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FAKULTÄT FÜR VERFAHRENS-
UND SYSTEMTECHNIK

Publikationsbericht 2018

Fakultät für Verfahrens- und Systemtechnik

FAKULTÄT FÜR VERFAHRENS- UND SYSTEMTECHNIK

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1. LEITUNG

Prof. Dr.-Ing. habil. Dominique Thévenin (Dekan)
Prof. Dr.-Ing. habil. Evangelos Tsotsas (Prodekan)
Prof. Dr.-Ing. Eckehard Specht (Studiendekan)

2. VERÖFFENTLICHUNGEN

DISSERTATIONEN

Aydin, Erdal; Sundmacher, Kai [GutachterIn]; Sager, Sebastian [GutachterIn]

Tailored indirect algorithms for efficient on-line optimization of batch and semi-batch processes
Magdeburg, 2018, xx, 119 Seiten, Tabellen, Diagramme;
[Literaturverzeichnis: Seite 107-113]

Birth, Torsten; Seidel-Morgenstern, Andreas [GutachterIn]; Hamel, Christof [GutachterIn]; Caro, Jürgen [GutachterIn]

Aufbereitung biogener und reststoffbasierter Gase - Untersuchung der trockenen Reformierung
Barleben: docupoint Verlag, 2018, IV, 223 Seiten, Diagramme, Illustrationen, 21 cm, 978-3-86912-142-6;
[Literaturverzeichnis: Seite 173-186]

Buchholz, Hannes; Seidel-Morgenstern, Andreas [GutachterIn]

Solid-liquid phase equilibria of chiral molecules - theory and experiment
Magdeburg, 2018, xi, 171 Seiten, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 136-152]

Buchtatj, Denis; Thévenin, Dominique [GutachterIn]; Hadler, Jens [GutachterIn]; Tschöke, Helmut [GutachterIn]

CFD-basierte Analyse der Gemischbildung mit einem skalenauflösenden Turbulenzmodell
Magdeburg, 2017, XVI, 140 Seiten, Illustrationen, Diagramme;
[Literaturverzeichnis: Seite 126-133]

Dülsen, Steffen; Krause, Ulrich [GutachterIn]

Development of a combined experimental and simulative method for the assessment of fire scenarios in motor vehicles
Magdeburg, 2018, XXIV, 83 Seiten, Illustrationen, Tabellen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite XI-XV]

Eisenschmidt, Holger; Sundmacher, Kai [GutachterIn]

A cyclic growth-dissolution process for the controlled manipulation of crystal shape distributions
Magdeburg, 2018, x, 119 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 104-114]

Farid, Muhammad Usman; Tsotsas, Evangelos [GutachterIn]; Bück, Andreas [GutachterIn]

CFD modeling of combustion of solid waste materials with low melting points
Magdeburg, 2018, xii, 204 Blätter, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Blatt 163-173]

Harder, Björn-Johannes

Modellbasiertes Metabolic Engineering zur Optimierung der Itaconatproduktion in Escherichia coli
Aachen: Shaker Verlag, 2018, [1. Auflage], IX, 130 Seiten, Illustrationen, 21 cm, 203 g - (Forschungsberichte aus dem Max-Planck-Institut für Dynamik Komplexer Technischer Systeme; Band 52), ISBN 978-3-8440-6360-8

Jörke, Andreas

Mechanisms and kinetics of petro- and oleochemicals in complex hydroformylation reaction networks
Aachen: Shaker Verlag, 2018, [1. Auflage], xi, 145 Seiten, Seite xiii-xxxvii, 41 Illustrationen, Diagramme, 21 cm, 262 g - (Forschungsberichte aus dem Max-Planck-Institut für Dynamik Komplexer Technischer Systeme; Band 50), ISBN 978-3-8440-6059-1

Khalid, Muhammad Kamran; Wachem, Berend [GutachterIn]; Scheffler, Franziska [GutachterIn]

Processing and characterization of tailor-made superparamagnetic iron oxide nanoparticles (SPIO-NPs) for pharmaceutical applications
Magdeburg, 2018, xx, 158 Seiten, Illustrationen, Tabellen, Diagramme;
[Literaturverzeichnis: Seite 131-153]

Kiedorf, Gregor; Seidel-Morgenstern, Andreas [GutachterIn]

Mechanistic and kinetic analysis of homogeneously and heterogeneously catalyzed reactions
Aachen: Shaker, 2018, 1. Auflage, xi, 189 Seiten, Illustrationen, Diagramme, 21 cm, 302 g - (Forschungsberichte aus dem Max-Planck-Institut für Dynamik komplexer technischer Systeme; Band 49), ISBN 978-3-8440-5768-3;
[Literaturverzeichnis: Seite 147-161]

Ludwig, Kristin; Sundmacher, Kai

Assessment of innovative downstream processing methods for microalgal β -carotene production
Magdeburg, 2018, xviii, 126 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 109-125]

Meyer, Lennart; Specht, Eckehard; Krause, Ulrich [GutachterIn]; Beyer, Michael [GutachterIn]; Grätz, Rainer [GutachterIn]

Die Entstehung von heißen Oberflächen in metallischen Reibsituationen und ihre Zündwirksamkeit
Bremen: Fachverlag NW in der Carl Schünemann Verlag GmbH, 2018, VII, 131 Seiten, Illustrationen, Diagramme, 30 cm - (PTB-Bericht; Ex, Explosionsschutz; 9), ISBN 978-3-95606-402-9

Mikalsen, Ragni Fjellgaard; Krause, Ulrich [GutachterIn]

Fighting flameless fires - initiating and extinguishing self-sustained smoldering fires in wood pellets
Magdeburg, 2018, XI, 85, iii Seiten, Illustrationen, 29 cm;
[Literaturverzeichnis: Seite 76-85]

Radicke, Susann; Scheffler, Franziska [GutachterIn]; Seidel-Morgenstern, Andreas [GutachterIn]

Entwicklung und Testung modifizierter photokatalytisch aktiver TiO₂-Beschichtungen für Glasformkörper
Magdeburg, 2018, XXV, 198 Seiten, Illustrationen, Tabellen, Diagramme, 30 cm;
[Im Titel ist "2" tiefgestellt; Literaturverzeichnis: Seite 169-179]

Reichardt, Thomas

Multiscale Euler/Lagrange approach to simulate finite-sized solid particles and bubbles as well as numerical and experimental studies to improve the modeling of complex bubble motion
Aachen: Shaker Verlag, 2018, 1. Auflage, viii, 284 Seiten, Illustrationen, Diagramme, 21 cm, 447 g - (Berichte aus der Strömungstechnik), ISBN 978-3-8440-6013-3

Schmidt, Martin; Tsotsas, Evangelos [GutachterIn]; Kienle, Achim [GutachterIn]

Process dynamics and structure formation in continuous spray fluidized bed processes
Magdeburg, 2018, XVII, 150 Seiten, Illustrationen, Diagramme, 24 cm;
[Literaturverzeichnis: Seite 129-137]

Schubert, Stefanie; Krause, Ulrich [GutachterIn]

Untersuchung zum Einfluss der Strömungsführung auf den Brandverlauf in einem Gebäude moderner Bauweise
Magdeburg, 2017, XXII, 182 Seiten, Illustrationen;
[Literaturverzeichnis: Seite 142-153]

Schulze, Peter

Lignin separation from ethanol water pulping liquors
Magdeburg, 2018, 179 Seiten, Illustrationen, Tabellen, Diagramme;
[Literaturverzeichnis: Seite 155-163]

Schwenke, Christian; Tsotsas, Evangelos; Schulze, Dietmar; Katterfeld, André

Modellierung und experimentelle Validierung des Schwerkraftaustrags ultrafeiner kohäsiver Pulver
Barleben: docupoint Verlag, 2018, IX, 215 Seiten, Seite X-XX, Illustrationen, Diagramme, 21 cm, ISBN
978-3-86912-153-6;
[Literaturverzeichnis: Seite 211-215]

Voigt, Nadine; Wachem, Berend [GutachterIn]; Sabel, Bernhard A. [GutachterIn]

Evaluierung pharmakokinetischer und toxikologischer Determinanten von Nanopartikeln mittels in vivo
Neuroimaging
Magdeburg, 2018, XIV, 111 Blätter, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Blatt 87-96]

Wenzel, Marcus; Sundmacher, Kai [GutachterIn]

Reverse water-gas shift chemical looping for syngas production from CO₂
Magdeburg, 2018, xviii, 149 Seiten, 30 cm;
[Im Titel ist "2" tiefgestellt; Literaturverzeichnis: Seite 129-141]

Zhang, Xiwei; Wachem, Berend [GutachterIn]; Sabel, Bernhard A. [GutachterIn]

In vitro and in vivo caspase-3 knock down by poly (butyl cyanoacrylate) nanoparticle-based RNA interference
Magdeburg, 2018, ix, 95 Blätter, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Blatt 78-88]

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1. LEITUNG

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Prof. Dr.-Ing. habil. Heinz Köser

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Addai, Emmanuel Kwasi; Clouthier, Martin; Amyotte, Paul; Safdar, Muddasar; Krause, Ulrich

Experimental investigation of limiting oxygen concentration of hybrid mixtures

Journal of loss prevention in the process industries - Amsterdam [u.a.]: Elsevier Science, Bd. 57.2018, S. 120-130;

[Imp.fact.: 1.982]

Farnell, D. J. J.; Götze, O.; Schulenburg, Jörg; Zinke, Ronald; Bishop, R. F.; Li, P. H. Y.

Interplay between lattice topology, frustration, and spin quantum number in quantum antiferromagnets on Archimedean lattices

Physical review - Woodbury, NY: Inst, Vol. 98.2018, 22, Art. 224402;

[Imp.fact.: 3.955]

Hecht, Kristin J.; Krause, Ulrich; Hofinger, J.; Bey, O.; Nilles, M.; Renze, P.

Prediction of gas density effects on bubbly flow hydrodynamics - new insights through an approach combining population balance models and computational fluid dynamics

AIChE journal - Hoboken, NJ: Wiley, 2018;

[Online first]

Idakiev, Vesselin; Steinke, Claudia; Sondej, Franziska; Bück, Andreas; Tsotsas, Evangelos; Mörl, Lothar

Inductive heating of fluidized beds - spray coating process

Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 328.2018, S. 26-37;

Mikalsen, Ragni Fjellgaard; Hagen, Bjarne Christian; Steen-Hansen, Anne; Krause, Ulrich; Frette, Vidar

Extinguishing smoldering fires in wood pellets with water cooling - an experimental study

Fire technology - New York, NY [u.a.]: Springer Science + Business Media B.V, insges. 28 S., 2018;

[Online first]

[Imp.fact.: 1.483]

Mörl, Lothar; Idakiev, Vesselin; Schönherr, Michael; Jacob, Michael

Vereinfachtes Modell zur Abschätzung der Arbeitsweise einer Wirbelschicht mit Eigenkeimbildung bei Flüssigkeitseindüsung
Chemie - Ingenieur - Technik: CIT - Weinheim: Wiley-VCH Verl, Bd. 90.2018, 8, S. 1080-1088;

Zhang, Lanyue; Weigler, Fabian; Idakiev, Vesselin; Jiang, Zhaochen; Mörl, Lothar; Mellmann, Jochen; Tsotsas, Evangelos

Experimental study of the particle motion in flighted rotating drums by means of Magnetic Particle Tracking
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 339.2018, S. 817-826;

Zinke, Ronald; Köhler, Florian; Krause, Ulrich

Long-term emission measurements at a floating roof tank for gasoline storage
Journal of loss prevention in the process industries - Amsterdam [u.a.]: Elsevier Science, Bd. 55.2018, S. 152-161;

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Fischer, Thomas; Gabel, Dieter; Marx, Marcus

Messung des Explosionsdrucks brennbarer Stäube
Technische Sicherheit - Düsseldorf: Springer-VDI-Verl, Vol. 8.2018, Januar/Februar, S. 31-37

BEGUTACHTETE BUCHBEITRäge

Zhang, Lanye; Weigler, Fabian; Jiang, Zaochen; Idakiev, Vesselin; Mörl, Lothar; Mellmann, Jochen; Tsotsas, Evangelos

Investigation of 3D particle flow in a flighted rotating drum
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 253-260;
[Konferenz: IDS 2018]

NICHT BEGUTACHTETE BUCHBEITRäge

Gabel, Dieter

Recent fields of interest in experimental explosions research
First Explosion Protection Conference 2018 in Turkey and Middle East: 06th of September, 2018, in the Amara Sealight Elite Hotel in Kusadasi/AYDIN - Kusadasi/AYDIN: Ex Proof TEKNO Turkey Ltd., insges. 22 S.;
[Konferenz: First Explosion Protection Conference 2018 in Turkey and Middle East, Kusadasi/AYDIN, 6. September 2018]

