

Sanku Mallik

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9209560/publications.pdf>

Version: 2024-02-01

118
papers

3,866
citations

101543
36
h-index

149698
56
g-index

128
all docs

128
docs citations

128
times ranked

5405
citing authors

#	ARTICLE	IF	CITATIONS
1	3D Printability of Alginate-Carboxymethyl Cellulose Hydrogel. <i>Materials</i> , 2018, 11, 454.	2.9	192
2	Exosomes as Drug Carriers for Cancer Therapy. <i>Molecular Pharmaceutics</i> , 2019, 16, 1789-1798.	4.6	135
3	Polymersome-based drug-delivery strategies for cancer therapeutics. <i>Therapeutic Delivery</i> , 2015, 6, 521-534.	2.2	119
4	Enzyme-Responsive Liposomes for the Delivery of Anticancer Drugs. <i>Bioconjugate Chemistry</i> , 2017, 28, 857-868.	3.6	118
5	Hypoxia-Responsive Polymersomes for Drug Delivery to Hypoxic Pancreatic Cancer Cells. <i>Biomacromolecules</i> , 2016, 17, 2507-2513.	5.4	110
6	Odorant binding protein based biomimetic sensors for detection of alcohols associated with Salmonella contamination in packaged beef. <i>Biosensors and Bioelectronics</i> , 2011, 26, 3103-3109.	10.1	106
7	Surface Recognition of a Protein Using Designed Transition Metal Complexes. <i>Journal of the American Chemical Society</i> , 2001, 123, 6283-6290.	13.7	95
8	MMP-9 Responsive PEG Cleavable Nanovesicles for Efficient Delivery of Chemotherapeutics to Pancreatic Cancer. <i>Molecular Pharmaceutics</i> , 2014, 11, 2390-2399.	4.6	91
9	Olfactory receptor based piezoelectric biosensors for detection of alcohols related to food safety applications. <i>Sensors and Actuators B: Chemical</i> , 2011, 155, 8-18.	7.8	86
10	Multifunctional polymersomes for cytosolic delivery of gemcitabine and doxorubicin to cancer cells. <i>Biomaterials</i> , 2014, 35, 6482-6497.	11.4	81
11	Overcoming Hurdles in Nanoparticle Clinical Translation: The Influence of Experimental Design and Surface Modification. <i>International Journal of Molecular Sciences</i> , 2019, 20, 6056.	4.1	81
12	Formulation of photocleavable liposomes and the mechanism of their content release. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 1730.	2.8	73
13	Mechanistic Studies of the Triggered Release of Liposomal Contents by Matrix Metalloproteinase-9. <i>Journal of the American Chemical Society</i> , 2008, 130, 10633-10642.	13.7	73
14	Ultrahigh Resolution Crystal Structures of Human Carbonic Anhydrases I and II Complexed with α -Two-Prong Inhibitors Reveal the Molecular Basis of High Affinity. <i>Journal of the American Chemical Society</i> , 2006, 128, 3011-3018.	13.7	70
15	Release of Liposomal Contents by Cell-Secreted Matrix Metalloproteinase-9. <i>Bioconjugate Chemistry</i> , 2009, 20, 1332-1339.	3.6	66
16	Surface-Derivatized Nanoceria with Human Carbonic Anhydrase II Inhibitors and Fluorophores: A Potential Drug Delivery Device. <i>Journal of Physical Chemistry C</i> , 2007, 111, 8437-8442.	3.1	65
17	Advances in Biomarker Research for Pancreatic Cancer. <i>Current Pharmaceutical Design</i> , 2012, 18, 2439-2451.	1.9	64
18	Structural Analysis of Charge Discrimination in the Binding of Inhibitors to Human Carbonic Anhydrases I and II. <i>Journal of the American Chemical Society</i> , 2007, 129, 5528-5537.	13.7	62

