

Abstractnr	Abstracttitel	Track	Talk Session	Lecture Type
2	Dispersibility of spray dried powders for inhalation	T03	T0321	Cutting Edge
3	Microstructure Modeling and Simulation of Nanoparticle Deposition	T01	T0113	Cutting Edge
8	Use of colloidal gas aphrons for separation of water based printing inks and impurities from paper stock suspensions	T04	T0451	Cutting Edge
10	Enabling novel drug delivery therapies by nanomilling of APIs: Acceleration of preclinical and clinical pharmaceutical development using a screening approach	T07	T0731	Cutting Edge
11	Physico-chemical, mechanical, electrokinetic and stabilizer-solution properties of aqueous and non-aqueous API nanosuspensions produced by stirred media milling	T12	T1202	Cutting Edge
12	Markov chain modelling of particle motion in an internal fluidised bed	T01	T0101	Cutting Edge
15	Influence of particle size on mechanical properties of powders produced of wheat	T09	T0921	Cutting Edge
17	Transport of powders and bulk materials with Vacuum	T09	T0932	Cutting Edge
18	Investigation of mixing effects in binary mixture of particulate solids in fluidized bed	T04	T0415	Cutting Edge
19	Flowability of Binary Mixtures of Ibuprofen and Lactose	T09	T0921	Cutting Edge
20	Flow properties of ductile ceramic granules – Challenges in characterization	T09	T0921	Cutting Edge
21	Accurate and high-resolution particle size distribution characterization of pharmaceutical nano-suspensions by means of disk centrifuge based differential sedimentation	T10	T1031	Cutting Edge
26	Gas-phase synthesis of highly-specific nanoparticles on the pilot-plant scale	T10	T1023	Cutting Edge
27	Probabilistic modelling of particle motion in a circulatory fluidised bed including inter-particle collisions	T01	T0101	Cutting Edge
31	Deformation behavior of single ceramic granules with regard to internal structure	T05	T0502	Cutting Edge
32	Polymorphic Transformation of anhydrous Caffeine under Compression and Grinding: Critical Review and New Results.	T07	T0701	Cutting Edge
34	Description of particle formation in fluidized beds with a stochastic modelling method	T01	T0131	Cutting Edge
35	Influence of chemical and structural characteristics of egg yolk granular and plasma fraction on the continuous centrifugal separation process of liquid egg yolk.	T12	T1201	Cutting Edge
37	Effects of Post-coating by Generating a Thin Secondary Particle Layer on Surface Filters for Dust Separation	T04	T0451	Cutting Edge
38	Preferential Targeting of Cells with Bionanoparticles: Flow Cytometric Analysis and Multivariate Population Balance Modeling	T01	T0132	Cutting Edge
39	Effect of Sample Amount on Particle Flowability Evaluation Based on Vibrating Tube Method	T09	T0911	Cutting Edge
40	Adhesion of TiO2 particles and particle systems on ceramic membranes	T08	T0821	Cutting Edge
44	Microscopic Simulation of Non-Spherical Particle Suspensions under Shear	T01	T0121	Cutting Edge
45	Shelf life of granules - what about surface roughness? -	T05	T0531	Cutting Edge
48	Dispersion of a metal powder – another type of comminution	T07	T0711	Cutting Edge
49	Scale-Up Rules for Solid Mixers with high Power Input	T09	T0933	Cutting Edge
51	High concentration zeta potential measurement using laser light scattering	T06	T0602	Cutting Edge
52	Experimental Study of Shock-induced Nanoparticle Growth	T10	T1023	Cutting Edge
53	Advancement in Zeta Potential Measurement	T10	T1031	Cutting Edge
55	Investigation of Grinding Ball Movement and Energy Distribution in Planetary Balls Mills	T01	T0123	Cutting Edge
57	Synthesis of Highly Filled Nanomagnetite Polymeric Composites via Sterically Stabilized Organosols and the Spray Drying Process	T11	T1111	Cutting Edge
58	Analysis of the influence of surface roughness of globular toner particles on their flow properties and adhesion behavior	T10	T1032	Cutting Edge
59	Numerical Simulation for the Transport of Solid Particles with a Vortex Ring	T01	T0111	Cutting Edge