Gabel, Dieter

Uncertainty in the determination of the ignition energy of dusts below 10mJ
2018 AIChE Spring Meeting and 14th Global Congress on Process Safety: Orlando, Florida, USA, 22-25 April 2018 - Orlando, Florida, USA, insges. 6 S.;
[Kongress: 2018 AIChE Spring Meeting and 14th Global Congress on Process Safety, Orlando, Florida, USA, 22-25 April 2018\$]

Gabel, Dieter; Krause, Ulrich

Ignition temperature and ignition energy of humid dusts
12th International Symposium of Hazards, Prevention, and Mitigation of Industrial Explosions: Kansas City, USA : August 12-17,2018 - Kansas City, USA, insges. 13 S.;
[Symposium: 12th International Symposium of Hazards, Prevention, and Mitigation of Industrial Explosions, ISHPMIE, Kansas City, USA, August 12-17,2018]

DISSERTATIONEN

Dülsen, Steffen; Krause, Ulrich [GutachterIn]

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Magdeburg, 2017, XXII, 182 Seiten, Illustrationen;

[Literaturverzeichnis: Seite 142-153]

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Prof. Dr. rer. nat. habil. Helmut Weiß
Prof. Dr. rer. nat. habil. Frank T. Edelmann

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Becker, Julia; Betke, Ulf; Wessel, Egbert; Krüger, Manja

Alloying effects in Mo-5X (X=Zr, Ti,V) Microstructural modifications and mechanical properties
Materials today / Communications - Amsterdam [u.a.]: Elsevier, Bd. 15.2018, S. 314-321

Betke, Ulf; Klaus, Michael; Eggebrecht, Jakob G.; Scheffler, Michael; Lieb, Alexandra

MOFs meet macropores - dynamic direct crystallization of the microporous aluminum isophthalate CAU-10 on reticulated open-cellular alumina foams
Microporous and mesoporous materials : the official journal of the International Zeolite Association - Amsterdam [u.a.]: Elsevier, Bd. 265.2018, S. 43-56
[Imp.fact.: 3.615]

Betke, Ulf; Lieb, Alexandra

Micro-macroporous composite materials - preparation techniques and selected applications - a review
Advanced engineering materials - Weinheim : Wiley-VCH Verl, Vol. 20.2018, 9, Art. 1800252
[Imp.fact.: 2.319]

Danzmann, Sascha; Liebing, Phil; Engelhardt, Felix; Hilfert, Liane; Edelmann, Frank

Azulene1carboxylate - a new azulene-based building block for coordination polymers
Inorganic chemistry communications : an international journal dedicated to rapid publications in inorganic and organometallic chemistry - Amsterdam [u.a.]: Elsevier Science, Bd. 99.2018, S. 176-179
[Imp.fact.: 1.81]

Edelmann, Frank T.

Lanthanides and actinides - annual survey of their organometallic chemistry covering the year 2017
Coordination chemistry reviews - Amsterdam [u.a.]: Elsevier Science, Bd. 370.2018, S. 129-223
[Imp.fact.: 13.324]

Haak, Edgar

Modern annulation strategies for the synthesis of cyclo[b]fused indoles
Synlett : accounts and rapid communications in synthetic organic chemistry - Stuttgart [u.a.]: Thieme, 2018
[Imp.fact.: 2.369]

Haak, Edgar; Kaufmann, Julia; Jäckel, Elisabeth

Ruthenium catalyzed cascade annulation of indole with propargyl alcohols

Angewandte Chemie / International edition : a journal of the Gesellschaft Deutscher Chemiker - Weinheim : Wiley-VCH, insges. 7 S., 2018

[Imp.fact.: 11.994]

Hampel, Nelli; Royeva, Evgeniya; Bück, Andreas; Tsotsas, Evangelos

Coating of finely dispersed particles by two-fluid nozzle

Particuology : science and technology of particles - Amsterdam : Elsevier, Bd. 38.2018, S. 80-93

[Imp.fact.: 2.785]

Heidenreich, Niclas; Lieb, Alexandra; Stock, Norbert; Reinsch, Helge

Green synthesis of a new layered aluminium citraconate - crystal structures, intercalation behaviour towards H₂O and in situ PXRD studies of its crystallisation

Dalton transactions : a journal of inorganic chemistry, including bioinorganic, organometallic, and solid-state chemistry - London : Soc, Bd. 47.2018, 1, S. 215-223

[Imp.fact.: 4.029]

Kaufmann, Julia; Jäckel, Elisabeth; Haak, Edgar

Rutheniumkatalysierte Kaskadenanellierung von Indol mit Propargylalkoholen

Angewandte Chemie - Weinheim : Wiley-VCH, 2018 ;

[Online first]

[Imp.fact.: 11.994]

Lorenz, Volker; Ehle, Sophie; Liebing, Phil; Engelhardt, Felix; Hashemi-Haeri, Haleh; Oehler, Florian; Hinderberger, Darius; Busse, Sabine; Urbaschok, Jens; Edelmann, Frank T.

High-yield synthesis of a unique Mn(III) siloxide complex through KMnO₄ oxidation of a Mn(II) precursor

Dalton transactions : a journal of inorganic chemistry, including bioinorganic, organometallic, and solid-state chemistry - London : Soc, Bd. 47.2018, 1, S. 62-66

[Imp.fact.: 4.029]

Lorenz, Volker; Liebing, Phil; Bathelier, Adrien; Engelhardt, Felix; Maron, Laurent; Hilfert, Liane; Busse, Sabine; Edelmann, Frank

The Wanderlust of Me 3Si groups in rare-earth triple-decker complexes - a combined experimental and computational study

Chemical communications : ChemComm - Cambridge : Soc, Bd. 54.2018, 73, S. 10280-10283

[Imp.fact.: 6.29]

Rädisch, Tim; Harmgarth, Nicole; Liebing, Phil; Beltrán-Leiva, Maria J.; Páez-Hernández, Dayán; Arratia-Pérez, Ramiro; Engelhardt, Felix; Hilfert, Liane; Oehler, Florian; Busse, Sabine; Edelmann, Frank

Three new types of transition metal carboranylaminidate complexes

Dalton transactions : a journal of inorganic chemistry, including bioinorganic, organometallic, and solid-state chemistry - London : Soc, Bd. 47.2018, 19, S. 6666-6671

[Imp.fact.: 4.029]

Wang, Sida; Liebing, Phil; Engelhardt, Felix; Hilfert, Liane; Busse, Sabine; Edelmann, Frank

Synthesis and structural characterization of four dichloridobis(cyclopropylalkynylamidine)metal complexes

Acta crystallographica / E - Chester : International Union of Crystallography, Bd. 74.2018, S. 1658-1664

ilinskas, Mindaugas; Kalkofen, Bodo; Balasubramanian, Ramasubramanian; Batmanov, Anatoliy; Burte, Edmund P.; Harmgarth, Nicole; Zörner, Florian; Edelmann, Frank T.; Garke, Bernd; Lisker, Marco

Plasma-assisted atomic layer deposition of germanium antimony tellurium compounds

Journal of vacuum science & technology / A : JVST : the official journal of the American Vacuum Society - New York, NY : Inst, Vol. 36.2018, Art. 021510, insgesamt 7 S.

[Imp.fact.: 1.374]

ARTIKEL IN ZEITSCHRIFT

Haeri, Haleh H.; Duraisamy, Ramesh; Harmgarth, Nicole; Liebing, Phil; Lorenz, Volker; Hinderberger, Dariush; Edelmann, Frank T.

Electronic and geometric structures of paramagnetic diazadiene complexes of lithium and sodium
ChemistryOpen: including thesis treasury - Weinheim: Wiley-VCH-Verl, Bd. 7.2018, 9, S. 701-708;
[Imp.fact.: 2.801]

DISSERTATIONEN

Radicke, Susann; Scheffler, Franziska [GutachterIn]; Seidel-Morgenstern, Andreas [GutachterIn]

Entwicklung und Testung modifizierter photokatalytisch aktiver TiO₂-Beschichtungen für Glasformkörper
Magdeburg, 2018, XXV, 198 Seiten, Illustrationen, Tabellen, Diagramme, 30 cm;
[Im Titel ist "2" tiefgestellt; Literaturverzeichnis: Seite 169-179]

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1. LEITUNG

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Prof. Dr.-Ing. D. Thévenin
Prof. Dr.-Ing. E. Specht

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Abdelsamie, Abouelmagd; Thévenin, Dominique

On the behavior of spray combustion in a turbulent spatially-evolving jet investigated by direct numerical simulation

Proceedings of the Combustion Institute - Amsterdam [u.a.]: Elsevier, 2018;

[Online first]

[Imp.fact.: 1.133]

Abram, Christopher; Fond, Benoit; Beyrau, Frank

Temperature measurement techniques for gas and liquid flows using thermographic phosphor tracer particles

Progress in energy and combustion science: an international review journal - Amsterdam [u.a.]: Elsevier Science, Bd. 64.2018, S. 93-156;

[Imp.fact.: 17.382]

Abram, Christopher; Mezhericher, Maksim; Beyrau, Frank; Stone, Howard A.; Ju, Yiguang

Flame synthesis of nanophosphors using sub-micron aerosols

Proceedings of the Combustion Institute - Amsterdam [u.a.]: Elsevier, 2018;

[Imp.fact.: 5.336]

Al-Hasnawi, Adnan Ghareb Taaamah; Refaey, H. A.; Redemann, Tino; Attalla, Mohamed Attia Mahmoud; Specht, Eckehard

Computational fluid dynamics simulation of flow mixing in tunnel kilns by air side injection

Journal of thermal science and engineering applications - New York, NY: ASME, Vol. 10.2018, 3, Art. 031007, insgesamt 9 S.;

[Imp.fact.: 0.985]

Alkhalaf, Ali; Refaey, H. A.; Al-durobi, Nabeh; Specht, Eckehard

Influence of contact point treatment on the cross flow mixing in a simple cubic packed bed - CFD simulation and experimental validation

Granular matter - Berlin: Springer, Vol. 20.2018, 2, Art. 22, insgesamt 13 S.;

Behrendt, Benjamin; Berg, Philipp; Beuing, Oliver; Preim, Bernhard; Saalfeld, Sylvia

Explorative blood flow visualization using dynamic line filtering based on surface features

Computer graphics forum: the international journal of the Eurographics Association - Oxford: Wiley-Blackwell, Bd. 37.2018, 3, S. 183-194;

[Konferenz: 20th EG/VGTC Conference on Visualization, EuroVis 2018, Brno, Czech Republic 4-8 June 2018]

[Imp.fact.: 2.046]

Berg, Philipp; Beuing, Oliver

Multiple intracranial aneurysms - a direct hemodynamic comparison between ruptured and unruptured vessel malformations

International journal of computer assisted radiology and surgery: a journal for interdisciplinary research, development and applications of image guided diagnosis and therapy - Berlin: Springer, Bd. 13.2018, 1, S. 83-93;

[Imp.fact.: 1.961]

Berg, Philipp; Saalfeld, Sylvia; Janiga, Gabor; Brina, Olivier; Cancelliere, Nicole M.; Machi, Paolo; Pereira, Vitor M.

