Syrris Flow Chemistry Publications

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The following document lists all of the publications that feature the Asia Flow Chemistry System from 2006 – 2018.

2018

Enzymatic microreactors in biocatalysis: history, features, and future perspectives

Enzo Laurenti, Ardson dos Santos Vianna Jr.

Biocatalysis, 2015, 1, 148-165

Release of Terminal Alkynes via Tandem Photodeprotection and Decarboxylation of o-Nitrobenzyl Arylpropiolates in a Flow Microchannel Reactor

Behabitu Ergette Tebikachew, Karl Börjesson, Nina Kann, and Kasper Moth-Poulsen

Bioconjugate Chem., 2018, 29 (4), pp 1178–1185

Dehydration of an Insoluble Urea Byproduct Enables the Condensation of DCC and Malonic Acid in Flow

Alexander G. O'Brien, Eric M. Ricci, and Michel Journet

Org. Process Res. Dev., 2018, 22 (3), pp 399–402

Continuous Endoperoxidation of Conjugated Dienes and Subsequent Rearrangements Leading to C–H Oxidized Synthons

Juliana M. de Souza, Timothy J. Brocksom, D.Tyler McQuade, and Kleber T. de Oliveira

J. Org. Chem., Article ASAP

Gold nanoparticles coupled with graphene quantum dots in organized medium to quantify aminoglycoside anti-biotics in yellow fever vaccine after solid phase extraction using a selective imprinted polymer

Carlos A.T.Toloza, Joseany M.S.Almeida, SarzaminKhan, Yasmin G.dos Santos, Andrea R.da Silva, Eric C.Romani, Dunieskys G.Larrude, Fernando L.FreireJr. and Ricardo Q.Aucélio

Journal of Pharmaceutical and Biomedical Analysis, Volume 158, 2018, Pages 480-493

Continuous-Flow Reductive Alkylation: Synthesis of Bio-based Symmetrical and Disymmetrical Ethers

Sophie Bruniaux, Denis Luart, Christophe Len

Synthesis 2018; 50(09): 1849-1856

Advances in electro- and sono-microreactors for chemical synthesis

Tomas Hardwick and Nisar Ahmed

RSC Adv., 2018, **8**, 22233-22249

Peptide Bond Formations through Flow Chemistry.

Nisar Ahmed

Chemical Biology & Drug Design, 92, 1, (1398-1398), (2018).

Towards chip prototyping: a model for droplet formation at both T and X-junctions in dripping regime

Vansteene, A., Jasmin, JP., Cavadias, S. et al.

Microfluid Nanofluid (2018) 22: 61.

Intensification of photocatalytic degradation of organic dyes and phenol by scale-up and numbering-up of meso- and microfluidic TiO2 reactors for wastewater treatment

D.S.de Sá, L.E.Vasconcellos, J.R.de Souza, B.A.Marinkovic, T.Del Rosso, D.Fulvio, D.Maza, A.Massi, and O.Pandoll

Journal of Photochemistry and Photobiology A: Chemistry, Volume 364, 2018, Pages 59-75

Closing the gap for efficient immobilization of biocatalysts in continuous processes: HaloTag™ fusion enzymes for a continuous enzymatic cascade towards a vicinal chiral diol

J. Döbber, T. Gerlach, H. Offermann, D. Rother and M. Pohl
Green Chem., 2018,20, 544-552

Automated measurements of gas-liquid mass transfer in micropacked bed reactors

Jisong Zhang, Andrew R. Teixeira and Klavs F. Jensen

Reaction Engineering, Kinetics and Catalysis, 2018 (64), 2, 564-570

Design and construction of an open source-based photometer and its applications in flow chemistry

Gabriel Glotz and C. Oliver Kappe

React. Chem. Eng., 2018, Advance Article

Continuous end-to-end production of solid drug dosage forms: Coupling flow synthesis and formulation by electrospinning

