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ISI Papers (selection 2015-2022)

1. Popescu, M.; Iancu P., Pleșu, V., Bildea C.S., Todașca C.M. Different spectrophotometric methods for simultaneous quantification of lycopene and β -carotene from a binary mixture, *LWT - Food Science and Technology*, 2022, 160, Factor impact 4.952
2. Ștefan, N.G.; Iancu, P.; Pleșu, V.; Călinescu, I.; Ignat, N.D. Highly Efficient Deacidification Process for *Camelina sativa* Crude Oil by Molecular Distillation. *Sustainability*, 13, 2818, 2021, WOS:000628579400001, Factor impact 3.251, ISSN: 2071-1050
3. Ștefan N.G., Iancu P., Plesu V., Calinescu I., Vapor pressure of two fatty acids alkyl esters: experimental vs. predicted data, *University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science*, 81(4), 45-58, 2020, WOS:000501994100005, Factor impact 0.49, ISSN: 1454-2331
4. Popescu M., Iancu P., Plesu V., Todasca M.C., Bildea C.S., Effect of different drying processes on lycopene recovery from tomato peels of crystal variety, *University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science*, 82(1), 85-102, 2019, WOS:000550837300008, Factor impact 0.49, ISSN: 1454-2331
5. Dimian, A.C., Iancu, P., Plesu, V., Bonet-Ruiz, A.E., Bonet-Ruiz, J., Castor oil biorefinery: Conceptual process design, simulation and economic analysis, *Chemical Engineering Research & Design*, 141, 198-219, 2019, WOS:000456640800016, Factor impact 3,739, ISSN:0263-8762
6. Risco, A., Plesu, V., , Bonet, J., Bonet-Ruiz, A.E., Iancu, P., Llorens, J. , Pressure selection for non-reactive and reactive pressure-swing distillation, *Chemical Engineering and Progressing – Process Intensification*, 135, 9-21, 2019, WOS:000457511600002, Factor impact 4.237, ISSN: 0255-2701
7. Pleșu, V., Marton G.I., Marton A.L., Iancu, P., Ruiz, A.E.B, Bonet, J., DIMCARB - A Quantum Mechanics Study of its Structure, *Revista de chimie*, 67(8), 1637-1640, 2016, WOS:000384514200048, Factor impact: 1.755, ISSN: 0034-7752
8. Pleșu, V., Ruiz, A.E.B, Bonet, J., Llorens, J., Iancu, P., Shortcut assessment of alternative distillation sequence process intensification, *Computers & Chemical Engineering*, 83, 58-71, 2015, WOS:000364166700006, Factor impact: 3.845, ISSN: 0098-1354.
9. Perederic, O.A., Pleșu, V., Iancu, P., Bumbac, G., Bonet-Ruiz, A.E., Bonet-Ruiz, J., Muchan, B., Simulation and process integration for tert-amyl-methyl ether (TAME) synthesis, *Computers & Chemical Engineering*, 83, 79-96, 2015, WOS: 000364166700008, Factor impact: 3.845, ISSN: 0098-1354

10. Şoriga, S.G., Iancu, P.*, Man, I.C., Marton, G., Pleşu, V., Optimizing Parallel Electronic Structure Calculations Through Customized Software Environment Study of GPAW on Small HPC Clusters, *Revista de chimie*, 66(11), 1826-1831, 2015, WOS:000368213500025, Factor impact: 1.755, ISSN: 0034-7752
11. Marton, G.I., Marton, A.L., Plesu, V., Iancu, P.*, Soriga, S.G., TAME - a Quantum Mechanics Study of the Reaction Mechanism for Methoxylation of Isoamylenes, *Revista de chimie*, 66(10), 1711-1715, 2015, WOS:000368436300035, Factor impact: 1.755, ISSN: 0034-7752
12. Iancu, P., Stefan, N.-G., Plesu, V., Toma, A., Stepan, E., Advanced high vacuum techniques for ω -3 polyunsaturated fatty acids esters concentration, *Revista de chimie*, 66(6), 911-917, 2015, WOS:000357403600033, Factor impact: 1.755, ISSN: 0034-7752
13. Bonet, J., Plesu, V., Bonet-Ruiz, A.E., Tuluc, A., Iancu, P., Tohaneanu, M.C., Llorens, J., Fast solvent screening for counter-current liquid-liquid extraction columns, *Clean Technologies and Environmental Policy*, 17(5), 1227-1238, 2015, WOS:000356878600011, Factor impact: 3.636, ISSN: 1618-954X
14. Bonet-Ruiz, A.E., Plesu, V., Bonet, J., Iancu, P., Llorens, J., Preliminary technical feasibility analysis of carbon dioxide absorption by ecological residual solvents rich in ammonia to be used in fertigation, *Clean Technologies and Environmental Policy*, 17(5), 1313-1321, 2015, WOS:000356878600019, Factor impact: 3.636, ISSN: 1618-954X
15. Marton, G.I., Iancu, P., Plesu, V., Marton, A., Soriga, S.G., Solketal - a Quantum Mechanics Study of the Reaction Mechanism of Ketalization, *Revista de chimie*, 66(5), 750-753, 2015, WOS:000355126000031, Factor impact: 1.755, ISSN: 0034-7752
16. Tuluc, A., Iancu, P.*, Plesu, V., Bonet-Ruiz, J., Bozga, G., Bumbac, G., Biodiesel Plant Optimisation Study by using Aspen-HYSYS[®] Process Simulator, *Revista de chimie*, 66(4), 565-569, 2015, WOS:000354914500027, Factor impact: 1.755, ISSN: 0034-7752

