Sebastian Kruss

List of Publications by Citations

56 papers	2,482 citations	30 h-index	49 g-index
68 ext. papers	3,250 ext. citations	10.4 avg, IF	5.35 L-index

#	Paper	IF	Citations
56	Carbon nanotubes as optical biomedical sensors. *Advanced Drug Delivery Reviews*, **2013**, 65, 1933-50	18.5	245
55	Neurotransmitter detection using corona phase molecular recognition on fluorescent single-walled carbon nanotube sensors. *Journal of the American Chemical Society*, **2014**, 136, 713-24	16.4	205
54	Molecular recognition using corona phase complexes made of synthetic polymers adsorbed on carbon nanotubes. *Nature Nanotechnology*, **2013**, 8, 959-68	28.7	205
53	Nanobiotechnology approaches for engineering smart plant sensors. *Nature Nanotechnology*, **2019**, 14, 541-553	28.7	195
52	Protein-targeted corona phase molecular recognition. *Nature Communications*, **2016**, 7, 10241	17.4	137
51	High-resolution imaging of cellular dopamine efflux using a fluorescent nanosensor array. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 1789-1794	11.5	100
50	Chromatin swelling drives neutrophil extracellular trap release. *Nature Communications*, **2018**, 9, 3767	17.4	92
49	Comparative Dynamics and Sequence Dependence of DNA and RNA Binding to Single Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2015**, 119, 10048-10058	3.8	61
48	A rapid, direct, quantitative, and label-free detector of cardiac biomarker troponin T using near-infrared fluorescent single-walled carbon nanotube sensors. *Advanced Healthcare Materials*, **2014**, 3, 412-23	10.1	61
47	Recent advances in molecular recognition based on nanoengineered platforms. *Accounts of Chemical Research*, **2014**, 47, 979-88	24.3	59
46	Chirality dependent corona phase molecular recognition of DNA-wrapped carbon nanotubes. *Carbon*, **2016**, 97, 147-153	10.4	57
45	Impact of Redox-Active Molecules on the Fluorescence of Polymer-Wrapped Carbon Nanotubes. *Journal of Physical Chemistry C*, **2016**, 120, 3061-3070	3.8	55
44	Monitoring Plant Health with Near-Infrared Fluorescent HO Nanosensors. *Nano Letters*, **2020**, 20, 2432-2443	11.5	54
43	Near-Infrared Imaging of Serotonin Release from Cells with Fluorescent Nanosensors. *Nano Letters*, **2019**, 19, 6604-6611	11.5	44
42	Nanoscale integrin ligand patterns determine melanoma cell behavior. *ACS Nano*, **2014**, 8, 9113-25	16.7	42
41	Adhesion maturation of neutrophils on nanoscopically presented platelet glycoprotein Ib *ACS Nano*, **2013**, 7, 9984-96	16.7	42
40	Mechanism of immobilized protein A binding to immunoglobulin G on nanosensor array surfaces. *Analytical Chemistry*, **2015**, 87, 8186-93	7.8	41

39	Au-Ag hybrid nanoparticle patterns of tunable size and density on glass and polymeric supports. *Langmuir*, **2012**, 28, 1562-8	4	41
38	Banning carbon nanotubes would be scientifically unjustified and damaging to innovation. *Nature Nanotechnology*, **2020**, 15, 164-166	28.7	40
37	Tuning Selectivity of Fluorescent Carbon Nanotube-Based Neurotransmitter Sensors. *Sensors*, **2017**, 17,	3.8	38
36	Emergent properties of nanosensor arrays: applications for monitoring IgG affinity distributions, weakly affined hypermannosylation, and colony selection for biomanufacturing. *ACS Nano*, **2013**, 7, 7472-82	16.7	38
35	Stimulation of cell adhesion at nanostructured teflon interfaces. *Advanced Materials*, **2010**, 22, 5499-506	24	38
34	Experimental tools to study molecular recognition within the nanoparticle corona. *Sensors*, **2014**, 14, 16196-211	3.8	37
33	Nanobody-Conjugated Nanotubes for Targeted Near-Infrared In Vivo Imaging and Sensing. *Angewandte Chemie - International Edition*, **2019**, 58, 11469-11473	16.4	36
32	Serum and Serum Albumin Inhibit Formation of Neutrophil Extracellular Traps (NETs). *Frontiers in Immunology*, **2019**, 10, 12	8.4	36
31	Low Dimensional Carbon Materials for Applications in Mass and Energy Transport. *Chemistry of Materials*, **2014**, 26, 172-183	9.6	35
30	Nanosensors for neurotransmitters. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 2727-41	4.4	34
29	Control of Integrin Affinity by Confining RGD Peptides on Fluorescent Carbon Nanotubes. *ACS Applied Materials & Interfaces*, **2018**, 10, 17693-17703	9.5	32
28	Quantification of the Number of Adsorbed DNA Molecules on Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2019**, 123, 4837-4847	3.8	31
27	A Mathematical Formulation and Solution of the CoPhMoRe Inverse Problem for Helically Wrapping Polymer Corona Phases on Cylindrical Substrates. *Journal of Physical Chemistry C*, **2015**, 119, 13876-13886	3.8	31
26	Quantum Defects as a Toolbox for the Covalent Functionalization of Carbon Nanotubes with Peptides and Proteins. *Angewandte Chemie - International Edition*, **2020**, 59, 17732-17738	16.4	30
25	A graphene-based physiometer array for the analysis of single biological cells. *Scientific Reports*, **2014**, 4, 6865	4.9	29
24	Carbon Nanotubes Encapsulated in Coiled-Coil Peptide Barrels. *Chemistry - A European Journal*, **2018**, 24, 12241-12245	4.8	29
23	Circular, nanostructured and biofunctionalized hydrogel microchannels for dynamic cell adhesion studies. *Lab on A Chip*, **2012**, 12, 3285-9	7.2	28
22	Remote near infrared identification of pathogens with multiplexed nanosensors. *Nature Communications*, **2020**, 11, 5995	17.4	27

