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FAKULTÄT FÜR VERFAHRENS-
UND SYSTEMTECHNIK

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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. Prof. Eckehard Specht (Studiendekan)/Dr. rer. nat. Franziska Scheffler (Studiendekanin)

2. VERÖFFENTLICHUNGEN

HABILITATIONEN

Kharaghani, Abdolreza; Tsotsas, Evangelos [AkademischeR BetreuerIn]

Drying and wetting of capillary porous materials - insights from imaging and physics-based modeling

Magdeburg, 2020, xiii, 141 Blätter, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Blatt 128-141]

DISSERTATIONEN

Bachmann, Philipp; Tsotsas, Evangelos [AkademischeR BetreuerIn]; Mörl, Lothar [AkademischeR BetreuerIn]

Verweilzeitverhalten von partikulären Gütern in kontinuierlich betriebenen Wirbelschichttrinnen am Beispiel von Trocknung und Coating

Magdeburg, 2020, XVI, 171 Seiten, Illustrationen, Diagramme, 21 cm;

[Literaturverzeichnis: Seite 157-165]

Chen, Kaicheng; Tsotsas, Evangelos [AkademischeR BetreuerIn]

Modeling and validation of particle drying and coating in a continuously operated horizontal fluidized bed

Magdeburg, 2020, xvii, 133 Seiten, Diagramme, 21 cm;

[Literaturverzeichnis: Seite 112-125]

Fakhr Darbanan, Ardalan; Krause, Ulrich [AkademischeR BetreuerIn]

Environmental impacts of firefighting foams

Magdeburg, 2020, xx, 164 Blätter, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Blatt 145-154]

Gabriel Silva, Vitor; Krause, Ulrich [AkademischeR BetreuerIn]

Flame propagation in complex geometries

Magdeburg, 2020, xii, 150 Blätter, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Blatt 145-150]

Grosshans, Holger; Krause, Ulrich [AkademischeR BetreuerIn]; Klausmeyer, Uwe [AkademischeR BetreuerIn]; Papaleandris, Miltiadis V. [AkademischeR BetreuerIn]

Simulation of turbulent particle-laden flows and their electrostatic charging

Bremen: Fachverlag NW in der Carl Schünemann Verlag GmbH, 2020, 61 Seiten, Illustrationen, Diagramme, 30 cm - (PTB-Bericht; Ex, Explosionsschutz; 16);

[Literaturverzeichnis: Seite 51-56]

Harmgarth, Nicole; Mörl, Lothar [AkademischeR BetreuerIn]; Edlmann, Frank T. [AkademischeR BetreuerIn]

Neuartige Metallkomplexe mit stickstoffhaltigen Chelatliganden
Magdeburg, 2020, VII, 208 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 131-140]

Hoerner, Stefan; Thévenin, Dominique [AkademischeR BetreuerIn]

Characterization of the fluid-structure interaction on a vertical axis turbine with deformable blades
Magdeburg, 2020, xvii, 162 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 152-162]

Hoffmann, Marcus; Reichl, Udo [AkademischeR BetreuerIn]; Rapp, Erdmann [AkademischeR BetreuerIn]

In-depth mass spectrometry-based glycoproteomics - advances in sample preparation, measurement and data-analysis of glycoproteins
Magdeburg, 2020, XI, 141 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 118-133]

Hosseini, Seyed Ali; Thévenin, Dominique [AkademischeR BetreuerIn]

Development of a lattice Boltzmann-based numerical method for the simulation of reacting flows
Magdeburg, 2020, xxiv, 205 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 167-184]

Jiang, Zhaochen; Tsotsas, Evangelos [AkademischeR BetreuerIn]; Thévenin, Dominique [AkademischeR BetreuerIn]

Experimental and simulation studies of mesoscale phenomena in gas-solid fluidized beds PTV and CFD-DEM
Magdeburg, 2020, x, 248 Seiten, Illustrationen, Diagramme, 24 cm;
[Literaturverzeichnis: Seite 199-221]

Jie, Haozhi; Specht, Eckehard [AkademischeR BetreuerIn]

Axial transport behavior and thermal treatment of polydisperse materials in direct heated rotary kilns
Magdeburg, Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Verfahrens- und Systemtechnik
2020, XIV, 201 Seiten, Illustrationen ;
[Literaturverzeichnis: Seite 156-161]

