CuO/ZnO/Al2O3 Catalyst. *Topics in Catalysis*,1	2.3	0

21	Auto-Thermal Chemical Looping Reforming Process in a Network of Catalytic Packed-Bed Reactors for Large-Scale Syngas Production: A Comprehensive Dynamic Modeling and Multi-Objective Optimization. *Topics in Catalysis*,1	2.3	0
20	Polarity-changing solvents for CO2 capture **2022**, 21-37		0
19	Modeling and Optimization of Heavy Naphtha Reforming on Bifunctional Pt-Re/Al2O3 Catalyst. *Topics in Catalysis*,1	2.3	0
18	Theoretical and experimental assessment of UV resistance of high-density polyethylene: Screening and optimization of hindered amine light stabilizers. *Journal of Applied Polymer Science*, **2021**, 138, 51262	2.9	0
17	Membrane reactors for methanol synthesis from forest-derived feedstocks **2016**, 383-410		0
16	Aqueous Na-Air Batteries **2020**, 441-464		
15	Basics and Developments of Zinc-Air Batteries **2020**, 151-166		
14	Cathode Materials for Zinc-Air Batteries **2020**, 85-101		
13	Electrolytes for Zinc-Air Batteries **2020**, 187-213		
12	Synthesis and Characterization of Biotemplate Al2O3 Nanoparticles Based on Morus alba Leaves. *Topics in Catalysis*,1	2.3	
11	Fundamentals of membrane technology **2022**, 1-23		
10	Combination of Combustion and Catalytic Reactors for Syngas Product: Modeling and Simulation. *Topics in Catalysis*,1	2.3	
9	Newborn Electrodes for K-Ion Batteries **2020**, 373-409		
8	Computational Fluid Dynamic Analysis to Investigate Methanol Synthesis on the Commercial Catalysts. *Topics in Catalysis*,1	2.3	
7	Ionic Liquids for Carbon Dioxide Capture. *Sustainable Agriculture Reviews*, **2019**, 193-219	1.3	
6	Methods for the Recovery of CO2 from Chemical Solvents. *Sustainable Agriculture Reviews*, **2019**, 221-242	2.3	
5	Phosphorous-Based Materials for K-Ion Batteries **2020**, 1-18		
4	Hydrogen production from pyrolysis-derived bio-oil using membrane reactors **2016**, 411-434		

3 Ethanol for Air Transportation **2019**, 425-448

2 CO2 Capture From Coal-Fired Power Plants **2018**, 309-328

1 Use of Oxidative Dehydrogenation of Ethane as a Supplemental Catalytic Reactor Configuration for Oxidative Coupling of Methane Process as an Alternative Way to Increase C2H4 Amount. *Topics in Catalysis*,1 2.3