60	Modelling of fluidized bed drying using population balance equations	T01	T0131	Cutting Edge
61	Characterisation of sono-chemical flow reactors	T02	T0211	Cutting Edge

64	Development of microstructured systems for the encapsulation of hydrophilic bioactive ingredients: Interactions between anthocyanins and matrix ingredients	T08	T0801	Cutting Edge
66	Modelling the wet scrubbing process with increasing levels of complexity	T01	T0112	Cutting Edge
67	Dispersion kinetics of nano-sized particles for different dispersing machines	T08	T0812	Cutting Edge
68	Stochastic modeling of fluidized bed spray drying: effect of particle porosity and bed temperature on agglomeration kinetics.	T01	T0101	Cutting Edge
70	Lung toxicity determination of ultra fine particles with the Karlsruhe Exposure System	T03	T0331	Cutting Edge
71	Multi-scale agglomerates: relationship between morphology and optical properties	T06	T0601	Cutting Edge
72	Emulsion droplets serving as Nanoreactors: Prospects and Limitations of the Miniemulsion Technique to precipitate Nanoparticles	T10	T1011	Cutting Edge
73	Die filling optimization with three-dimensional discrete element modeling	T01	T0127	Cutting Edge
77	Silica-coated Ag nanoparticles by flame spray pyrolysis.	T11	T1121	Cutting Edge
78	Design of granules for die pressing by organic compaction aids	T05	T0531	Cutting Edge
79	Controlling axial segregation through boundary conditions	T09	T0933	Cutting Edge
84	Weather durability of Titanium dioxide particles coated with transition metal oxides	T10	T1012	Cutting Edge
85	Controlling the properties of pharmaceutical and food extrudates using a flat die press	T05	T0521	Cutting Edge
86	Chemical vapour synthesis of silicon nanoparticles	T10	T1022	Cutting Edge
89	A Simple Control Strategy for the Process of Particle Coating in Fluidized Beds.	T05	T0541	Cutting Edge
91	Effect of Particles Size on Explosives within Dynamic Vacuum Stability Test	T10	T1034	Cutting Edge
92	Mechanochemical treatment of fly ash toward recycling as a cement material	T07	T0701	Cutting Edge
96	Fiber-optical inline measurement of particle size distributions in fluidized bed processes	T06	T0622	Cutting Edge
97	Nanoscale Hollow Spheres - A novel Materials Morphology, its Properties and Application	T10	T1013	Cutting Edge
99	Experimental and numerical investigation of the formation mechanism of monodisperse silicon nanoparticles via aerosol synthesis	T10	T1024	Cutting Edge
101	Ordering of monosized particles during simulations of a fluid-solid flow under shear	T01	T0103	Cutting Edge
102	Characterisation of the clogging behaviour of cleanable filter media	T04	T0451	Cutting Edge
103	Long-term stability of nano ground suspensions	T07	T1203	Cutting Edge
104	Analysis of Tribo-Electric Charging of Spherical Beads using Distinct Element Method	T01	T0123	Cutting Edge
105	Selecting a spectroscopic approach for the chemical analysis of pharmaceutical tablets	T12	T1203	Cutting Edge
107	Intensive Granulation in Powder Coating Production	T05	T0501	Cutting Edge
108	Residence Times in Fluidized Bed Granulation	T04	T0412	Cutting Edge
110	Application of CFD in predicting the breakage of protein precipitates during transport	T01	T0111	Cutting Edge
111	Numerical Investigation of the 3-D Unsteady Reactive Flow within a Gas Dynamic Particle Reactor	T01	T0112	Cutting Edge
112	Influence of humidity cycling on the caking behaviour of three food powders	T09	T0421	Cutting Edge
113	On the modelling of wall roughness and wall structure in pneumatic conveying and cyclone separation	T04	T0451	Cutting Edge
114	Multi-scale modelling and experimental measurements of soot filtration in diesel particulate filters	T01	T0113	Cutting Edge
116	Development and characterization of new sampling devices for cohesive systems	T06	T0603	Cutting Edge
117	Effective boundary conditions for dense granular flows	T01	T0902	Cutting Edge