Kamranian Marnani, Abbas; Thévenin, Dominique [AkademischeR BetreuerIn]

Study on the effect of very cohesive ultra-fine particles in mixtures on compression, consolidation, permeation, and fluidization
Magdeburg, Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Verfahrens- und Systemtechnik
2020, xxxiii, 214 Seiten, Illustrationen ;
[Literaturverzeichnis: Seite 197-209]

Knecht, Camila Ayelén; Köser, Heinz [AkademischeR BetreuerIn]; Lackner, Susanne [AkademischeR BetreuerIn]; Berendonk, Thomas U. [AkademischeR BetreuerIn]

Fate of antibiotic resistant bacteria and antibiotic resistance genes in constructed wetlands
[Halle (Saale)]: Helmholtz Centre for Environmental Research, 2020, xxii, 134 Seiten, Diagramme, Illustrationen,
25 cm - (Dissertation; Helmholtz-Zentrum für Umweltforschung; 2020, 3);
[Literaturverzeichnis: Seite 104-115]

Koch, Sabine

Stöchiometrische Modellierung von mikrobiellen Gemeinschaften in Biogasanlagen
Magdeburg, 2020, iii, 145 Seiten, Illustrationen, Diagramme, 23 cm;
[Literaturverzeichnis: Seite 129-145]

Kupke, Sascha Young; Reichl, Udo [AkademischeR BetreuerIn]

Single-cell analysis of influenza A virus replication - sources of cell-to-cell heterogeneity and discovery of a novel type of defective interfering particle
Magdeburg, 2020, XV, 155 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 122-136]

Mansour, Michael; Thévenin, Dominique [AkademischeR BetreuerIn]

Transport of two-phase air-water flows in radial centrifugal pumps
Magdeburg, 2020, xxvi, 207, 3 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 196-207]

Nikolay, Alexander; Reichl, Udo [AkademischeR BetreuerIn]

Intensified yellow fever and Zika virus production in animal cell culture
Magdeburg, 2020, XV, 175 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 139-157]

Ricardo, Guilherme Antônio Novelletto; Sommerfeld, Martin [AkademischeR BetreuerIn]

Studies of erosion in gas-solid flows by using experimental and numerical techniques
Magdeburg, 2020, XXXVII, 216 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 205-216]

Rieck, Christian; Tsotsas, Evangelos [AkademischeR BetreuerIn]

Microscopic and macroscopic modeling of particle formation processes in spray fluidized beds
Magdeburg, Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Verfahrens- und Systemtechnik
2020, XVII, 187 Seiten, Illustrationen ;
[Literaturverzeichnis: Seite 179-183]

Russell, Alexander; Wachem, Berend [AkademischeR BetreuerIn]

On the mechanical behavior of coarse particulate products
Magdeburg, 2020, 142 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 117-132]

Trüe, Michael; Wachem, Berend [AkademischeR BetreuerIn]

Experimentelle und mathematische Evaluation der Mahlkörperbewegungen sowie der Kräfteinwirkungen bei der Zerkleinerung von Graphitpartikeln und der Beschichtung von 3D-Druckpulvern mit Kohlenstoffnanoröhrchen in einer Scheibenschwingmühle
Barleben: docupoint GmbH, 2020, XVII, 171 Seiten, Illustrationen, Diagramme, 21 cm - (docupoint Wissenschaft);
[Literaturverzeichnis: Seite 145-158]

Wang, Sida; Edelman, Frank T. [AkademischeR BetreuerIn]

Synthesis and structural characterization of new transition metal alkynylamidates
Magdeburg, 2020, VI, 173 Seiten, Illustrationen, Diagramme, 21 cm;
[Literaturverzeichnis: Seite 163-172]

Wiedmeyer, Viktoria; Sundmacher, Kai [AkademischeR BetreuerIn]

Continuous crystallization in a helically coiled flow tube crystallizer
Magdeburg, 2020, XI, 123 Seiten, Illustrationen, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 105-114]

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Prof. Dr.-Ing. habil. Heinz Köser

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Addai, Emmanuel K.; Aljaroudi, Ali; Abbas, Zaheer; Amyotte, Paul; Addo, Albert; Krause, Ulrich

