Doris Segets

List of Publications by Year
in descending order

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Version: 2024-02-01

75	2,114	218592	243529
papers	citations	26 h-index	44 g-index

87	87	87	2551
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Robust optimization in nanoparticle technology: A proof of principle by quantum dot growth in a residence time reactor. Computers and Chemical Engineering, 2022, 157, 107618.	2.0	2
2	Towards a framework for evaluating and reporting Hansen solubility parameters: applications to particle dispersions. Nanoscale Advances, 2021, 3, 4400-4410.	2.2	10
3	Crossing the Valley of Death: From Fundamental to Applied Research in Electrolysis. Jacs Au, 2021, 1, 527-535.	3.6	79
4	On the defect structures and associated diffraction phenomena in Au nanoparticles. Microscopy and Microanalysis, 2021, 27, 1746-1746.	0.2	0
5	On the state and stability of fuel cell catalyst inks. Advanced Powder Technology, 2021, 32, 3845-3859.	2.0	16
6	Wavelet neural network modeling for the retention efficiency of sub-15 nm nanoparticles in ultraï¬ltration under small particle to pore diameter ratio. Journal of Membrane Science, 2021, 635, 119503.	4.1	60
7	Calcium Oxalate Crystallization: Influence of pH, Energy Input, and Supersaturation Ratio on the Synthesis of Artificial Kidney Stones. ACS Omega, 2021, 6, 26566-26574.	1.6	11
8	Diffusion of Gold Nanoparticles in Inverse Opals Probed by Heterodyne Dynamic Light Scattering. Transport in Porous Media, 2020, 131, 723-737.	1.2	11
9	Rapid Characterization and Parameter Space Exploration of Perovskites Using an Automated Routine. ACS Combinatorial Science, 2020, 22, 6-17.	3.8	10
10	Tailoring of Electrocatalyst Inks for Performance Enhancement in Proton Exchange Membrane Fuel Cells. ECS Transactions, 2020, 97, 651-657.	0.3	2
11	Unraveling Complexity: A Strategy for the Characterization of Anisotropic Core Multishell Nanoparticles. Particle and Particle Systems Characterization, 2020, 37, 2000145.	1.2	3
12	Sedimentation Dynamics of Colloidal Formulations through Direct Visualization: Implications for Fuel Cell Catalyst Inks. ACS Applied Nano Materials, 2020, 3, 7384-7391.	2.4	18
13	Microstructure characteristics of non-monodisperse quantum dots: on the potential of transmission electron microscopy combined with X-ray diffraction. CrystEngComm, 2020, 22, 3644-3655.	1.3	6
14	Modelâ€Based Optimization of Ripening Processes with Feedback Modules. Chemical Engineering and Technology, 2020, 43, 896-903.	0.9	7
15	Effects of filter structure, flow velocity, particle concentration and fouling on the retention efficiency of ultrafiltration for sub-20Ânm gold nanoparticles. Separation and Purification Technology, 2020, 241, 116689.	3.9	7
16	Chromatographic property classification of narrowly distributed ZnS quantum dots. Nanoscale, 2020, 12, 12114-12125.	2.8	10
17	Modeling, Simulation and Optimization of Process Chains. , 2020, , 549-578.		0
18	Flowsheet Simulation of Integrated Precipitation Processes. , 2020, , 269-304.		0