118	Coupling between rheology and drag forces in gas flow through a slowly moving granular bed	T04	T0421	Cutting Edge
119	Simulation of dense granular flows: rheology and dynamics of wall stress in silos	T01	T0111	Cutting Edge
122	The effect of Ca addition to Fe/Zn oxides made by flame spray pyrolysis for nutritional applications	T10	T1002	Cutting Edge
124	Polymorphism driven caking of an active pharmaceutical ingredient (API) powder	T09	T0921	Cutting Edge

125	ON THE EXTENSION OF THE THEORY OF FLUIDIZATION TO BEDS OF TWO SOLIDS SUBJECTED TO SEGREGATION BY DENSITY OR SIZE	T04	T0413	Cutting Edge
126	Influence of drainage flow and holdup on the separation behaviour of mist separators	T04	T0401	Cutting Edge
127	Experimental results of nanoparticle production by shock-induced synthesis	T10	T1023	Cutting Edge
128	Design of gas-phase coating of nanoparticles	T01	T0101	Cutting Edge
130	DEM-CFD modelling of fine powder dispersion in pharmaceutical inhalers	T03	T0301	Cutting Edge
131	Investigation of flow characteristics in vertical and inclined pipes using tomography measurements and DEM simulations	T09	T0941	Cutting Edge
135	Influence of interparticle forces on separation efficiency by selective wet agglomeration	T05	T0511	Cutting Edge
136	Large-Scale Discrete Element Modeling of Gas-Solid and Solid-Liquid Flows	T01	T0241	Cutting Edge
137	SrGa ₂ S ₄ :Eu nanoparticle phosphors prepared by a ball milling method	T10	T1001	Cutting Edge
140	Experimental and numerical investigations of granule formation and growth in the fluidized bed spray granulation process	T05	T0513	Cutting Edge
143	Photoluminescent nanoparticle surfaces: The potential of alkaline earth oxide powders for optical applications	T10	T1031	Cutting Edge
144	Antimicrobial efficacy of antibiotic-loaded nanoparticulate aerosols against P. Aeruginosa biofilm	T03	T0301	Cutting Edge
147	Understanding the links between Rheology and Particle Parameters	T04	T0401	Cutting Edge
148	Towards the optimum detector for wide dynamic range laser diffraction measurements	T06	T0611	Cutting Edge
149	Amorphous Flame-made NO _x storage-reduction catalysts with Pt/K/Al ₂ O ₃	T10	T1024	Cutting Edge
150	Investigation of particle formation in a supercritical antisolvent process far above the critical point at injection pressures up to 100 MPa	T02	T0201	Cutting Edge
156	Influence of doping and Oxide Layer on the Conductivity of Silicon Nanoparticles	T10	T1033	Cutting Edge
157	On-line quantification of the coating on aerosol nanoparticles in CVD-processes	T10	T1032	Cutting Edge
158	Clarification of Significant Mechanisms for Dust Suppression with Water Sprays in Enclosed Bulk Solid Systems	T09	T0901	Cutting Edge
159	The use of a colloidal silica reference material IRMM-304 for quality control in nanoparticle sizing by dynamic light scattering and centrifugal sedimentation	T10	T1031	Cutting Edge
160	Assessment of microparticle coating quality and functionality	T05	T0501	Cutting Edge
162	Evaluation of dry powder blending using Positron Emission Tomography and the relationship between powder bulk properties and process parameters	T09	T0933	Cutting Edge
164	The application of advanced powder characterisation techniques to pharmaceutical Quality by Design protocols	T12	T1202	Cutting Edge
167	Influence of cell lyses and floc size on filtration performance of fermentation broth	T12	T1204	Cutting Edge
168	Characterization of photo- and electroactive phosphonic acids adsorbed to the surfaces of ZnO nanorods	T10	T1012	Cutting Edge
169	The influence of dry powder coating methods, including mechanofusion, on the flow properties of inhalable grades of lactose monohydrate	T03	T0311	Cutting Edge
171	Co-synthesis of LiMn ₂ O ₄ and carbon electrodes for high power batteries	T11	T1121	Cutting Edge
172	Detailed investigation of the growth kinetics and the photoluminescence properties of ZnO nanorods by oriented aggregation	T02	T0201	Cutting Edge
