Olivier Deschaume

List of Publications by Year in descending order

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64 papers 1,670 citations

361413 20 h-index 302126 39 g-index

66 all docs

66 docs citations

66 times ranked 2601 citing authors

#	Article	IF	CITATIONS
1	Chemistry of Aqueous Silica Nanoparticle Surfaces and the Mechanism of Selective Peptide Adsorption. Journal of the American Chemical Society, 2012, 134, 6244-6256.	13.7	349
2	An overview of the fundamentals of the chemistry of silica with relevance to biosilicification and technological advances. FEBS Journal, 2012, 279, 1710-1720.	4.7	233
3	Urea potentiometric enzymatic biosensor based on charged biopolymers and electrodeposited polyaniline. Biosensors and Bioelectronics, 2011, 26, 4139-4145.	10.1	88
4	A Solution Study of Silica Condensation and Speciation with Relevance to in Vitro Investigations of Biosilicification. Journal of Physical Chemistry B, 2010, 114, 9947-9955.	2.6	66
5	Label-Free Detection of <i>Escherichia coli</i> Based on Thermal Transport through Surface Imprinted Polymers. ACS Sensors, 2016, 1, 1140-1147.	7.8	64
6	Direct evidence of ZnO morphology modification via the selective adsorption of ZnO-binding peptides. Journal of Materials Chemistry, 2011, 21, 80-89.	6.7	63
7	Genetically Engineered Chimeric Silk–Silver Binding Proteins. Advanced Functional Materials, 2011, 21, 2889-2895.	14.9	56
8	Sensitive and specific detection of E. coli using biomimetic receptors in combination with a modified heat-transfer method. Biosensors and Bioelectronics, 2019, 136, 97-105.	10.1	43
9	QCM-D Study of Time-Resolved Cell Adhesion and Detachment: Effect of Surface Free Energy on Eukaryotes and Prokaryotes. ACS Applied Materials & Interfaces, 2020, 12, 18258-18272.	8.0	43
10	Cell detection by surface imprinted polymers SIPs: A study to unravel the recognition mechanisms. Sensors and Actuators B: Chemical, 2018, 255, 907-917.	7.8	41
11	Bioinspired Silicification of Silica-Binding Peptide-Silk Protein Chimeras: Comparison of Chemically and Genetically Produced Proteins. Biomacromolecules, 2012, 13, 683-690.	5.4	39
12	Interactions of Bovine Serum Albumin with Aluminum Polyoxocations and Aluminum Hydroxide. Langmuir, 2006, 22, 10078-10088.	3.5	37
13	Cationic Cellulose Nanocrystals for Flocculation of Microalgae: Effect of Degree of Substitution and Crystallinity. ACS Applied Nano Materials, 2019, 2, 3394-3403.	5.0	35
14	High-Temperature Speciation Studies of Al-Ion Hydrolysis. Advanced Engineering Materials, 2004, 6, 836-839.	3.5	31
15	Morphology and structure of ZIF-8 during crystallisation measured by dynamic angle-resolved second harmonic scattering. Nature Communications, 2018, 9, 3418.	12.8	29
16	The static anion exchange method for generation of high purity aluminium polyoxocations and monodisperse aluminium hydroxide nanoparticles. Journal of Materials Chemistry, 2005, 15, 3415.	6.7	25
17	The pH-dependent photoluminescence of colloidal CdSe/ZnS quantum dots with different organic coatings. Nanotechnology, 2015, 26, 255703.	2.6	25
18	Photoacoustic temperature imaging based on multi-wavelength excitation. Photoacoustics, 2019, 13, 33-45.	7.8	25

