## Carsten Sönnichsen

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8054652/publications.pdf

Version: 2024-02-01

80 papers 11,131 citations

43 h-index 75989 78 g-index

83 all docs 83 docs citations

times ranked

83

15885 citing authors

#	Article	IF	Citations
1	Integrating Nanosensors into Macroporous Hydrogels for Implantation. ACS Applied Bio Materials, 2022, 5, 465-470.	2.3	3
2	Intensity-Based Single Particle Plasmon Sensing. Nano Letters, 2021, 21, 2053-2058.	4.5	32
3	Single Out-of-Resonance Dielectric Nanoparticles as Molecular Sensors. ACS Sensors, 2021, 6, 716-721.	4.0	6
4	Implantable Sensors Based on Gold Nanoparticles for Continuous Long-Term Concentration Monitoring in the Body. Nano Letters, 2021, 21, 3325-3330.	4.5	35
5	Warhead Reactivity Limits the Speed of Inhibition of the Cysteine Protease Rhodesain. ACS Chemical Biology, 2021, 16, 661-670.	1.6	6
6	Interfacial States Cause Equal Decay of Plasmons and Hot Electrons at Gold–Metal Oxide Interfaces. Nano Letters, 2020, 20, 3338-3343.	4.5	46
7	CTAB Stabilizes Silver on Gold Nanorods. Chemistry of Materials, 2020, 32, 1650-1656.	3.2	34
8	Plasmonic Nanosensors for the Label-Free Imaging of Dynamic Protein Patterns. Journal of Physical Chemistry Letters, 2020, 11, 4554-4558.	2.1	11
9	Structural and mechanistic insights into the interaction of the circadian transcription factor BMAL1 with the KIX domain of the CREB-binding protein. Journal of Biological Chemistry, 2019, 294, 16604-16619.	1.6	9
10	Plasmon damping depends on the chemical nature of the nanoparticle interface. Science Advances, 2019, 5, eaav0704.	4.7	128
11	Narrowing the Plasmonic Sensitivity Distribution by Considering the Individual Size of Gold Nanorods. Journal of Physical Chemistry C, 2018, 122, 10133-10137.	1.5	14
12	Synthesis of Au–CdS@CdSe Hybrid Nanoparticles with a Highly Reactive Gold Domain. Langmuir, 2018, 34, 187-190.	1.6	7
13	Membrane Composition Determines Mechanism of MIN Wave Cycle. Biophysical Journal, 2018, 114, 258a.	0.2	1
14	Plasmonic Nanosensors Reveal a Height Dependence of MinDE Protein Oscillations on Membrane Features. Journal of the American Chemical Society, 2018, 140, 17901-17906.	6.6	26
15	Conformational Dynamics of a Single HSP90 Molecule Monitored for 24Hrs at Video Rate. Biophysical Journal, 2018, 114, 168a.	0.2	1
16	Conformational Dynamics of a Single Protein Monitored for 24 h at Video Rate. Nano Letters, 2018, 18, 6633-6637.	4.5	53
17	Particle Plasmons as Dipole Antennas: State Representation of Relative Observables. Journal of Physical Chemistry C, 2018, 122, 19116-19123.	1.5	28
18	Chemical Interface Damping Depends on Electrons Reaching the Surface. ACS Nano, 2017, 11, 2886-2893.	7.3	223