Attila Balogh, András Domokos, Balázs Farkas, Attila Farkas, Zsolt Rapi, Domokos Kiss, Zoltán Nyiri, Zsuzsanna Eke, Györgyi Szarka, Róbert Örkényi, Béla Mátravölgyi, Ferenc Faigl, György Marosi, Zsombor Kristóf Nagy

Chemical Engineering Journal, Volume 350, 15 October 2018, Pages 290-299

Dehydration of an Insoluble Urea Byproduct Enables the Condensation of DCC and Malonic Acid in Flow

Alexander G. O'Brien, Eric M. Ricci, and Michel Journet

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Redesign of a Grignard-Based Active Pharmaceutical Ingredient (API) Batch Synthesis to a Flow Process for the Preparation of Melitracen HCl

Michael J. Pedersen, Tommy Skovby, Michael J. Mealy, Kim Dam-Johansen, and Søren Kiil

Org. Process Res. Dev., 2018, 22 (2), pp 228–235

Total Synthesis of Mycenarubin A, Sanguinolentaquinone and Mycenaflavin B and their Cytotoxic Activities

Jana Backenköhler, Bernhard Reck, Markus Plaumann, Peter Spiteller

Eur. J. Org. Chem. · Volume2018, Issue22, 2018, Pages 2806-2816

Advancing Flow Chemistry Portability: A Simplified Approach to Scaling Up Flow Chemistry

François Lévesque, Nicholas J. Rogus, Glenn Spencer, Plamen Grigorov, Jonathan P. McMullen, David A. Thaisrivongs, Ian W. Davies, and John R. Naber

Org. Process Res. Dev., Article ASAP

Continuous Endoperoxidation of Conjugated Dienes and Subsequent Rearrangements Leading to C–H Oxidized Synthons

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J. Org. Chem., Article ASAP

Studies on the dynamic resolution of Crizotinib intermediate

Alexandre da S.de França, Marcus V.M.Silva, Rebeca V.NevesaStefania P.de Souza, Raquel A.C.Leão, Carlos M.Monteiro, ÂngeloRocha, Carlos A.M.Afonso, Rodrigo O.M.A.de Souza

Bioorganic & Medicinal Chemistry, Volume 26, Issue 7, 1 April 2018, Pages 1333-1337

n-Butyl levulinate synthesis using lipase catalysis: comparison of batch reactor versus continuous flow packed bed tubular microreactor

Kalpesh V. Bhavsar and Ganapati D. Yadav

J Flow Chem (2018) 8: 97.

Antitumor activity of kinetochore-associated protein 2 siRNA against lung cancer patient-derived tumor xenografts

Makita Y, Teratani M, Murata S, Hoashi Y, Matsumoto S and Kawamata Y

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Rapid, selective and stable HaloTag-LbADH immobilization directly from crude cell extract for the continuous biocatalytic production of chiral alcohols and epoxides

J. Döbber, M. Pohl, S. V. Ley and B. Musio

React. Chem. Eng., 2018, 3, 8-12

Organic electrosynthesis – A road to greater application. A mini review

Derek Pletcher

Electrochemistry Communications, Volume 88, March 2018, Pages 1-4

Sol–gel Entrapped Nitroxyl Radicals: Catalysts of Broad Scope

Dr. Rosaria Ciriminna, Dr. Valerica Pandarus, Dr. Francois Béland and Dr. Mario Pagliaro

ChemCatChem, Special Issue: Supported Molecular Catalysts, 10 (8), 2018, 1731

Automated separation of immiscible liquids using an optically monitored porous capillary

James H. Bannock, Tsz Yin (Martin) Lui, Simon T. Turner and John C. deMello
React. Chem. Eng., 2018, Advance Article

Closing the gap for efficient immobilization of biocatalysts in continuous processes: HaloTag™ fusion enzymes for a continuous enzymatic cascade towards a vicinal chiral diol

J. Döbber,a T. Gerlach,a H. Offermann,a D. Rothera and M. Pohl*a

Green Chem., 2018,20, 544-552

Towards chip prototyping: a model for droplet formation at both T and X-junctions in dripping regime

Axel Vansteene, Jean-Philippe Jasmin, Siméon Cavadias, Clarisse Mariet and Gérard Cote

Microfluid Nanofluid (2018) 22: 61.