Virtual stenting of intracranial aneurysms - a pilot study for the prediction of treatment success based on hemodynamic simulations

The international journal of artificial organs - Thousand Oaks, Calif: Sage, 2018;

[Online first]

[Imp.fact.: 1.133]

Berg, Philipp; Saalfeld, Sylvia; Voß, Samuel; Redel, Thomas; Preim, Bernhard; Janiga, Gábor; Beuing, Oliver

Does the DSA reconstruction kernel affect hemodynamic predictions in intracranial aneurysms? - an analysis of geometry and blood flow variations

Journal of neuroInterventional surgery: JNIS : the journal of the Society of NeuroInterventional Surgery - London: BMJ Journals, Bd. 10.2018, 3, S. 290-296;

[Imp.fact.: 3.551]

Berg, Philipp; Voß, Samuel; Saalfeld, Sylvia; Janiga, Gábor; Bergersen, Aslak W.; Valen-Sendstad, Kristian; Bruening, Jan; Goubergrits, Leonid; Spuler, Andreas; Cancelliere, Nicole M.; Steinman, David A.; Pereira, Vitor M.; Chiu, Tin Lok; Tsang, Anderson Chun On; Chung, Bong Jae; Cebra, Juan R.; Cito, Salvatore; Pallarès, Jordi; Copelli, Gabriele; Csippa, Benjamin; Paál, György; Fujimura, Soichiro; Takao, Hiroyuki; Hodis, Simona; Hille, Georg; Karmonik, Christof; Elias, Saba; Kellermann, Kerstin; Khan, Muhammad Owais; Marsden, Alison L.; Morales, Hernán G.; Piskin, Senol; Finol, Ender A.; Pravdivtseva, Mariya; Rajabzadeh-Oghaz, Hamidreza; Paliwal, Nikhil; Meng, Hui; Seshadhri, Santhosh; Howard, Matthew; Shojima, Masaaki; Sugiyama, Shin-ichiro; Niizuma, Kuniyasu; Sindeev, Sergey; Frolov, Sergey; Wagner, Thomas; Brawanski, Alexander; Qian, Yi; Wu, Yu-An; Carlson, Kent D.; Dragomir-Daescu, Dan; Beuing, Oliver

Multiple Aneurysms AnaTomy CHallenge 2018 (MATCH) - phase I : segmentation

Cardiovascular engineering and technology: CVET - New York, NY: Springer, Bd. 9.2018, 4, S. 565-581;

[Online first]

[Imp.fact.: 1.451]

Chi, Cheng; Abdelsamie, Abouelmagd; Thévenin, Dominique

Direct numerical simulations of hotspot-induced ignition in homogeneous hydrogen-air pre-mixtures and ignition spot tracking

Flow, turbulence and combustion: an international journal published in association with ERCOFTAC - Dordrecht [u.a.]: Springer Science + Business Media B.V, Bd. 101.2018, 1, S. 103-121;

[Imp.fact.: 2.207]

Chi, Cheng; Janiga, Gabor; Zähringer, Katharina; Thévenin, Dominique

DNS study of the optimal heat release rate marker in premixed methane flames

Proceedings of the Combustion Institute - Amsterdam [u.a.]: Elsevier, 2018;

[Online first]

[Imp.fact.: 5.336]

Cleynen, Olivier; Kerikous, Emeel; Hoerner, Stefan; Thévenin, Dominique

Characterization of the performance of a free-stream water wheel using computational fluid dynamics

Energy: the international journal - Amsterdam [u.a.]: Elsevier Science, Vol. 165.2018, Part B, S. 1392-1400;

[Imp.fact.: 4.968]

Daróczy, László; Janiga, Gabor; Thévenin, Dominique

Computational fluid dynamics based shape optimization of airfoil geometry for an H-rotor using a genetic algorithm

Engineering optimization - London: Taylor & Francis, Bd. 50.2018, 9, S. 1483-1499;

[Imp.fact.: 1.622]

Dragomirov, Plamen; Mendieta, Aldo; Abram, Christopher; Fond, Benoit; Beyrau, Frank

Planar measurements of spray-induced wall cooling using phosphor thermometry

Experiments in fluids: experimental methods and their applications to fluid flow : research journal - Berlin: Springer, Vol. 59.2018, 3, Art. 42, insgesamt 13 S.;

[Imp.fact.: 1.832]

Eshghinejadfard, Amir; Zhao, Lihao; Thévenin, Dominique

Lattice Boltzmann simulation of resolved oblate spheroids in wall turbulence

Journal of fluid mechanics - Cambridge [u.a.]: Cambridge Univ. Press, Bd. 849.2018, S. 510-540;

Fernandes, Leonardo S.; Jessen Werneck de Almeida Martins, Fábio; Azevedo, Luis F. A.

A technique for measuring ensemble-averaged, three-component liquid velocity fields in two-phase, gas-liquid, intermittent pipe flows

Experiments in fluids: experimental methods and their applications to fluid flow : research journal - Berlin: Springer, Vol. 59.2018, 10, Art. 147, insgesamt 18 S.;

Fond, Benoît; Xiao, Cheng-Nian; TJoen, Christophe; Henkes, Ruud; Veenstra, Peter; Wachem, Berend; Beyrau, Frank

Investigation of a highly underexpanded jet with real gas effects confined in a channel - flow field measurements

Experiments in fluids: experimental methods and their applications to fluid flow : research journal - Berlin: Springer, Vol. 59. 2018, 10, Art. 160, insgesamt 21 S.;

Harth, Kirsten; Trittel, Torsten; Wegner, Sandra; Stannarius, Ralf

Free cooling of a granular gas of rodlike particles in microgravity

Physical review letters - College Park, Md: APS, Vol. 120.2018, 21, Art. 214301;

[Imp.fact.: 8.462]

Herz, Fabian

Prozessmodellierung von direkt befeuerten Drehrohröfen zur beurteilung der thermischen Belastung des Feuerfestmaterials

Keramische Zeitschrift - Wiesbaden: Springer Fachmedien GmbH, Bd. 70.2018, 1/2, S. 26-34;

Hosseini, Seyed Ali; Darabiha, N.; Thévenin, Dominique

Mass-conserving advection-diffusion Lattice Boltzmann model for multi-species reacting flows

Physica / A: euophysic journal - Amsterdam: North Holland Publ. Co, Bd. 499.2018, S. 40-57;

Hütter, Sebastian; Hasemann, Georg; Al-Karawi, J.; Krüger, Manja; Halle, Thorsten

Prediction of thermodynamic properties of Mo-Si-B alloys from first-principles calculations

Metallurgical and materials transactions / A - Boston: Springer, Bd. 49.2018, 12, S. 6075-6083;

[Imp.fact.: 1.887]

Janiga, Gabor

Quantitative assessment of 4D hemodynamics in cerebral aneurysms using proper orthogonal decomposition

Journal of biomechanics: affiliated with the American Society of Biomechanics, the European Society of Biomechanics, the International Society of Biomechanics, the Japanese Society for Clinical Biomechanics and Related Research and the Australian and New Zealand Society of Biomechanics - Amsterdam [u.a.]: Elsevier Science, 2018;

[Imp.fact.: 2.431]

Jiang, Zhaochen; Hagemeyer, Thomas; Bück, Andreas; Tsotsas, Evangelos

Color-PTV measurement and CFD-DEM simulation of the dynamics of poly-disperse particle systems in a pseudo-2D fluidized bed

Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, Bd. 179.2018, S. 115-132;

Jokiel, Michael; Kaiser, Nicolas Maximilian; Kováts, Péter; Mansour, Michael; Zähringer, Katharina; Nigam, Krishna Deo Prasad; Sundmacher, Kai

Helically coiled segmented flow tubular reactor for the hydroformylation of long-chain olefins in a thermomorphic multiphase system

The chemical engineering journal - Amsterdam: Elsevier, 2018;

[Online first]

[Imp.fact.: 6.735]

Karali, Mohamed A.; Specht, Eckehard; Herz, Fabian; Mellmann, Jochen; Refaey, Hassanein A.

Unloading characteristics of flights in a flighted rotary drum operated at optimum loading

Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 333.2018, S. 347-352;

Kováts, P.; Pohl, D.; Thévenin, Dominique; Zähringer, Katharina

Optical determination of oxygen mass transfer in a helically-coiled pipe compared to a straight horizontal tube

Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, Bd. 190.2018, S. 273-285;

Kováts, Péter; Thévenin, Dominique; Zähringer, Katharina

Characterizing fluid dynamics in a bubble column aimed for the determination of reactive mass transfer

Heat and mass transfer: research journal - Berlin: Springer, Bd. 54.2018, 2, S. 453-461;

[Imp.fact.: 1.494]

Mansour, Michael; Janiga, Gabor; Nigam, K. D. P.; Thévenin, Dominique; Zähringer, Katharina

Numerical study of heat transfer and thermal homogenization in a helical reactor

Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, Bd. 177.2018, S. 369-379;

Mansour, Michael; Khot, Prafull; Thévenin, Dominique; Nigam, Krishna D. P.; Zähringer, Katharina

Optimal Reynolds number for liquid-liquid mixing in helical pipes

Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, 2018;

[Online first]

[Imp.fact.: 3.306]

Mansour, Michael; Kováts, Péter; Wunderlich, Bernd; Thévenin, Dominique

Experimental investigations of a two-phase gas/liquid flow in a diverging horizontal channel

Experimental thermal and fluid science: international journal of experimental heat transfer, thermodynamics and fluid mechanics : ETF science - New York, NY: Elsevier, Bd. 93.2018, S. 210-217;

Mansour, Michael; Wunderlich, Bernd; Thévenin, Dominique

Effect of tip clearance gap and inducer on the transport of two-phase air-water flows by centrifugal pumps

Experimental thermal and fluid science: international journal of experimental heat transfer, thermodynamics and fluid mechanics : ETF science - New York, NY: Elsevier, Bd. 99.2018, S. 487-509;

Mendieta, Aldo; Dragomirov, Plamen; Schulz, Florian; Beyrau, Frank; Samenfink, Wolfgang; Schuenemann, Erik

Laser-based measurements of surface cooling following fuel spray impingement

SAE technical papers - Warrendale, Pa: Soc, 2018, Paper 2018-01-0273, insgesamt 9 S.;

Meuschke, Monique; Gunther, Tobias; Berg, Philipp; Wickenhofer, Ralph; Preim, Bernhard; Lawonn, Kai

Visual analysis of aneurysm data using statistical graphics

IEEE transactions on visualization and computer graphics: TVCG - New York, NY: IEEE, 2018;

[Online first]

[Imp.fact.: 3.078]

Meuschke, Monique; Voß, Samuel; Preim, Bernhard; Lawonn, Kai

Exploration of blood flow patterns in cerebral aneurysms during the cardiac cycle

Computers & graphics - Amsterdam [u.a.]: Elsevier Science, Bd. 72.2018, S. 12-25;

[Imp.fact.: 1.176]

Nafsun, Aainaa Izyan Binti; Herz, Fabian; Liu, Xiaoyan

Influence of material thermal properties and dispersity on thermal bed mixing in rotary drums
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 331.2018, S. 121-128;

Neuber, Gregor; Garcia, Carlos E.; Kronenburg, Andreas; Williams, Benjamin A. O.; Beyrau, Frank; Stein, Oliver T.; Cleary, Matthew J.

Joint experimental and numerical study of silica particulate synthesis in a turbulent reacting jet
Proceedings of the Combustion Institute - Amsterdam [u.a.]: Elsevier, 2018;
[Online first]
[Imp.fact.: 5.336]

Oeltze-Jafra, Steffen; Meuschke, Monique; Neugebauer, M.; Saalfeld, Sylvia; Lawonn, K.; Janiga, Gábor; Hege, H.-C.; Zachow, S.; Preim, Bernhard

Generation and visual exploration of medical flow data - survey, research trends and future challenges
Computer graphics forum: the international journal of the Eurographics Association - Oxford: Wiley-Blackwell, 2018;
[Online first]
[Imp.fact.: 2.046]

Oster, Timo; Abdelsamie, Abouelmagd; Motejat, Michael; Gerrits, Tim; Rössl, Christian; Thevenin, Dominique; Theisel, Holger

Onthefly tracking of flame surfaces for the visual analysis of combustion processes
Computer graphics forum: the international journal of the Eurographics Association - Oxford: Wiley-Blackwell, Bd. 37.2018, 6, S. 358-369;
[Imp.fact.: 2.046]

Otto, Hendrik; Kerst, Kristin; Roloff, Christoph; Janiga, Gábor; Katterfeld, André

CFDDem simulation and experimental investigation of the flow behavior of lunar regolith JSC-1A
Particuology - Amsterdam: Elsevier, insges. 10 S., 2018;

Patil, Rohit; Daróczy, László; Janiga, Gábor; Thévenin, Dominique

Large eddy simulation of an H-Darrieus rotor
Energy: the international journal - Amsterdam [u.a.]: Elsevier Science, Bd. 160.2018, S. 388-398;

Penumakala, Pavan Kumar; Nallathambi, Ashok; Specht, Eckehard; Urlau, Ulrich; Hamilton, Doug; Dykes, Charlie

Influence of process parameters on solidification length of twin-belt continuous casting
Applied thermal engineering: design, processes, equipment, economics - Amsterdam [u.a.]: Elsevier Science, Bd. 134.2018, S. 275-286;
[Imp.fact.: 3.356]

Roloff, Christoph; Lukas, Eduard; Wachem, Berend; Thévenin, Dominique

Particle dynamics investigation by means of shadow imaging inside an air separator
Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, 2018;
[Online first]
[Imp.fact.: 3.306]

Roloff, Christoph; Stucht, Daniel; Beuing, Oliver; Berg, Philipp

Comparison of intracranial aneurysm flow quantification techniques - standard PIV vs stereoscopic PIV vs tomographic PIV vs phase-contrast MRI vs CFD
Journal of neuroInterventional surgery: JNIS : the journal of the Society of NeuroInterventional Surgery - London: BMJ Journals, 2018;
[Online first]
[Imp.fact.: 3.524]

Saalfeld, Patrick; Luz, Maria; Berg, Philipp; Preim, Bernhard; Saalfeld, Sylvia

Guidelines for quantitative evaluation of medical visualizations on the example of 3D aneurysm surface comparisons
Computer graphics forum: the international journal of the Eurographics Association - Oxford: Wiley-Blackwell, Bd. 37.2018, 1, S. 226-238;

[Imp.fact.: 2.046]

Saalfeld, Sylvia; Berg, Philipp; Niemann, Annika; Luz, Maria; Preim, Bernhard; Beuing, Oliver

