Cedric J Gommes

List of Publications by Year
in descending order

62	2,142	236833	233338
papers	citations	25 h-index	45 g-index

66	66	66	3217
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sulfonated silica/carbon nanocomposites as novel catalysts for hydrolysis of cellulose to glucose. Green Chemistry, 2010, 12, 1560.	4.6	286
2	Practical methods for measuring the tortuosity of porous materials from binary or grayâ€tone tomographic reconstructions. AIChE Journal, 2009, 55, 2000-2012.	1.8	143
3	Mesoporosity of Zeoliteâ€…Y: Quantitative Threeâ€Dimensional Study by Image Analysis of Electron Tomograms. Angewandte Chemie - International Edition, 2012, 51, 4213-4217.	7.2	103
4	Support Functionalization To Retard Ostwald Ripening in Copper Methanol Synthesis Catalysts. ACS Catalysis, 2015, 5, 4439-4448.	5.5	96
5	Quantitative Structural Analysis of Binary Nanocrystal Superlattices by Electron Tomography. Nano Letters, 2009, 9, 2719-2724.	4.5	90
6	Quantitative Characterization of Pore Corrugation in Ordered Mesoporous Materials Using Image Analysis of Electron Tomograms. Chemistry of Materials, 2009, 21, 1311-1317.	3.2	85
7	Nanoparticle Growth in Supported Nickel Catalysts during Methanation Reactionâ€”Larger is Better. Angewandte Chemie - International Edition, 2014, 53, 9493-9497.	7.2	84
8	The range of validity of sorption kinetic models. Journal of Colloid and Interface Science, 2015, 448, 437-450.	5.0	79
9	Structure development of resorcinol-formaldehyde gels: Microphase separation or colloid aggregation. Physical Review E, 2008, 77, 041409.	0.8	60
10	Preparation of highly loaded Pt/carbon xerogel catalysts for Proton Exchange Membrane fuel cells by the Strong Electrostatic Adsorption method. Catalysis Today, 2010, 150, 119-127.	2.2	51
11	The Structure and Thermal Stability of Amyloseâ€“Lipid Complexes: A Case Study on Amyloseâ€“Glycerol Monostearate. Crystal Growth and Design, 2014, 14, 3221-3233.	1.4	51
12	Ostwald ripening of confined nanoparticles: chemomechanical coupling in nanopores. Nanoscale, 2019, 11, 7386-7393.	2.8	51
13	Revealing the Formation of Copper Nanoparticles from a Homogeneous Solid Precursor by Electron Microscopy. Journal of the American Chemical Society, 2016, 138, 3433-3442.	6.6	50
14	CONEX, a program for angular calibration and averaging of two-dimensional powder scattering patterns. Journal of Applied Crystallography, 2010, 43, 352-355.	1.9	48
15	Influence of the operating conditions on the production rate of multi-walled carbon nanotubes in a CVD reactor. Carbon, 2004, 42, 1473-1482.	5.4	45
16	Image analysis characterization of multi-walled carbon nanotubes. Carbon, 2003, 41, 2561-2572.	5.4	44
17	Assessment of the 3D Localization of Metallic Nanoparticles in Pd/SiO2Cogelled Catalysts by Electron Tomography. Langmuir, 2005, 21, 12378-12385.	1.6	43
18	Molecular and Morphological Aspects of Annealing-Induced Stabilization of Starch Crystallites. Biomacromolecules, 2012, 13, 1361-1370.	2.6	43