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19	Plasmonic Nanosensors for the Determination of Drug Effectiveness on Membrane Receptors. ACS Applied Materials & Interfaces, 2017, 9, 218-223.	4.0	10
20	Momentum Distribution of Electrons Emitted from Resonantly Excited Individual Gold Nanorods. Nano Letters, 2017, 17, 6606-6612.	4.5	28
21	Potassium Triggers a Reversible Specific Stiffness Transition of Polyethylene Glycol. Journal of Physical Chemistry C, 2017, 121, 22396-22402.	1.5	10
22	Organization into Higher Ordered Ring Structures Counteracts Membrane Binding of IM30, a Protein Associated with Inner Membranes in Chloroplasts and Cyanobacteria. Journal of Biological Chemistry, 2016, 291, 14954-14962.	1.6	33
23	Single Particle Plasmon Sensors as Label-Free Technique To Monitor MinDE Protein Wave Propagation on Membranes. Nano Letters, 2016, 16, 3540-3544.	4.5	24
24	The role of halide ions in the anisotropic growth of gold nanoparticles: a microscopic, atomistic perspective. Physical Chemistry Chemical Physics, 2016, 18, 13246-13254.	1.3	118
25	Gold Nanorods as Plasmonic Sensors for Particle Diffusion. Journal of Physical Chemistry Letters, 2016, 7, 4951-4955.	2.1	20
26	Mechanical properties of MDCK II cells exposed to gold nanorods. Beilstein Journal of Nanotechnology, 2015, 6, 223-231.	1.5	16
27	Comparative evaluation of the impact on endothelial cells induced by different nanoparticle structures and functionalization. Beilstein Journal of Nanotechnology, 2015, 6, 300-312.	1.5	33
28	Plasmonic Core–Satellite Assemblies as Highly Sensitive Refractive Index Sensors. Journal of Physical Chemistry C, 2015, 119, 5577-5582.	1.5	32
29	Mammalian cell growth on gold nanoparticle-decorated substrates is influenced by the nanoparticle coating. Beilstein Journal of Nanotechnology, 2014, 5, 2479-2488.	1.5	8
30	Plasmonic Nanosensors for Simultaneous Quantification of Multiple Protein–Protein Binding Affinities. Nano Letters, 2014, 14, 5528-5532.	4.5	62
31	Surface Asymmetry of Coated Spherical Nanoparticles. Nano Letters, 2014, 14, 4138-4144.	4.5	33
32	Transient Absorption of Gold Nanorods Induced by Femtosecond Laser Irradiation. Ukrainian Journal of Physics, 2014, 59, 331-335.	0.1	2
33	Multiplexed Plasmon Sensor for Rapid Label-Free Analyte Detection. Nano Letters, 2013, 13, 3243-3247.	4.5	107
34	Plasmonic Silver Nanorod Sensitivity: Experiment and Simple Theoretical Treatment. , 2013, , .		0
35	Angular Trapping of Anisometric Nano-Objects in a Fluid. Nano Letters, 2012, 12, 5791-5796.	4.5	19
36	A New Approach to Assess Gold Nanoparticle Uptake by Mammalian Cells: Combining Optical Darkâ€Field and Transmission Electron Microscopy. Small, 2012, 8, 3683-3690.	5.2	63

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37	Single Unlabeled Protein Detection on Individual Plasmonic Nanoparticles. Nano Letters, 2012, 12, 1092-1095.	4.5	306
38	Highly Sensitive Plasmonic Silver Nanorods. ACS Nano, 2011, 5, 6880-6885.	7.3	135
39	Phase separated Cu@Fe3O4 heterodimer nanoparticles from organometallic reactants. Journal of Materials Chemistry, 2011, 21, 8605.	6.7	44
40	Toxicity of gold-nanoparticles: Synergistic effects of shape and surface functionalization on micromotility of epithelial cells. Nanotoxicology, 2011, 5, 254-268.	1.6	139
41	Detecting Intruders on the Nanoscale. Science, 2011, 332, 1389-1390.	6.0	5
42	Absorption Properties of Metal–Semiconductor Hybrid Nanoparticles. ACS Nano, 2011, 5, 4712-4719.	7.3	199
43	Novel plasmonic sensor design using plasmon-induced transparency. , 2010, , .		0
44	The Optimal Aspect Ratio of Gold Nanorods for Plasmonic Bio-sensing. Plasmonics, 2010, 5, 161-167.	1.8	430
45	Au@MnO Nanoflowers: Hybrid Nanocomposites for Selective Dual Functionalization and Imaging. Angewandte Chemie - International Edition, 2010, 49, 3976-3980.	7.2	135
46	Light-controlled one-sided growth of large plasmonic gold domains on quantum rods observed on the single particle level. , $2010$ , , .		2
47	LbL multilayer capsules: recent progress and future outlook for their use in life sciences. Nanoscale, 2010, 2, 458.	2.8	208
48	Planar Metamaterial Analogue of Electromagnetically Induced Transparency for Plasmonic Sensing. Nano Letters, 2010, 10, 1103-1107.	4.5	1,135
49	Probing the Size Effect of Co <sub>2</sub> FeGa-SiO <sub>2</sub> @C Nanocomposite Particles Prepared by a Chemical Approach. Chemistry of Materials, 2010, 22, 6575-6582.	3.2	27
50	Nanoassembled Plasmonic-Photonic Hybrid Cavity for Tailored Light-Matter Coupling. Nano Letters, 2010, 10, 891-895.	<b>4.</b> 5	180
51	Plasmonic-photonic hybrid cavity for tailored light-matter coupling. Proceedings of SPIE, 2010, , .	0.8	1
52	Selfâ€Assembly of Amphiphilic Nanocrystals. Angewandte Chemie - International Edition, 2009, 48, 4282-4283.	7.2	18
53	Growth Kinetic of a Rod-Shaped Metal Nanocrystal. Journal of Physical Chemistry C, 2009, 113, 10390-10394.	1.5	48
54	Rotational Dynamics of Laterally Frozen Nanoparticles Specifically Attached to Biomembranes. Journal of Physical Chemistry C, 2009, 113, 11179-11183.	1.5	34