Semiautomatic neck curve reconstruction for intracranial aneurysm rupture risk assessment based on morphological parameters

International journal of computer assisted radiology and surgery: a journal for interdisciplinary research, development and applications of image guided diagnosis and therapy - Berlin: Springer, Bd. 13.2018, 11, S. 1781-1793;

[Imp.fact.: 1.961]

Sandaka, Gourisankar; Specht, Eckehard

Influence of material properties on the decomposition time of limestone under shaft kiln conditions

ZKG international: Bundesverband der Deutschen Zementindustrie ; Bundesverband der Deutschen Kalkindustrie ; Bundesverband der Gips- und Gipsbauplattenindustrie - Walluf: Bauverl, 3, S. 53-56, 2018

Schulz, Florian; Beyrau, Frank

Comparison of the spray and the spray/wall interaction of two gasoline injectors

International journal of automotive technology: IJAT - Berlin: Springer, Bd. 19.2018, 4, S. 615-622;

Schulz, Florian; Beyrau, Frank

Systematic investigation of fuel film evaporation

SAE technical papers - Warrendale, Pa: Soc, 2018, Paper 2018-01-0310, insgesamt 11S.;

Sindeev, Sergey; Arnold, Philipp Georg; Frolov, Sergey; Prothmann, Sascha; Liepsch, Dieter; Balasso, Andrea; Berg, Philipp; Kaczmarz, Stephan; Kirschke, Jan Stefan

Phase-contrast MRI versus numerical simulation to quantify hemodynamical changes in cerebral aneurysms after flow diverter treatment

PLOS ONE - San Francisco, California, US: PLOS, Vol. 13.2018, 1, Art. e190696, insgesamt 17 S.;

Szabó, Balázs; Kovács, Zsolt; Wegner, Sandra; Ashour, Ahmed; Fischer, David; Stannarius, Ralf; Börzsönyi, Tamás

Flow of anisometric particles in a quasi-two-dimensional hopper

Physical review - Woodbury, NY: Inst, Vol. 97.2018, 6, Art. 062904;

[Imp.fact.: 2.284]

Szaszák, N.; Roloff, Christoph; Bordás, Róbert; Bencs, P.; Szabó, S.; Thévenin, Dominique

A novel type of semi-active jet turbulence grid

Heliyon - London [u.a.]: Elsevier, Vol. 4.2018, 12, Art. e01026;

Valen-Sendstad, Kristian; Bergersen, Aslak W.; Shimogonya, Yuji; Goubergrits, Leonid; Bruening, Jan; Pallares, Jordi; Cito, Salvatore; Piskin, Senol; Pekkan, Kerem; Geers, Arjan J.; Larrabide, Ignacio; Rapaka, Saikiran; Mihalef, Viorel; Fu, Wenyu; Qiao, Aike; Jain, Kartik; Roller, Sabine; Mardal, Kent-Andre; Kamakoti, Ramji; Spirka, Thomas; Ashton, Neil; Revell, Alistair; Aristokleous, Nicolas; Houston, J. Graeme; Tsuji, Masanori; Ishida, Fujimaro; Menon, Prahlad G.; Browne, Leonard D.; Broderick, Stephen; Shojima, Masaaki; Koizumi, Satoshi; Barbour, Michael; Aliseda, Alberto; Morales, Hernán G.; Lefèvre, Thierry; Hodis, Simona; Al-Smadi, Yahia M.; Tran, Justin S.; Marsden, Alison L.; Vaippummadhom, Sreeja; Einstein, G. Albert; Brown, Alistair G.; Debus, Kristian; Niizuma, Kuniyasu; Rashad, Sherif; Sugiyama, Shin-Ichiro; Owais Khan, M.; Updegrove, Adam R.; Shadden, Shawn C.; Cornelissen, Bart M. W.; Majoie, Charles B. L. M.; Berg, Philipp; Saalfeld, Sylvia; Kono, Kenichi; Steinman, David A.

Real-world variability in the prediction of intracranial aneurysm wall shear stress - the 2015 international aneurysm CFD challenge

Cardiovascular engineering and technology: CVET - New York, NY: Springer, Bd. 9.2018, 4, S. 544-564;

[Imp.fact.: 2.046]

Voss, Samuel; Arens, Christoph; Janiga, Gábor

Assessing transitional air flow during human exhalation from Large Eddy Simulations based on spectral entropy

Flow, turbulence and combustion: an international journal published in association with ERCOFTAC - Dordrecht [u.a.]: Springer Science + Business Media B.V, Bd. 100.2018, insges. 12 S.;

[Imp.fact.: 2.207]

Voß, Samuel; Saalfeld, Sylvia; Hoffmann, Thomas; Beuing, Oliver; Janiga, Gábor; Berg, Philipp

Fluid-structure interaction in intracranial vessel walls - the role of patient-specific wall thickness
Current directions in biomedical engineering - Berlin: De Gruyter, Bd. 4.2018, 1, S. 587-590;

Waldeck, Steffen; Woche, Hermann; Specht, Eckehard; Fritsching, Udo

Evaluation of heat transfer in quenching processes with impinging liquid jets
International journal of thermal sciences: IJTS - Amsterdam [u.a.]: Elsevier Science, Bd. 134.2018, S. 160-167;

Woche, Hermann; Fang, Yuan; Specht, Eckehard

Heat transfer analysis during metal cooling with sprays and jets
Heat processing: international magazine for industrial furnaces, heat treatment & equipment - Essen: Vulkan-Verl, Bd. 16.2018, 1, S. 41-47

Wu, Wei-Ning; Liu, Xiao-Yan; Hu, Zhou; Herz, Fabian; Specht, Eckehard

Measurement of the local material depth in a directly-heated pilot rotary kiln based on temperature fields
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, insges. 33 S., 2018;
[Imp.fact.: 2.942]

Zhou, Hao; You, Jiaping; Xiong, Shiyong; Yang, Yue; Thévenin, Dominique; Chen, Shiyi

Interactions between the premixed flame front and the three-dimensional Taylor-Green vortex
Proceedings of the Combustion Institute - Amsterdam [u.a.]: Elsevier, 2018;
[Online first]
[Imp.fact.: 5.336]

Zähringer, Katharina; Wagner, Lisa-Maria; Thévenin, Dominique; Siegmund, Patrick; Sundmacher, Kai

Particle-image-velocimetry measurements in organic liquid multiphase systems for an optimal reactor design and operation
Journal of visualization - Berlin: Springer, Bd. 21.2018, 1, S. 5-17;
[Imp.fact.: 0.971]

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Woche, Hermann; Fang, Yuan; Specht, Eckehard

Wärmeübergang von Sprays und Strahlen bei der Kühlung heißer Metalle
Prozesswärme: Thermoprozesstechnik, Wärmebehandlung, Anlagenbau und -betrieb - Essen: Vulkan-Verlag, Bd. 1.2018, 1, S. 129-136

BEGUTACHTETE BUCHBEITRÄGE

Abdelsamie, Abouelmagd; Thévenin, Dominique

DNS of burning N-heptane droplets - auto-ignition and turbulence modulation mechanisms
Direct and Large-Eddy Simulation X - Cham: Springer International Publishing, S. 391-397, 2018 - (ERCOFTAC Series; 24);

Berg, Philipp; Radtke, Livia; Voß, Samuel; Serowy, Steffen; Janiga, Gábor; Preim, Bernhard; Beuing, Oliver; Saalfeld, Sylvia

3DRA reconstruction of intracranial aneurysms - how does voxel size influences morphologic and hemodynamic parameters
Learning from the past, looking to the future: 2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society : July 17-21, 2018, Hawaii Convention Center, Honolulu, Hawaii - [Piscataway, NJ]: IEEE, S. 1327-1330;
[Konferenz: 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Honolulu, HI, USA, 18-21 July 2018]

Kulkarni, Gaurav A.; Specht, Eckehard

Quantifying the parameters influencing heat transfer during quenching of metal plate
Proceedings of the 4th World Congress on Mechanical, Chemical, and Material Engineering (MCM'18) - International ASET Inc., 2018, Paper-Nr. HTFF 167, insgesamt 10 S.;

Mansour, Michael; Wunderlich, Bernd; Thevenin, Dominique

Experimental study of two-phase air/water flow in a centrifugal pump working with a closed or a semi-open impeller

ASME Turbo Expo 2018: Turbomachinery Technical Conference and Exposition: Volume 9: Oil and gas applications, supercritical CO₂ power cycles, wind energy, Oslo, Norway, June 11-15, 2018 - New York, N.Y.: The American Society of Mechanical Engineers, 2018, Paper No. GT2018-75380, insgesamt 13 S.;
[Konferenz: ASME Turbo Expo 2018: Turbomachinery Technical Conference and Exposition, Oslo, Norway, June 11-15, 2018]

Misra, Anurag; Bonamy, Cyrille; Souza, Luís M.; Hohl, Lena; Illner, Markus; Kraume, Matthias; Repke, Jens-Uwe; Thévenin, Dominique

A multi-fluid approach to simulate separation of liquid-liquid systems in a gravity settler
Computer aided chemical engineering - Amsterdam [u.a.]: Elsevier, Bd. 43.2018, S. 31-36;
[Symposium: 28th European Symposium on Computer Aided Process Engineering, Graz, Austria, 10-13 June 2018]

Niemann, Uli; Berg, Philipp; Niemann, Annika; Beuing, Oliver; Preim, Bernhard; Spiliopoulou, Myra; Saalfeld, Sylvia

Rupture status classification of intracranial aneurysms using morphological parameters
31st IEEE International Symposium on Computer-Based Medical Systems: CBMS 2018 : 18-21 June 2018, Karlstad, Sweden : proceedings - Piscataway, NJ: IEEE;
[Symposium: 31st IEEE International Symposium on Computer-Based Medical Systems, CBMS 2018, Karlstad, Sweden, 18-21 June 2018]

Pliester, Stefan; Bauer, Wolfgang; Al-Karawi, Janan; Specht, Eckehard

Ermittlung gesicherter Werte der Wärmeleitfähigkeit feuerfester Werkstoffe für die Auslegung von Industrieöfen und für die Prozessoptimierung

Tagungsband zum 20. Werkstofftechnischen Kolloquium: 14. und 15. März 2018 in Chemnitz - Chemnitz: Eigenverlag Chemnitz, S. 326 - (Schriftenreihe Werkstoffe und werkstofftechnische Anwendungen; Band 72);
[Tagung: 20. Werkstofftechnischen Kolloquium, Chemnitz, 14. und 15. März 2018]

Ranga Dinesh, K. K. J.; Shalaby, H.; Luo, K. H.; Thévenin, Dominique

DNS of turbulent lean premixed syngas flames at elevated pressures
Direct and Large-Eddy Simulation X - Cham: Springer International Publishing, S. 399-405, 2018 - (ERCOFTAC Series; 24);

Thévenin, Dominique

DNS and LES of transitional and two-phase flows
Direct and Large-Eddy Simulation X - Cham: Springer International Publishing, S. 35-42, 2018 - (ERCOFTAC Series; 24);

Voß, Samuel; Saalfeld, Patrick; Saalfeld, Sylvia; Beuing, Oliver; Janiga, Gábor; Preim, Bernhard

Impact of gradual vascular deformations on the intra-aneurysmal hemodynamics
Bildverarbeitung für die Medizin 2018: Algorithmen - Systeme - Anwendungen ; Proceedings des Workshops vom 11. bis 13. März 2018 in Erlangen - Berlin: Springer Vieweg, S. 359-364;
[Workshop: Bildverarbeitung für die Medizin 2018, Erlangen, 11. bis 13. März 2018]

HERAUSGEBERSCHAFTEN

Wolter, Martin; Beyrau, Frank; Tsotsas, Evangelos; Klabunde, Christian; Dancker, Jonte; Gast, Nicola; Schröter, Tamara; Schulz, Florian; Rossberg, Jari; Richter, André

Intelligentes Multi-Energie-System (SmartMES) - Statusbericht der Otto-von-Guericke-Universität Magdeburg zum Verbundprojekt ; 1. Statusseminar 28. März 2018 in Magdeburg

Magdeburg: Otto-von-Guericke-Universität, 2018, XII, 159 Seiten, Illustrationen, Diagramme, 21 cm - (Res electricae Magdeburgenses; Band 74), ISBN 978-3-944722-69-6;

Kongress: Statusseminar 1 (Magdeburg : 2018.03.28) [Literaturangaben: Seite 150-159]

ABSTRACTS

Abram, Christopher; Fond, Benoit; Pougin, Miriam; Beyrau, Frank

Characterising dispersed phosphor particles for fluid thermometry

Inaugural International Conference on Phosphor Thermometry: July 25th -27th, 2018, Technology and Innovation Centre, University of Strathclyde, Glasgow, Scotland - Glasgow;