173	Predicting the Mixing Behaviour of Gravity Blenders Using the Discrete-Element-Method	T01	T0121	Cutting Edge
175	Coagulation of highly concentrated aerosols	T03	T0301	Cutting Edge
176	Hoop Stress Theory Applied to Funnel-Flow and Live Capacity Determinations of Gravity Reclaim Stockpiles	T09	T0901	Cutting Edge
177	An Investigation of Transient Phenomena in Dense Phase Pneumatic Transport	T09	T0931	Cutting Edge
179	Characterization of Gas-Borne Nanoparticle Aggregates by Wide-Angle Light Scattering (WALS)	T10	T1031	Cutting Edge

183	Comparison of the Discrete Element Method with a Finite Volume Approach for Predicting Bulk Flows and for Designing Silos	T01	T0102	Cutting Edge
184	Making DEM-CFD simulations feasible by switching to Discrete Phase Model (DPM) in dilute regions – model synthesis and validation	T01	T0126	Cutting Edge
187	Optimizing of a dispersion process in a rotor stator high shear mixer	T07	T0741	Cutting Edge
188	Investigation of fluidized bed agglomeration concerning integral process variables and micro-level influences	T05	T0513	Cutting Edge
190	Particle aggregation in papermaking: correlating kinetics with polyelectrolyte characteristics	T08	T0811	Cutting Edge
191	Assessing Flowability of Cohesive Powders from a Small Sample Quantity	T09	T0921	Cutting Edge
192	Automated Image Analysis – Particle characterisation beyond size and a reference technique for particle size measurements	T06	T0611	Cutting Edge
194	Understanding the structure and dissolution of multi-component food powders	T12	T1201	Cutting Edge
195	Synthesis of cobalt nanoparticles to enhance magnetic permeability of metal-polymer composites	T10	T1024	Cutting Edge
196	Microprocesses in confined particle bed comminution	T07	T0711	Cutting Edge
201	An Experimental Study of Gas-solid Two-phase Flow in the Standpipe under Negative Pressure Gradient	T04	T0415	Cutting Edge
202	Effects of operating parameters on product quality in stirred media mills for production of nanoparticles	T07	T0731	Cutting Edge
206	Production of Metallic Nanoparticles by Laser Ablation in Liquid for Nanocomposite Materials for Medical Devices	T11	T1111	Cutting Edge
207	Size and Shape Control of Semiconductor Nanoparticles Synthesised by Precipitation in Organic Solvents	T10	T1012	Cutting Edge
212	Aerosol processing and stabilization of catalytically active nanoparticles	T10	T1022	Cutting Edge
213	Seeded granulation: batch and continuous high shear granulators	T05	T0502	Cutting Edge
219	Regime map for particle-droplet collisions	T01	T0103	Cutting Edge
220	Effect of temperature on nanoparticle structuring in confined geometries: a numerical investigation	T01	T0126	Cutting Edge
221	Investigation of Pressure and Gas Velocity in Bypass Pneumatic Conveying Systems	T09	T0931	Cutting Edge
222	Synthesis of Pore Size- and Outer Diameter-Controllable Mesoporous Silica Nanoparticle using a Novel Water/Oil-Phase Technique	T10	T1013	Cutting Edge
224	Liquid-phase Synthesis-assisted Preparation of Novel Full-color-emitting BCNO Phosphors Under Low-temperature Process	T11	T1112	Cutting Edge
225	Dispersion of Carbon Black Powder by a Bead-mill and Optimization	T01	T1301	Cutting Edge
226	Novel in-situ techniques for particle surface characterisation based on optical Second Harmonic Generation	T06	T0601	Cutting Edge
228	Particle Characterization with Digital Image Processing in a size range from a few microns to a few millimeters	T06	T0602	Cutting Edge
230	Emulsion Droplets as Reactors: A Model-Based Analysis of the Metal Oxide Nanoparticle Synthesis by Diffusive Mass Transfer across the Droplet Interface	T10	T1011	Cutting Edge
231	Towards tailor-made crystal shape distributions – A model-based analysis	T01	T0132	Cutting Edge
233	The effect of flame spray configuration on synthesis of inhomogeneous nanoparticles	T10	T1024	Cutting Edge