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19	From biominerals to biomaterials: the role of biomolecule–mineral interactions. Biochemical Society Transactions, 2009, 37, 687-691.	3.4	24
20	Interactions of aluminium hydrolytic species with biomolecules. New Journal of Chemistry, 2008, 32, 1346.	2.8	22
21	Synthesis and Properties of Gold Nanoparticle Arrays Self-Organized on Surface-Deposited Lysozyme Amyloid Scaffolds. Chemistry of Materials, 2014, 26, 5383-5393.	6.7	20
22	Optimization of the structural parameters of new potentiometric pH and urea sensors based on polyaniline and a polysaccharide coupling layer. Sensors and Actuators B: Chemical, 2012, 166-167, 794-801.	7.8	19
23	Dependence of Gold Nanoparticle Radiosensitization on Functionalizing Layer Thickness. Radiation Research, 2016, 185, 384-392.	1.5	19
24	Harmonic light scattering study reveals structured clusters upon the supramolecular aggregation of regioregular poly (3-alkylthiophene). Communications Chemistry, 2019, 2, .	4.5	17
25	Room temperature atomic layer deposition of Al2O3 and replication of butterfly wings for photovoltaic application. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	15
26	Glycine betaine grafted nanocellulose as an effective and bio-based cationic nanocellulose flocculant for wastewater treatment and microalgal harvesting. Nanoscale Advances, 2021, 3, 4133-4144.	4.6	14
27	Modulation of fungal biofilm physiology and secondary product formation based on physico-chemical surface properties. Bioprocess and Biosystems Engineering, 2019, 42, 1935-1946.	3.4	13
28	SANS study of mixed cholesteric cellulose nanocrystal $\hat{a} \in \text{``gold nanorod suspensions.}$ Chemical Communications, 2020, 56, 13001-13004.	4.1	13
29	Detection of yeast strains by combining surface-imprinted polymers with impedance-based readout. Sensors and Actuators B: Chemical, 2021, 340, 129917.	7.8	13
30	Multiscale Characterization of the Mechanical Properties of Fibrin and Polyethylene Glycol (PEG) Hydrogels for Tissue Engineering Applications. Macromolecular Chemistry and Physics, 2022, 223, 2100366.	2.2	13
31	Ionic strength controls long-term cell-surface interactions – A QCM-D study of S. cerevisiae adhesion, retention and detachment. Journal of Colloid and Interface Science, 2021, 585, 583-595.	9.4	12
32	Lightâ€Addressable Nanocomposite Hydrogels Allow Plasmonic Actuation and In Situ Temperature Monitoring in 3D Cell Matrices. Advanced Functional Materials, 2022, 32, 2108234.	14.9	12
33	Impact of Amino Acids on the Isomerization of the Aluminum Tridecamer Al ₁₃ . Inorganic Chemistry, 2017, 56, 12401-12409.	4.0	10
34	Towards Mimicking the Fetal Liver Niche: The Influence of Elasticity and Oxygen Tension on Hematopoietic Stem/Progenitor Cells Cultured in 3D Fibrin Hydrogels. International Journal of Molecular Sciences, 2020, 21, 6367.	4.1	10
35	Development of a Layered Hybrid Nanocomposite Material Using \hat{l}_{\pm} , \hat{l}_{∞} -Bifunctionalized Polythiophenes. Macromolecules, 2020, 53, 11098-11105.	4.8	9
36	Solvent Role in the Self-Assembly of Poly(3-alkylthiophene): A Harmonic Light Scattering Study. Macromolecules, 2021, 54, 2477-2484.	4.8	9