[Konferenz: Inaugural International Conference on Phosphor Thermometry, IGET 2018, Glasgow, Scotland, July 25th -27th, 2018]

Fond, Benoit; Xiao, Cheng; Abram, Christopher; T'Joen, Christophe; Wachem, Berend; Beyrau, Frank

Phosphor thermometry for the validation of computational fluid dynamics simulations of heat transfer in compressible real-gas flows

Inaugural International Conference on Phosphor Thermometry: July 25th -27th, 2018, Technology and Innovation Centre, University of Strathclyde, Glasgow, Scotland - Glasgow;

[Konferenz: Inaugural International Conference on Phosphor Thermometry, IGET 2018, Glasgow, Scotland, July 25th -27th, 2018]

Harth, Kirsten; Trittel, Torsten; Wegner, Sandra; Stannarius, Ralf

Free cooling of a granular gas in microgravity

Bulletin of the American Physical Society - New York, NY: Soc, 2018, Abstract: L60.00202;

[APS March Meeting 2018, Los Angeles, California, March 59, 2018]

Mendieta, Aldo; Fond, Benoit; Dragomirov, Plamen; Beyrau, Frank

Exploiting optical signals from single-phosphor particles for simultaneous point measurements of flow temperature and velocity

Inaugural International Conference on Phosphor Thermometry: July 25th -27th, 2018, Technology and Innovation Centre, University of Strathclyde, Glasgow, Scotland - Glasgow;

[Konferenz: Inaugural International Conference on Phosphor Thermometry, IGET 2018, Glasgow, Scotland, July 25th -27th, 2018]

Ojo, Anthony; Fond, Benoit; Abram, Christopher; Wachem, Berend; Heyes, Andrew; Beyrau, Frank

Simultaneous measurements of the thermal and velocity boundary layer over a heated flat plate using thermographic laser Doppler velocimetry

Inaugural International Conference on Phosphor Thermometry: July 25th -27th, 2018, Technology and Innovation Centre, University of Strathclyde, Glasgow, Scotland - Glasgow;

[Konferenz: Inaugural International Conference on Phosphor Thermometry, IGET 2018, Glasgow, Scotland, July 25th -27th, 2018]

Voß, Samuel; Saalfeld, Sylvia; Hoffmann, Thomas; Janiga, Gábor; Beuing, Oliver; Berg, Philipp

Fluid-structure interaction in intracranial vessel walls - the role of patient-specific wall thickness

Biomedical engineering: joint journal of the German Society for Biomedical Engineering in VDE and the Austrian and Swiss Societies for Biomedical Engineering - Berlin [u.a.]: de Gruyter, Vol. 63.2018, Suppl.1, S. S378;

[Kongress: BMT 2018, Aachen, September 26-28, 2018]

[Imp.fact.: 1.088]

DISSERTATIONEN

Buchtatj, Denis; Thévenin, Dominique [GutachterIn]; Hadler, Jens [GutachterIn]; Tschöke, Helmut [GutachterIn]

CFD-basierte Analyse der Gemischbildung mit einem skalenauflösenden Turbulenzmodell

Magdeburg, 2017, XVI, 140 Seiten, Illustrationen, Diagramme;

[Literaturverzeichnis: Seite 126-133]

Meyer, Lennart; Specht, Eckehard; Krause, Ulrich [GutachterIn]; Beyer, Michael [GutachterIn]; Grätz, Rainer [GutachterIn]

Die Entstehung von heißen Oberflächen in metallischen Reibsituationen und ihre Zündwirksamkeit

Bremen: Fachverlag NW in der Carl Schünemann Verlag GmbH, 2018, VII, 131 Seiten, Illustrationen, Diagramme, 30 cm - (PTB-Bericht; Ex, Explosionsschutz; 9), ISBN 978-3-95606-402-9

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2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Abdol Azis, Mohd Hazmil; Evrard, Fabien; Wachem, Berend

An immersed boundary method for flows with dense particle suspensions
Acta mechanica - Wien: Springer, 2018;
[Online first]
[Imp.fact.: 2.113]

Ariane, M.; Sommerfeld, Martin; Alexiadis, A.

Wall collision and drug-carrier detachment in dry powder inhalers - using DEM to devise a sub-scale model for CFD calculations
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 334.2018, S. 65-75;

Aydin, Erdal; Bonvin, Dominique; Sundmacher, Kai

Computationally efficient NMPC for batch and semi-batch processes using parsimonious input parameterization
Journal of process control: a journal affiliated with IFAC, the International Federation of Automatic Control - Amsterdam [u.a.]: Elsevier Science, Bd. 66.2018, S. 12-22;

Aydin, Erdal; Bonvin, Dominique; Sundmacher, Kai

NMPC using ponyragins minimum principle-application to a two-phase semi-batch hydroformylation reactor under uncertainty
Computers & chemical engineering: an international journal of computer applications in chemical engineering - Amsterdam [u.a.]: Elsevier Science, Bd. 108.2018, S. 47-56;

Aydin, Erdal; Bonvin, Dominique; Sundmacher, Kai

Toward fast dynamic optimization - an indirect algorithm that uses parsimonious input parameterization
Industrial & engineering chemistry research - Columbus, Ohio: American Chemical Society, Bd. 57.2018, 30, S. 10038-10048;

Bartholomew, Paul; Denner, Fabian; Abdol-Azis, Mohd Hazmil; Marquis, Andrew; Wachem, Berend

Unified formulation of the momentum-weighted interpolation for collocated variable arrangements
Journal of computational physics - Amsterdam: Elsevier, Bd. 375.2018, S. 177-208;
[Imp.fact.: 2.864]

Bechtel, Simon; Vidakovic-Koch, Tanja; Sundmacher, Kai

Novel process for the exergetically efficient recycling of chlorine by gas phase electrolysis of hydrogen chloride
The chemical engineering journal - Amsterdam: Elsevier, Bd. 346.2018, S. 535-548;

Beneyton, Thomas; Krafft, Dorothee; Bednarz, Claudia; Kleineberg, Christin; Woelfer, Christian; Ivanov, Ivan; Vidakovi-Koch, Tanja; Sundmacher, Kai; Baret, Jean-Christophe

Out-of-equilibrium microcompartments for the bottom-up integration of metabolic functions
Nature Communications - [London]: Nature Publishing Group UK, Vol. 9.2018, Art. 2391, insgesamt 10 S.;

Brächer, Alexander; Kreußer, Lisa Maria; Qamar, Shamsul; Seidel-Morgenstern, Andreas; Harbou, Erik

Application of quantitative inline NMR spectroscopy for investigation of a fixed-bed chromatographic reactor process
The chemical engineering journal - Amsterdam: Elsevier, Bd. 336.2018, S. 518-530;

Buchbinder, Jörn Holger; Pischel, Dennis; Sundmacher, Kai; Flassig, Robert J.; Lavrik, Inna N.

Quantitative single cell analysis uncovers the life/death decision in CD95 network
PLoS Computational Biology: a new community journal - San Francisco, Calif: Public Library of Science, Vol. 14.2018, 9, Art. e1006368, insgesamt 21 S.;

[Imp.fact.: 3.955]

Böhmert, Linda; König, Laura; Sieg, Holger; Lichtenstein, Dajana; Paul, Niklas; Braeuning, Albert; Voigt, Andreas; Lampen, Alfonso

In vitro nanoparticle dosimetry for adherent growing cell monolayers covering bottom and lateral walls
Particle and fibre toxicology: pft - London: BioMed Central, Vol. 15.2018, Art. 42, insgesamt 20 S.;

[Imp.fact.: 6.105]

Carvalho, Sofia B.; Fortuna, A. Raquel; Wolff, Michael W.; Peixoto, Cristina; Alves, Paula M.; Reichl, Udo

Purification of influenza viruslike particles using sulfated cellulose membrane adsorbers
Journal of chemical technology & biotechnology - Chichester: Wiley, Bd. 93.2018, 7, S. 1988-1996;
[Special issue: Bioseparations]

Charogiannis, Alexandros; Denner, Fabian; Wachem, Berend; Kalliadasis, Serafim; Scheid, Benoit; Markides, Christos N.

Experimental investigations of liquid falling films flowing under an inclined planar substrate
Physical review fluids - College Park, MD: APS, Vol. 3.2018, 11, Artikel 114002;
[Imp.fact.: 2.021]

Cui, Yan; Sommerfeld, Martin

Application of Lattice-Boltzmann method for analysing detachment of micron-sized particles from carrier particles in turbulent flows
Flow, turbulence and combustion: an international journal published in association with ERCOFTAC - Dordrecht [u.a.]: Springer Science + Business Media B.V, Bd. 100.2018, 1, S. 271-297;

David, Uche Ugochukwu; Qamar, Shamsul; Seidel-Morgenstern, Andreas

Analytical and numerical solutions of two-dimensional general rate models for liquid chromatographic columns packed with coreshell particles
Chemical engineering research and design: CERD - Amsterdam: Elsevier, Bd. 130.2018, S. 295-320;

Denner, Fabian; Charogiannis, Alexandros; Pradas, Marc; Markides, Christos N.; Wachem, Berend; Kalliadasis, Serafim

Solitary waves on falling liquid films in the inertia-dominated regime
Journal of fluid mechanics - Cambridge [u.a.]: Cambridge Univ. Press, Bd. 837.2018, S. 491-519;
[Imp.fact.: 2.821]

Denner, Fabian; Xiao, Cheng-Nian; Wachem, Berend

Pressure-based algorithm for compressible interfacial flows with acoustically-conservative interface discretisation
Journal of computational physics - Amsterdam: Elsevier, Bd. 367.2018, S. 192-234;
[Imp.fact.: 2.744]

Diez, E.; Meyer, K.; Bück, A.; Tsotsas, Evangelos; Heinrich, S.

Influence of process conditions on the product properties in a continuous fluidized bed spray granulation process
Chemical engineering research and design: CERD - Amsterdam: Elsevier, Bd. 139.2018, S. 104-115;

Duvigneau, Stefanie; Dürr, Robert; Laske, Tanja; Bachmann, Mandy; Dostert, Melanie; Reichl, Udo; Kienle, Achim

Mathematical modeling as a tool to improve influenza vaccine production processes

IFAC-PapersOnLine - Frankfurt: Elsevier, Bd. 51.2018, 19, S. 1-4;

[Konferenz: 7th Conference on Foundation of Systems Biology in Engineering, FOSBE 2018, Chicago, Illinois, USA, 05-08 August 2018]

[Imp.fact.: 0.434]

Evrard, Fabien; Denner, Fabian; Wachem, Berend

Surface reconstruction from discrete indicator functions

IEEE transactions on visualization and computer graphics: TVCG - New York, NY: IEEE, 2018;

[Online first]

[Imp.fact.: 3.078]

Fischer, Laura M.; Wolff, Michael; Reichl, Udo

Purification of cell culture-derived influenza A virus via continuous anion exchange chromatography on monoliths
Vaccine - Amsterdam: Elsevier, Bd. 36.2018, 22, S. 3153-3160;

Fortuna, Ana Raquel; Taft, Florian; Villain, Louis; Wolff, Michael W.; Reichl, Udo

Optimization of cell culture-derived influenza A virus particles purification using sulfated cellulose membrane adsorbers

Engineering in life sciences - Weinheim: Wiley-VCH, Bd. 18.2018, 1, S. 29-39;

Gerlach, Martin; Kirschtowski, Sabine; Seidel-Morgenstern, Andreas; Hamel, Christof

Kinetic modeling of the palladiumcatalyzed isomerizing methoxycarbonylation of 1decene

Chemie - Ingenieur - Technik: CIT - Weinheim: Wiley-VCH Verl, Bd. 90.2018, 5, S. 673-678;

[Imp.fact.: 1.1]

Golovin, Ievgen; Strenzke, Gerd; Dürr, Robert; Palis, Stefan; Bück, Andreas; Tsotsas, Evangelos; Kienle, Achim

Parameter identification for continuous fluidized bed spray agglomeration

Processes: open access journal - Basel: MDPI, Vol. 6.2018, 12, Artikel 246;

Gouaou, Imen; Shamaei, Samira; Koutchoukali, Mohamed Salah; Bouhelassa, Mohamed; Tsotsas, Evangelos; Kharaghani, Abdolreza

Impact of operating conditions on a single droplet and spray drying of hydroxypropylated pea starch - process performance and final powder properties

Asia-Pacific journal of chemical engineering - Hoboken, NJ: Wiley, Bd. 13.2018, 5;

[Imp.fact.: 1.238]

Hampel, Nelli; Royeva, Evgeniya; Bück, Andreas; Tsotsas, Evangelos

Coating of finely dispersed particles by two-fluid nozzle

Particuology : science and technology of particles - Amsterdam : Elsevier, Bd. 38.2018, S. 80-93

[Imp.fact.: 2.785]