234	Analysis of Particle Motion in a Paddle Mixer: a Comparison between DEM Simulation and PEPT Measurement	T01	T0125	Cutting Edge
235	Modelling confined compression and compaction of granular materials	T01	T0102	Cutting Edge
238	Laser synthesis and characterization of nano-meter-scale iron-carbon nanocomposites for magnetic fluid applications	T10	T1012	Cutting Edge
240	Segregation of Formulated Bulk Powders due to Electrostatic Effects	T09	T0941	Cutting Edge
241	Continuous hydrothermal synthesis of iron oxide nanoparticle dispersions	T10	T1015	Cutting Edge
244	Modelling coating quality in fluidized bed coating: spray and particle sub-model.	T04	T0411	Cutting Edge
245	Fluidization Characteristics under Vertical Bed Vibration for Group A Powders	T04	T0411	Cutting Edge

246	Properties of reinforced hydrogels prepared by mechanochemical polymerization initiation	T07	T0701	Cutting Edge
247	"Application of SolidSim Flowsheet Simulation to the Chemical Looping Combustion"	T01	T0103	Cutting Edge
249	Generation of nanoparticles by wood combustion in stoves and particle control	T10	T1001	Cutting Edge
252	Yield locus from a single DEM simulation	T01	T0123	Cutting Edge
253	Laser ablation of corundum in liquid phase for an efficient generation of stabilized dispersed nanoparticle colloids	T10	T1014	Cutting Edge
254	Novel Plasma Device for Particle Surface Modification at Atmospheric Pressure	T09	T0901	Cutting Edge
257	Size Selected Flame-made Agglomerates of SnO ₂ nanoparticles as Gas Sensors	T06	T0621	Cutting Edge
258	Round Robin Test on Ring Shear Testers	T09	T0911	Cutting Edge
259	Effect of solution concentration on the precipitation of paracetamol particles in the supercritical antisolvent process	T06	T0603	Cutting Edge
260	A flexible, cost-effective production method for high-quality nanoparticles	T10	T1012	Cutting Edge
261	Characterization of thin film formation of ZnO nanorods for printable electronics	T10	T1034	Cutting Edge
262	Characterization of iron oxide nanoparticles in a laser vaporization reactor using time-resolved laser-induced incandescence	T10	T1033	Cutting Edge
263	Imaging particulate multiphase flow with Electric Impedance Tomography	T04	T0401	Cutting Edge
264	Particle precipitation correlated with jet fluid-dynamics and phase equilibria in the supercritical antisolvent process	T10	T1001	Cutting Edge
265	Luminescing silicon nanoparticles: Synthesis, surface functionalization and properties	T03	T0311	Cutting Edge
267	Standards in Laser Diffraction: The Picket Fence Distribution	T06	T0602	Cutting Edge
268	Influence of particle flatness and elongation on size distributions obtained from laser diffraction, static and dynamic image analysis.	T06	T0622	Cutting Edge
269	Laser Diffraction for Particle Size Analysis at Absolute Precision	T06	T0602	Cutting Edge
270	Laser-Diffraction Results from Dynamic Image Analysis Data	T06	T0602	Cutting Edge
274	Innovations in Dynamic Image Analysis: Down to 1 µm	T06	T0611	Cutting Edge
276	Preparation of Inorganic Nanoparticles - Polymer Nanocomposite through Hetero-Coagulation and its Flame Retardancy	T11	T1112	Cutting Edge
277	A new type of aerosol charge neutralizer on the basis of an electrostatic discharge	T03	T0331	Cutting Edge
278	Economical Jet Milling & Dry Grinding in the Sub-Micron Range	T07	T0741	Cutting Edge
281	Automated image processing for in-situ observation and control of multiphase dispersions occurring in chemical and process engineering	T06	T0622	Cutting Edge
284	Several methods to quantify the dispersion progress of concentrated suspensions	T06	T0621	Cutting Edge
285	Influence of electrical double layer on the rheological properties of suspensions from fumed silica	T08	T0813	Cutting Edge
291	Tracing System Pressure of Dense Phase Pneumatic Conveying for Industrial Applications	T09	T0931	Cutting Edge