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19	Tailored SiNx-based Anode Processing for Li-Ion Batteries. ECS Transactions, 2020, 97, 185-193.	0.3	0
20	Evolution of the Ligand Shell Around Small ZnO Nanoparticles During the Exchange of Acetate by Catechol: A Small Angle Scattering Study. ChemNanoMat, 2019, 5, 116-123.	1.5	10
21	Scalable classification of nanoparticles: A proof of principle for process design. Advanced Powder Technology, 2019, 30, 2801-2811.	2.0	6
22	Cleaning Matters!. ACS Combinatorial Science, 2019, 21, 722-725.	3.8	3
23	Predicting collision efficiencies of colloidal nanoparticles in single spherical and fibrous collectors using an individual particle tracking method. Separation and Purification Technology, 2019, 222, 202-213.	3.9	16
24	A solution-based ALD route towards (CH₃NH₃)(PbI₃) perovskite via lead sulfide films. Journal of Materials Chemistry A, 2019, 7, 25112-25119.	5.2	21
25	Suspension- and powder-based derivation of Hansen dispersibility parameters for zinc oxide quantum dots. Particuology, 2019, 44, 71-79.	2.0	11
26	Determination of Hansen parameters for particles: A standardized routine based on analytical centrifugation. Advanced Powder Technology, 2018, 29, 1550-1561.	2.0	77
27	Quantifying Surface Properties of Silica Particles by Combining Hansen Parameters and Reichardt's Dye Indicator Data. Particle and Particle Systems Characterization, 2018, 35, 1800328.	1.2	6
28	Retention mechanisms of 1.7â€¯nm ZnS quantum dots and sub-20â€¯nm Au nanoparticles in ultrafiltration membranes. Journal of Membrane Science, 2018, 567, 58-67.	4.1	12
29	Simple and Reliable Method for Studying the Adsorption Behavior of Aquivion Ionomers on Carbon Black Surfaces. Langmuir, 2018, 34, 12324-12334.	1.6	23
30	Efficient adsorption and sustainable degradation of gaseous acetaldehyde and o-xylene using rGO-TiO2 photocatalyst. Chemical Engineering Journal, 2018, 349, 708-718.	6.6	102
31	Quantitative evaluation of nanoparticle classification by size-exclusion chromatography. Powder Technology, 2018, 339, 264-272.	2.1	34
32	The effect of mixing on silver particle morphology in flow synthesis. Chemical Engineering Science, 2018, 192, 254-263.	1.9	8
33	Ultrastable photodegradation of formaldehyde under fluorescent lamp irradiation by anti-reflection structure SnS2/TiO2 composite. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 364, 725-731.	2.0	9
34	A widely applicable tool for modeling precipitation processes. Computers and Chemical Engineering, 2017, 98, 197-208.	2.0	16
35	Automated synthesis of quantum dot nanocrystals by hot injection: Mixing induced self-focusing. Chemical Engineering Journal, 2017, 320, 232-243.	6.6	27
36	Mechanochemically induced sulfur doping in ZnO via oxygen vacancy formation. Physical Chemistry Chemical Physics, 2017, 19, 13838-13845.	1.3	21

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37	Changes within the stabilizing layer of ZnO nanoparticles upon washing. Journal of Colloid and Interface Science, 2017, 504, 356-362.	5.0	10
38	Choosing the right nanoparticle size â€“ designing novel ZnO electrode architectures for efficient dye-sensitized solar cells. Journal of Materials Chemistry A, 2017, 5, 7516-7522.	5.2	8
39	Liquid filtration of nanoparticles through track-etched membrane filters under unfavorable and different ionic strength conditions: Experiments and modeling. Journal of Membrane Science, 2017, 524, 682-690.	4.1	37
40	2D analysis of polydisperse coreâ€“shell nanoparticles using analytical ultracentrifugation. Analyst, The, 2017, 142, 206-217.	1.7	25
41	Adaptive Behavior of Dynamic Orthoester Cryptands. Angewandte Chemie - International Edition, 2017, 56, 776-781.	7.2	72
42	Influence of Tail Groups during Functionalization of ZnO Nanoparticles on Binding Enthalpies and Photoluminescence. Langmuir, 2017, 33, 13581-13589.	1.6	8
43	Enhanced Crystallization of Lysozyme Mediated by the Aggregation of Inorganic Seed Particles. Crystal Growth and Design, 2017, 17, 967-981.	1.4	10
44	Spectra Library: An Assumptionâ€Free In Situ Method to Access the Kinetics of Catechols Binding to Colloidal ZnO Quantum Dots. Angewandte Chemie, 2016, 128, 944-947.	1.6	6
45	Extension of the Deep UVâ€Capabilities in Multiwavelength Spectrometry in Analytical Ultracentrifugation: The Role of Oil Deposits. Particle and Particle Systems Characterization, 2016, 33, 184-189.	1.2	8
46	Simultane Bestimmung spektraler Eigenschaften und GrÃ¶ÃŸen von multiplen Partikeln in LÃ¶sung mit Subnanometerâ€Auflã¶sung. Angewandte Chemie, 2016, 128, 11944-11949.	1.6	2
47	Simultaneous Identification of Spectral Properties and Sizes of Multiple Particles in Solution with Subnanometer Resolution. Angewandte Chemie - International Edition, 2016, 55, 11770-11774.	7.2	46
48	Analysis of Particle Size Distributions of Quantum Dots: From Theory to Application. KONA Powder and Particle Journal, 2016, 33, 48-62.	0.9	19
49	Classification of Nanoparticles by Size-Selective Precipitation: The Role of Solubility Parameters. Chemie-Ingenieur-Technik, 2016, 88, 1299-1299.	0.4	0
50	Spectra Library: An Assumptionâ€Free In Situ Method to Access the Kinetics of Catechols Binding to Colloidal ZnO Quantum Dots. Angewandte Chemie - International Edition, 2016, 55, 932-935.	7.2	13
51	An experimental study of ultrafiltration for sub-10 nm quantum dots and sub-150 nm nanoparticles through PTFE membrane and Nuclepore filters. Journal of Membrane Science, 2016, 497, 153-161.	4.1	27
52	On the mechanism of Zn4O-acetate precursors ripening to ZnO: How dimerization is promoted by hydroxide incorporation. Journal of Chemical Physics, 2015, 143, 064501.	1.2	4
53	Analysis of Colloidal Interactions by Means of Sedimentation Analysis and their Use during Ultrafiltration. Chemie-Ingenieur-Technik, 2015, 87, 1089-1089.	0.4	0
54	From In Situ Characterization to Process Control of Quantum Dot Systems. Procedia Engineering, 2015, 102, 575-581.	1.2	1