Hazmil Abdol Azis, Mohd; Evrard, Fabien; Wachem, Berend

An immersed boundary method for incompressible flows in complex domains

Journal of computational physics - Amsterdam: Elsevier, 2018;

[Online first]

[Imp.fact.: 2.864]

Hoffmann, Marcus; Pioch, Markus; Pralow, Alexander; Henning, René; Kottler, Robert; Reichl, Udo; Rapp, Erdmann

The fine art of destruction - a guide to indepth glycoproteomic analyses-exploiting the diagnostic potential of fragment ions

Proteomics - Weinheim: Wiley VCH, Vol. 18.2018, 24, Art.-Nr. 1800282;

Idakiev, Vesselin; Steinke, Claudia; Sondej, Franziska; Bück, Andreas; Tsotsas, Evangelos; Mörl, Lothar

Inductive heating of fluidized beds - spray coating process

Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 328.2018, S. 26-37;

Jiang, Zhaochen; Bück, Andreas; Tsotsas, Evangelos

CFDDEM study of residence time, droplet deposition, and collision velocity for a binary particle mixture in a Wurster fluidized bed coater

Drying technology: an international journal - Philadelphia, Pa: Taylor & Francis, Bd. 36.2018, 6, S. 638-650;

Jiang, Zhaochen; Hagemeyer, Thomas; Bück, Andreas; Tsotsas, Evangelos

Color-PTV measurement and CFD-DEM simulation of the dynamics of poly-disperse particle systems in a pseudo-2D fluidized bed

Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, Bd. 179.2018, S. 115-132;

Jokiel, Michael; Kaiser, Nicolas Maximilian; Kováts, Péter; Mansour, Michael; Zähringer, Katharina; Nigam, Krishna Deo Prasad; Sundmacher, Kai

Helically coiled segmented flow tubular reactor for the hydroformylation of long-chain olefins in a thermomorphic multiphase system

The chemical engineering journal - Amsterdam: Elsevier, 2018;

[Online first]

[Imp.fact.: 6.735]

Kaiser, Nicolas Maximilian; Flassig, Robert; Sundmacher, Kai

Reactor-network synthesis via flux profile analysis

The chemical engineering journal - Amsterdam: Elsevier, Bd. 335.2018, S. 1018-1030;

Khalid, Muhammad Kamran; Asad, Muhammad; Henrich-Noack, Petra; Sokolov, Maxim; Hintz, Werner; Grigartzik, Lisa; Zhang, Enqi; Dityatev, Alexander; Wachem, Berend; Sabel, Bernhard A.

Evaluation of toxicity and neural uptake in vitro and in vivo of superparamagnetic iron oxide nanoparticles

International journal of molecular sciences - Basel: Molecular Diversity Preservation International, Vol. 19.2018, 9, Art. 2613, insgesamt 14 S.;

[Imp.fact.: 3.687]

Koullapis, P.; Kassinos, S. C.; Muela, J.; Perez-Segarra, C.; Rigola, J.; Lehmkuhl, O.; Cui, Y.; Sommerfeld, Martin; Elcner, J.; Jicha, M.; Saveljic, I.; Filipovic, N.; Lizal, F.; Nicolaou, L.

Regional aerosol deposition in the human airways - the SimInhale benchmark case and a critical assessment of in silico methods

European journal of pharmaceutical sciences: official journal of the European Federation for Pharmaceutical Sciences - New York, NY [u.a.]: Elsevier, Bd. 113.2018, S. 77-94;

Le, Kieu Hiep; Hampel, Neli; Kharaghani, Abdolreza; Bück, Andreas; Tsotsas, Evangelos

Superheated steam drying of single wood particles: A characteristic drying curve model deduced from continuum model simulations and assessed by experiments

Drying technology: an international journal - Philadelphia, Pa: Taylor & Francis, Bd. 36.2018, 15, S. 1866-1881; [Special Issue to Celebrate the 30th Anniversary of the Editorship of Prof. Arun S. Mujumdar]

Le, Kieu Hiep; Tsotsas, Evangelos; Kharaghani, Abdolreza

Continuum-scale modeling of superheated steam drying of cellular plant porous media

International journal of heat and mass transfer - Amsterdam [u.a.]: Elsevier, Bd. 124.2018, S. 1033-1044;

Lee, Ju Weon; Seidel-Morgenstern, Andreas

Model predictive control of simulated moving bed chromatography for binary and pseudo-binary separations - simulation study

IFAC-PapersOnLine - Frankfurt: Elsevier, Bd. 51.2018, 18, S. 530-535;

[Symposium: 10th IFAC Symposium on Advanced Control of Chemical Processes, ADCHEM 2018, Shenyang, China, 25-27 July 2018]

[Imp.fact.: 0.434]

Liesche, Georg; Sundmacher, Kai

Identification of key transport phenomena in high-temperature reactors - flow and heat transfer characteristics
Industrial & engineering chemistry research - Columbus, Ohio: American Chemical Society, Bd. 57.2018, 46, S. 15884-15897;
[Imp.fact.: 3.141]

Liu, Daoyin; Wachem, Berend

Comprehensive assessment of the accuracy of CFD-DEM simulations of bubbling fluidized beds
Powder technology: an international journal on the science and technology of wet and dry particulate systems -
Amsterdam [u.a.]: Elsevier Science, Bd. 343.2018, S. 145-158;
[Imp.fact.: 3.23]

Mahour, Reza; Klapproth, Jan; Rexer, Thomas F. T.; Schildbach, Anna; Klamt, Steffen; Pietzsch, Markus; Rapp, Erdmann; Reichl, Udo

Establishment of a five-enzyme cell-free cascade for the synthesis of uridine diphosphate N-acetylglucosamine
Journal of biotechnology - Amsterdam [u.a.]: Elsevier Science, Bd. 283.2018, S. 120-129;

Moghaddam, Alireza Attari; Kharaghani, Abdolreza; Tsotsas, Evangelos; Prat, Marc

A pore network study of evaporation from the surface of a drying nonhygroscopic porous medium
AIChE journal - Hoboken, NJ: Wiley, Bd. 64.2018, 4, S. 1435-1447;

Mueller, Ines; Kiedorf, Gregor; Runne, Eike; Pottratz, Ines; Seidel-Morgenstern, Andreas

Process control and yield enhancement of the galactooligosaccharide formation
Chemie - Ingenieur - Technik: CIT - Weinheim: Wiley-VCH Verl, Bd. 90.2018, 5, S. 725-730;

Muth, Thilo; Kohrs, Fabian; Heyer, Robert; Benndorf, Dirk; Rapp, Erdmann; Reichl, Udo; Martens, Lennart; Renard, Bernhard Y.

MPA portable - a stand-alone software package for analyzing metaproteome samples on the go
Analytical chemistry: the authoritative voice of the analytical community - Columbus, Ohio: American Chemical Society, Bd. 90.2018, 1, S. 685-689;

Müller, Daniel; Bück, Andreas; Tsotsas, Evangelos

Influence of separation properties and processing strategies on product characteristics in continuous fluidized bed spray granulation
Powder technology: an international journal on the science and technology of wet and dry particulate systems -
Amsterdam [u.a.]: Elsevier Science, Bd. 342.2019, S. 572-584, 2018;
[Online first]

Müller, Ines; Kiedorf, G; Runne, E.; Seidel-Morgenstern, Andreas; Hamel, Christof

Synthesis, kinetic analysis and modelling of galacto-oligosaccharides formation
Chemical engineering research and design: CERD - Amsterdam: Elsevier, Bd. 130.2018, 02, S. 154-166;
[Imp.fact.: 2.538]

Neugebauer, Christoph; Bück, Andreas; Palis, Stefan; Mielke, Lisa; Tsotsas, Evangelos; Kienle, Achim

Influence of thermal conditions on particle properties in fluidized bed layering granulation
Processes: open access journal - Basel: MDPI, Vol. 6.2018, 12, Artikel 235;
[Imp.fact.: 1.279]

Nguyen, Duy; Rimmelgas, Johan; Björn, Ingela Niklasson; Wachem, Berend; Thalberg, Kyrre

Towards quantitative prediction of the performance of dry powder inhalers by multi-scale simulations and experiments
International journal of pharmaceuticals - New York, NY [u.a.]: Elsevier, Bd. 547.2018, 1, S. 31-43;
[Imp.fact.: 3.649]

Nguyen-Khuong, Terry; Pralow, Alexander; Reichl, Udo; Rapp, Erdmann

Improvement of electrospray stability in negative ion mode for nano-PGC-LC-MS glycoanalysis via post-column make-up flow
Glycoconjugate journal: official journal of the International Glycoconjugate Organization - Dordrecht [u.a.]: Springer Science + Business Media B.V, Bd. 35.2018, 6, S. 499-509;

Nikolay, Alexander; Castilho, Leda R.; Reichl, Udo; Genzel, Yvonne

Propagation of Brazilian Zika virus strains in static and suspension cultures using Vero and BHK cells
Vaccine - Amsterdam: Elsevier, Bd. 36.2018, 22, S. 3140-3145;

Nikolay, Alexander; Léon, Arnaud; Schwamborn, Klaus; Genzel, Yvonne; Reichl, Udo

Process intensification of EB66[®] cell cultivations leads to high-yield yellow fever and Zika virus production
Applied microbiology and biotechnology - Berlin: Springer, Bd. 102.2018, 20, S. 8725-8737;

Pashminehazar, Reihaneh; Ahmed, Syed Jawwad; Kharaghani, Abdolreza; Tsotsas, Evangelos

Spatial morphology of maltodextrin agglomerates from X-ray microtomographic data - real structure evaluation vs. spherical primary particle model
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 331.2018, S. 204-217;

Pashminehazar, Reihaneh; Kharaghani, Abdolreza; Tsotsas, Evangelos

Determination of fractal dimension and prefactor of agglomerates with irregular structure
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 343.2019, S. 765-774, 2018;
[First online]
[Imp.fact.: 3.23]

Pioch, Markus; Hoffmann, Marcus; Prahlow, Alexander; Reichl, Udo; Rapp, Erdmann

glyXtoolMS - an open-source pipeline for semiautomated analysis of glycopeptide mass spectrometry data
Analytical chemistry: the authoritative voice of the analytical community - Columbus, Ohio: American Chemical Society, Bd. 90.2018, 20, S. 11908-11916;

Pischel, Dennis; Buchbinder, Jörn Holger; Sundmacher, Kai; Lavrik, Inna N.; Flassig, Robert J.

A guide to automated apoptosis detection - how to make sense of imaging flow cytometry data
PLOS ONE - San Francisco, California, US: PLOS, Vol. 13.2018, 5, Art. e0197208, insgesamt 17 S.;
[Imp.fact.: 2.766]

Qamar, Shamsul; Kiran, Nadia; Anwar, Talha; Bibi, Sameena; Seidel-Morgenstern, Andreas

Theoretical investigation of thermal effects in an adiabatic chromatographic column using a lumped kinetic model incorporating heat transfer resistances
Industrial & engineering chemistry research - Columbus, Ohio: American Chemical Society, Bd. 57.2018, 6, S. 2287-2297;

Radeva, Zheni; Lukas, Eduard; Aman, Sergej

Influence of the pelletizing process parameters on the breakage behaviour of the received alumina oxide pellets
Granular matter - Berlin: Springer, Vol. 20.2018, 2, Art. 23, insgesamt 23 S.;

Rexer, Thomas F. T.; Schildbach, Anna; Klapproth, Jan; Schierhorn, Angelika; Mahour, Reza; Pietzsch, Markus; Rapp, Erdmann; Reichl, Udo

One pot synthesis of GDP-mannose by a multi-enzyme cascade for enzymatic assembly of lipid-linked oligosaccharides
Biotechnology & bioengineering - New York, NY [u.a.]: Wiley, Bd. 115.2018, 1, S. 192-205;
[Online first]

Rieck, Christian; Schmidt, Martin; Bück, Andreas; Tsotsas, Evangelos

Monte Carlo modeling of binderless spray agglomeration in fluidized beds
AIChE journal - Hoboken, NJ: Wiley, Bd. 64.2018, 10, S. 3582-3594;
[Imp.fact.: 3.326]

Roloff, Christoph; Lukas, Eduard; Wachem, Berend; Thévenin, Dominique

Particle dynamics investigation by means of shadow imaging inside an air separator
Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, 2018;
[Online first]
[Imp.fact.: 3.306]

Rüdiger, D.; Kupke, S. Y.; Reichl, Udo

A multiscale model of influenza A virus replication covering highly different infection conditions in cell cultures
IFAC-PapersOnLine - Frankfurt: Elsevier, Bd. 51.2018, 19, S. 32-33;
[Konferenz: 7th Conference on Foundation of Systems Biology in Engineering, FOSBE 2018, Chicago, Illinois, USA, 05-08 August 2018]

Sadegh-Vaziri, Ramiar; Ludwig, Kristin; Sundmacher, Kai; Babler, Matthaus U.