292	Relationship between Structure and Mass Transfer Coefficient in Fast Fluidized Beds	T04	T0411	Cutting Edge
293	Improvement in Performance of a New Accurate High-throughput Triple-product Classification System using Almost Rigidly Rotating Flow	T04	T0441	Cutting Edge
294	Formation of Core-Shell-Nanoparticles using High Pressure Homogenisation	T10	T1013	Cutting Edge
296	Aerodynamic Dispersion of Cohesive Powders: An Evaluation of Dry Powder Dispersers	T04	T0431	Cutting Edge
297	Determination of the Macroscopic Cohesion of Fine Powders by the Rain-Off Experiment	T09	T0902	Cutting Edge
299	A consolidation-based criterion for extrusion ability of firm pastes	T04	T0441	Cutting Edge
301	Effect of the wet milling on the oxidation process of microfibrillar cellulose suspension	T10	T1013	Cutting Edge
302	Confined crystallization phenomena in a drop-based microfluidic crystallizer : application to an organic pharmaceutical product	T02	T0201	Cutting Edge

303	Comparison of several thermodynamic models for the prediction of drug molecule solubility	T02	T0241	Cutting Edge
307	Evolution of moisture content distribution during fed-batch fluidized-bed drying	T01	T0131	Cutting Edge
309	Impact behaviour of water-soluble amorphous food agglomerates: agglomeration and breakage phenomena	T05	T0511	Cutting Edge
310	Influence of moisture content on the flow behaviour of amorphous food agglomerates and the collapse of the fluidized bed	T05	T0502	Cutting Edge
315	SILO DISCHARGE OF AN ULTRAFINE COHESIVE POWDER BY VIBRATING HOPPERS	T09	T0902	Cutting Edge
316	Calculation of Stresses on Inserts in Bulk Silos by Discrete Element Method (DEM)	T01	T0123	Cutting Edge
319	Granule structure obtained using biphasic binder in high shear wet granulation	T05	T0531	Cutting Edge
320	PNEUMATIC CONVEYING OF FLUIDIZABLE, ABRASIVE OR FRAGILE POWDERS	T09	T0932	Cutting Edge
322	Experimental and theoretical analysis of friction force on vertical plug flows	T04	T0421	Cutting Edge
324	Wave Motion in Granular Materials: a Comparison of Discrete and Continuum Models	T01	T0102	Cutting Edge
325	Coupled DEM-CFD simulation of a Wurster coater	T01	T0125	Cutting Edge
328	Anisotropic consolidation behaviour of cohesive powders	T09	T0911	Cutting Edge
329	Analysis of various granulation process structures by dynamic flowsheet simulation of solids processes	T05	T0541	Cutting Edge
331	Distributed dosage of reactants in fluidized beds by porous membranes	T04	T0415	Cutting Edge
333	NANOPARTICLES AERATION AND MIXING IN SOUND ASSISTED FLUIDIZED BEDS	T10	T1034	Cutting Edge
335	Wetting, imbibition and sinking properties of dehydrated food powders during the reconstitution process	T05	T0531	Cutting Edge
336	Segregation in Ball Size during Tumbling Ball Milling with Two different Ball Sizes	T07	T0711	Cutting Edge
338	Selection and Breakage functions of particles under Impact	T07	T0711	Cutting Edge
343	Scaling-up the generation of monodisperse nanoparticles by mobility-based size fractionation	T10	T1021	Cutting Edge
344	Investigation on deposition of polarized particles on a fiber with discrete element method	T01	T0127	Cutting Edge
345	Supercritical Hydrothermal Synthesis of Organic-Inorganic Hybrid Nanoparticles-Towards Superhybrid Nanomaterials-	T10	T1014	Cutting Edge
350	The residence time distribution of the gas phase in circulating fluidized beds	T04	T0412	Cutting Edge
351	THE SOLIDS FLOW IN THE RISER OF A CFB VIEWED BY POSITRON EMISSION PARTICLE TRACKING (PEPT)	T04	T0413	Cutting Edge
353	Predicting the dynamics of a continuous powder mixer in transitory regimes	T09	T0932	Cutting Edge
355	Controlled release characteristics of active polymer microsponge	T06	T0603	Cutting Edge
356	Formation and transport properties of hard-shell microparticle	T06	T0621	Cutting Edge
358	Pilot scale investigation of the influence of silo insert on flow pattern and wall pressure	T09	T0941	Cutting Edge
360	Relationship between breakage force and energy by compression test	T07	T0711	Cutting Edge