#	ARTICLE	IF	CITATIONS
19	Synthesis of New, Pyrene-Containing, Metal-Chelating Lipids and Sensing of Cupric Ions. Organic Letters, 2003, 5, 11-14.	4.6	61
20	Hypoxia Responsive, Tumor Penetrating Lipid Nanoparticles for Delivery of Chemotherapeutics to Pancreatic Cancer Cell Spheroids. Bioconjugate Chemistry, 2016, 27, 1830-1838.	3.6	60
21	Protein Surface-Assisted Enhancement in the Binding Affinity of an Inhibitor for Recombinant Human Carbonic Anhydrase-II. Journal of the American Chemical Society, 2004, 126, 10875-10883.	13.7	59
22	Polymeric Nanoparticles with Sequential and Multiple FRET Cascade Mechanisms for Multicolor and Multiplexed Imaging. Small, 2013, 9, 2129-2139.	10.0	59
23	Synthetic Bis-Metal Ion Receptors for Bis-Imidazole "Protein Analogs". Journal of the American Chemical Society, 1994, 116, 8902-8911.	13.7	58
24	Matrix Metalloproteinase-Assisted Triggered Release of Liposomal Contents. Bioconjugate Chemistry, 2008, 19, 57-64.	3.6	57
25	Hexanoic Acid and Polyethylene Glycol Double Grafted Amphiphilic Chitosan for Enhanced Gene Delivery: Influence of Hydrophobic and Hydrophilic Substitution Degree. Molecular Pharmaceutics, 2014, 11, 982-994.	4.6	54
26	A disintegrin and metalloproteinase-12 (ADAM12): Function, roles in disease progression, and clinical implications. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4445-4455.	2.4	51
27	Encapsulated microbubbles and echogenic liposomes for contrast ultrasound imaging and targeted drug delivery. Computational Mechanics, 2014, 53, 413-435.	4.0	50
28	Synthesis of barbiturate-based methionine aminopeptidase-1 inhibitors. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 2373-2376.	2.2	49
29	Stereocontrol during the alkylation of enolates attached to .pi.-allyl-Mo(CO)2Cp systems. Journal of the American Chemical Society, 1990, 112, 8034-8042.	13.7	46
30	PEG-b-poly (carbonate)-derived nanocarrier platform with pH-responsive properties for pancreatic cancer combination therapy. Colloids and Surfaces B: Biointerfaces, 2019, 174, 126-135.	5.0	45
31	Biomarkers and Targeted Therapy in Pancreatic Cancer. Biomarkers in Cancer, 2016, 8s1, BIC.S34414.	3.6	44
32	Nuclear Localizing Peptide-Conjugated, Redox-Sensitive Polymersomes for Delivering Curcumin and Doxorubicin to Pancreatic Cancer Microtumors. Molecular Pharmaceutics, 2017, 14, 1916-1928.	4.6	44
33	Olfactory receptor-based polypeptide sensor for acetic acid VOC detection. Materials Science and Engineering C, 2012, 32, 1307-1313.	7.3	41
34	Targeting the Tumor Core: Hypoxia-Responsive Nanoparticles for the Delivery of Chemotherapy to Pancreatic Tumors. Molecular Pharmaceutics, 2020, 17, 2849-2863.	4.6	40
35	Design of photocleavable lipids and their application in liposomal "uncorking". Chemical Communications, 2005, , 3021.	4.1	39
36	Two-Prong Inhibitors for Human Carbonic Anhydrase II. Journal of the American Chemical Society, 2004, 126, 13206-13207.	13.7	38