Microfluidic-assisted nanoprecipitation of (PEGylated) poly (d,l-lactic acid-co-caprolactone): Effect of macromolecular and microfluidic parameters on particle size and paclitaxel encapsulation

Enrique Lallana, RobertoDonno, Davide Magrì, Katie Barker, Zahid Nazir, Kevin Treacher, M. Jayne Lawrence, Marianne Ashford and NicolaTirelli

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Continuous flow biocatalysis

Joshua Britton, Sudipta Majumdara and Gregory A. Weiss

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On-Demand Generation and Consumption of Diazomethane in Multistep Continuous Flow Systems

Hongwei Yang, Benjamin Martin, and Berthold Schenkel

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Atom- and Mass-economical Continuous Flow Production of 3-Chloropropionyl Chloride and its Subsequent Amidation

Marine Movsisyan, Dr. Thomas S. A. Heugebaert, Dr. Bart I. Roman, Dr. Rudolf Dams, Rudy Van Campenhout, Dr. Matthias Conradi and Prof. Dr. Christian V. Stevens

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Peptide Bond Formations through Flow Chemistry.

Nisar Ahmed,

Chemical Biology & Drug Design, 92, 1, (1398-1398), (2018).

Continuous-Flow Synthesis of (R)-Propylene Carbonate: An Important Intermediate in the Synthesis of Tenofovir

Leandro S. M. Miranda, Bruno A. C. Horta, Sérgio F. Pedraza, Otavio V. de Carvalho, Karla C. Pais, José H. C. Terra and Rodrigo O. M. A. de Souza

European Journal of Organic Chemistry, 2018, Issue 23, Pages 2931-2938

Continuous multistep synthesis of 2-(azidomethyl)oxazoles

Thaís A Rossa, Nícolas S Suveges, Marcus M Sá, David Cantillo, and C Oliver Kappe

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Recyclable alkylated Ru(bpy)32+ complex as a visible-light photoredox catalyst for perfluoroalkylation

Xiaodan Zhang, Yaming Li, Xinyu Hao, Kun Jin, Rong Zhang and ChunyingDuan

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Continuous Flow Synthesis of a Key 1,4-Benzoxazinone Intermediate via a Nitration/Hydrogenation/Cyclization Sequence

David Cantillo, Bernd Wolf, Roland Goetz, and C. Oliver Kappe

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Nanomanufacturing through microfluidic-assisted nanoprecipitation: Advanced analytics and structure-activity relationships

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Design and 3D printing of a stainless steel reactor for continuous difluoromethylations using fluoroform

Bernhard Gutmann, Manuel Köckinger, Gabriel Glotz, Tania Ciaglia, Eyke Slama, Matej Zadravec, Stefan Pfanner, Manuel C. Maier, Heidrun Gruber-Wölfler and C. Oliver Kappe

React. Chem. Eng., 2017, 2, 919-927

Microreactor Technology as a Tool for the Synthesis of a Glitazone Drug Intermediate

Danilo da Silva Pinheiro, Renan Rodrigues de Oliveira Silva, Paulo Victor Cuesta Calvo, Milena Fernandes da Silva, Attilio Converti, Mauri Sergio and Alves Palma

Chemical and Engineering Technology, Accepted article

The assembly and use of continuous flow systems for chemical synthesis

Joshua Britton and & Timothy F Jamison

Nature Protocols volume12, pages2423–2446 (2017)

Kinetic Resolution of (R,S)-α-Tetralol by Immobilized Candida antarcticaLipase B: Comparison of Packed-Bed over Stirred-Tank Batch Bioreactor