Mechanisms behind overshoots in mean cluster size profiles in aggregation-breakup processes
Journal of colloid and interface science: JCIS - Amsterdam [u.a.]: Elsevier, Bd. 528.2018, S. 336-348;

Schack, Dominik; Rihko-Struckmann, Liisa; Sundmacher, Kai

Linear programming approach for structure optimization of renewable-to-chemicals (R2Chem) production networks
Industrial & engineering chemistry research - Columbus, Ohio: American Chemical Society, Bd. 57.2018, 30, S. 9889-9902;

Seidel, Carsten; Jörke, A.; Vollbrecht, B.; Seidel-Morgenstern, Andreas; Kienle, Achim

Kinetic modeling of methanol synthesis from renewable resources
Chemical engineering science - Amsterdam [u.a.]: Elsevier Science, Bd. 175.2018, S. 130-138;
[Imp.fact.: 2.895]

Shen, Li; Denner, Fabian; Morgan, Neal; Wachem, Berend; Dini, Daniele

Capillary waves with surface viscosity
Journal of fluid mechanics - Cambridge [u.a.]: Cambridge Univ. Press, Bd. 847.2018, S. 644-663;
[Imp.fact.: 2.893]

Sommerfeld, Martin; Lain, S.

Stochastic modelling for capturing the behaviour of irregular-shaped non-spherical particles in confined turbulent flows
Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 332.2018, S. 253-264;

Sommerfeld, Martin; Muniz, Marcelo; Reichardt, Thomas

On the importance of modelling bubble dynamics for point-mass numerical calculations of bubble columns
Journal of chemical engineering of Japan: JCEJ - Tokyo, Bd. 51.2018, 4, S. 301-317;

Sommerfeld, Martin; Qadir, Z.

Fluid dynamic forces acting on irregular shaped particles - simulations by the Lattice-Boltzmann method
International journal of multiphase flow - Oxford: Pergamon Press, Bd. 101.2018, S. 212-222;

Sondej, Franziska; Peglow, Mirko; Bück, Andreas; Tsotsas, Evangelos

Experimental investigation of the morphology of salt deposits from drying sessile droplets by whitelight interferometry
AIChE journal - Hoboken, NJ: Wiley, Bd. 64.2018, 6, S. 2002-2016;

Trüe, Michael; Aman, Sergej; Müller, Peter; Hintz, Werner; Hirsch, Sören

Herstellung von mehrschichtigem Graphen in einer Scheibenschwingmühle
Chemie - Ingenieur - Technik: CIT - Weinheim: Wiley-VCH Verl, Bd. 90.2018, 4, S. 533-539;

Trüe, Michael; Böttcher, Ronny; Faßhauer, Oliver; Aman, Sergej; Wachem, Berend; Müller, Peter

Comparison of measurement systems for free fall tests and calculations of the coefficient of restitution
Measurement science and technology: devoted to the theory, practice and application of measurement in physics, chemistry, engineering and the environmental and life sciences from inception to commercial exploitation - Bristol: IOP Publ, Vol. 29.2018, 10, Art. 105403, insgesamt 14 S.;
[Imp.fact.: 1.685]

Vodovnik, Maa; Vrabec, Katja; Hellwig, Patrick; Benndorf, Dirk; Seun, Mija; Gregori, Andrej; Gottumukkala, Lalitha D.; Anderson, Robin C.; Reichl, Udo

Valorisation of deinking sludge as a substrate for lignocellulolytic enzymes production by *Pleurotus ostreatus*
Journal of cleaner production - Amsterdam [u.a.]: Elsevier Science, Vol. 197.2018, Part 1, S. 253-263;

Vorhauer, Nicole; Tsotsas, Evangelos; Prat, Marc

Drying of thin porous disks from pore network simulations

Drying technology: an international journal - Philadelphia, Pa: Taylor & Francis, Bd. 36.2018, 6, S. 651-663;

Vorhauer, Nicole; Tsotsas, Evangelos; Prat, Marc

Temperature gradient induced double stabilization of the evaporation front within a drying porous medium

Physical review fluids - College Park, MD: APS, Vol. 3.2018, 11, Artikel 114201, insgesamt 24 Seiten;

Vu, Hong Thai; Tsotsas, Evangelos

Mass and heat transport models for analysis of the drying process in porous media: a review and numerical implementation

International journal of chemical engineering - New York, NY [u.a.]: Hindawi Publ. Corp, Vol. 2018, Article ID 9456418, insgesamt 13 Seiten;

Vázquez-Ramírez, Daniel; Genzel, Yvonne; Jordan, Ingo; Sandig, Volker; Reichl, Udo

High-cell-density cultivations to increase MVA virus production

Vaccine - Amsterdam: Elsevier, Bd. 36.2018, 22, S. 3124-3133;

[Online first]

[Imp.fact.: 3.235]

Wang, MinHui; Wölfer, Christian; Otrin, Lado; Ivanov, Ivan; Vidakovi-Koch, Tanja; Sundmacher, Kai

Transmembrane NADH oxidation with tetracyanoquinodimethane

Langmuir - Washington, DC: ACS Publ, Bd. 34.2018, 19, S. 5435-5443;

Weiss, Marian; Frohnmayer, Johannes Patrick; Benk, Lucia Theresa; Haller, Barbara; Janiesch, Jan-Willi; Heitkamp, Thomas; Börsch, Michael; Lira, Rafael B.; Dimova, Rumiana; Lipowsky, Reinhard; Bodenschatz, Eberhard; Baret, Jean-Christophe; Vidakovic-Koch, Tanja; Sundmacher, Kai; Platzman, Ilia; Spatz, Joachim P.

Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics

Nature materials - Basingstoke: Nature Publishing Group, Bd. 17.2018, S. 89-96;

Wenzel, Lisa; Heyer, Robert; Schallert, Kay; Löser, Lucy; Wünschiers, Röbbbe; Reichl, Udo; Benndorf, Dirk

SDSPAGE fractionation to increase metaproteomic insight into the taxonomic and functional composition of microbial communities for biogas plant samples

Engineering in life sciences - Weinheim: Wiley-VCH, Bd. 18.2018, 7, S. 498-509;

Wenzel, Marcus; Rihko-Struckmann, Liisa; Sundmacher, Kai

Continuous production of CO from CO₂ by RWGS chemical looping in fixed and fluidized bed reactors

The chemical engineering journal - Amsterdam: Elsevier, Bd. 336.2018, S. 278-296;

[Imp.fact.: 6.216]

Wrzosek, Katarzyna; Harriehausen, Isabel; Seidel-Morgenstern, Andreas

Combination of enantioselective preparative chromatography and racemization - experimental demonstration and model-based process optimization

Organic process research & development: web edition - Washington, DC: ACS Publ, Bd. 22.2018, 12, S. 1761-1771;

Zhang, Lanyue; Weigler, Fabian; Idakiev, Vesselin; Jiang, Zhaochen; Mörl, Lothar; Mellmann, Jochen; Tsotsas, Evangelos

Experimental study of the particle motion in flighted rotating drums by means of Magnetic Particle Tracking

Powder technology: an international journal on the science and technology of wet and dry particulate systems - Amsterdam [u.a.]: Elsevier Science, Bd. 339.2018, S. 817-826;

Zhang, Xiwei; Zhang, Enqi; Grigartzik, Lisa; Henrich-Noack, Petra; Hintz, Werner; Sabel, Bernhard A.

Antiapoptosis function of PBCA nanoparticles containing caspase3 siRNA for neuronal protection

Chemie - Ingenieur - Technik: CIT - Weinheim: Wiley-VCH Verl, Bd. 90.2018, 4, S. 451-455;

[Imp.fact.: 1.1]

Zähringer, Katharina; Wagner, Lisa-Maria; Thévenin, Dominique; Siegmund, Patrick; Sundmacher, Kai

Particle-image-velocimetry measurements in organic liquid multiphase systems for an optimal reactor design and operation

Journal of visualization - Berlin: Springer, Bd. 21.2018, 1, S. 5-17;
[Imp.fact.: 0.971]

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Benner, Peter; Seidel-Morgenstern, Andreas; Zuyev, Alexander

Computation of periodic switching strategies for the optimal control of chemical reactors

ResearchGATE: scientific network : the leading professional network for scientists - Cambridge, Mass: ResearchGATE Corp, insges. 8 S., 2018;

[Konferenz: 14th International Conference "Dynamical Systems Theory and Applications" (DSTA 2017), At ód, Poland]

BEGUTACHTETE BUCHBEITRäge

Bechtel, Simon; Song, Zhen; Zhou, Teng; Vidakovic-Koch, Tanja; Sundmacher, Kai

Integrated process and ionic liquid design by combining flowsheet simulation with quantum-chemical solvent screening

Computer aided chemical engineering - Amsterdam [u.a.]: Elsevier, Bd. 44.2018, S. 2167-2172;
[Symposium: 13th International Symposium on Process Systems Engineering, PSE 2018]

Dancker, Jonte; Wolter, Martin; Rosberg, Jari; Tsotsas, Evangelos

Increasing self-sufficiency in a micro grid - integrated vs. non-integrated energy system approach

2018 53rd International Universities Power Engineering Conference (UPEC): 4th-7th September 2018, Glasgow, United Kingdom : proceedings - [Piscataway, NJ]: IEEE, insges. 6 S.;

[Kongress: 53rd International Universities Power Engineering Conference (UPEC) , Glasgow, UK, 4-7 September 2018]

Du, Jiajie; Bück, Andreas; Tsotsas, Evangelos

Investigation of spray agglomeration process in continuously operated horizontal fluidized bed

IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 1855-1862;

[Konferenz: IDS 2018]

Golovin, Ivgen; Strenzke, Gerd; Wegner, Maximilian; Palis, Stefan; Bück, Andreas; Kienle, Achim; Tsotsas, Evangelos

Parameter identification for continuous fluidized bed spray agglomeration

6th International Conference on Population Balance Modelling: PBM 2018 ; Conference proceedings ; Ghent, Belgium, May 6 - 9, 2018 - Ghent, Belgium: Ghent University, insges. 4 S.;

[Konferenz: PBM 2018, Ghent, Belgium, 6 - 9 May]

Janki, Atin; Zoun, Roman; Schallert, Kay; Ravindran, Rohith; Broneske, David; Fenske, Wolfram; Heyer, Robert; Benndorf, Dirk; Saake, Gunter

Connecting X! Tandem to a database management system

CEUR workshop proceedings - Aachen: RWTH, Bd. 2126.2018, S. 77-82;

[Workshop: 30th GI-Workshop Grundlagen von Datenbanken, Wuppertal, Germany, May 22-25, 2018]

Jaskulski, Maciej; Tran, Tran Thi Hang; Tsotsas, Evangelos

CFD model-supported design of monodisperse co-current spray dryers

IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 213-220;

[Konferenz: IDS 2018]

Jiang, Zaochen; Rieck, Christian; Bück, Andreas; Tsotsas, Evangelos

Modeling of particle behavior in a Wurster fluidized bed - coupling CFD-DEM with Monte Carlo
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 205-212;
[Konferenz: IDS 2018]

Liesche, Georg; Schack, Dominik; Rätze, Karsten Hans Georg; Sundmacher, Kai

Thermodynamic network flow approach for chemical process synthesis
Computer aided chemical engineering - Amsterdam [u.a.]: Elsevier, Bd. 43.2018, S. 881-886;
[Symposium: 28th European Symposium on Computer Aided Process Engineering, Graz, Austria, 10-13 June 2018]

Lu, Xiang; Kharaghani, Abdolreza; Tsotsas, Evangelos

Dependency of continuum model parameters on the spatially correlated pore structure studied by pore-network drying simulations
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 307-314;
[Konferenz: IDS 2018]

McBride, Kevin; Linke, Steffen; Xu, Shuang; Sundmacher, Kai

Computer aided design of green thermomorphic solvent systems for homogeneous catalyst recovery
Computer aided chemical engineering - Amsterdam [u.a.]: Elsevier, Bd. 44.2018, S. 1783-1788;
[Symposium: 13th International Symposium on Process Systems Engineering, PSE 2018]

Mencke, Nicole; Vorndran, Markus; Vorhauer, Nicole; Tsotsas, Evangelos

Virtual reality-based training system for complex engineering processes on the example of a fractionating column
EDULEARN18: 10th International Conference on Education and New Learning Technologies, Palma de Mallorca (Spain), 2nd-4th of July, 2018 : conference proceedings - [Valencia, Spain]: IATED Academy, insges. 10 S.;
[Konferenz: EDULEARN18]

Mielke, Lisa; Bück, Andreas; Tsotsas, Evangelos

Multi-zone & multi-compartment model for dynamic simulation of horizontal fluidized bed granulator
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 123-130;
[Konferenz: IDS 2018]