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19	Scale-dependent diffusion anisotropy in nanoporous silicon. Scientific Reports, 2017, 7, 40207.	1.6	43
20	Adsorption, Capillary Bridge Formation, and Cavitation in SBA-15 Corrugated Mesopores: A Derjaguinâ€“Broekhoffâ€“de Boer Analysis. Langmuir, 2012, 28, 5101-5115.	1.6	41
21	In Situ SAXS Analysis of Silica Gel Formation with an Additive. Journal of Physical Chemistry B, 2004, 108, 8983-8991.	1.2	39
22	Subâ€Micrometer Structure Formation during Spin Coating Revealed by Timeâ€Resolved In Situ Laser and Xâ€Ray Scattering. Advanced Functional Materials, 2017, 27, 1702516.	7.8	35
23	Stochastic models of disordered mesoporous materials for small-angle scattering analysis and more. Microporous and Mesoporous Materials, 2018, 257, 62-78.	2.2	35
24	Increased aortic compliance maintains left ventricular performance at lower energetic cost. European Journal of Cardio-thoracic Surgery, 2000, 17, 272-278.	0.6	25
25	Branching, aggregation, and phase separation during the gelation of tetraethoxysilane. Journal of Non-Crystalline Solids, 2007, 353, 2495-2499.	1.5	25
26	Effect of the counter-ion of the basification agent on the pore texture of organic and carbon xerogels. Journal of Non-Crystalline Solids, 2008, 354, 4698-4701.	1.5	25
27	Three-dimensional reconstruction of liquid phases in disordered mesopores usingin situsmall-angle scattering. Journal of Applied Crystallography, 2013, 46, 493-504.	1.9	25
28	Mesoscale Characterization of Nanoparticles Distribution Using Xâ€ray Scattering. Angewandte Chemie - International Edition, 2015, 54, 11804-11808.	7.2	22
29	Disentangling the Degradation Pathways of Highly Defective PtNi/C Nanostructures â€“ An Operando Wide and Small Angle X-ray Scattering Study. ACS Catalysis, 2019, 9, 160-167.	5.5	22
30	Small-angle scattering for beginners. Journal of Applied Crystallography, 2021, 54, 1832-1843.	1.9	20
31	2-Point correlation function of nanostructured materials via the grey-tone correlation function of electron tomograms: A three-dimensional structural analysis of ordered mesoporous silica. Acta Materialia, 2010, 58, 770-780.	3.8	19
32	Small-Angle Scattering Analysis of Empty or Loaded Hierarchical Porous Materials. Journal of Physical Chemistry C, 2016, 120, 1488-1506.	1.5	19
33	Critical opalescence points to thermodynamic instability: relevance to small-angle X-ray scattering of resorcinolâ€“formaldehyde gel formation at low pH. Journal of Applied Crystallography, 2008, 41, 663-668.	1.9	18
34	A high pressure cell for supercritical CO2 on-line chemical reactions studied with x-ray techniques. Review of Scientific Instruments, 2014, 85, 093905.	0.6	17
35	An Ecoâ€friendly Soft Template Synthesis of Mesostructured Silicaâ€Carbon Nanocomposites for Acid Catalysis. ChemCatChem, 2015, 7, 3047-3058.	1.8	16
36	Rapid aqueous synthesis of ordered mesoporous carbons: Investigation of synthesis variables and application as anode materials for Li-ion batteries. Microporous and Mesoporous Materials, 2014, 195, 92-101.	2.2	15