Manoj P. Kamble and Ganapati D. Yadav

Ind. Eng. Chem. Res., 2017, 56 (7), pp 1750–1757

Evaluating Dihydroazulene/Vinylheptafulvene Photoswitches for Solar Energy Storage Applications

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Flow Electrolysis Cells for the Synthetic Organic Chemistry Laboratory

Robert A. Green, and Richard C. D. Brown

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An Environmentally Friendly Nb–P–Si Solid Catalyst for Acid-Demanding Reactions

Antonio Aronne, Martino Di Serio, Rosa Vitiello, Nigel J. Clayden, Luciana Minieri, Claudio Imparato, Alessandro Piccolo, Pasquale Pernice, Paolo Carnit, and Antonella Gervasini

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Reaction Calorimetry in Microreactor Environments—Measuring Heat of Reaction by Isothermal Heat Flux Calorimetry

Gabriel Glotz, Donald J. Knoechel, Philip Podmore, Heidrun Gruber-Woelfler, and C. Oliver Kappe

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Molecularly Engineered Azobenzene Derivatives for High Energy Density Solid-State Solar Thermal Fuels

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A Unified Continuous Flow Assembly-Line Synthesis of Highly Substituted Pyrazoles and Pyrazolines

Dr. Joshua Britton, Prof. Dr. Timothy F. Jamison

Angewandte Chemie – Int Ed. Volume 56, Issue 30, July 17, 2017, Pages 8823–8827

Continuous-flow synthesis of highly functionalized imidazo-oxadiazoles facilitated by microfluidic extraction

Ananda Herath1 and Nicholas D P Cosford 1

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Tuning reaction products by constrained optimisation

Barnaby E. Walker, James H. Bannock, Adrian M. Nightingale and John C. deMello

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Heterogeneous catalysis in continuous flow microreactors: A review of methods and applications

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Environment-Friendly Synthesis of Indoline Derivatives Using Flow Chemistry Techniques

Róbert Örkényi,*[a] Gyula Beke,[b] Eszter Riethmüller,[c] Zoltán Szakács,[b] János Kóti, [b] Ferenc Faigl,[a] János Éles[b] and István Greiner[b]

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Towards More Efficient, Greener Syntheses through Flow Chemistry

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Synthesis of α-amino-1,3-dicarbonyl compounds via Ugi flow chemistry reaction: access to functionalized 1,2,3-triazoles

Stanley N. S. Vasconcelos1 · Evelin Fornari1 · Ignez Caracelli2 · Hélio A. Stefani1

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Terje Didriksen and Richard Blom

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American Institute of Chemical Engineers (AIChE) Received: Mar 14, 2017; Revised: Jul 11, 2017; Accepted: Aug 22, 2017

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Joshua Britton and Colin L. Raston

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Synthesis of Geraniol Esters in a Continuous-Flow Packed-Bed Reactor of Immobilized Lipase: Optimization of Process Parameters and Kinetic Modeling

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Continuous Flow Synthesis of a Key 1,4-Benzoxazinone Intermediate via a Nitration/Hydrogenation/Cyclization Sequence

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Development of a Safe Continuous Manufacturing Route to 2-(4-Isopropyl-1H-1,2,3-triazol-1-yl)acetic Acid

Staffan Karlsson, Calum Cook, Hans Emtenäs, Kenny Fan, Paul Gillespie, and Mubina Mohamed

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An integrated chemical biology approach reveals the mechanism of action of HIV replication inhibitors

Author links open overlay panelNicholasPaganoa1PeterTerietea1Margrith E.MattmannaLiYangaBeth A.SnyderbZhaohuiCaibMarintha L.HeilbNicholas D.P.Cosforda

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Rosaria Ciriminna,a Valerica Pandarus,b François Béland*b and Mario Pagliaro*a

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Olalla Novo**,** Mercè Balcells**,** Ramon Canela-Garayoa and Jordi Eras

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