ISI Proceeding (selection 2015-2022)

1. Dimian A.C., Iancu P., Plesu V., Bonet-Ruiz A.E., Bonet J., Innovative design and simulation of castor oil biorefinery, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), *Computer Aided Chemical Engineering*, 40A, 1111-1116, 2017, WOS:000417380000187, ISSN: 1570-7946
2. Iancu P., Vilas-Bonafoux S., Iglesias-Fernandez J.M., Plesu V., Bonet J., Bonet-Ruiz A.E., Llorens J., Computational Fluid Dynamics (CFD) Simulation of Fuel Gas and Stream Mixtures to Decrease Nox Emissions of Industrial Burners, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), *Computer Aided Chemical Engineering*, 40 PART A, 565-570, 2017, WOS:000417380000096, ISSN: 1570-7946
3. Plesu V., Valverde H.C., Curco D., Bonet-Ruiz A.E., Bonet J., Iancu P., Llorens J., Software Tool for Computing and Visualization of Enhanced Residue Curve Maps, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), *Computer Aided Chemical Engineering*, 40 PART A, 199-204, 2017, WOS:000417380000035, ISSN: 15707946
4. Bonet-Ruiz A.E., Surinyach R.L., Plesu V., Bonet J., Iancu P., Llorens J., Distillation Sequence Efficiency (DSE) for Suitable Liquid-Liquid Extraction Solvents: Acetic Acid Extraction with TOA, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27),

Computer Aided Chemical Engineering, 40 PART A, 397-402, 2017, WOS:000417380000068, ISSN: 15707946

5. Bonet J., Para Paz A., Bonet-Ruiz A.E., Plesu V., Iancu P., Llorens J., Distillation Sequence Efficiency (DSE) Applied to Trains of Columns with Recycle Streams, 27th European Symposium on Computer Aided Process Engineering (ESCAPE27), Computer Aided Chemical Engineering, 40 PART A, 751-756, 2017, WOS:000417380000127, ISSN: 15707946
6. Mendez-Alvarez, C., Plesu V., Bonet-Ruiz A.E., Bonet-Ruiz J., Iancu, P., Llorens J., Distillation Energy Assessment for Solvent Recovery from Carbon Dioxide Absorption, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38, 1917-1922, 2016, WOS:000406968900117, ISSN: 15707-946
7. Onofrei R., Iancu, P., Danciu T.D., Plesu V., Quality Education in Romanian Chemical Engineering Higher Education, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38, 1917-1922, 2016, WOS:000406968900160, ISSN: 1570-7946
8. Ortuno-Boyer D., Plesu V., Bonet-Ruiz A.E., Bonet-Ruiz J., Iancu, P., Llorens J., Enhanced Distillation Based on Feed Impurities, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), Computer Aided Chemical Engineering, 38, 1923-1928, 2016, WOS:000406968900118, ISSN: 15707946
9. Tohaneanu, M.C., Plesu, V., Iancu, P., Bonet-Ruiz, A., Bonet-Ruiz, J., Muchan, B., Rational Use of Cooling Water in Heat Exchanger Network on Industrial Site, 18th International conference on process integration, modelling and optimisation for energy saving and pollution reduction (PRES2015), Chemical Engineering Transactions, 45, 1837-1842, 2015, WOS:000366034200307, ISSN: 1974-9791
10. Ceausescu, M.M., Bonet-Ruiz, J., Plesu, V., Iancu, P., Bonet-Ruiz, A.E., Theoretical Modeling Of (Non) Reactive Residue Curve Maps For TAME Synthesis System Using MATLAB - SIMULIS Thermodynamics Communication Facility's, 25th European Symposium on Computer Aided Process Engineering (ESCAPE25), Computer Aided Chemical Engineering, 37(Part A), 659-664, 2015, WOS:000366889500105, ISSN: 1570-7946

