# Rafiqul Gani

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/5611583/rafiqul-gani-publications-by-year.pdf

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

 482
 12,679
 60
 97

 papers
 citations
 h-index
 g-index

 522
 13,912
 2.8
 6.89

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
482	Sustainable synthesis of integrated process, water treatment, energy supply, and CCUS networks under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2022</b> , 157, 107636	4	Ο
481	Overview of biorefinery <b>2022</b> , 3-32		0
480	Complete design case study for pulp and paper industry <b>2022</b> , 641-681		
479	Sustainable biorefinery process synthesis, design, and simulation: Systematic computer-aided methods and tools <b>2022</b> , 559-605		1
478	Sustainable process synthesis, design, and analysis: Challenges and opportunities. Sustainable Production and Consumption, 2022,	8.2	2
477	Intensified separation alternatives for offshore natural gas sweetening. <i>Separation and Purification Technology</i> , <b>2022</b> , 286, 120436	8.3	0
476	Hybrid Data-Driven and Mechanistic Modeling Approaches for Multiscale Material and Process Design. <i>Engineering</i> , <b>2021</b> , 7, 1231-1231	9.7	5
475	Process systems engineering <b>T</b> he generation next?. <i>Computers and Chemical Engineering</i> , <b>2021</b> , 147, 107252	4	38
474	Novel biorefinery-Integrated-Kraft-pulping network for sustainable development. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2021</b> , 163, 108373	3.7	2
473	A Versatile Modeling Framework for Integrated Chemical Product Design. <i>Industrial &amp; amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 436-456	3.9	2
472	Machine learning-based atom contribution method for the prediction of surface charge density profiles and solvent design. <i>AICHE Journal</i> , <b>2021</b> , 67, e17110	3.6	16
471	Computer-Aided Refrigerant Design: New Developments. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 19-24	0.6	1
470	ProREFD: Tool for Automated Computer-Aided Refrigerant Design, Analysis, and Verification. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 50, 457-462	0.6	2
469	Development of sustainable integrated biorefinery networks in pulp and paper industries. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 50, 1517-1522	0.6	
468	A versatile modelling system for integrated chemical product design problems. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 75-80	0.6	
467	Computer-Aided Solvent Design Integrated with a Machine Learning-based Atom Contribution Method. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 69-74	0.6	
466	Synthesis and Design of Sustainable Integrated Process, Water Treatment, Energy Supply Networks and Carbon Utilization Networks Under Uncertainty. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 1497-	1863	O

# (2020-2021)

465	Integrated design and control of reactive distillation processes using the driving force approach. <i>AICHE Journal</i> , <b>2021</b> , 67, e17227	3.6	5
464	Heat-Pump-Assisted Reactive Distillation for Direct Hydration of Cyclohexene to Cyclohexanol: A Sustainable Alternative. <i>Separation and Purification Technology</i> , <b>2021</b> , 119808	8.3	2
463	Separation of NH3/CO2 from melamine tail gas with ionic liquid: Process evaluation and thermodynamic properties modelling. <i>Separation and Purification Technology</i> , <b>2021</b> , 274, 119007	8.3	7
462	Driving Force Based Design and Control Performance Analysis of Reactive Distillation Columns. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 1209-1214	0.6	1
461	A Platform of Machine Learning-Based Next-Generation Property Estimation Methods for CAMD. <i>Computer Aided Chemical Engineering</i> , <b>2021</b> , 227-233	0.6	2
460	A process synthesis-intensification method for generation of novel and intensified solutions. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2020</b> , 156, 108103	3.7	6
459	Process Analysis of Shea Butter Solvent Fractionation Using a Generic Systematic Approach. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 9152-9164	3.9	6
458	Deep learning and knowledge-based methods for computer-aided molecular design <b>E</b> oward a unified approach: State-of-the-art and future directions. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 141, 107005	4	35
457	ProCACD: A computer-aided versatile tool for process control. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 136, 106771	4	9
456	A grand product design model for crystallization solvent design. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 135, 106764	4	14
455	Comparative Economic Analysis of Physical, Chemical, and Hybrid Absorption Processes for Carbon Capture. <i>Industrial &amp; Discourse amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 2005-2012	3.9	17
454	Process development of sustainable biorefinery system integrated into the existing pulping process. <i>Journal of Cleaner Production</i> , <b>2020</b> , 255, 120278	10.3	13
453	Structure optimization of tailored ionic liquids and process simulation for shale gas separation. <i>AICHE Journal</i> , <b>2020</b> , 66, e16794	3.6	19
452	Computer-aided process intensification: Challenges, trends and opportunities. <i>AICHE Journal</i> , <b>2020</b> , 66, e16819	3.6	24
451	A multi-layered view of chemical and biochemical engineering. <i>Chemical Engineering Research and Design</i> , <b>2020</b> , 155, A133-A145	5.5	43
450	Chemical product design Irecent advances and perspectives. <i>Current Opinion in Chemical Engineering</i> , <b>2020</b> , 27, 22-34	5.4	35
449	Synthesis of Sustainable Integrated Process, Water Treatment and Power Generation Networks. <i>Computer Aided Chemical Engineering</i> , <b>2020</b> , 48, 1063-1068	0.6	
448	Synthesis and design of sustainable integrated process, water treatment, and power generation networks. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 141, 107041	4	7

447	Enhancing the lubricity of gas-to-liquid (GTL) paraffinic kerosene: impact of the additives on the physicochemical properties. <i>BMC Chemical Engineering</i> , <b>2020</b> , 2,	3.5	2
446	Hybrid method and associated tools for synthesis of sustainable process flowsheets. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 131, 106572	4	5
445	A Gibbs energy-driving force method for the optimal design of non-reactive and reactive distillation columns. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 128, 53-68	4	9
444	Group contribution-based property estimation methods: advances and perspectives. <i>Current Opinion in Chemical Engineering</i> , <b>2019</b> , 23, 184-196	5.4	34
443	Sustainable solutions by integrating process synthesis-intensification. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 126, 499-519	4	16
442	Application of the Corresponding-State Law to the Parametrization of Statistical Associating Fluid Theory (SAFT)-Type Models: Generation and Use of Generalized Charts Industrial & Company & Engineering Chemistry Research, <b>2019</b> , 58, 9127-9139	3.9	8
441	Computer-aided reaction solvent design based on transition state theory and COSMO-SAC. <i>Chemical Engineering Science</i> , <b>2019</b> , 202, 300-317	4.4	23
440	Process design and economic analysis of methacrylic acid extraction for three organic solvents. <i>Chinese Journal of Chemical Engineering</i> , <b>2019</b> , 27, 2909-2916	3.2	1
439	Systematic Model-Based Methodology for Substitution of Hazardous Chemicals. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 7652-7666	8.3	10
438	Energy and CO2 management for chemical and related industries: issues, opportunities and challenges. <i>BMC Chemical Engineering</i> , <b>2019</b> , 1,	3.5	9
437	Process engineering advances in pharmaceutical and chemical industries: digital process design, advanced rectification, and continuous filtration. <i>Current Opinion in Chemical Engineering</i> , <b>2019</b> , 25, 114	-₹2 <sup>1</sup> 1	7
436	Chemical product design: Advances in and proposed directions for research and teaching. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 126, 147-156	4	23
435	Integrated ionic liquid and process design involving azeotropic separation processes. <i>Chemical Engineering Science</i> , <b>2019</b> , 203, 402-414	4.4	25
434	Optimal Solvent Design for Extractive Distillation Processes: A Multiobjective Optimization-Based Hierarchical Framework. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 5777-5786	3.9	38
433	Thermodynamic analysis of the driving force approach: Reactive systems. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 129, 106509	4	5
432	ProCAFD: Computer-aided Tool for Sustainable Process Synthesis, Intensification and Hybrid solutions. <i>Computer Aided Chemical Engineering</i> , <b>2019</b> , 46, 481-486	0.6	
431	Computer-aided design of ionic liquids for hybrid process schemes. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 130, 106556	4	16
430	Integrated Process and Controller Design Software Tool IProCACD. <i>Computer Aided Chemical Engineering</i> , <b>2019</b> , 745-750	0.6	1