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37	Chlorite oxidized oxyamylose differentially influences the microstructure of fibrin and self assembling peptide hydrogels as well as dental pulp stem cell behavior. Scientific Reports, 2021, 11, 5687.	3.3	8
38	Cell detection by surface imprinted polymers (SIPs) $\hat{a}\in$ " A study of the sensor surface by optical and dielectric relaxation spectroscopy. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 816-821.	2.9	7
39	Development of a new direct liquid injection system for nanoparticle deposition by chemical vapor deposition using nanoparticle solutions. Review of Scientific Instruments, 2016, 87, 025101.	1.3	6
40	The Importance of Excellent π–π Interactions in Poly(thiophene)s To Reach a High Third-Order Nonlinear Optical Response. Journal of Physical Chemistry B, 2020, 124, 9668-9679.	2.6	6
41	Quantum Dot-Functionalized Extracellular Matrices for <i>In Situ</i> Monitoring of Cardiomyocyte Activity. ACS Applied Nano Materials, 2020, 3, 6118-6126.	5.0	6
42	Enhanced electric field sensitivity of quantum dot/rod two-photon fluorescence and its relevance for cell transmembrane voltage imaging. Nanophotonics, 2021, 10, 2407-2420.	6.0	6
43	Second-order optimized regularized structured illumination microscopy (sorSIM) for high-quality and rapid super resolution image reconstruction with low signal level. Optics Express, 2020, 28, 16708.	3.4	6
44	Taylor Dispersion Analysis and Atomic Force Microscopy Provide a Quantitative Insight into the Aggregation Kinetics of Aβ (1–40)/Aβ (1–42) Amyloid Peptide Mixtures. ACS Chemical Neuroscience, 2022, 13, 786-795.	3.5	6
45	Label-Free Iron Oxide Nanoparticles as Multimodal Contrast Agents in Cells Using Multi-Photon and Magnetic Resonance Imaging. International Journal of Nanomedicine, 2021, Volume 16, 8375-8389.	6.7	6
46	Selective Protein Immobilization onto Gold Nanoparticles Deposited under Vacuum on a Protein-Repellent Self-Assembled Monolayer. Langmuir, 2013, 29, 15328-15335.	3.5	5
47	Enhancement of Nonlinear Optical Scattering by Gold Nanoparticles through Aggregationâ€Induced Plasmon Coupling in the Nearâ€Infrared. ChemPhysChem, 2019, 20, 1765-1774.	2.1	5
48	Unraveling the Supramolecular Organization Mechanism of Chiral Star-Shaped Poly(3-alkylthiophene). Macromolecules, 2020, 53, 9513-9520.	4.8	5
49	Advent of Plasmonic Behavior: Dynamically Tracking the Formation of Gold Nanoparticles through Nonlinear Spectroscopy. Chemistry of Materials, 2020, 32, 7327-7337.	6.7	5
50	Low Cost, Sensitive Impedance Detection of <i>E. coli</i> Bacteria in Foodâ€Matrix Samples Using Surfaceâ€Imprinted Polymers as Wholeâ€Cell Receptors. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100405.	1.8	5
51	Stress-controlled shear flow alignment of collagen type I hydrogel systems. Acta Biomaterialia, 2022, 150, 128-137.	8.3	5
52	Comparison of the Density of Proteins and Peptides Grafted on Silane Layers and Polyelectrolyte Multilayers. Biomacromolecules, 2014, 15, 3706-3716.	5.4	4
53	Understanding the Dehydration Stress in Lipid Vesicles by a Combined Quartz Crystal Microbalance and Dielectric Spectroscopy Study. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900986.	1.8	4
54	Labelâ€Free Imaging of Membrane Potentials by Intramembrane Field Modulation, Assessed by Second Harmonic Generation Microscopy. Small, 2022, 18, e2200205.	10.0	4

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55	Versatile and Robust Method for Antibody Conjugation to Nanoparticles with High Targeting Efficiency. Pharmaceutics, 2021, 13, 2153.	4.5	4
56	Dual photonic bandgap hollow sphere colloidal photonic crystals for real-time fluorescence enhancement in living cells. Biosensors and Bioelectronics, 2021, 194, 113577.	10.1	3
57	Uncovering Log Jamming in Semidilute Suspensions of Quasi-Ideal Rods. Macromolecules, 2021, 54, 9609-9617.	4.8	3
58	lonic strength tunes yeast viscoelasticity and promotes trace-level cell detection. Physics in Medicine, 2022, 14, 100049.	1.3	3
59	Capillary electrophoresis for aluminum ion speciation: Optimized separation conditions for complex polycation mixtures. Journal of Chromatography A, 2018, 1552, 79-86.	3.7	1
60	Effect of poly(thiophene)s topology on their third-order nonlinear optical response. Polymer, 2021, 222, 123630.	3.8	1
61	Site-specific bio-functionalization of surfaces by means of metal nanostructures., 2012,,.		0
62	Enzyme conjugation and biosensing with quantum dots: A photoluminescence study. , 2012, , .		0
63	Visualization and characterization of metallo-aggregates using multi-photon microscopy. RSC Advances, 2021, 11, 657-661.	3.6	0
64	Morphology and structure of the metal–organic framework ZIF-8 during crystallisation measured by a new technique: dynamic angle-resolved second-harmonic scattering (AD-SHS). Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e671-e671.	0.1	0