#	ARTICLE	IF	CITATIONS
37	“Uncorking” of liposomes by matrix metalloproteinase-9. Chemical Communications, 2005, , 999-1001.	4.1	38
38	Peptide-targeted, stimuli-responsive polymersomes for delivering a cancer stemness inhibitor to cancer stem cell microtumors. Colloids and Surfaces B: Biointerfaces, 2018, 163, 225-235.	5.0	37
39	Spacer-Based Selectivity in the Binding of “Two-Prong” Ligands to Recombinant Human Carbonic Anhydrase II. Biochemistry, 2005, 44, 3211-3224.	2.5	34
40	An Investigation on the Analytical Potential of Polymerized Liposomes Bound to Lanthanide Ions for Protein Analysis. Journal of the American Chemical Society, 2004, 126, 10738-10745.	13.7	33
41	Ultrasound Enhanced Matrix Metalloproteinase-9 Triggered Release of Contents from Echogenic Liposomes. Molecular Pharmaceutics, 2012, 9, 2554-2564.	4.6	32
42	Polymer-Coated Echogenic Lipid Nanoparticles with Dual Release Triggers. Biomacromolecules, 2013, 14, 841-853.	5.4	32
43	Hypoxia-Responsive, Polymeric Nanocarriers for Targeted Drug Delivery to Estrogen Receptor-Positive Breast Cancer Cell Spheroids. Molecular Pharmaceutics, 2020, 17, 4312-4322.	4.6	32
44	pH-Triggered Echogenicity and Contents Release from Liposomes. Molecular Pharmaceutics, 2014, 11, 4059-4068.	4.6	31
45	pH-Sensitive Nanodrug Carriers for Codelivery of ERK Inhibitor and Gemcitabine Enhance the Inhibition of Tumor Growth in Pancreatic Cancer. Molecular Pharmaceutics, 2021, 18, 87-100.	4.6	31
46	Modified Bovine Milk Exosomes for Doxorubicin Delivery to Triple-Negative Breast Cancer Cells. ACS Applied Bio Materials, 2022, 5, 2163-2175.	4.6	31
47	Tissue-Penetrating, Hypoxia-Responsive Echogenic Polymersomes For Drug Delivery To Solid Tumors. Chemistry - A European Journal, 2018, 24, 12490-12494.	3.3	30
48	In vitro measurement of attenuation and nonlinear scattering from echogenic liposomes. Ultrasonics, 2012, 52, 962-969.	3.9	29
49	Targeted Polymeric Nanoparticles for Drug Delivery to Hypoxic, Triple-Negative Breast Tumors. ACS Applied Bio Materials, 2021, 4, 1450-1460.	4.6	29
50	Acridine Orange Conjugated Polymersomes for Simultaneous Nuclear Delivery of Gemcitabine and Doxorubicin to Pancreatic Cancer Cells. Bioconjugate Chemistry, 2016, 27, 762-771.	3.6	28
51	Synthesis of Metal-Chelating Lipids to Sensitize Lanthanide Ions. Journal of Organic Chemistry, 2003, 68, 3999-4007.	3.2	27
52	Characterization of novel radicals from COX-catalyzed arachidonic acid peroxidation. Free Radical Biology and Medicine, 2009, 47, 568-576.	2.9	27
53	Prostate-Specific Membrane Antigen Targeted Polymersomes for Delivering Mocetinostat and Docetaxel to Prostate Cancer Cell Spheroids. ACS Omega, 2016, 1, 952-962.	3.5	27
54	Role of freeze-drying in the presence of mannitol on the echogenicity of echogenic liposomes. Journal of the Acoustical Society of America, 2017, 142, 3670-3676.	1.1	27