### (2018-2019)

429	Systematic Method and Tool for Sustainable Process Synthesis, Designanalysis and Innovation. <i>Computer Aided Chemical Engineering</i> , <b>2019</b> , 47, 385-390	0.6		
428	Component based development of computer-aided tools for different applications. <i>Computer Aided Chemical Engineering</i> , <b>2019</b> , 46, 91-96	0.6	2	
427	An Integrated Approach for the Design of Emulsified Products. AICHE Journal, 2019, 65, 75-86	3.6	12	
426	OptCAMD: An optimization-based framework and tool for molecular and mixture product design. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 124, 285-301	4	40	
425	Intensification Methodology To Minimize the Number of Pieces of Equipment and Its Application to a Process To Produce Dioxolane Products. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 9810-9820	3.9	15	
424	Computer aided chemical product design IProCAPD and tailor-made blended products. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 116, 37-55	4	36	
423	Sustainable chemical processing and energy-carbon dioxide management: Review of challenges and opportunities. <i>Chemical Engineering Research and Design</i> , <b>2018</b> , 131, 440-464	5.5	37	
422	A Computer-Aided Methodology for Mixture-Blend Design. Applications to Tailor-Made Design of Surrogate Fuels. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 7008-7020	3.9	19	
421	A machine learning based computer-aided molecular design/screening methodology for fragrance molecules. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 115, 295-308	4	44	
420	Systematic identification method for data analysis and phase equilibria modelling for lipids systems. <i>Journal of Chemical Thermodynamics</i> , <b>2018</b> , 121, 153-169	2.9	9	
419	Prediction of acid dissociation constants of organic compounds using group contribution methods. <i>Chemical Engineering Science</i> , <b>2018</b> , 183, 95-105	4.4	31	
418	Advances in chemical product design. <i>Reviews in Chemical Engineering</i> , <b>2018</b> , 34, 319-340	5	27	
417	Estimation of physical properties of amino acids by group-contribution method. <i>Chemical Engineering Science</i> , <b>2018</b> , 175, 148-161	4.4	28	
416	Perspective on PSE in pharmaceutical process development and innovation. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 597-656	0.6	5	
415	Design and Analysis of Edible Oil Processes Containing Lipids. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 737-742	0.6	1	
4 <sup>1</sup> 4	Chemical Product Design: Advances in Research and Teaching. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 44, 21-32	0.6	8	
413	Integrated Solvent-Membrane and Process Design Method for Hybrid Reaction-Separation Schemes. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 851-856	0.6	2	
412	A Multi-stage and Multi-level Computer Aided Framework for Sustainable Process Intensification.  Computer Aided Chemical Engineering, 2018, 875-880	0.6	2	

411	Synthesis, design and analysis of energy efficient sustainable process alternatives. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 893-899	0.6	1
410	Exergy efficiency based design and analysis of utilization pathways of biomasses. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 857-862	0.6	3
409	A General Model-based Methodology for Chemical Substitution. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 887-892	0.6	
408	LCSoft as a Tool for LCA: New LCIA Methodologies and Interpretation. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 13-18	0.6	5
407	Energy Efficient Design of Ionic Liquid based Gas Separation Processes. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 1513-1518	0.6	
406	Application of COSMO-RS and UNIFAC for ionic liquids based gas separation. <i>Chemical Engineering Science</i> , <b>2018</b> , 192, 816-828	4.4	40
405	Integration of the Biorefinery Concept for Development of Sustainable Processes for the Pulp and Paper Industry. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 1135-1140	0.6	1
404	ProCAPD IA Computer-Aided Model-Based Tool for Chemical Product Design and Analysis. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 44, 469-474	0.6	2
403	A novel Graphical Gibbs Energy-Driving Force Method for the Optimal Design of Non-reactive and Reactive Distillation Columns. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 43, 905	0.6	1
402	Improvement of predictive tools for vapor-liquid equilibrium based on group contribution methods applied to lipid technology. <i>Fluid Phase Equilibria</i> , <b>2018</b> , 470, 249-258	2.5	7
401	Integration of computational modeling and experimental techniques to design fuel surrogates. <i>Journal of Natural Gas Science and Engineering</i> , <b>2018</b> , 55, 585-594	4.6	8
400	Sustainable and Innovative Solutions through an Integrated Systematic Framework. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 1165-1170	0.6	
399	Integrated Ionic Liquid and Process Design involving Hybrid Separation Schemes. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 44, 1045-1050	0.6	4
398	Hybrid Method/Tool for Sustainable Process Synthesis, Design, Analysis, and Improvement. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 44, 475-480	0.6	
397	A Systematic Methodology for Property Model-Based Chemical Substitution from Chemical-based Products. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 349-354	0.6	
396	An Improved Recycle-loop Tearing Algorithm Based on Process Topology Information. <i>Computer Aided Chemical Engineering</i> , <b>2018</b> , 1399-1404	0.6	
395	Integration of the biorefinery concept for the development of sustainable processes for pulp and paper industry. <i>Computers and Chemical Engineering</i> , <b>2018</b> , 119, 70-84	4	31
394	A generic methodology for processing route synthesis and design based on superstructure optimization. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 106, 892-910	4	87

393	Energy efficiency as an example of cross-discipline collaboration in chemical engineering. <i>Chemical Engineering Research and Design</i> , <b>2017</b> , 119, 183-187	5.5	5
392	A computer-aided software-tool for sustainable process synthesis-intensification. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 105, 74-95	4	73
391	Sustainable process design & analysis of hybrid separations. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 105, 96-104	4	23
390	lonic liquids for absorption and separation of gases: An extensive database and a systematic screening method. <i>AICHE Journal</i> , <b>2017</b> , 63, 1353-1367	3.6	62
389	Model-based design and analysis of glucose isomerization process operation. <i>Computers and Chemical Engineering</i> , <b>2017</b> , 98, 128-142	4	5
388	LCSoft Ithe Life Cycle Assessment Software: New developments and status. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 2305-2310	0.6	2
387	Application of a computer-aided framework for the design of CO2 capture and utilization processes. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 2653-2658	0.6	5
386	Computer Aided Synthesis of Innovative Processes: Renewable Adipic Acid Production. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 709-714	0.6	
385	Development of an Intensified Reactive Distillation Process for the Synthesis of Dioxolane Products. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 1081-1086	0.6	2
384	Separation and recovery of intracellular beta-carotene using a process synthesis framework. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 2851-2856	0.6	1
383	A Systematic Identification Method for Thermodynamic Property Modelling. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 205-210	0.6	
382	The Chemical Product Simulator IProCAPD. Computer Aided Chemical Engineering, 2017, 979-984	0.6	11
381	Design of Novel Integrated Pharmaceutical Processes <b>2017</b> , 71-93		
380	Designing a Surrogate Fuel for Gas-to-Liquid Derived Diesel. <i>Energy &amp; Designing &amp; Designi</i>	4.1	21
379	Synthesis of Sustainable Biofuel Production Processes: A Generic Methodology for Superstructure Optimization and Data Management <b>2017</b> , 651-681		1
378	New Method and Software for Computer-Aided Flowsheet Design and Analysis. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 649-654	0.6	1
377	A Reaction Database for Small Molecule Pharmaceutical Processes Integrated with Process Information. <i>Processes</i> , <b>2017</b> , 5, 58	2.9	7
376	A Systematic Approach to Green Solvent Selection, Design, and Verification <b>2017</b> , 57-90		1

375	Intensification of ethylene glycol production process. Computer Aided Chemical Engineering, 2017, 113	5-ф1640	4
374	The Systematic Screening Methodology for Surfactant Flooding Chemicals in Enhanced Oil Recovery. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 991-996	0.6	3
373	Location-dependent optimal biorefinery synthesis. Computer Aided Chemical Engineering, 2017, 907-91	20.6	
372	Energy Efficient Hybrid Gas Separation with Ionic Liquids. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 421-426	0.6	
371	Industrial wastewater treatment network based on recycling and rerouting strategies for retrofit design schemes. <i>Journal of Cleaner Production</i> , <b>2016</b> , 111, 231-252	10.3	20
370	Systematic screening methodology and energy efficient design of ionic liquid-based separation processes. <i>Journal of Cleaner Production</i> , <b>2016</b> , 111, 93-107	10.3	23
369	A systematic modelling framework for phase transfer catalyst systems. <i>Chemical Engineering Research and Design</i> , <b>2016</b> , 115, 407-422	5.5	5
368	Modeling and Prediction of Solid Solubility by GE Models <b>2016</b> , 235-262		1
367	Application of the e-KT-UNIFAC Model for the Improved and Innovative Design of Biphasic Reacting Systems. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2016</b> , 61, 4090-4103	2.8	1
366	Process systems engineering issues and applications towards reducing carbon dioxide emissions through conversion technologies. <i>Chemical Engineering Research and Design</i> , <b>2016</b> , 116, 27-47	5.5	37
365	Systematic integrated process design and control of binary element reactive distillation processes. <i>AICHE Journal</i> , <b>2016</b> , 62, 3137-3154	3.6	40
364	Toward the Development and Deployment of Large-Scale Carbon Dioxide Capture and Conversion Processes. <i>Industrial &amp; Deployment of Large-Scale Carbon Dioxide Capture and Conversion Processes</i> . <i>Industrial &amp; Deployment of Large-Scale Carbon Dioxide Capture and Conversion Processes</i> .	3.9	145
363	A grand model for chemical product design. <i>Computers and Chemical Engineering</i> , <b>2016</b> , 91, 15-27	4	47
362	Systematic methods and tools for design of sustainable chemical processes for CO2 utilization. <i>Computers and Chemical Engineering</i> , <b>2016</b> , 87, 125-144	4	25
361	A methodology for the sustainable design and implementation strategy of CO2 utilization processes. <i>Computers and Chemical Engineering</i> , <b>2016</b> , 91, 407-421	4	32
360	A methodological framework for the development of feasible CO 2 conversion processes. <i>International Journal of Greenhouse Gas Control</i> , <b>2016</b> , 47, 250-265	4.2	34
359	Analysis and modeling of alkali halide aqueous solutions. Fluid Phase Equilibria, 2016, 412, 177-198	2.5	10
358	Sustainable Chemical Process Development through an Integrated Framework. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 38, 841-846	0.6	4