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37	Small-Angle X-ray Scattering Insights into the Architecture-Dependent Emulsifying Properties of Amphiphilic Copolymers in Supercritical Carbon Dioxide. Journal of Physical Chemistry B, 2015, 119, 1706-1716.	1.2	15
38	A more thorough analysis of water rockets: Moist adiabats, transient flows, and inertial forces in a soda bottle. American Journal of Physics, 2010, 78, 236-243.	0.3	13
39	Structure of Silica Xerogels Synthesized with Organoalkoxysilane Co-reactants Hints at Multiple Phase Separation. Journal of Physical Chemistry B, 2006, 110, 7757-7765.	1.2	12
40	Positive curvature effects and interparticle capillary condensation during nitrogen adsorption in particulate porous materials. Journal of Colloid and Interface Science, 2007, 314, 415-421.	5.0	11
41	Morphological models of complex ordered materials based on inhomogeneously clipped Gaussian fields. Physical Review E, 2009, 80, 061401.	0.8	11
42	Small-angle scattering and scale-dependent heterogeneity. Journal of Applied Crystallography, 2016, 49, 1162-1176.	1.9	11
43	Stochastic analysis of capillary condensation in disordered mesopores. Physical Chemistry Chemical Physics, 2018, 20, 13646-13659.	1.3	11
44	Formation and structural characteristics of Pdâ€“Ag/SiO2 and Pdâ€“Cu/SiO2 catalysts synthesized by cogelation. Journal of Non-Crystalline Solids, 2005, 351, 3839-3853.	1.5	10
45	Nitrogen Adsorption on Silica Xerogels or the Odd Look of a t Plot. Langmuir, 2005, 21, 1703-1705.	1.6	8
46	Phase separation during silica gel formation followed by time-resolved SAXS. Nuclear Instruments & Methods in Physics Research B, 2005, 238, 141-145.	0.6	7
47	Water desorption from resorcinol-formaldehyde hydrogels and adsorption in the resulting xerogels. Microporous and Mesoporous Materials, 2009, 117, 61-66.	2.2	7
48	Small-angle scattering by supported nanoparticles: exact results and useful approximations. Journal of Applied Crystallography, 2019, 52, 507-519.	1.9	7
49	Chord-length distributions cannot generally be obtained from small-angle scattering. Journal of Applied Crystallography, 2020, 53, 127-132.	1.9	7
50	Relevance of Spinodal Decomposition for Support Formation and Metal Dispersion in Cogelled Pd/SiO₂ Catalysts. Journal of Physical Chemistry C, 2007, 111, 11150-11156.	1.5	6
51	Formation mechanism of Y-junctions in arrays of multi-walled carbon nanotubes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 327, 140-143.	2.3	5
52	Condensation-Induced Decrease of Small-Angle X-ray Scattering Intensity in Gelling Silica Solutions. Journal of Physical Chemistry C, 2010, 114, 17350-17357.	1.5	5
53	Characterization of gels via solvent desorption measurements. Adsorption, 2007, 13, 533-540.	1.4	4
54	The PÃ©clet number of a casino: Diffusion and convection in a gambling context. American Journal of Physics, 2020, 88, 439-447.	0.3	4

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55	The microstructure of hybrid silica gels and its modification by evaporative and supercritical dryings. Journal of Sol-Gel Science and Technology, 2007, 44, 211-218.	1.1	3
56	Synthesis and characterization of highly loaded Pt/carbon xerogel catalysts prepared by the Strong Electrostatic Adsorption method. Studies in Surface Science and Catalysis, 2010, 175, 169-176.	1.5	3
57	Stochastic models of dense or hollow nanoparticles and their scattering properties. Journal of Applied Crystallography, 2020, 53, 811-823.	1.9	3
58	Multiscale image analysis of microcellular solids: application to hybrid silica xerogels. Journal of Microscopy, 2007, 226, 156-162.	0.8	2
59	3D Nanoscale Analysis of Zeolite Catalysts by Electron Tomography and Image Processing. Microscopy and Microanalysis, 2014, 20, 784-785.	0.2	2
60	Inelastic neutron scattering analysis with time-dependent Gaussian-field models. Journal of Chemical Physics, 2021, 155, 024121.	1.2	2
61	Thin Films: Subâ€Micrometer Structure Formation during Spin Coating Revealed by Timeâ€Resolved In Situ Laser and Xâ€Ray Scattering (Adv. Funct. Mater. 46/2017). Advanced Functional Materials, 2017, 27, .	7.8	0
62	A Time-Dependent Hierarchical Model for Elastic and Inelastic Scattering Data Analysis of Aerogels and Similar Soft Materials. Gels, 2022, 8, 236.	2.1	0