Nicholas O Fischer

List of Publications by Year
in descending order

60	2,443	236925 25	206112 48
papers	citations	h-index	g-index

60	60	60	3626
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control of Protein Structure and Function through Surface Recognition by Tailored Nanoparticle Scaffolds. Journal of the American Chemical Society, 2004, 126, 739-743.	13.7	273
2	Surface PEGylation and Ligand Exchange Chemistry of FePt Nanoparticles for Biological Applications. Chemistry of Materials, 2005, 17, 4617-4621.	6.7	215
3	Inhibition of chymotrypsin through surface binding using nanoparticle-based receptors. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5018-5023.	7.1	187
4	Protein-passivated Fe3O4 nanoparticles: low toxicity and rapid heating for thermal therapy. Journal of Materials Chemistry, 2008, 18, 1204.	6.7	167
5	Tissue-specific extracellular matrix accelerates the formation of neural networks and communities in a neuron-glia co-culture on a multi-electrode array. Scientific Reports, 2019, 9, 4159.	3.3	119
6	A flexible 3-dimensional microelectrode array for in vitro brain models. Lab on A Chip, 2020, 20, 901-911.	6.0	111
7	Reversible â€œIrreversibleâ€•Inhibition of Chymotrypsin Using Nanoparticle Receptors. Journal of the American Chemical Society, 2003, 125, 13387-13391.	13.7	100
8	Colocalized Delivery of Adjuvant and Antigen Using Nanolipoprotein Particles Enhances the Immune Response to Recombinant Antigens. Journal of the American Chemical Society, 2013, 135, 2044-2047.	13.7	80
9	Protein detection via direct enzymatic amplification of short DNA aptamers. Analytical Biochemistry, 2008, 373, 121-128.	2.4	75
10	Single microbead SELEX for efficient ssDNA aptamer generation against botulinum neurotoxin. Chemical Communications, 2008, , 1883.	4.1	75
11	Surface Modification Using Cubic Silsesquioxane Ligands. Facile Synthesis of Water-Soluble Metal Oxide Nanoparticles. Chemistry of Materials, 2006, 18, 956-959.	6.7	64
12	Aptasensors for biosecurity applications. Current Opinion in Chemical Biology, 2007, 11, 316-328.	6.1	55
13	Conjugation to Nickel-Chelating Nanolipoprotein Particles Increases the Potency and Efficacy of Subunit Vaccines to Prevent West Nile Encephalitis. Bioconjugate Chemistry, 2010, 21, 1018-1022.	3.6	46
14	Massively Parallel Interrogation of Aptamer Sequence, Structure and Function. PLoS ONE, 2008, 3, e2720.	2.5	45
15	Highly Efficient Biocatalysts via Covalent Immobilization ofCandida rugosa Lipase on Ethylene Glycol-Modified Goldâ€“Silica Nanocomposites. Advanced Materials, 2004, 16, 271-274.	21.0	44
16	Hydrogen Production by a Hyperthermophilic Membrane-Bound Hydrogenase in Water-Soluble Nanolipoprotein Particles. Journal of the American Chemical Society, 2009, 131, 7508-7509.	13.7	43
17	Immobilization of His-Tagged Proteins on Nickel-Chelating Nanolipoprotein Particles. Bioconjugate Chemistry, 2009, 20, 460-465.	3.6	42
18	Evaluation of Nanolipoprotein Particles (NLPs) as an In Vivo Delivery Platform. PLoS ONE, 2014, 9, e93342.	2.5	42

#	Article	IF	Citations
19	Enhanced Cellulose Degradation Using Cellulase-Nanosphere Complexes. PLoS ONE, 2012, 7, e42116.	2.5	42
20	Controlled placement of multiple CNS cell populations to create complex neuronal cultures. PLoS ONE, 2017, 12, e0188146.	2.5	35
21	The use of nanolipoprotein particles to enhance the immunostimulatory properties of innate immune agonists against lethal influenza challenge. Biomaterials, 2013, 34, 10305-10318.	11.4	33
22	Optimizing cell encapsulation condition in ECM-Collagen I hydrogels to support 3D neuronal cultures. Journal of Neuroscience Methods, 2020, 329, 108460.	2.5	32
23	Evaluation of in vitro neuronal platforms as surrogates for in vivo whole brain systems. Scientific Reports, 2018, 8, 10820.	3.3	31
24	A Reconfigurable In Vitro Model for Studying the Bloodâ€“Brain Barrier. Annals of Biomedical Engineering, 2020, 48, 780-793.	2.5	31
25	Kinetic Analysis of His-Tagged Protein Binding to Nickel-Chelating Nanolipoprotein Particles. Bioconjugate Chemistry, 2010, 21, 1321-1330.	3.6	29
26	Cell-free production of a functional oligomeric form of a Chlamydia major outer-membrane protein (MOMP) for vaccine development. Journal of Biological Chemistry, 2017, 292, 15121-15132.	3.4	28
27	Functional and transcriptional characterization of complex neuronal co-cultures. Scientific Reports, 2020, 10, 11007.	3.3	27
28	Biofunctional Subwavelength Optical Waveguides for Biodetection. ACS Nano, 2008, 2, 255-262.	14.6	25
29	HSV-2 disrupts gap junctional intercellular communication between mammalian cells in vitro. Journal of Virological Methods, 2001, 91, 157-166.	2.1	24
30	Heightened sense for sensing: recent advances in pathogen immunoassay sensing platforms. Analyst, The, 2007, 132, 187.	3.5	22
31	Sensitive and selective viral DNA detection assay via microbead-based rolling circle amplification. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5871-5874.	2.2	22
32	Fluorescence Correlation Spectroscopy at Micromolar Concentrations without Optical Nanoconfinement. Journal of Physical Chemistry B, 2014, 118, 9662-9667.	2.6	22
33	Long-term non-invasive interrogation of human dorsal root ganglion neuronal cultures on an integrated microfluidic multielectrode array platform. Analyst, The, 2016, 141, 5346-5357.	3.5	22
34	Dual-acting agents that possess free radical scavenging and antithrombotic activities: Design, synthesis, and evaluation of phenolic tetrahydro-Î²-carboline RGD peptide conjugates. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 4523-4527.	2.2	20
35	Characterization and Purification of Polydisperse Reconstituted Lipoproteins and Nanolipoprotein Particles. International Journal of Molecular Sciences, 2009, 10, 2958-2971.	4.1	19
36	Isolation, Characterization, and Stability of Discretely-Sized Nanolipoprotein Particles Assembled with Apolipophorin-III. PLoS ONE, 2010, 5, e11643.	2.5	19