# (2015-2016)

357	A Generic Methodology for Superstructure Optimization of Different Processing Networks. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 685-690	0.6	9
356	Integrated Computer-aided Framework for Sustainable Chemical Product Design and Evaluation. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 38, 2343-2348	0.6	8
355	Phenomena Based Process Intensification of Toluene Methylation for Sustainable Para-xylene Production. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 1093-1098	0.6	1
354	VPPD-Lab: The Chemical Product Simulator. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 39, 61-94	0.6	8
353	Systematic, efficient and consistent LCA calculations for chemical and biochemical processes. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 1249-1254	0.6	2
352	Sustainable DME synthesis-design with CO2 utilization. Computer Aided Chemical Engineering, 2016, 108	tb.608	64
351	Computer-Aided Molecular Design and Property Prediction. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 39, 153-196	0.6	5
350	Predictive Modelling of Phase-Transfer Catalyst Systems for Improved and Innovative Design. <i>Computer Aided Chemical Engineering</i> , <b>2016</b> , 829-834	0.6	2
349	Fundamentals of Process Intensification: A Process Systems Engineering View <b>2016</b> , 7-33		11
348	New Vistas in Chemical Product and Process Design. <i>Annual Review of Chemical and Biomolecular Engineering</i> , <b>2016</b> , 7, 557-82	8.9	70
347	Ionic Liquid Design and Process Simulation for Decarbonization of Shale Gas. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 5931-5944	3.9	75
346	Integrated Process Design and Control of Multi-element Reactive Distillation Processes. <i>IFAC-PapersOnLine</i> , <b>2016</b> , 49, 735-740	0.7	6
345	Solvent selection methodology for pharmaceutical processes: Solvent swap. <i>Chemical Engineering Research and Design</i> , <b>2016</b> , 115, 443-461	5.5	27
344	Systematic integrated process design and control of reactive distillation processes involving multi-elements. <i>Chemical Engineering Research and Design</i> , <b>2016</b> , 115, 348-364	5.5	34
343	Methods and tools for sustainable chemical process design <b>2015</b> , 277-321		3
342	VPPD Lab -The Chemical Product Simulator. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 37, 1415-1420	0.6	5
341	Computer-aided modelling template: Concept and application. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 83, 232-247	4	23

339	Life Cycle Assessment Studies of Chemical and Biochemical Processes through the new LCSoft Software-tool. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 2549-2554	0.6	
338	Generic mathematical programming formulation and solution for computer-aided molecular design. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 78, 79-84	4	53
337	Product design IMolecules, devices, functional products, and formulated products. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 81, 70-79	4	59
336	Optimal design of microalgae-based biorefinery: Economics, opportunities and challenges. <i>Applied Energy</i> , <b>2015</b> , 150, 69-79	10.7	85
335	Process synthesis, design and analysis using a process-group contribution method. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 81, 245-259	4	56
334	Sustainable Process Design: Sustainable Process Networks for Carbon Dioxide Conversion. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 36, 175-195	0.6	9
333	Integrated Process Design and Control of Reactive Distillation Processes. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 1120-1125	0.7	19
332	Optimal processing pathway selection for microalgae-based biorefinery under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 82, 362-373	4	15
331	Vapour liquid equilibria of monocaprylin plus palmitic acid or methyl stearate at $P = (1.20 \text{ and } 2.50)$ kPa by using DSC technique. <i>Journal of Chemical Thermodynamics</i> , <b>2015</b> , 91, 108-115	2.9	18
330	Systematic network synthesis and design: Problem formulation, superstructure generation, data management and solution. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 72, 68-86	4	36
329	The coupling of Eransaminase and Oppenauer oxidation reactions via intra-membrane multicomponent diffusion A process model for the synthesis of chiral amines. <i>Chemical Engineering Journal</i> , <b>2015</b> , 259, 221-231	14.7	9
328	Model-Based Analysis and Efficient Operation of a Glucose Isomerization Reactor Plant. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 37, 563-568	0.6	1
327	Early-Stage Design and Analysis of Biorefinery Networks <b>2015</b> , 1-38		
326	Development of Computer Aided Modelling Templates for Model Re-use in Chemical and Biochemical Process and Product Design: Import and export of models. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 953-958	0.6	2
325	Development of sustainable CO2 conversion processes for the methanol production. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 1145-1150	0.6	14
324	Synthesis of Optimal Processing Pathway for Microalgae-based Biorefinery under Uncertainty. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 37, 2303-2308	0.6	1
323	Design of Separation Processes with Ionic Liquids. Computer Aided Chemical Engineering, 2015, 1325-13	<b>30</b> .6	5
322	Application of New Electrolyte Model to Phase Transfer Catalyst (PTC) Systems. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 701-706	0.6	1

Synthesis and Design of Integrated Process and Water Networks. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 37, 875-880	0.6	6
Sustainable process synthesisIntensification. Computers and Chemical Engineering, 2015, 81, 218-244	4	97
Techno-economic evaluation of different CO2-based processes for dimethyl carbonate production. <i>Chemical Engineering Research and Design</i> , <b>2015</b> , 93, 496-510	5.5	73
Analysis and prediction of the alpha-function parameters used in cubic equations of state. <i>Chemical Engineering Science</i> , <b>2015</b> , 126, 584-603	4.4	22
Assessment of Recent Process Analytical Technology (PAT) Trends: A Multiauthor Review. <i>Organic Process Research and Development</i> , <b>2015</b> , 19, 3-62	3.9	251
Data, analysis and modeling of physical properties for process design of systems involving lipids. <i>Fluid Phase Equilibria</i> , <b>2014</b> , 362, 318-327	2.5	22
Industrial Process Water Treatment and Reuse: A Framework for Synthesis and Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 5160-5171	3.9	25
A comprehensive framework for surfactant selection and design for emulsion based chemical product design. <i>Fluid Phase Equilibria</i> , <b>2014</b> , 362, 288-299	2.5	60
Development and analysis of the Original UNIFAC-CI model for prediction of vaporliquid and solidliquid equilibria. <i>Fluid Phase Equilibria</i> , <b>2014</b> , 366, 24-44	2.5	6
Hybrid Distillation Schemes <b>2014</b> , 357-381		3
Crystallization Kinetics within a Generic Modeling Framework. Chemical Engineering and Technology		
, <b>2014</b> , 37, 1383-1392	2	1
A systematic methodology for design of tailor-made blended products. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 66, 201-213	4	56
A systematic methodology for design of tailor-made blended products. <i>Computers and Chemical</i>	4	
A systematic methodology for design of tailor-made blended products. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 66, 201-213  Integration of life cycle assessment software with tools for economic and sustainability analyses	4	56
A systematic methodology for design of tailor-made blended products. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 66, 201-213  Integration of life cycle assessment software with tools for economic and sustainability analyses and process simulation for sustainable process design. <i>Journal of Cleaner Production</i> , <b>2014</b> , 71, 98-109  Process Synthesis, Design and Analysis using Process-Group Contribution Method. <i>Computer Aided</i>	10.3	56 75
A systematic methodology for design of tailor-made blended products. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 66, 201-213  Integration of life cycle assessment software with tools for economic and sustainability analyses and process simulation for sustainable process design. <i>Journal of Cleaner Production</i> , <b>2014</b> , 71, 98-109  Process Synthesis, Design and Analysis using Process-Group Contribution Method. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 34, 453-458	10.3	56 75 7
A systematic methodology for design of tailor-made blended products. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 66, 201-213  Integration of life cycle assessment software with tools for economic and sustainability analyses and process simulation for sustainable process design. <i>Journal of Cleaner Production</i> , <b>2014</b> , 71, 98-109  Process Synthesis, Design and Analysis using Process-Group Contribution Method. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 34, 453-458  Sustainable Process Synthesis-Intensification. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 255-260  A Framework for the Modelling of Biphasic Reacting Systems. <i>Computer Aided Chemical Engineering</i>	4 10.3 0.6	<ul><li>56</li><li>75</li><li>7</li><li>4</li></ul>
	Techno-economic evaluation of different CO2-based processes for dimethyl carbonate production. Chemical Engineering Research and Design, 2015, 93, 496-510  Analysis and prediction of the alpha-function parameters used in cubic equations of state. Chemical Engineering Science, 2015, 126, 584-603  Assessment of Recent Process Analytical Technology (PAT) Trends: A Multiauthor Review. Organic Process Research and Development, 2015, 19, 3-62  Data, analysis and modeling of physical properties for process design of systems involving lipids. Fluid Phase Equilibria, 2014, 362, 318-327  Industrial Process Water Treatment and Reuse: A Framework for Synthesis and Design. Industrial & Amp; Engineering Chemistry Research, 2014, 53, 5160-5171  A comprehensive framework for surfactant selection and design for emulsion based chemical product design. Fluid Phase Equilibria, 2014, 362, 288-299  Development and analysis of the Original UNIFAC-CI model for prediction of vaporllquid and solidllquid equilibria. Fluid Phase Equilibria, 2014, 366, 24-44  Hybrid Distillation Schemes 2014, 357-381	Techno-economic evaluation of different CO2-based processes for dimethyl carbonate production.  Chemical Engineering Research and Design, 2015, 93, 496-510  Analysis and prediction of the alpha-function parameters used in cubic equations of state. Chemical Engineering Science, 2015, 126, 584-603  Assessment of Recent Process Analytical Technology (PAT) Trends: A Multiauthor Review. Organic Process Research and Development, 2015, 19, 3-62  Data, analysis and modeling of physical properties for process design of systems involving lipids.  Fluid Phase Equilibria, 2014, 362, 318-327  Industrial Process Water Treatment and Reuse: A Framework for Synthesis and Design. Industrial & A comprehensive framework for surfactant selection and design for emulsion based chemical product design. Fluid Phase Equilibria, 2014, 362, 288-299  Development and analysis of the Original UNIFAC-CI model for prediction of vaporflquid and solidflquid equilibria. Fluid Phase Equilibria, 2014, 366, 24-44  Hybrid Distillation Schemes 2014, 357-381