21	Kinetic Requirements for Spatiotemporal Chemical Imaging with Fluorescent Nanosensors. *ACS Nano*, **2017**, 11, 4017-4027	16.7	21
20	Effect of Adhesion and Substrate Elasticity on Neutrophil Extracellular Trap Formation. *Frontiers in Immunology*, **2019**, 10, 2320	8.4	20
19	Exfoliated near infrared fluorescent silicate nanosheets for (bio)photonics. *Nature Communications*, **2020**, 11, 1495	17.4	17
18	Chirality enriched carbon nanotubes with tunable wrapping via corona phase exchange purification (CPEP). *Nanoscale*, **2019**, 11, 11159-11166	7.7	14
17	The power from within - understanding the driving forces of neutrophil extracellular trap formation. *Journal of Cell Science*, **2020**, 133,	5.3	13
16	Blue and Long-Wave Ultraviolet Light Induce Neutrophil Extracellular Trap (NET) Formation. *Frontiers in Immunology*, **2019**, 10, 2428	8.4	11
15	Nanoscale Tuning of VCAM-1 Determines VLA-4-Dependent Melanoma Cell Plasticity on RGD Motifs. *Molecular Cancer Research*, **2018**, 16, 528-542	6.6	11
14	Sensing with Chirality-Pure Near-Infrared Fluorescent Carbon Nanotubes. *Analytical Chemistry*, **2021**, 93, 6446-6455	7.8	10
13	Imaging of Monoamine Neurotransmitters with Fluorescent Nanoscale Sensors. *ChemPlusChem*, **2020**, 85, 1465-1480	2.8	9
12	Multispectral near infrared absorption imaging for histology of skin cancer. *Journal of Biophotonics*, **2020**, 13, e201960080	3.1	9
11	Transport and programmed release of nanoscale cargo from cells by using NETosis. *Nanoscale*, **2020**, 12, 9104-9115	7.7	9
10	Quantum Defects in Fluorescent Carbon Nanotubes for Sensing and Mechanistic Studies. *Journal of Physical Chemistry C*, **2021**, 125, 18341-18351	3.8	8
9	Morphological Plasticity of Human Melanoma Cells Is Determined by Nanoscopic Patterns of E- and N-Cadherin Interactions. *Journal of Investigative Dermatology*, **2019**, 139, 562-572	4.3	7
8	Quantendefekte als Werkzeugkasten f□ die kovalente Funktionalisierung von Kohlenstoffnanor□ren mit Peptiden und Proteinen. *Angewandte Chemie*, **2020**, 132, 17885-17891	3.6	2
7	Effect of Adhesion and Substrate Elasticity on Neutrophil Extracellular Trap Formation		2
6	Nanor□ren-Nanobody-Konjugate als zielgerichtete Sonden und Marker f□ die In-vivo-Nahinfrarot-Bildgebung. *Angewandte Chemie*, **2019**, 131, 11591	3.6	1
5	Molecular recognition using corona phase complexes made of synthetic polymers adsorbed on carbon nanotubes **2014**,		1
4	Exfoliated near infrared fluorescent CaCuSi4O10 nanosheets with ultra-high photostability and brightness for biological imaging		1

3	Photophysical properties and fluorescence lifetime imaging of exfoliated near-infrared fluorescent silicate nanosheets. *Nanoscale Advances*, **2021**, 3, 4541-4553	5.1	0
2	Nanostructured biofunctionalized polyurethanes for applications in regenerative medicine. *Materials Research Society Symposia Proceedings*, **2012**, 1417, 36		
1	Innentitelbild: Quantendefekte als Werkzeugkasten f□ die kovalente Funktionalisierung von Kohlenstoffnanor□ren mit Peptiden und Proteinen (Angew. Chem. 40/2020). *Angewandte Chemie*, **2020**, 132, 17458-17458	3.6	