Müller, Daniel; Bück, Andreas; Tsotsas, Evangelos

Heat and mass transfer modelling of continuous Wurster spray granulation with external product classification
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 1383-1390;
[Konferenz: IDS 2018]

Neugebauer, Christoph; Bück, Andreas; Palis, Stefan; Mielke, Lisa; Tsotsas, Evangelos; Kienle, Achim

Influence of thermal conditions on particle properties in fluidized bed layering granulation
6th International Conference on Population Balance Modelling: PBM 2018 ; Conference proceedings ; Ghent, Belgium, May 6 - 9, 2018 - Ghent, Belgium: Ghent University, insges. 8 S.;
[Konferenz: PBM 2018, Ghent, Belgium, 6 - 9 May]

Pham, Thai Son; Chareyre, B.; Tsotsas, Evangelos; Kharaghani, Abdolreza

A pore-scale study on the drying kinetics and mechanical behavior of particle aggregates
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 245-252;
[Konferenz: IDS 2018]

Rahimi, Arman; Metzger, Thomas; Kharaghani, Abdolreza; Tsotsas, Evangelos

Discrete modeling of ion transport and crystallization in layered porous media during drying
IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 299-306;
[Konferenz: IDS 2018]

Seidel, Carsten; Jörke, Andreas; Vollbrecht, Bert; Seidel-Morgenstern, Andreas; Kienle, Achim

Kinetic modeling of methanol synthesis - impact of catalyst deactivation

Computer aided chemical engineering - Amsterdam [u.a.]: Elsevier, Bd. 43.2018, S. 85-90;

[Symposium: 28th European Symposium on Computer Aided Process Engineering, Graz, Austria, 10-13 June 2018]

Strenzke, Gerd; Golovin, Ievgen; Wegner, M.; Palis, Stefan; Bück, Andreas; Kienle, Achim; Tsotsas, Evangelos

Influence of drying conditions on process properties and parameter identification for continuous fluidized bed spray agglomeration

IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 579-586;

[Konferenz: IDS 2018]

Tsotsas, Evangelos

Wärmeleitfähigkeit von Schüttschichten

VDI-Wärmeatlas - Wiesbaden: Springer, insges. 13 S., 2018;

[Dies ist ein Kapitel der 12. Auflage des VDI-Wärmeatlas.]

Tsotsas, Evangelos

Wärmeleitung und Dispersion in durchströmten Schüttungen

VDI-Wärmeatlas - Wiesbaden: Springer, insges. 20 S., 2018;

[Dies ist ein Kapitel der 12. Auflage des VDI-Wärmeatlas.; First online]

Tsotsas, Evangelos

Wärmeübergang in Wirbelschichten

VDI-Wärmeatlas - Wiesbaden: Springer, insges. 12 S., 2018;

[Dies ist ein Kapitel der 12. Auflage des VDI-Wärmeatlas.; First online]

Tsotsas, Evangelos

Wärmeübergang von einer Heizfläche an ruhende oder mechanisch durchmischte Schüttungen

VDI-Wärmeatlas - Wiesbaden: Springer, insges. 21 S., 2018;

[Dies ist ein Kapitel der 12. Auflage des VDI-Wärmeatlas.; First online]

Vorhauer, Nicole; Först, Petra; Schuchmann, Harald; Tsotsas, Evangelos

Pore network model of primary freeze drying

IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 221-228;

[Konferenz: IDS 2018]

Zhang, Lanye; Weigler, Fabian; Jiang, Zaochen; Idakiev, Vesselin; Mörl, Lothar; Mellmann, Jochen; Tsotsas, Evangelos

Investigation of 3D particle flow in a flighted rotating drum

IDS 2018: 21st International Drying Symposium : proceedings ; September, 2018, València, Spain - València, Spain: Universitat, S. 253-260;

[Konferenz: IDS 2018]

Zoun, Roman; Durand, Gabriel; Schallert, Kay; Patrikar, Apoorva; Broneske, David; Fenske, Wolfram; Heyer, Robert; Benndorf, Dirk; Saake, Gunter

Protein identification as a suitable application for fast data architecture

Database and Expert Systems Applications: DEXA 2018 : International Workshops BDMICS, BIOKDD, and TIR Regensburg, Germany, September 3-6, 2018 : proceedings - Cham: Springer Nature Switzerland, S. 168-178 - (Communications in Computer and Information Science; 903);

[Workshop: 9. International Workshop on Biological Knowledge Discovery from Data, BIOKDD, Regensburg, Germany, 03. - 06.09.2018]

Zoun, Roman; Schallert, Kay; Janki, Atin; Ravindran, Rohith; Campero Durand, Gabriel; Fenske, Wolfram; Broneske, David; Heyer, Robert; Benndorf, Dirk; Saake, Gunter

Streaming FDR calculation for protein identification

New Trends in Databases and Information Systems: ADBIS 2018 Short Papers and Workshops, AI*QA, BIGPMED, CSACDB, M2U, BigDataMAPS, ISTREND, DC, Budapest, Hungary, September, 2-5, 2018, Proceedings - Cham: Springer International Publishing, S. 80-87 - (Communications in Computer and

Information Science; 909);

[Konferenz: European Conference on Advances in Databases and Information Systems, ADBIS, Budapest, Hungary, September, 2-5, 2018]

HERAUSGEBERSCHAFTEN

Wolter, Martin; Beyrau, Frank; Tsotsas, Evangelos; Klabunde, Christian; Dancker, Jonte; Gast, Nicola; Schröter, Tamara; Schulz, Florian; Rossberg, Jari; Richter, André

Intelligentes Multi-Energie-System (SmartMES) - Statusbericht der Otto-von-Guericke-Universität Magdeburg zum Verbundprojekt ; 1. Statusseminar 28. März 2018 in Magdeburg

Magdeburg: Otto-von-Guericke-Universität, 2018, XII, 159 Seiten, Illustrationen, Diagramme, 21 cm - (Res electricae Magdeburgenses; Band 74), ISBN 978-3-944722-69-6;

Kongress: Statusseminar 1 (Magdeburg : 2018.03.28) [Literaturangaben: Seite 150-159]

ABSTRACTS

Fond, Benoit; Xiao, Cheng; Abram, Christopher; T'Joen, Christophe; Wachem, Berend; Beyrau, Frank

Phosphor thermometry for the validation of computational fluid dynamics simulations of heat transfer in compressible real-gas flows

Inaugural International Conference on Phosphor Thermometry: July 25th -27th, 2018, Technology and Innovation Centre, University of Strathclyde, Glasgow, Scotland - Glasgow;

[Konferenz: Inaugural International Conference on Phosphor Thermometry, IGET 2018, Glasgow, Scotland, July 25th -27th, 2018]

Ojo, Anthony; Fond, Benoit; Abram, Christopher; Wachem, Berend; Heyes, Andrew; Beyrau, Frank

Simultaneous measurements of the thermal and velocity boundary layer over a heated flat plate using thermographic laser Doppler velocimetry

Inaugural International Conference on Phosphor Thermometry: July 25th -27th, 2018, Technology and Innovation Centre, University of Strathclyde, Glasgow, Scotland - Glasgow;

[Konferenz: Inaugural International Conference on Phosphor Thermometry, IGET 2018, Glasgow, Scotland, July 25th -27th, 2018]

DISSERTATIONEN

Aydin, Erdal; Sundmacher, Kai [GutachterIn]; Sager, Sebastian [GutachterIn]

Tailored indirect algorithms for efficient on-line optimization of batch and semi-batch processes

Magdeburg, 2018, xx, 119 Seiten, Tabellen, Diagramme;

[Literaturverzeichnis: Seite 107-113]

Birth, Torsten; Seidel-Morgenstern, Andreas [GutachterIn]; Hamel, Christof [GutachterIn]; Caro, Jürgen [GutachterIn]

Aufbereitung biogener und reststoffbasierter Gase - Untersuchung der trockenen Reformierung

Barleben: docupoint Verlag, 2018, IV, 223 Seiten, Diagramme, Illustrationen, 21 cm, 978-3-86912-142-6;

[Literaturverzeichnis: Seite 173-186]

Buchholz, Hannes; Seidel-Morgenstern, Andreas [GutachterIn]

Solid-liquid phase equilibria of chiral molecules - theory and experiment

Magdeburg, 2018, xi, 171 Seiten, Diagramme, 30 cm;

[Literaturverzeichnis: Seite 136-152]

Eisenschmidt, Holger; Sundmacher, Kai [GutachterIn]

A cyclic growth-dissolution process for the controlled manipulation of crystal shape distributions

Magdeburg, 2018, x, 119 Seiten, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Seite 104-114]

Farid, Muhammad Usman; Tsotsas, Evangelos [GutachterIn]; Bück, Andreas [GutachterIn]

CFD modeling of combustion of solid waste materials with low melting points
Magdeburg, 2018, xii, 204 Blätter, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Blatt 163-173]

Jörke, Andreas

Mechanisms and kinetics of petro- and oleochemicals in complex hydroformylation reaction networks
Aachen: Shaker Verlag, 2018, [1. Auflage], xi, 145 Seiten, Seite xiii-xxxvii, 41 Illustrationen, Diagramme, 21 cm, 262 g - (Forschungsberichte aus dem Max-Planck-Institut für Dynamik Komplexer Technischer Systeme; Band 50), ISBN 978-3-8440-6059-1

Khalid, Muhammad Kamran; Wachem, Berend [GutachterIn]; Scheffler, Franziska [GutachterIn]

Processing and characterization of tailor-made superparamagnetic iron oxide nanoparticles (SPIO-NPs) for pharmaceutical applications
Magdeburg, 2018, xx, 158 Seiten, Illustrationen, Tabellen, Diagramme;
[Literaturverzeichnis: Seite 131-153]

Kiedorf, Gregor; Seidel-Morgenstern, Andreas [GutachterIn]

Mechanistic and kinetic analysis of homogeneously and heterogeneously catalyzed reactions
Aachen: Shaker, 2018, 1. Auflage, xi, 189 Seiten, Illustrationen, Diagramme, 21 cm, 302 g - (Forschungsberichte aus dem Max-Planck-Institut für Dynamik komplexer technischer Systeme; Band 49), ISBN 978-3-8440-5768-3;
[Literaturverzeichnis: Seite 147-161]

Radicke, Susann; Scheffler, Franziska [GutachterIn]; Seidel-Morgenstern, Andreas [GutachterIn]

Entwicklung und Testung modifizierter photokatalytisch aktiver TiO₂-Beschichtungen für Glasformkörper
Magdeburg, 2018, XXV, 198 Seiten, Illustrationen, Tabellen, Diagramme, 30 cm;
[Im Titel ist "2" tiefgestellt; Literaturverzeichnis: Seite 169-179]

Reichardt, Thomas

Multiscale Euler/Lagrange approach to simulate finite-sized solid particles and bubbles as well as numerical and experimental studies to improve the modeling of complex bubble motion
Aachen: Shaker Verlag, 2018, 1. Auflage, viii, 284 Seiten, Illustrationen, Diagramme, 21 cm, 447 g - (Berichte aus der Strömungstechnik), ISBN 978-3-8440-6013-3

Schmidt, Martin; Tsotsas, Evangelos [GutachterIn]; Kienle, Achim [GutachterIn]

Process dynamics and structure formation in continuous spray fluidized bed processes
Magdeburg, 2018, XVII, 150 Seiten, Illustrationen, Diagramme, 24 cm;
[Literaturverzeichnis: Seite 129-137]

Schwenke, Christian; Tsotsas, Evangelos; Schulze, Dietmar; Katterfeld, André

Modellierung und experimentelle Validierung des Schwerkraftaustrags ultrafeiner kohäsiver Pulver
Barleben: docupoint Verlag, 2018, IX, 215 Seiten, Seite X-XX, Illustrationen, Diagramme, 21 cm, ISBN 978-3-86912-153-6;
[Literaturverzeichnis: Seite 211-215]

Voigt, Nadine; Wachem, Berend [GutachterIn]; Sabel, Bernhard A. [GutachterIn]

Evaluierung pharmakokinetischer und toxikologischer Determinanten von Nanopartikeln mittels in vivo Neuroimaging
Magdeburg, 2018, XIV, 111 Blätter, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Blatt 87-96]

Wenzel, Marcus; Sundmacher, Kai [GutachterIn]

Reverse water-gas shift chemical looping for syngas production from CO₂
Magdeburg, 2018, xviii, 149 Seiten, 30 cm;
[Im Titel ist "2" tiefgestellt; Literaturverzeichnis: Seite 129-141]

Zhang, Xiwei; Wachem, Berend [GutachterIn]; Sabel, Bernhard A. [GutachterIn]

In vitro and in vivo caspase-3 knock down by poly (butyl cyanoacrylate) nanoparticle-based RNA interference
Magdeburg, 2018, ix, 95 Blätter, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Blatt 78-88]