303	Product Design From Molecules to Formulations to Devices. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 34, 108-123	0.6	3
302	Early Stage Design of a Biorefinery from Castor Oil. Computer Aided Chemical Engineering, 2014, 489-496	<b>4</b> 0.6	2
301	A computer-aided framework for development, identification and management of physiologically-based pharmacokinetic models. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 71, 677-698	4	19
300	The Virtual Product-Process Design Laboratory for Structured Chemical Product Design and Analysis. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 61-66	0.6	7
299	Financial Risk Analysis in the Synthesis and Design of Processing Networks: Balancing Risk and Return. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 33, 1-6	0.6	1
298	Achieving More Sustainable Designs through a Process Synthesis-Intensification Framework. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 31-36	0.6	3
297	Computer-Aided Template for Model Reuse, Development and Maintenance. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 817-822	0.6	6
296	Application of the Generic Modelling Template Approach to Unsaturated Fatty Acid Oxidation and Crystallization Systems. <i>Computer Aided Chemical Engineering</i> , <b>2014</b> , 309-314	0.6	
295	Modeling of the Critical Micelle Concentration (CMC) of Nonionic Surfactants with an Extended Group-Contribution Method. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2013</b> , 52, 12236-12246	3.9	32
294	Introducing uncertainty analysis of nucleation and crystal growth models in Process Analytical Technology (PAT) system design of crystallization processes. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2013</b> , 85, 911-29	5.7	7
293	Optimal processing pathway for the production of biodiesel from microalgal biomass: A superstructure based approach. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 58, 305-314	4	60
292	Applications of process synthesis: Moving from conventional chemical processes towards biorefinery processes. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 49, 217-229	4	54
291	A systematic framework for enterprise-wide optimization: Synthesis and design of processing networks under uncertainty. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 59, 47-62	4	37
290	Prediction of vapor pressure and heats of vaporization of edible oil/fat compounds by group contribution. <i>Fluid Phase Equilibria</i> , <b>2013</b> , 337, 53-59	2.5	41
289	ThermoData Engine (TDE): software implementation of the dynamic data evaluation concept. 8. Properties of material streams and solvent design. <i>Journal of Chemical Information and Modeling</i> , <b>2013</b> , 53, 249-66	6.1	25
288	First principles pharmacokinetic modeling: A quantitative study on Cyclosporin. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 54, 97-110	4	12
287	Prediction of Thermophysical Properties of Liquid Formulated Products <b>2013</b> , 121-151		1
286	Systematic substrate adoption methodology (SAM) for future flexible, generic pharmaceutical production processes. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 58, 344-368	4	13

285	Design methodology for bio-based processing: Biodiesel and fatty alcohol production. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 57, 48-62	4	12
284	Process Systems Engineering, 4. Process and Product Synthesis, Design, and Analysis <b>2013</b> ,		2
283	Computer-aided modeling framework has generic modeling template for catalytic membrane fixed bed reactors. <i>Computer Aided Chemical Engineering</i> , <b>2013</b> , 32, 775-780	0.6	4
282	Molecular structure-based methods of property prediction in application to lipids: A review and refinement. <i>Fluid Phase Equilibria</i> , <b>2013</b> , 357, 2-18	2.5	30
281	SustainProA tool for systematic process analysis, generation and evaluation of sustainable design alternatives. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 50, 8-27	4	89
280	A systematic framework for design of process monitoring and control (PAT) systems for crystallization processes. <i>Computers and Chemical Engineering</i> , <b>2013</b> , 54, 8-23	4	14
279	Process Systems Engineering, 1. Introduction <b>2013</b> ,		2
278	Phenomena Based Methodology for Process Synthesis Incorporating Process Intensification. <i>Industrial &amp; Description of the Computer of the Manager of the Man</i>	3.9	115
277	A method to estimate the enthalpy of formation of organic compounds with chemical accuracy. <i>Fluid Phase Equilibria</i> , <b>2013</b> , 348, 23-32	2.5	34
276	Systematic Sustainable Process Design and Analysis of Biodiesel Processes. <i>Processes</i> , <b>2013</b> , 1, 167-202	2.9	22
275	Design of an Emulsion-based Personal Detergent through a Model-based Chemical Product Design Methodology. <i>Computer Aided Chemical Engineering</i> , <b>2013</b> , 32, 817-822	0.6	5
274	Superstructure optimization of biodiesel production from microalgal biomass. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 111-116		1
273	2. Process intensification in integrated membrane processes <b>2013</b> , 25-58		
272	Design of Sustainable Blended Products using an Integrated Methodology. <i>Computer Aided Chemical Engineering</i> , <b>2013</b> , 835-840	0.6	6
271	Design of a Generic and Flexible Data Structure for Efficient Formulation of Large Scale Network Problems. <i>Computer Aided Chemical Engineering</i> , <b>2013</b> , 661-666	0.6	5
270	Design of formulated products: Experimental component. AICHE Journal, 2012, 58, 173-189	3.6	42
269	The Solvent Selection framework: solvents for organic synthesis, separation processes and ionic liquids solvents. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 30, 762-766	0.6	10
268	Optimal Design of Biodiesel Production Process from Waste Cooking Palm Oil. <i>Procedia Engineering</i> , <b>2012</b> , 42, 1292-1301		16

267	Estimation of environment-related properties of chemicals for design of sustainable processes: development of group-contribution+ (GC+) property models and uncertainty analysis. <i>Journal of Chemical Information and Modeling</i> , <b>2012</b> , 52, 2823-39	6.1	86
266	Simultaneous design of ionic liquid entrainers and energy efficient azeotropic separation processes. <i>Computers and Chemical Engineering</i> , <b>2012</b> , 42, 248-262	4	88
265	Active pharmaceutical ingredient (API) production involving continuous processesa process system engineering (PSE)-assisted design framework. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2012</b> , 82, 437-56	5.7	55
264	Systematic identification of crystallization kinetics within a generic modelling framework. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 31, 945-949	0.6	2
263	A generic process template for continuous pharmaceutical production. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 715-719	0.6	2
262	A framework for the design of reacting systems with phase transfer catalysis. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 30, 757-761	0.6	4
261	An Integrated Methodology for Design of Tailor-Made Blended Products. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 752-756	0.6	9
260	State-of-the-art and progress in the optimization-based simultaneous design and control for chemical processes. <i>AICHE Journal</i> , <b>2012</b> , 58, 1640-1659	3.6	98
259	A robust methodology for kinetic model parameter estimation for biocatalytic reactions. <i>Biotechnology Progress</i> , <b>2012</b> , 28, 1186-96	2.8	39
258	Systematic Multi-Scale Model Development Strategy for the Fragrance Spraying Process and Transport. <i>Chemical Engineering and Technology</i> , <b>2012</b> , 35, 1381-1391	2	5
257	Are safe results obtained when SAFT equations are applied to ordinary chemicals? Part 2: Study of solid I quid equilibria in binary systems. <i>Fluid Phase Equilibria</i> , <b>2012</b> , 318, 61-76	2.5	35
256	Group-contribution+ (GC+) based estimation of properties of pure components: Improved property estimation and uncertainty analysis. <i>Fluid Phase Equilibria</i> , <b>2012</b> , 321, 25-43	2.5	190
255	A systematic synthesis and design methodology to achieve process intensification in (bio) chemical processes. <i>Computers and Chemical Engineering</i> , <b>2012</b> , 36, 189-207	4	37
254	Integrated business and engineering framework for synthesis and design of enterprise-wide processing networks. <i>Computers and Chemical Engineering</i> , <b>2012</b> , 38, 213-223	4	68
253	Design methodology for bio-based processing. Computer Aided Chemical Engineering, 2012, 855-859	0.6	1
252	A Systematic Methodology for Design of Emulsion Based Chemical Products. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 31, 220-224	0.6	15
251	Phenomena-based Process Synthesis and Design to achieve Process Intensification. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 1697-1701	0.6	2
250	Sensitivity of Process Design due to Uncertainties in Property Estimates. <i>Computer Aided Chemical Engineering</i> , <b>2012</b> , 200-204	0.6	2