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37	Quantifying Interactions of a Membrane Protein Embedded in a Lipid Nanodisc using Fluorescence Correlation Spectroscopy. Biophysical Journal, 2014, 106, L05-L08.	0.5	15
38	Enhancement of antigen-specific CD4+ and CD8+ T cell responses using a self-assembled biologic nanolipoprotein particle vaccine. Vaccine, 2017, 35, 1475-1481.	3.8	15
39	Intranasal Nanoparticle Vaccination Elicits a Persistent, Polyfunctional CD4 T Cell Response in the Murine Lung Specific for a Highly Conserved Influenza Virus Antigen That Is Sufficient To Mediate Protection from Influenza Virus Challenge. Journal of Virology, 2021, 95, e0084121.	3.4	15
40	Probing function in 3D neuronal cultures: A survey of 3D multielectrode array advances. Current Opinion in Pharmacology, 2021, 60, 255-260.	3.5	15
41	HIV influences microtubule associated protein-2: potential marker of HIV-associated neurocognitive disorders. Aids, 2020, 34, 979-988.	2.2	14
42	Lipid Cross-Linking of Nanolipoprotein Particles Substantially Enhances Serum Stability and Cellular Uptake. ACS Applied Materials & Interfaces, 2016, 8, 20549-20557.	8.0	12
43	Lipid composition dictates serum stability of reconstituted high-density lipoproteins: implications for in vivo applications. Nanoscale, 2018, 10, 7420-7430.	5.6	12
44	Nanofiber Near-Field Lightâ€“Matter Interactions for Enhanced Detection of Molecular Level Displacements and Dynamics. Nano Letters, 2013, 13, 1440-1445.	9.1	10
45	Light-induced inhibition of chymotrypsin using photocleavable monolayers on gold nanoparticles. Chemical Communications, 2004, , 2866.	4.1	9
46	Nanoparticles and antigen delivery: understanding the benefits and drawbacks of different delivery platforms. Nanomedicine, 2014, 9, 373-376.	3.3	9
47	Cationic HDL mimetics enhance in vivo delivery of self-replicating mRNA. Nanomedicine: Nanotechnology, Biology, and Medicine, 2020, 24, 102154.	3.3	8
48	Extent of MHC Clustering Regulates Selectivity and Effectiveness of T Cell Responses. Journal of Immunology, 2019, 202, 591-597.	0.8	7
49	Cellular, molecular, and therapeutic characterization of pilocarpine-induced temporal lobe epilepsy. Scientific Reports, 2021, 11, 19102.	3.3	7
50	Smallâ€angle Xâ€ray and neutron scattering demonstrates that cellâ€free expression produces properly formed discâ€shaped nanolipoprotein particles. Protein Science, 2018, 27, 780-789.	7.6	6
51	Modeling the temporal network dynamics of neuronal cultures. PLoS Computational Biology, 2020, 16, e1007834.	3.2	4
52	Characterization of Bacillus anthracis Spore Proteins Using a Nanoscaffold Vaccine Platform. Frontiers in Immunology, 2020, 11, 1264.	4.8	4
53	Enhancing the efficacy of innate immune agonists: could nanolipoprotein particles hold the key?. Nanomedicine, 2014, 9, 369-372.	3.3	3
54	Nanofiber-Based Total Internal Reflection Microscopy for Characterizing Colloidal Systems at the Microscale. Journal of Physical Chemistry C, 2018, 122, 22114-22124.	3.1	3

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55	Identification and Optimization of DNA Aptamer Binding Regions Using DNA Microarrays. Methods in Molecular Biology, 2011, 723, 57-66.	0.9	3
56	Induction of Protection in Mice against a Chlamydia muridarum Respiratory Challenge by a Vaccine Formulated with the Major Outer Membrane Protein in Nanolipoprotein Particles. Vaccines, 2021, 9, 755.	4.4	2
57	Tailoring HDL mimetics for in vivo delivery of mRNA. FASEB Journal, 2020, 34, 1-1.	0.5	2
58	Strategies for Functionalizing Lipoprotein-Based Nanoparticles. ACS Symposium Series, 2017, , 131-150.	0.5	1
59	A Survey of Preclinical Studies Evaluating Nanoparticle-Based Vaccines Against Non-Viral Sexually Transmitted Infections. Frontiers in Pharmacology, 2021, 12, 768461.	3.5	1
60	Cell-free Scaled Production and Adjuvant Addition to a Recombinant Major Outer Membrane Protein from Chlamydia muridarum for Vaccine Development. Journal of Visualized Experiments, 2022, , .	0.3	0