#	ARTICLE	IF	CITATIONS
55	Nucleus-Targeted, Echogenic Polymersomes for Delivering a Cancer Stemness Inhibitor to Pancreatic Cancer Cells. <i>Biomacromolecules</i> , 2018, 19, 4122-4132.	5.4	27
56	CYR61/CCN1 Regulates dCK and CTGF and Causes Gemcitabine-resistant Phenotype in Pancreatic Ductal Adenocarcinoma. <i>Molecular Cancer Therapeutics</i> , 2019, 18, 788-800.	4.1	27
57	Selective recognition of bis-imidazoles by complementary bis-metal ion complexes. <i>Journal of the American Chemical Society</i> , 1993, 115, 2518-2520.	13.7	26
58	Size-Transformable, Multifunctional Nanoparticles from Hyperbranched Polymers for Environment-Specific Therapeutic Delivery. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 1354-1365.	5.2	26
59	Synthesis and Fluorescence Properties of New Fluorescent, Polymerizable, Metal-Chelating Lipids. <i>Journal of Organic Chemistry</i> , 2000, 65, 3644-3651.	3.2	23
60	Recognition of Flexible Peptides in Water by Transition Metal Complexes. <i>Organic Letters</i> , 2000, 2, 911-914.	4.6	23
61	Stereocontrolled functionalization of 1,5-cyclooctadiene using organomolybdenum chemistry. <i>Journal of Organic Chemistry</i> , 1992, 57, 2910-2917.	3.2	22
62	Sequential culture on biomimetic nanoclay scaffolds forms three-dimensional tumoroids. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1591-1602.	4.0	22
63	Partial filling multiple injection affinity capillary electrophoresis (PFMIACE) to estimate binding constants of receptors to ligands. <i>Talanta</i> , 2007, 71, 192-201.	5.5	21
64	Characterization of free radicals formed from COX-catalyzed DGLA peroxidation. <i>Free Radical Biology and Medicine</i> , 2011, 50, 1163-1170.	2.9	20
65	Mechanism of N-Acylthiourea-mediated Activation of Human Histone Deacetylase 8 (HDAC8) at Molecular and Cellular Levels. <i>Journal of Biological Chemistry</i> , 2015, 290, 6607-6619.	3.4	19
66	Synthesis of New Polymerizable Metal-Chelating Lipids. <i>Journal of Organic Chemistry</i> , 1999, 64, 2969-2974.	3.2	18
67	Novel bis-(arylsulfonamide) hydroxamate-based selective MMP inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 3333-3337.	2.2	18
68	Liposome-mediated amplified detection of cell-secreted matrix metalloproteinase-9. <i>Chemical Communications</i> , 2010, 46, 3209.	4.1	18
69	Fluorescent Liposomes for Differential Interactions with Glycosaminoglycans. <i>Analytical Chemistry</i> , 2011, 83, 5989-5995.	6.5	18
70	Light-mediated and H-bond facilitated liposomal release: the role of lipid head groups in release efficiency. <i>Tetrahedron Letters</i> , 2010, 51, 529-532.	1.4	17
71	Chemical Architecture of Block Copolymers Differentially Abrogate Cardiotoxicity and Maintain the Anticancer Efficacy of Doxorubicin. <i>Molecular Pharmaceutics</i> , 2020, 17, 4676-4690.	4.6	17
72	Purification of recombinant human carbonic anhydrase-II by metal affinity chromatography without incorporating histidine tags. <i>Protein Expression and Purification</i> , 2004, 37, 450-454.	1.3	16