249	Synthesis and Design of Processing Networks. Computer Aided Chemical Engineering, 2012, 467-471	0.6	9
248	Computer-Aided Approach for Design of Tailor-Made Blended Products <b>2012</b> , 303-310		
247	Chameleonic behavior of ionic liquids and its impact on the estimation of solubility parameters. Journal of Physical Chemistry B, <b>2011</b> , 115, 12879-88	3.4	38
246	Computer-Aided Modelling Methods and Tools <b>2011</b> , 33-76		
245	Modelling of Batch Process Operations <b>2011</b> , 305-336		
244	Constitutive Models <b>2011</b> , 87-124		
243	Distributed Parameter Modelling Applications <b>2011</b> , 213-272		
242	Overview of the Case Studies <b>2011</b> , 77-85		
241	Computer-Aided Modeling Framework for Efficient Model Development, Analysis, and Identification: Combustion and Reactor Modeling. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 5253-5265	3.9	21
240	Design of an Optimal Biorefinery. Computer Aided Chemical Engineering, 2011, 371-376	0.6	6
239	Selection of Prediction Methods for Thermophysical Properties for Process Modeling and Product Design of Biodiesel Manufacturing. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 6809-68	3 <i>⋛</i> ∙9	75
238	Lipid Processing Technology: Building a Multilevel Modeling Network. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 29, 256-260	0.6	3
237	Integration of Generic Multi-dimensional Model and Operational Policies for Batch Cooling Crystallization. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 86-90	0.6	
236	Robust Market Launch Planning for a Multi-Echelon Pharmaceutical Supply Chain. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 935-939	0.6	1
235	A systematic methodology for the design of continuous active pharmaceutical ingredient production processes. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 271-275	0.6	1
234	Computer Aided Flowsheet Design using Group Contribution Methods. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 29, 321-325	0.6	7
233	Chemicals-Based Formulation Design: Virtual Experimentations. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 29, 1588-1592	0.6	6
232	Analysis and application of GCPlus models for property prediction of organic chemical systems. <i>Fluid Phase Equilibria</i> , <b>2011</b> , 302, 274-283	2.5	8

231	Design of formulated products: A systematic methodology. <i>AICHE Journal</i> , <b>2011</b> , 57, 2431-2449	3.6	103
230	Lipid technology: Property prediction and process design/analysis in the edible oil and biodiesel industries. <i>Fluid Phase Equilibria</i> , <b>2011</b> , 302, 284-293	2.5	28
229	The virtual Product-Process Design laboratory to manage the complexity in the verification of formulated products. <i>Fluid Phase Equilibria</i> , <b>2011</b> , 302, 294-304	2.5	20
228	Methodology for design and analysis of reactive distillation involving multielement systems. <i>Chemical Engineering Research and Design</i> , <b>2011</b> , 89, 1295-1307	5.5	17
227	Simultaneous Design of Ionic Liquids and Azeotropic Separation Processes. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 1578-1582	0.6	4
226	A generic multi-dimensional model-based system for batch cooling crystallization processes. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 828-843	4	20
225	Optimal design of a multi-product biorefinery system. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 1752-1766	4	130
224	A combined heuristic and indicator-based methodology for design of sustainable chemical process plants. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 1343-1358	4	23
223	Design of tailor-made chemical blend using a decomposition-based computer-aided approach 2011,		2
222	Modeling and design of reacting systems with phase transfer catalysis. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 266-270	0.6	1
221	Application of computer-aided multi-scale modelling framework - Aerosol case study. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 29, 16-20	0.6	5
220	Phenomena-based Process Synthesis and Design to achieve Process Intensification. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 29, 221-225	0.6	5
219	A retrofit strategy to achieve Bast, Flexible, Future (F3) harmaceutical production processes. <i>Computer Aided Chemical Engineering</i> , <b>2011</b> , 29, 291-295	0.6	8
218	Modelling for Bio-,Agro- and Pharma-Applications <b>2011</b> , 363-432		
217	Parameter Estimation <b>2011</b> , 337-362		
216	Computer Aided Modelling IDpportunities and Challenges <b>2011</b> , 433-437		
215	SIMULATION OF THIN-FILM DEODORIZERS IN PALM OIL REFINING. <i>Journal of Food Process Engineering</i> , <b>2010</b> , 33, 208-225	2.4	6
214	A computer-aided framework for regression and multi-scale modelling needs in innovative product-process engineering. <i>Computer Aided Chemical Engineering</i> , <b>2010</b> , 379-384	0.6	2

213	Control of Process Operations and Monitoring of Product Qualities through Generic Model-based in Batch Cooling Crystallization. <i>Computer Aided Chemical Engineering</i> , <b>2010</b> , 28, 613-618	0.6	4
212	A systematic synthesis and design methodology to achieve process intensification in (bio) chemical processes. <i>Computer Aided Chemical Engineering</i> , <b>2010</b> , 241-246	0.6	4
211	Design of Sustainable Processes: Systematic Generation & Evaluation of Alternatives <b>2010</b> , 267-274		
210	Synthesis, Design and Analysis of Downstream Separation in Bio-refinery Processes through a Group-Contribution Approach. <i>Computer Aided Chemical Engineering</i> , <b>2010</b> , 28, 1147-1152	0.6	3
209	The calculation of thermodynamic properties of molecules. <i>Chemical Society Reviews</i> , <b>2010</b> , 39, 1764-79	58.5	79
208	Sustainable Chemical Process Design <b>2010</b> , 159-187		
207	The Virtual Product-Process Laboratory applied to personal care formulations. <i>Computer Aided Chemical Engineering</i> , <b>2010</b> , 1297-1302	0.6	2
206	Are safe results obtained when the PC-SAFT equation of state is applied to ordinary pure chemicals?. Fluid Phase Equilibria, 2010, 295, 76-92	2.5	109
205	Process intensification: A perspective on process synthesis. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2010</b> , 49, 547-558	3.7	150
204	A model-based systems approach to pharmaceutical product-process design and analysis. <i>Chemical Engineering Science</i> , <b>2010</b> , 65, 5757-5769	4.4	76
203	ICAS-PAT: A software for design, analysis and validation of PAT systems. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 1108-1136	4	38
202	Multiple steady states detection in a packed-bed reactive distillation column using bifurcation analysis. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 460-466	4	19
201	Integration of process design and controller design for chemical processes using model-based methodology. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 683-699	4	63
200	An ontological knowledge-based system for the selection of process monitoring and analysis tools. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 1137-1154	4	35
199	A model-based methodology for simultaneous design and control of a bioethanol production process. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 2043-2061	4	30
198	Heterogeneous Catalytic Distillation - A Patent Review. <i>Recent Patents on Chemical Engineering</i> , <b>2010</b> , 3, 208-229		12
197	Modelling for PSE and Product-Process Design. Computer Aided Chemical Engineering, 2009, 27, 7-12	0.6	3
196	The Virtual Product-Process Design Laboratory as a Tool for Product Development. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 26, 249-254	0.6	4

195	Multiscale Modelling Framework for Chemical Product-Process Design. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 26, 495-500	0.6	10
194	A software tool for design of process monitoring and analysis systems. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 26, 321-326	0.6	
193	A Group Contribution Method for Mineral Flotation Circuit Design. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 27, 1065-1070	0.6	
192	Model-based retrofit design and analysis of petrochemical processes. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 105-110	0.6	1
191	Integrated Design of Solvent-Based Extractive Separation Processes Including Experimental Validation. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 201-206	0.6	
190	Prediction of heat capacities and heats of vaporization of organic liquids by group contribution methods. <i>Fluid Phase Equilibria</i> , <b>2009</b> , 283, 49-55	2.5	73
189	Biorefining: Computer aided tools for sustainable design and analysis of bioethanol production. <i>Chemical Engineering Research and Design</i> , <b>2009</b> , 87, 1171-1183	5.5	84
188	Model-based computer-aided framework for design of process monitoring and analysis systems. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 22-42	4	66
187	Computer aided design, analysis and experimental investigation of membrane assisted batch reaction eparation systems. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 551-574	4	17
186	A general model for membrane-based separation processes. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 644-659	4	36
185	Computer-aided polymer design using group contribution plus property models. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 1004-1013	4	33
184	Design of batch operations: Systematic methodology for generation and analysis of sustainable alternatives. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 2075-2090	4	28
183	A Model-Based Methodology for Simultaneous Design and Control of a Bioethanol Production Process. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 27, 237-242	0.6	
182	The Virtual Product-Process Design Laboratory for Design and Analysis of Formulations. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 825-830	0.6	6
181	Thermodynamic Property Modeling for Chemical Process and Product Engineering: Some Perspectives. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 4619-4637	3.9	40
180	Sustainability Analysis of Chemical Processes Plants Using a Hybrid Heuristic and Indicator Model. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 837-842	0.6	1
179	Multiscale Modelling for Computer Aided Polymer Design. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 27, 213-218	0.6	2
178	Model-based retrofit design and analysis of petrochemical processes <b>2009</b> , 387-393		