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55	Simultaneous Analysis of Hydrodynamic and Optical Properties Using Analytical Ultracentrifugation Equipped with Multiwavelength Detection. Analytical Chemistry, 2015, 87, 3396-3403.	3.2	57
56	Classification of Zinc Sulfide Quantum Dots by Size: Insights into the Particle Surfaceâ€“Solvent Interaction of Colloids. Journal of Physical Chemistry C, 2015, 119, 4009-4022.	1.5	24
57	A General Approach To Study the Thermodynamics of Ligand Adsorption to Colloidal Surfaces Demonstrated by Means of Catechols Binding to Zinc Oxide Quantum Dots. Chemistry of Materials, 2015, 27, 358-369.	3.2	64
58	New possibilities of accurate particle characterisation by applying direct boundary models to analytical centrifugation. Nanoscale, 2015, 7, 6574-6587.	2.8	52
59	Investigation of the sizeâ€“property relationship in CuInS₂quantum dots. Nanoscale, 2015, 7, 18105-18118.	2.8	38
60	Enhanced Nucleation of Lysozyme Using Inorganic Silica Seed Particles of Different Sizes. Crystal Growth and Design, 2015, 15, 3582-3593.	1.4	12
61	A Combined SAXS/SANS Study for the in Situ Characterization of Ligand Shells on Small Nanoparticles: The Case of ZnO. Langmuir, 2015, 31, 10130-10136.	1.6	40
62	In Situ Study on the Evolution of Multimodal Particle Size Distributions of ZnO Quantum Dots: Some General Rules for the Occurrence of Multimodalities. Journal of Physical Chemistry B, 2015, 119, 15370-15380.	1.2	38
63	FIMOR: An efficient simulation for ZnO quantum dot ripening applied to the optimization of nanoparticle synthesis. Chemical Engineering Journal, 2015, 260, 706-715.	6.6	26
64	Unified Design Strategies for Particulate Products. Advances in Chemical Engineering, 2015, , 1-81.	0.5	22
65	Mixed Layers of Î²-Lactoglobulin and SDS at Airâ€“Water Interfaces with Tunable Intermolecular Interactions. Journal of Physical Chemistry B, 2014, 118, 4098-4105.	1.2	26
66	Synthesis of silver nanoparticles in melts of amphiphilic polyesters. Nanotechnology, 2013, 24, 115604.	1.3	4
67	Quantitative evaluation of size selective precipitation of Mn-doped ZnS quantum dots by size distributions calculated from UV/Vis absorbance spectra. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	41
68	Tuning the size and the optical properties of ZnO mesocrystals synthesized under solvothermal conditions. Nanoscale, 2012, 4, 864-873.	2.8	34
69	Determination of the Quantum Dot Band Gap Dependence on Particle Size from Optical Absorbance and Transmission Electron Microscopy Measurements. ACS Nano, 2012, 6, 9021-9032.	7.3	138
70	A population balance model of quantum dot formation: Oriented growth and ripening of ZnO. Chemical Engineering Science, 2012, 70, 4-13.	1.9	35
71	Experimental and Theoretical Studies of the Colloidal Stability of Nanoparticlesâ€”A General Interpretation Based on Stability Maps. ACS Nano, 2011, 5, 4658-4669.	7.3	102
72	Shape Transformation Mechanism of Silver Nanorods in Aqueous Solution. Small, 2011, 7, 147-156.	5.2	42

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73	Optimum between purification and colloidal stability of ZnO nanoparticles. Advanced Powder Technology, 2010, 21, 41-49.	2.0	58
74	Real-Time Monitoring of the Nucleation and Growth of ZnO Nanoparticles Using an Optical Hyper-Rayleigh Scattering Method. Journal of Physical Chemistry C, 2009, 113, 11995-12001.	1.5	62
75	Analysis of Optical Absorbance Spectra for the Determination of ZnO Nanoparticle Size Distribution, Solubility, and Surface Energy. ACS Nano, 2009, 3, 1703-1710.	7.3	248