361	Particle impact experiments for validation of agglomeration penetration regime map	T05	T0501	Cutting Edge
362	Process development to obtain high-quality organosols	T10	T1015	Cutting Edge
363	Break-up process of suspension ligaments and films	T03	T0311	Cutting Edge
368	SET UP OF LAB-SCALE APPARATUS AND PROCEDURES FOR THE CHARACTERIZATION OF ATTRITION UNDER CIRCULATING FLUIDIZED BED CONDITIONS	T04	T0412	Cutting Edge
369	DEM/CFD Modelling of powder flow in the presence of air	T01	T0128	Cutting Edge
370	A comparison between bulk powder flow properties and fluidized powder flow properties for glass beads conditioned in humid air	T04	T0411	Cutting Edge
371	Heating properties of magnetic nanoparticles in solid and liquid matrixes	T06	T0621	Cutting Edge
372	A combined Lagrangian-Eulerian examination of the non-Newtonian rheology of suspensions	T01	T0121	Cutting Edge
376	Calibration of DEM models using rotating drum and confined compression measurements	T01	T0127	Cutting Edge
378	Size Reduction Mechanisms of Aggregate Assemblies in a Dynamic Dry Powder Bed	T05	T0521	Cutting Edge

381	Tracking Process and Product Performance through Pharmaceutical Development with the Use of Multivariate Tools	T05	T0513	Cutting Edge
383	Metal Ferrite Spinel Coatings on High Surface Area Particles for Solar-thermal Water Splitting REDOX Cycles	T10	T1022	Cutting Edge
385	Foam Granulation: Control of particle size distribution in a high shear mixer-granulator	T05	T0512	Cutting Edge
387	The Effect of "History" on the Strength Distribution, Selection Function and Breakage Function	T07	T0701	Cutting Edge
388	Surface-modification of Silica-particles by nano-scaled Titania-particles via Sol-Gel-Process	T10	T1014	Cutting Edge
389	Whey protein based food-grade microparticles for targeted release application	T12	T1201	Cutting Edge
390	Optimal flow control of segregating component in mixing of particulate solids	T04	T0401	Cutting Edge
391	Implementation of comminution functions in jet-mill DEM simulation	T01	T0124	Cutting Edge
393	Dewatering and flow behaviour of fine limestone particle packings	T04	T0441	Cutting Edge
397	Acidified Gelatin Head-End Treatment Process for Zirconium Nitrate Solutions from Silica containing Zirconium Frit	T04	T0441	Cutting Edge
400	Nanoparticle separation from rising bubbles in aqueous solutions	T10	T1001	Cutting Edge
401	Flow Characteristics of Fluidized Horizontal Conveyor due to Powder Head	T09	T0933	Cutting Edge
403	Synthesis of Nano-sized Hollow Calcium Silicate Particles by Template Method Assisted with Hydrothermal Treatment	T10	T1002	Cutting Edge
405	Improved heat transfer in structured fluidized beds by two innovative techniques: gas pulsation and fractal injection	T04	T0414	Cutting Edge
407	Graphene-encapsulated nanoparticles of non-noble metals for electromagnetic applications	T11	T1111	Cutting Edge
409	Investigation of the friction of gasborne nanoparticles in the high Knudsen number regime	T06	T0604	Cutting Edge
411	Molecular Information from Gold Nanoparticle Surfaces by Sum Frequency Generation	T10	T1032	Cutting Edge
412	DEM modelling of solids transport in mixed-flow dryers	T01	T0122	Cutting Edge
415	Measurement of hindrance functions to describe the separation behaviour of concentrated dispersions	T04	T0431	Cutting Edge
419	Sedimentation and consolidation behaviour of flocculated dispersions characterized by different methods measuring transmission	T08	T0801	Cutting Edge
422	MODELING PNEUMATIC CONVEYING AND HOPPER DISCHARGE USING THE DISCRETE ELEMENT METHOD	T01	T0128	Cutting Edge
424	Effect of Particle Size on Packing Fraction Obtained by Dry Compaction of Powders Having Sizes in the Range from Micron to Nano-meter	T09	T0941	Cutting Edge
426	Numerical and experimental study of the effect of multiple spouts on the spout fluidized bed dynamics	T01	T0124	Cutting Edge