### (2008-2009)

177	A New Model-Based Methodology for Simultaneous Design and Control of Reaction-Separation System with Recycle. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 26, 839-845	0.6	2
176	Systematic Representation and Property Prediction of Fatty Systems for Process Design/Analysis in the Oil and Fat Industry. <i>Computer Aided Chemical Engineering</i> , <b>2009</b> , 27, 819-824	0.6	
175	Biodiesel Process Design through a Computer-aided Molecular Design Approach <b>2009</b> , 979-986		2
174	Determination of Optimal Design and Control Decisions for Reactor-Separator Systems with Recycle <b>2009</b> , 593-602		
173	Modelling and simulation of vegetable oil processes. <i>Food and Bioproducts Processing</i> , <b>2008</b> , 86, 87-95	4.9	15
172	Systematic Selection of Green Solvents for Organic Reacting Systems. <i>Chinese Journal of Chemical Engineering</i> , <b>2008</b> , 16, 376-383	3.2	30
171	Combined Group-Contribution and Atom Connectivity Index-Based Methods for Estimation of Surface Tension and Viscosity. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 7940-7954	3.9	71
170	Model-Based Calculation of Solid Solubility for Solvent Selection? A Review. <i>Industrial &amp; amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 5234-5242	3.9	65
169	Preface to the John P. Ollonnell Festschrift. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 4971-4972	3.9	
168	Atomistic Simulation of the Sorption of Small Gas Molecules in Polyisobutylene. <i>Macromolecules</i> , <b>2008</b> , 41, 6228-6238	5.5	16
167	Off-line design of PAT systems for on-line applications. <i>Computer Aided Chemical Engineering</i> , <b>2008</b> , 25, 423-428	0.6	1
166	Integrated design of solvent-based extractive separation processes. <i>Computer Aided Chemical Engineering</i> , <b>2008</b> , 121-126	0.6	4
165	CAPE methods and tools for systematic analysis of new chemical product design and development. <i>Computer Aided Chemical Engineering</i> , <b>2008</b> , 997-1002	0.6	3
164	Modeling and analysis of vacuum membrane distillation for the recovery of volatile aroma compounds from black currant juice. <i>Journal of Membrane Science</i> , <b>2008</b> , 320, 442-455	9.6	42
163	Design of sustainable chemical processes: Systematic retrofit analysis generation and evaluation of alternatives. <i>Chemical Engineering Research and Design</i> , <b>2008</b> , 86, 328-346	5.5	96
162	Solvents in organic synthesis: Replacement and multi-step reaction systems. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 2420-2444	4	55
161	Use of CAPE-OPEN standards in the interoperability between modelling tools (MoT) and process simulators (Simulis: Thermodynamics and ProSimPlus). <i>Chemical Engineering Research and Design</i> , <b>2008</b> , 86, 823-833	5.5	16
160	A systematic synthesis framework for extractive distillation processes. <i>Chemical Engineering Research and Design</i> , <b>2008</b> , 86, 781-792	5.5	128

159	Methodology for the Design and Analysis of ReactionBeparation Systems with Recycle. 2. Design and Control Integration. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 8084-8100	3.9	12
158	Methodology for the Design and Analysis of ReactionBeparation Systems with Recycle. 1. The Design Perspective. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 8066-8083	3.9	5
157	Process systems engineering and CAPE (what next?. Computer Aided Chemical Engineering, 2007, 1-5	0.6	7
156	A method for prediction of UNIFAC group interaction parameters. <i>AICHE Journal</i> , <b>2007</b> , 53, 1620-1632	3.6	18
155	Computer-aided framework for pure component properties and phase equilibria prediction for organic systems. <i>Fluid Phase Equilibria</i> , <b>2007</b> , 261, 199-204	2.5	16
154	Polymer property modeling using grid technology for design of structured products. <i>Fluid Phase Equilibria</i> , <b>2007</b> , 261, 58-63	2.5	17
153	An experimental verification of morphology of ibuprofen crystals from CAMD designed solvent. <i>Chemical Engineering Science</i> , <b>2007</b> , 62, 3276-3281	4.4	22
152	Chemical Product Design 🖪 Brief Overview. Computer Aided Chemical Engineering, 2007, 1-20	0.6	1
151	Product Development I What to Make and How to Make. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 473-489	0.6	1
150	A hierarchal approach based on reverse design algorithm for simultaneous design and analysis of product and processes <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 24, 461-466	0.6	
149	Case Studies in Chemical Product Design (Use of CAMD Techniques. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 435-458	0.6	6
148	Computer-aided multiscale modelling for chemical process engineering. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 24, 207-212	0.6	13
147	A computer aided framework for prediction of properties of organic systems. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 24, 141-146	0.6	2
146	Simultaneous polymer property modeling using grid technology for structured products. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 321-326	0.6	
145	Model-based hybrid reaction-separation process design. <i>Computer Aided Chemical Engineering</i> , <b>2007</b> , 395-400	0.6	2
144	Mathematical and numerical analysis of classes of property models. <i>Fluid Phase Equilibria</i> , <b>2006</b> , 250, 1-32	2.5	35
143	Design of sustainable processes: Systematic generation & evaluation of alternatives. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 817-822	0.6	5
142	Computer aided methodology for simultaneous synthesis, design & analysis of chemical products-processes. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 21, 853-858	0.6	2

### (2005-2006)

141	Static/dynamic analysis and controllability issues in reactive distillation columns. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 21, 1323-1328	0.6	О
140	Structural design of polymers for membrane based separation processes using reverse simulation approach. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 21, 689-694	0.6	1
139	Computer aided methods & tools for separation & purification of fine chemical & pharmaceutical products. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 21, 805-810	0.6	О
138	Operating Pressure Sensitivity of DistillationControl Structure Consequences. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 8310-8318	3.9	11
137	Generic hybrid models of solvent-based reactive systems combined with membrane separation system. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 21, 527-532	0.6	2
136	Computer Aided Polymer Design Using Group Contribution Techniques. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 257-299	0.6	
135	Thermal pretreatment of the solid fraction of manure: impact on the biogas reactor performance and microbial community. <i>Water Science and Technology</i> , <b>2006</b> , 53, 59-67	2.2	65
134	Model discrimination and parameter estimation through sensitivity analysis. <i>Computer Aided Chemical Engineering</i> , <b>2006</b> , 625-631	0.6	2
133	A computer-aided molecular design framework for crystallization solvent design. <i>Chemical Engineering Science</i> , <b>2006</b> , 61, 1247-1260	4.4	124
132	Computer-Aided Model Based Analysis for Design and Operation of a Copolymerization Process. <i>Chemical Engineering Research and Design</i> , <b>2006</b> , 84, 911-931	5.5	4
131	Computer-Aided Modelling of Short-Path Evaporation for Chemical Product Purification, Analysis and Design. <i>Chemical Engineering Research and Design</i> , <b>2006</b> , 84, 583-594	5.5	13
130	A New Retrofit Design Methodology for Identifying, Developing, and Evaluating Retrofit Projects for Cost-Efficiency Improvements in Continuous Chemical Processes. <i>Industrial &amp; amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 1842-1853	3.9	20
129	Design and control structure integration from a model-based methodology for reaction-separation with recycle systems. <i>Computer Aided Chemical Engineering</i> , <b>2005</b> , 1519-1524	0.6	3
128	A New Decomposition-Based Computer-Aided Molecular/Mixture Design Methodology for the Design of Optimal Solvents and Solvent Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 4785-4797	3.9	150
127	Automatic Creation of Missing Groups through Connectivity Index for Pure-Component Property Prediction. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 7262-7269	3.9	67
126	Estimation of the Enthalpy of Vaporization and the Entropy of Vaporization for Pure Organic Compounds at 298.15 K and at Normal Boiling Temperature by a Group Contribution Method. <i>Industrial &amp; Description Communication Research</i> , 2005, 44, 8436-8454	3.9	62
125	A framework for product analysis: Modelling and design of release and uptake of pesticides. <i>Computer Aided Chemical Engineering</i> , <b>2005</b> , 20, 733-738	0.6	1
124	Short-path evaporation for chemical product modelling, analysis and design. <i>Computer Aided Chemical Engineering</i> , <b>2005</b> , 841-846	0.6	1

123	Design and operation of copolymerisation reactors through modelling and nonlinear analysis. <i>Computer Aided Chemical Engineering</i> , <b>2005</b> , 20, 439-444	0.6	
122	Predictive property models for use in design of controlled release of pesticides. <i>Fluid Phase Equilibria</i> , <b>2005</b> , 228-229, 127-133	2.5	19
121	Method for selection of solvents for promotion of organic reactions. <i>Computers and Chemical Engineering</i> , <b>2005</b> , 29, 1661-1676	4	124
120	Model-based computer-aided design for controlled release of pesticides. <i>Computers and Chemical Engineering</i> , <b>2005</b> , 30, 28-41	4	17
119	Group contribution based process flowsheet synthesis, design and modelling. <i>Fluid Phase Equilibria</i> , <b>2005</b> , 228-229, 141-146	2.5	48
118	Novel group contribution based approach in process flowsheet synthesis, design and modelling. <i>Computer Aided Chemical Engineering</i> , <b>2005</b> , 643-648	0.6	1
117	Integrated chemical product-process design: CAPE perspectives. <i>Computer Aided Chemical Engineering</i> , <b>2005</b> , 20, 21-30	0.6	3
116	A systematic approach for the design and analysis of reaction-separation systems with recycle. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 18, 469-474	0.6	
115	Aspects of modelling and model identification for bioprocesses through a computer-aided modelling system. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 1123-1128	0.6	1
114	Models for Liquid Phase Activity Coefficients - UNIFAC. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 59-74	0.6	3
113	Optimal (Solvent) mixture design through a decomposition based CAMD methodology. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 18, 217-222	0.6	3
112	Chapter 13: Property Models in Computation of Phase Equilibria. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 309-337	0.6	1
111	Role of Properties and their Models in Process and Product Design. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 27-41	0.6	1
110	Chapter 14: Application of Property Models in Chemical Product Design. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 339-369	0.6	1
109	Challenges and Opportunities for Property Modeling. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 407-416	0.6	
108	Computer-Aided Methods and Tools for Chemical Product Design. <i>Chemical Engineering Research and Design</i> , <b>2004</b> , 82, 1494-1504	5.5	79
107	Design and synthesis of distillation systems using a driving-force-based approach. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2004</b> , 43, 251-262	3.7	70
106	A novel framework for simultaneous separation process and product design. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2004</b> , 43, 595-608	3.7	154