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1. Exposito S., Bone J., Bonet-Ruiz A.E., Llorens J., Iancu P., Energy consumption in sharp and non-sharp splits of ideal ternary mixtures, Chemical Engineering Transactions, 76, 799-804, 2019, ISSN: 2283-9216 (scopus.com)
2. Marin K., Bonet-Ruiz J., Bonet-Ruiz A.E., Plesu V., Iancu P., Llorens J., Integrated reaction-separation processes sequencing and screening at early stages of design, Chemical Engineering Transactions, 76, 631-636, 2019, ISSN: 2283-9216 (scopus.com)
3. Marchante I., Ruiz A.E.B., Plesu V., Bonet-Ruiz J., Iancu P., Hydration of cyclohexene to cyclohexanol in a hybrid reactive distillation with a side decanter, Chemical Engineering Transactions, 76, 25-30, 2019, ISSN: 2283-9216 (scopus.com)
4. Plesu V., Bonet J., Bonet-Ruiz A.E., Chavarria A., Iancu P., Llorens J., Surrogate model for carbon dioxide equilibrium absorption using aqueous monoethanolamine, Chemical Engineering Transactions, 70, 919-924, 2018, ISSN: 2283-9216 (scopus.com)

5. Plesu V., Bonet-Ruiz A.E., Bonet J., Iancu P., Llorens J., Becerra L.I., Immision assessment inside an industrial ventilated room using CFD, *Chemical Engineering Transactions*, 70, 1825-1830, 2018, ISSN: 2283-9216 (scopus.com)
6. Plesu V., Cantero S., Bonet-Ruiz A.E., Bonet J., Iancu P., Llorens J., A heuristic for extractive agent flow rate in extractive distillation, *Chemical Engineering Transactions*, 70, 1849-1854, 2018, ISSN: 2283-9216 (scopus.com)
7. Osle A., Bonet Ruiz A.E., Bonet J., Plesu V., Iancu P., Llorens J., Distillation pressure influence on total site, 19th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction (PRES 2016), Prague, Czech Republic, 27-31 August 2016, vol 2, pp.1383-1384, 2016, ISBN: 978-151085962-3 (scopus.com)
8. Bonet J., Bonet Ruiz A.E., Plesu V., Iancu P., Llorens J., Screening of reaction-separation processes with recycle streams based on distillation efficiency, 19th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction (PRES 2016), Prague, Czech Republic, 27-31 August 2016, vol 2, pp.1423, 2016, ISBN: 978-151085962-3 (scopus.com)
9. Perederic O.A., Plesu V., Iancu P., Bonet-Ruiz A.E., Bonet-Ruiz J., Muchan B., TAEE Sustainable Process Design and Simulation, 26th European Symposium on Computer Aided Process Engineering (ESCAPE26), *Computer Aided Chemical Engineering*, 38, 2199-2204, 2016, ISSN: 15707946 (scopus.com)

Patents

1. Tuluc A., Stepan E., Plesu V., Iancu P., Process and catalyst for preparing biodiesel fuel and catalyst comprises calcium ethylene glycolate or calcium diethylene glycolate, Brevet nr.130618/30.10.2017, University POLITEHNICA din Bucuresti, Derwent Primary Accession Number: 2015-66045A [01]
2. Enascuta C.E., Stepan E., Plesu V., Iancu P., Stefan N.G., Procedeu de obtinere a unui ulei cu continut marit de acizi grasi polinesaturati si a unui biocarburant diesel, Brevet nr. 129836/30.03.2017, University POLITEHNICA din Bucuresti, Derwent Primary Accession Number: 2015-10373L [51]
3. Plesu V., Stepan E., Iancu P., Procedeu in flux continuu de preparare a 1,2-o-isopropylidene-glyceroului, Brevet nr.129835/30.05.2017, University POLITEHNICA din Bucuresti, Derwent Primary Accession Number: 2015-10373T [51]
4. Stepan E., Plesu V., Neamtu C., Iancu P., Procedeu pentru obtinerea esterilor 1,2-o-isopropylidene-glyceroului, Brevet nr. 129837/30.05.2017, University POLITEHNICA din Bucuresti, Stepan E. Plesu V., Neamtu C., Iancu P., Brevet nr. 129837/30.05.2017, Procedeu de preparare a esterilor 1,2-o-izopropiliden-glicerolului, Derwent Primary Accession Number: 2015-10373G [51]