#	ARTICLE	IF	CITATIONS
73	Intrinsic selectivity in binding of matrix metalloproteinase-7 to differently charged lipid membranes. <i>FEBS Letters</i> , 2007, 581, 5723-5726.	2.8	16
74	Thermodynamic Studies on the Recognition of Flexible Peptides by Transition-Metal Complexes. <i>Inorganic Chemistry</i> , 2002, 41, 1584-1590.	4.0	15
75	Artificial neural networks for qualitative and quantitative analysis of target proteins with polymerized liposome vesicles. <i>Analytical Biochemistry</i> , 2007, 361, 109-119.	2.4	15
76	Microwave-assisted synthesis of triple-helical, collagen-mimetic lipopeptides. <i>Nature Protocols</i> , 2010, 5, 39-50.	12.0	15
77	Molecular Basis for the Origin of Differential Spectral and Binding Profiles of Dansylamide with Human Carbonic Anhydrase I and II. <i>Biochemistry</i> , 2005, 44, 3673-3682.	2.5	14
78	Microenvironment-sensing, nanocarrier-mediated delivery of combination chemotherapy for pancreatic cancer. <i>Journal of Cell Communication and Signaling</i> , 2019, 13, 407-420.	3.4	14
79	Polymerized Fluorescent Liposomes Incorporating Lanthanide Ions. <i>Organic Letters</i> , 2000, 2, 3067-3070.	4.6	13
80	New fluorescent probes for carbonic anhydrases. <i>Chemical Communications</i> , 2007, , 2723.	4.1	13
81	Differentiation of Prostate Cancer Cells Using Flexible Fluorescent Polymers. <i>Analytical Chemistry</i> , 2012, 84, 17-20.	6.5	12
82	Thermodynamics of Binding of Structurally Similar Ligands to Histone Deacetylase 8 Sheds Light on Challenges in the Rational Design of Potent and Isozyme-Selective Inhibitors of the Enzyme. <i>Biochemistry</i> , 2014, 53, 7445-7458.	2.5	12
83	Mitochondria-targeted fluorescent polymersomes for drug delivery to cancer cells. <i>Polymer Chemistry</i> , 2016, 7, 4151-4154.	3.9	12
84	Kinetic and Thermodynamic Rationale for Suberoylanilide Hydroxamic Acid Being a Preferential Human Histone Deacetylase 8 Inhibitor As Compared to the Structurally Similar Ligand, Trichostatin A. <i>Biochemistry</i> , 2013, 52, 8139-8149.	2.5	11
85	Echogenic exosomes as ultrasound contrast agents. <i>Nanoscale Advances</i> , 2020, 2, 3411-3422.	4.6	11
86	Evaluation of two lanthanide complexes for qualitative and quantitative analysis of target proteins via partial least squares analysis. <i>Analytical Biochemistry</i> , 2005, 336, 64-74.	2.4	10
87	Inhibition of matrix metalloproteinase-9 by a multi-pronged surface binding groups. <i>Chemical Communications</i> , 2005, , 2549.	4.1	10
88	A strategy for designing a multi-pronged enzyme inhibitors by incorporating selective ligands to the liposomal surface. <i>Chemical Communications</i> , 2007, , 3377.	4.1	10
89	Linker-Induced Anomalous Emission of Organic-Molecule Conjugated Metal-Oxide Nanoparticles. <i>ACS Nano</i> , 2012, 6, 4854-4863.	14.6	10
90	Polymeric Composite Matrix with High Biobased Content as Pharmaceutically Relevant Molecular Encapsulation and Release Platform. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40229-40248.	8.0	10