# (2003-2004)

105	Chemical product design: challenges and opportunities. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 28, 2441-2457	4	240
104	Introduction to Computer Aided Property Estimation. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 3-26	0.6	10
103	Pure Component Property Estimation: Models & Databases. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 45-57	0.6	2
102	Computational Algorithms for Electrolyte System Properties. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 19, 371-404	0.6	
101	Computer-aided and predictive models for design of controlled release of pesticides. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 301-306	0.6	2
100	Actuator Selection Based Upon Model Insights for an Energy Integrated Distillation Column. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2004</b> , 37, 131-136		
99	Nonlinear behavior analysis of heat integrated distillation. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 18, 691-696	0.6	
98	An Integrated Computer Aided System for Generation and Evaluation of Sustainable Process Alternatives <b>2004</b> , 183-214		2
97	A modelling tool for different stages of the process life. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 209-249	0.6	16
96	Challenges and Opportunities for CAMD. Computer Aided Chemical Engineering, 2003, 12, 357-377	0.6	
95	A Hybrid CAMD Method. Computer Aided Chemical Engineering, 2003, 129-165	0.6	2
94	Generation and screening of retrofit alternatives using a systematic indicator-based retrofit analysis method. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 14, 17-22	0.6	
93	A new modeling approach for future challenges in process and product design. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 101-106	0.6	
92	Synthesis, design and operational modelling of batch processes: An integrated approach. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 14, 245-250	0.6	
91	Integration of design and control for energy integrated distillation. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 14, 449-454	0.6	3
90	Analysis of optimal operation of an energy integrated distillation plant. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 15, 940-945	0.6	
89	Integrated synthesis, design and modelling of batch operations. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 15, 990-995	0.6	
88	Property cluster based visual technique for synthesis and design of formulations. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 1175-1180	0.6	7

87	Reverse problem formulation based techniques for process and product synthesis and design. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 451-456	0.6	10
86	An integrated computer-aided system for generation and evaluation of sustainable process alternatives. <i>Clean Technologies and Environmental Policy</i> , <b>2003</b> , 5, 209-225	4.3	19
85	Screening for profitable retrofit options of chemical processes: A new method. <i>AICHE Journal</i> , <b>2003</b> , 49, 2400-2418	3.6	35
84	Graphical and stage-to-stage methods for reactive distillation column design. <i>AICHE Journal</i> , <b>2003</b> , 49, 2822-2841	3.6	41
83	Process-Insights-Based Control Structuring of an Integrated Distillation Pilot Plant. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 4620-4627	3.9	4
82	Blanket Wash Solvent Blend Design Using Interval Analysis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2003</b> , 42, 516-527	3.9	40
81	Introduction to CAMD. Computer Aided Chemical Engineering, 2003, 12, 3-21	0.6	6
80	Computer aided model analysis and dynamic simulation of a wastewater treatment plant. <i>Clean Technologies and Environmental Policy</i> , <b>2002</b> , 4, 100-114	4.3	10
79	Performance analysis of a denitrifying wastewater treatment plant. <i>Clean Technologies and Environmental Policy</i> , <b>2002</b> , 4, 171-182	4.3	9
78	Property modelling and simulation for product and process design. <i>Fluid Phase Equilibria</i> , <b>2002</b> , 194-197, 43-59	2.5	25
77	Conceptual design and analysis methodology for crystallization processes with electrolyte systems. <i>Fluid Phase Equilibria</i> , <b>2002</b> , 194-197, 783-803	2.5	7
76	Integration of design and control through model analysis. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 213-225	4	31
75	Modelling Frameworks. Computer Aided Chemical Engineering, 2002, 11, 89-125	0.6	2
74	A General Framework for the Synthesis and Operational Design of Batch Processes. <i>Computer Aided Chemical Engineering</i> , <b>2002</b> , 10, 289-294	0.6	1
73	Tools Integration for Computer Aided Process Engineering Applications. <i>Computer Aided Chemical Engineering</i> , <b>2002</b> , 11, 485-513	0.6	
<del>7</del> 2	Property Integration New Approach for Simultaneous Solution of Process and Molecular Design Problems. <i>Computer Aided Chemical Engineering</i> , <b>2002</b> , 79-84	0.6	17
71	Estimation of Mixture Properties from First- and Second-Order Group Contributions with the UNIFAC Model. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 3260-3273	3.9	46
70	Case Studies in Design & Analysis. Computer Aided Chemical Engineering, 2002, 11, 591-634	0.6	3

### (2000-2002)

69	Group-Contribution-Based Estimation of Octanol/Water Partition Coefficient and Aqueous Solubility. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2002</b> , 41, 6623-6633	3.9	68
68	The interactions of design control and operability in reactive distillation systems. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 735-746	4	75
67	The interactions of design, control and operability in reactive distillation systems. <i>Computer Aided Chemical Engineering</i> , <b>2001</b> , 997-1002	0.6	4
66	Computer aided design and analysis of separation processes with electrolyte systems. <i>Computer Aided Chemical Engineering</i> , <b>2001</b> , 9, 559-566	0.6	
65	Modeling, simulation and control of an industrial electrochemical process. <i>Computer Aided Chemical Engineering</i> , <b>2001</b> , 9, 773-780	0.6	
64	Group-contribution based estimation of pure component properties. <i>Fluid Phase Equilibria</i> , <b>2001</b> , 183-184, 183-208	2.5	781
63	A computer aided system for correlation and prediction of phase equilibrium data. <i>Fluid Phase Equilibria</i> , <b>2001</b> , 185, 13-20	2.5	4
62	Analysis of infinite dilution activity coefficients of solutes in hydrocarbons from UNIFAC. <i>Fluid Phase Equilibria</i> , <b>2001</b> , 181, 163-186	2.5	20
61	Properties and CAPE: from present uses to future challenges. <i>Computers and Chemical Engineering</i> , <b>2001</b> , 25, 3-14	4	34
60	Integration of thermodynamic insights and MINLP optimization for the synthesis, design and analysis of process flowsheets. <i>Computers and Chemical Engineering</i> , <b>2001</b> , 25, 73-83	4	38
59	The CAPEC Database [] Journal of Chemical & amp; Engineering Data, 2001, 46, 1041-1044	2.8	43
58	A novel interactive MINLP solver for CAPE applications. <i>Computer Aided Chemical Engineering</i> , <b>2000</b> , 7-	1 <b>2</b> 5.6	1
57	Analysis of input-output controllability in reactive distillation using the element model. <i>Computer Aided Chemical Engineering</i> , <b>2000</b> , 157-162	0.6	
56	Simple new algorithm for distillation column design. AICHE Journal, 2000, 46, 1271-1274	3.6	66
55	Computer aided design and analysis of separation processes with electrolyte systems. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 645-651	4	4
54	Integration of design and control through model analysis. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 967-973	4	11
53	A multi-step and multi-level approach for computer aided molecular design. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 677-683	4	171
52	Determination of optimal energy efficient separation schemes based on driving forces. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 253-259	4	18