427	Surface modification of talc particles by dry coating: influence on the wettability and the dispersibility in aqueous solutions	T08	T0811	Cutting Edge
428	Thin layer coating of the surface of solid particles with a composite material: application to the coating of food powders	T08	T0831	Cutting Edge
430	Highly magnetic nanocomposite actuator for artificial muscle applications	T10	T1002	Cutting Edge
431	Chemical aerosol engineering as a novel tool for large scale particle processing: From oxides to salt and metal nanoparticles	T10	T1021	Cutting Edge
432	Magnetic nanoparticles functionalized for heavy and noble metal recovery	T04	T0441	Cutting Edge
434	Highly Efficient Nano-Silver Composites Enable Self-Disinfecting Polymer	T11	T1122	Cutting Edge
435	2D-fractal based logics and computing architecture for fine and ultra-fine particle characterization	T06	T0612	Cutting Edge
438	Magnetic Metal Nanoparticles as Carrier for targeted Drug Delivery	T12	T1202	Cutting Edge
439	Reactive nanoparticles for reconstructive bone surgery and dental applications	T11	T1101	Cutting Edge
440	Econanotoxicology: Nanoparticles clearance through sewage treatment plants	T06	T0604	Cutting Edge

441	Nanotoxicology: Physico-chemical differences between nanoparticle and molecule derived toxicity	T10	T1032	Cutting Edge
442	DEM investigation of the friction behaviour of multi-sphere particle models	T01	T0123	Cutting Edge
443	Precise balancing of viscous and radiation forces on a particle in liquid-filled photonic bandgap fiber	T06	T0604	Cutting Edge
444	Charge Accumulation Process of a Single Particle due to Cascade Impacts onto Metal Wall	T06	T0604	Cutting Edge
445	Fabrication of Carbon Nanotube Reinforced Magnesium Alloy Composites by Melt Stirring	T10	T1015	Cutting Edge
446	Investigation of the defect structure of nanoparticles during mechanical stressing	T01	T0132	Cutting Edge
448	CeO ₂ – based nano-structured coatings from liquid precursor solutions by aerosol-thermal spraying techniques	T03	T0312	Cutting Edge
450	Using Particle Image Velocimetry to Study Particles Inside a Spray Dryer	T04	T0401	Cutting Edge
452	Synthesis and characterization of hybrid PNIPAM-silica microparticles prepared by inverse Pickering emulsion polymerization	T11	T1121	Cutting Edge
454	Observation of Reverse Core-Annular Flow in Risers with Geldart Group B particles	T04	T0411	Cutting Edge
455	Interface-controlled property changes of titanate nanostructures	T08	T0831	Cutting Edge
456	Simulation of liquid dispersion in powder beds using DEM-CIP coupling method	T01	T0111	Cutting Edge
457	Filter Media and Dust Particles Segregated by Vibrating Sieve in Granular Bed Filtration	T03	T0301	Cutting Edge
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479	Hydrodynamic study of a cylindrical, flat-bottom spouted bed using Magnetic Resonance Imaging	T04	T0414	Cutting Edge
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483	Heat transfer in a microwave plasma fluidized bed	T04	T0415	Cutting Edge
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486	Low-Temperature Fabrication of Functional Thin Films from Nanoparticle Dispersions	T11	T1122	Cutting Edge
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489	Characterisation of pyrogenic powders with conventional particle sizing technique	T06	T0604	Cutting Edge
490	Parameter and uncertainty estimation for a multivariate granulation model using a projection method	T05	T0541	Cutting Edge
491	Interaction between two fractal aggregates	T08	T0812	Cutting Edge
492	Detailed modelling of the flame spray pyrolysis of SiO ₂ nanoparticles	T01	T1101	Cutting Edge
493	Prediction of Molecular Crystal Morphology using Surface Free Energy Minimization	T02	T0241	Cutting Edge
494	Computational modelling of Silica nanoparticle formation in a flame reactor	T10	T1021	Cutting Edge

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