#	ARTICLE	IF	CITATIONS
91	Design and Synthesis of New Ligands for Positioning Two Metal Ions. <i>Synlett</i> , 1996, 1996, 734-736.	1.8	8
92	Selective recognition of carbonic anhydrase using transition metal complexes. <i>Chemical Communications</i> , 2000, , 547-548.	4.1	8
93	Conjugation of poor inhibitors with surface binding groups: a strategy to improve inhibitionElectronic supplementary information (ESI) available: experimental details and UV-Vis titration data. See http://www.rsc.org/suppdata/cc/b3/b305179j/ . <i>Chemical Communications</i> , 2003, , 2328.	4.1	8
94	Acoustic Characterization of Echogenic Polymersomes Prepared From Amphiphilic Block Copolymers. <i>Ultrasound in Medicine and Biology</i> , 2018, 44, 447-457.	1.5	8
95	Single-Molecule Force Probing of RGD-Binding Integrins on Pancreatic Cancer Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 7671-7679.	8.0	8
96	Solid-Supported Synthesis of Polymerizable Lanthanide-Ion Chelating Lipids for Protein Detection. <i>Inorganic Chemistry</i> , 2005, 44, 2234-2244.	4.0	7
97	Urinary concentrations of ADAM 12 from breast cancer patients pre- and post-surgery vs. cancer-free controls: a clinical study for biomarker validation. <i>Journal of Negative Results in BioMedicine</i> , 2014, 13, 5.	1.4	7
98	Synthesis of Conjugated Diacetylene, Metal-Chelating Monomers for Polymerizable Monolayer Assemblies. <i>Organic Letters</i> , 2001, 3, 1877-1879.	4.6	6
99	Fluorescent water soluble polymers for isozyme-selective interactions with matrix metalloproteinase-9. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 2007-2010.	2.2	6
100	Bridging of a substrate between cyclodextrin and an enzyme's active site pocket triggers a unique mode of inhibition. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2015, 1850, 141-149.	2.4	6
101	Methods and Techniques to Facilitate the Development of <i>Clostridium novyi</i> NT as an Effective, Therapeutic Oncolytic Bacteria. <i>Frontiers in Microbiology</i> , 2021, 12, 624618.	3.5	6
102	Dynamic cellular biomechanics in responses to chemotherapeutic drug in hypoxia probed by atomic force spectroscopy. <i>Oncotarget</i> , 2021, 12, 1165-1177.	1.8	6
103	Targeting Estrogen Receptor-Positive Breast Microtumors with Endoxifen-Conjugated, Hypoxia-Sensitive Polymersomes. <i>ACS Omega</i> , 2021, 6, 27654-27667.	3.5	6
104	Glycosaminoglycan-Mediated Selective Changes in the Aggregation States, Zeta Potentials, and Intrinsic Stability of Liposomes. <i>Langmuir</i> , 2012, 28, 16115-16125.	3.5	5
105	Role of the Substrate Specificity-Defining Residues of Human SIRT5 in Modulating the Structural Stability and Inhibitory Features of the Enzyme. <i>PLoS ONE</i> , 2016, 11, e0152467.	2.5	5
106	Energetic rationale for an unexpected and abrupt reversal of guanidinium chloride-induced unfolding of peptide deformylase. <i>Protein Science</i> , 2007, 17, 11-15.	7.6	4
107	Material Properties, Dissolution and Time Evolution of PEGylated Lipid-Shelled Microbubbles: Effects of the Polyethylene Glycol Hydrophilic Chain Configurations. <i>Ultrasound in Medicine and Biology</i> , 2022, 48, 1720-1732.	1.5	4
108	Recognition of isozymes via lanthanide ion incorporated polymerized liposomes. <i>Chemical Communications</i> , 2007, , 4495.	4.1	3

#	ARTICLE	IF	CITATIONS
109	Real-time monitoring of conformational transitions of single-molecule histone deacetylase 8 with nanocircuits. Chemical Communications, 2017, 53, 3307-3310.	4.1	3
110	Functional Applications of Polyarginine-Hyaluronic Acid-Based Electrostatic Complexes. Bioelectricity, 2020, 2, 158-166.	1.1	3
111	Biopolymeric systems for diagnostic applications. , 2021, , 705-722.		2
112	Fluorescent polymer-based post-translational differentiation and subtyping of breast cancer cells. Analyst, The, 2012, 137, 5487.	3.5	1
113	Electronic Detection of Single Cancer Cells with Graphene Field Effect Transistors. Biophysical Journal, 2017, 112, 461a.	0.5	1
114	Real-time tracking of single-molecule collagenase on native collagen and partially structured collagen-mimic substrates. Chemical Communications, 2018, 54, 10248-10251.	4.1	1
115	Nanoparticles for Delivering Natural Product Chemotherapeutics to Breast Cancer Cells. , 2021, , 283-294.		1
116	Stabilization of anionic and neutral forms of a fluorophoric ligand at the active site of human carbonic anhydrase I. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 1965-1973.	2.3	0
117	Natural Product Inhibitors and Activators of Histone Deacetylases. , 2011, , 273-309.		0
118	An artificial receptor for a tri(histidine) ligand. , 2002, , 257-258.		0