51	Design and Analysis of Separation by Distillation. <i>Chemical Engineering Research and Design</i> , <b>2000</b> , 78, 217-230	5.5	4
50	Integrated System for Design and Analysis of Separation Processes with Electrolyte Systems. <i>Chemical Engineering Research and Design</i> , <b>2000</b> , 78, 763-772	5.5	6
49	Computer aided technique for pollution prevention and treatment. <i>Computer Aided Chemical Engineering</i> , <b>2000</b> , 949-954	0.6	
48	Using driving force based separation efficiency curves within an integrated system for process synthesis/design. <i>Computer Aided Chemical Engineering</i> , <b>2000</b> , 955-960	0.6	5
47	Design of environmentally benign processes: integration of solvent design and separation process synthesis. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, 1395-1414	4	158
46	Integration of thermodynamic insights and MINLP optimization for the synthesis, design and analysis of process flowsheets. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S23-S26	4	1
45	Integrated system for design and analysis of industrial processes with electrolyte system. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S121-S124	4	1
44	Exploring the interaction between flows and composition in reactive distillation. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S339-S342	4	2
43	A hybrid approach for reactive separation systems. Computers and Chemical Engineering, 1999, 23, S419	9- <u>5</u> 422	4
42	A computer aided modeling system. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S673-S678	4	18
42 41	A computer aided modeling system. <i>Computers and Chemical Engineering</i> , <b>1999</b> , 23, S673-S678  Computer-aided molecular design with combined molecular modeling and group contribution. <i>Fluid Phase Equilibria</i> , <b>1999</b> , 158-160, 337-347	2.5	18
	Computer-aided molecular design with combined molecular modeling and group contribution. <i>Fluid</i>		
41	Computer-aided molecular design with combined molecular modeling and group contribution. <i>Fluid Phase Equilibria</i> , <b>1999</b> , 158-160, 337-347  Modeling, simulation and optimization of membrane-based gas separation systems. <i>Chemical</i>	2.5	122
41 40	Computer-aided molecular design with combined molecular modeling and group contribution. <i>Fluid Phase Equilibria</i> , <b>1999</b> , 158-160, 337-347  Modeling, simulation and optimization of membrane-based gas separation systems. <i>Chemical Engineering Science</i> , <b>1999</b> , 54, 943-955  A Hybrid Modelling Approach for Separation Systems Involving Distillation. <i>Chemical Engineering</i>	2.5 4·4	122 45
41 40 39	Computer-aided molecular design with combined molecular modeling and group contribution. <i>Fluid Phase Equilibria</i> , <b>1999</b> , 158-160, 337-347  Modeling, simulation and optimization of membrane-based gas separation systems. <i>Chemical Engineering Science</i> , <b>1999</b> , 54, 943-955  A Hybrid Modelling Approach for Separation Systems Involving Distillation. <i>Chemical Engineering Research and Design</i> , <b>1999</b> , 77, 519-534	2.5 4·4	122 45 23
41 40 39 38	Computer-aided molecular design with combined molecular modeling and group contribution. Fluid Phase Equilibria, 1999, 158-160, 337-347  Modeling, simulation and optimization of membrane-based gas separation systems. Chemical Engineering Science, 1999, 54, 943-955  A Hybrid Modelling Approach for Separation Systems Involving Distillation. Chemical Engineering Research and Design, 1999, 77, 519-534  Computer Aided Product Design and Pollution Prevention Through Substitution 1999, 299-315  Simulation and optimization of fractional crystallization processes. Chemical Engineering Science,	2.5 4.4 5.5	122 45 23
41 40 39 38 37	Computer-aided molecular design with combined molecular modeling and group contribution. Fluid Phase Equilibria, 1999, 158-160, 337-347  Modeling, simulation and optimization of membrane-based gas separation systems. Chemical Engineering Science, 1999, 54, 943-955  A Hybrid Modelling Approach for Separation Systems Involving Distillation. Chemical Engineering Research and Design, 1999, 77, 519-534  Computer Aided Product Design and Pollution Prevention Through Substitution 1999, 299-315  Simulation and optimization of fractional crystallization processes. Chemical Engineering Science, 1998, 53, 1551-1564  A generalized reactive separation unit model. Modelling and simulation aspects. Computers and	2.5 4.4 5.5	122 45 23 1

33	An integrated computer aided system for integrated design of chemical processes. <i>Computers and Chemical Engineering</i> , <b>1997</b> , 21, 1135-1146	4	116
32	Dynamic optimization of differential-algebraic systems through the dynamic simulator DYNSIM. <i>Computers and Chemical Engineering</i> , <b>1997</b> , 21, S727-S732	4	1
31	Correlation and prediction of thermal properties and phase behaviour for a class of aqueous electrolyte systems. <i>Chemical Engineering Science</i> , <b>1996</b> , 51, 3675-3683	4.4	128
30	A computer aided system for generation of problem specific process models. <i>Computers and Chemical Engineering</i> , <b>1996</b> , 20, S145-S150	4	7
29	An integreated approach to process/product design and synthesis based on properties-process relationship. <i>Computers and Chemical Engineering</i> , <b>1996</b> , 20, S151-S156	4	14
28	Towards the development of a second-order approximation in activity coefficient models based on group contributions. <i>Fluid Phase Equilibria</i> , <b>1996</b> , 118, 1-12	2.5	22
27	Molecular structure based estimation of properties for process design. <i>Fluid Phase Equilibria</i> , <b>1996</b> , 116, 75-86	2.5	42
26	Prediction of supercritical fluid-liquid equilibria for carbon dioxide and fish oil related compounds through the equation of state lexcess function (EOS-gE) approach. <i>Fluid Phase Equilibria</i> , <b>1996</b> , 116, 510-517	2.5	10
25	Estimation of the acentric factor and the liquid molar volume at 298 K using a new group contribution method. <i>Fluid Phase Equilibria</i> , <b>1995</b> , 103, 11-22	2.5	202
24	Synthesis and analysis of processes with electrolyte mixtures. <i>Computers and Chemical Engineering</i> , <b>1995</b> , 19, 27-32	4	5
23	Development and application of problem specific lbcallprocess simulators in cape. Computers and		
	Chemical Engineering, <b>1995</b> , 19, 311-316	4	2
22		4	5
22	Chemical Engineering, 1995, 19, 311-316  An integrated computer aided system for integrated design and control of chemical processes.		
	Chemical Engineering, 1995, 19, 311-316  An integrated computer aided system for integrated design and control of chemical processes.  Computers and Chemical Engineering, 1995, 19, 489-494  Correlation and Prediction of Phase Equilibria of Mixtures with Supercritical Compounds for a Class	4	5
21	Chemical Engineering, 1995, 19, 311-316  An integrated computer aided system for integrated design and control of chemical processes.  Computers and Chemical Engineering, 1995, 19, 489-494  Correlation and Prediction of Phase Equilibria of Mixtures with Supercritical Compounds for a Class of Equations of State. ACS Symposium Series, 1995, 140-153  Model Prediction of Supercritical Fluid-Liquid Equilibria for Carbon Dioxide and Fish Oil Related	0.4	5 3
21	Chemical Engineering, 1995, 19, 311-316  An integrated computer aided system for integrated design and control of chemical processes.  Computers and Chemical Engineering, 1995, 19, 489-494  Correlation and Prediction of Phase Equilibria of Mixtures with Supercritical Compounds for a Class of Equations of State. ACS Symposium Series, 1995, 140-153  Model Prediction of Supercritical Fluid-Liquid Equilibria for Carbon Dioxide and Fish Oil Related Compounds. Industrial & Dioxide Engineering Chemistry Research, 1995, 34, 2473-2484  Separation process design and synthesis based on thermodynamic insights. Chemical Engineering	4 0.4 3.9	5 3 25
21 20 19	An integrated computer aided system for integrated design and control of chemical processes.  Computers and Chemical Engineering, 1995, 19, 489-494  Correlation and Prediction of Phase Equilibria of Mixtures with Supercritical Compounds for a Class of Equations of State. ACS Symposium Series, 1995, 140-153  Model Prediction of Supercritical Fluid-Liquid Equilibria for Carbon Dioxide and Fish Oil Related Compounds. Industrial & Diagneering Chemistry Research, 1995, 34, 2473-2484  Separation process design and synthesis based on thermodynamic insights. Chemical Engineering Science, 1995, 50, 511-530  New group contribution method for estimating properties of pure compounds. AICHE Journal, 1994	4 0.4 3.9 4.4	5 3 25 143

15	Computer aided molecular design: a novel method for optimal solvent selection. <i>Fluid Phase Equilibria</i> , <b>1993</b> , 82, 47-54	2.5	202
14	Design and analysis of chemical processes through DYNSIM. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1992</b> , 31, 244-254	3.9	21
13	Modelling for dynamic simulation of chemical processes: the index problem. <i>Chemical Engineering Science</i> , <b>1992</b> , 47, 1311-1315	4.4	23
12	A group contribution approach to computer-aided molecular design. <i>AICHE Journal</i> , <b>1991</b> , 37, 1318-133	<b>2</b> 3.6	203
11	Combined phase and reaction equilibria calculations using the uniwaals equation of state. <i>Fluid Phase Equilibria</i> , <b>1989</b> , 53, 89-96	2.5	3
10	A knowledge based system for the selection of thermodynamic models. <i>Computers and Chemical Engineering</i> , <b>1989</b> , 13, 397-404	4	23
9	Simultaneous steady state and dynamic simulation of chemical processes. <i>Computers and Chemical Engineering</i> , <b>1989</b> , 13, 563-570	4	
8	A strategy for the design and selection of solvents for separation processes <i>Fluid Phase Equilibria</i> , <b>1986</b> , 29, 125-132	2.5	96
7	Prediction of properties of petroleum mixtures: improvement in reliability and validity of tuned parameters. <i>Fluid Phase Equilibria</i> , <b>1986</b> , 29, 575-582	2.5	4
6	CONTROL STUDIES IN AN EXTRACTIVE DISTILLATION PROCESS: SIMULATION AND MEASUREMENT STRUCTURE. <i>Chemical Engineering Communications</i> , <b>1986</b> , 40, 281-302	2.2	5
5	A simple algorithm for sensitivity and operability analysis of separation processes. <i>Industrial &amp; Engineering Chemistry Process Design and Development</i> , <b>1985</b> , 24, 42-48		7
4	A liquid-liquid extractor model based on UNIFAC. Computers and Chemical Engineering, 1984, 8, 127-136	4	4
3	Studies of distributed parameter systems: Decoupling the state-parameter estimation problem. <i>Chemical Engineering Science</i> , <b>1983</b> , 38, 1831-1843	4.4	5
2	Integrated Chemical Product-Process Design: CAPE Perspectives647-666		O
1	Next generation pure component property estimation models: With and without machine learning techniques. <i>AICHE Journal</i> .e17469	3.6	5