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55	Tuning Plasmonic Properties by Alloying Copper into Gold Nanorods. Journal of Physical Chemistry C, 2009, 113, 2200-2204.	1.5	64
56	Light-Controlled One-Sided Growth of Large Plasmonic Gold Domains on Quantum Rods Observed on the Single Particle Level. Nano Letters, 2009, 9, 3710-3714.	4.5	106
57	Synthesis of Rod-Shaped Gold Nanorattles with Improved Plasmon Sensitivity and Catalytic Activity. Journal of the American Chemical Society, 2009, 131, 1871-1875.	6.6	312
58	Cytotoxicity of Metal and Semiconductor Nanoparticles Indicated by Cellular Micromotility. ACS Nano, 2009, 3, 213-222.	7.3	112
59	Growth of Gold Tips onto Hyperbranched CdTe Nanostructures. Advanced Materials, 2008, 20, 588-591.	11.1	49
60	Mapping the Polarization Pattern of Plasmon Modes Reveals Nanoparticle Symmetry. Nano Letters, 2008, 8, 2345-2350.	4.5	65
61	Plasmonic Focusing Reduces Ensemble Linewidth of Silver-Coated Gold Nanorods. Nano Letters, 2008, 8, 1719-1723.	4.5	159
62	Quantitative Optical Trapping of Single Gold Nanorods. Nano Letters, 2008, 8, 2998-3003.	4.5	171
63	Liquid crystalline phases from polymer functionalised semiconducting nanorods. Journal of Materials Chemistry, 2008, 18, 3050.	6.7	69
64	Protein–Membrane Interaction Probed by Single Plasmonic Nanoparticles. Nano Letters, 2008, 8, 1724-1728.	4.5	98
65	Mycosynthesis of Silver Nanoparticles Using the Fungus Fusarium acuminatum and its Activity Against Some Human Pathogenic Bacteria. Current Nanoscience, 2008, 4, 141-144.	0.7	478
66	En-Face differential absorption optical coherence tomography with gold nanorods as the contrast agent. , 2008, , .		0
67	Enhanced Thermal Stability of Gold and Silver Nanorods by Thin Surface Layers. Journal of Physical Chemistry C, 2007, 111, 12886-12889.	1.5	64
68	Gold Nanoparticle Growth Monitored in situ Using a Novel Fast Optical Single-Particle Spectroscopy Method. Nano Letters, 2007, 7, 1664-1669.	4.5	89
69	Self-Assembly of Small Gold Colloids with Functionalized Gold Nanorods. Nano Letters, 2007, 7, 259-263.	4.5	133
70	Separation of Nanoparticles by Gel Electrophoresis According to Size and Shape. Nano Letters, 2007, 7, 2881-2885.	4.5	339
71	Microfluidic continuous flow synthesis of rod-shaped gold and silver nanocrystals. Physical Chemistry Chemical Physics, 2006, 8, 3824-3827.	1.3	136
72	Controlled Synthesis of Hyperbranched Inorganic Nanocrystals with Rich Three-Dimensional Structures. Nano Letters, 2005, 5, 2164-2167.	4.5	207

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73	Gold Nanorods as Novel Nonbleaching Plasmon-Based Orientation Sensors for Polarized Single-Particle Microscopy. Nano Letters, 2005, 5, 301-304.	4.5	461
74	A molecular ruler based on plasmon coupling of single gold and silver nanoparticles. Nature Biotechnology, 2005, 23, 741-745.	9.4	1,431
75	Integration of Colloidal Nanocrystals into Lithographically Patterned Devices. Nano Letters, 2004, 4, 1093-1098.	4.5	507
76	Biomolecular Recognition Based on Single Gold Nanoparticle Light Scattering. Nano Letters, 2003, 3, 935-938.	4.5	711
77	Electrically controlled light scattering with single metal nanoparticles. Applied Physics Letters, 2002, 81, 171-173.	1.5	178
78	Plasmon resonances in large noble-metal clusters. New Journal of Physics, 2002, 4, 93-93.	1.2	359
79	Launching surface plasmons into nanoholes in metal films. Applied Physics Letters, 2000, 76, 140-142.	1.5	126
80	Spectroscopy of single metallic nanoparticles using total internal reflection microscopy. Applied Physics Letters, 2000, 77, 2949-2951.	1.5	346