Investigation of the explosion severity of multiphase hybrid mixtures
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Process intensification education contributes to sustainable development goals. Part 1
Education for chemical engineers - London [u.a.]: IChemE, 2006, Bd. 32.2020, S. 1-14;

Rivas, David Fernandez; Boffito, Daria C.; Faria-Albanese, Jimmy; Glassey, Jarka; Cantin, Judith; Afraz, Nona; Akse, Henk; Boodhoo, Kamelia V. K.; Bos, Rene; Chiang, Yi Wai; Commenge, Jean-Marc; Dubois, Jean-Luc; Galli, Federico; Mussy, Jean Paul Gueneau; Harmsen, Jan; Kalra, Siddharth; Keil, Fred; Morales-Menendez, Ruben; Navarro-Brull, Francisco J.; Noel, Timothy; Ogden, Kim; Patience, Gregory S.; Reay, David; Santos, Rafael M.; Smith-Schoettker, Ashley; Stankiewicz, Andrzej I.; Berg, Henk; Gerven, Tom; Gestel, Jeroen; Weber, R. S.

Process intensification education contributes to sustainable development goals. Part 2
Education for chemical engineers - London [u.a.]: IChemE, 2006, Bd. 32.2020, S. 15-24;

Zinke, Ronald; Köhler, Florian; Klippel, Andrea; Krause, Ulrich; Leitl, Bernd

Emissions of volatile hydrocarbons from floating roof tanks and their local dispersion - considerations for normal operation and in case of damage

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Reliability engineering & system safety - London [u.a.]: Elsevier Science, 1988, Volume 197 (2019), article 106826, 2020;

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Gabel, Dieter

Explosion process safety

Safety and security issues in technical infrastructures - Hershey, PA: Information Science Reference, an imprint of IGI Global, 2020; Rehak, David . - 2020, S. 203-231;

DISSERTATIONEN

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Fate of antibiotic resistant bacteria and antibiotic resistance genes in constructed wetlands

[Halle (Saale)]: Helmholtz Centre for Environmental Research, 2020, xxii, 134 Seiten, Diagramme, Illustrationen, 25 cm - (Dissertation; Helmholtz-Zentrum für Umweltforschung; 2020, 3);

[Literaturverzeichnis: Seite 104-115]

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1. LEITUNG

Prof. Dr. rer nat. habil. Dieter Schinzer (Institutsleiter)
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Prof. Dr. rer. nat. habil. Helmut Weiß
Prof. Dr. rer. nat. Nora Kulak
Prof. Dr. rer. biol. hum. Heike Walles

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Alzheimer, Mona; Svensson, Sarah L.; König, Fabian; Schweinlin, Matthias; Metzger, Marco; Walles, Heike; Sharma, Cynthia M.

A three-dimensional intestinal tissue model reveals factors and small regulatory RNAs important for colonization with *Campylobacter jejuni*

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DISSERTATIONEN

Harmgarth, Nicole; Mörl, Lothar [AkademischeR BetreuerIn]; Edlmann, Frank T. [AkademischeR BetreuerIn]

Neuartige Metallkomplexe mit stickstoffhaltigen Chelatliganden

Magdeburg, 2020, VII, 208 Seiten, Illustrationen, Diagramme, 30 cm;

[Literaturverzeichnis: Seite 131-140]

Wang, Sida; Edlmann, Frank T. [AkademischeR BetreuerIn]

Synthesis and structural characterization of new transition metal alkynylamidates

Magdeburg, 2020, VI, 173 Seiten, Illustrationen, Diagramme, 21 cm;

[Literaturverzeichnis: Seite 163-172]

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Prof. Dr.-Ing. E. Specht
Jun.-Prof. Dr.-Ing. A. Diéguez-Alonso

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Abdelsamie, Abouelmagd; Chi, Chi; Nanjaiah, Monika; Skenderovi, Ivan; Suleiman, Samer; Thévenin, Dominique

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Flow, turbulence and combustion: an international journal published in association with ERCOFTAC - Dordrecht
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Journal of computational physics - Amsterdam: Elsevier, 1961, Volume 404(2020), article 109122;
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Prof. Dr.-Ing. habil. Kai Sundmacher
Prof. Dr.-Ing. habil. Evangelos Tsotsas
Prof. Dr. Ir. Berend van Wachem

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