## 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

36 h-index 149686 56 g-index

128 all docs

 $\begin{array}{c} 128 \\ \text{docs citations} \end{array}$ 

times ranked

128

5405 citing authors

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

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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 .piallyl-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

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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 lâ€. Biochemistry, 2005, 44, 3211-3224.	2.5	34
40	An Investigation on the Analytical Potential of Polymerized Liposomes Bound to Lanthanide lons 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 <b>.</b> 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	Tissueâ€Penetrating, Hypoxiaâ€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

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

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73	Intrinsic selectivity in binding of matrix metalloproteinaseâ€₹ to differently charged lipid membranes. FEBS Letters, 2007, 581, 5723-5726.	2.8	16
74	Thermodynamic Studies on the Recognition of Flexible Peptides by Transition-Metal Complexes. Inorganic Chemistry, 2002, 41, 1584-1590.	4.0	15
75	Artificial neural networks for qualitative and quantitative analysis of target proteins with polymerized liposome vesicles. Analytical Biochemistry, 2007, 361, 109-119.	2.4	15
76	Microwave-assisted synthesis of triple-helical, collagen-mimetic lipopeptides. Nature Protocols, 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 IIâ€. Biochemistry, 2005, 44, 3673-3682.	2.5	14
78	Microenvironment-sensing, nanocarrier-mediated delivery of combination chemotherapy for pancreatic cancer. Journal of Cell Communication and Signaling, 2019, 13, 407-420.	3.4	14
79	Polymerized Fluorescent Liposomes Incorporating Lanthanide Ions. Organic Letters, 2000, 2, 3067-3070.	4.6	13
80	New fluorescent probes for carbonic anhydrases. Chemical Communications, 2007, , 2723.	4.1	13
81	Differentiation of Prostate Cancer Cells Using Flexible Fluorescent Polymers. Analytical Chemistry, 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. Biochemistry, 2014, 53, 7445-7458.	2.5	12
83	Mitochondria-targeted fluorescent polymersomes for drug delivery to cancer cells. Polymer Chemistry, 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. Biochemistry, 2013, 52, 8139-8149.	2.5	11
85	Echogenic exosomes as ultrasound contrast agents. Nanoscale Advances, 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. Analytical Biochemistry, 2005, 336, 64-74.	2.4	10
87	Inhibition of matrix metalloproteinase-9 by "multi-prong―surface binding groups. Chemical Communications, 2005, , 2549.	4.1	10
88	A strategy for designing "multi-prong―enzyme inhibitors by incorporating selective ligands to the liposomal surface. Chemical Communications, 2007, , 3377.	4.1	10
89	Linker-Induced Anomalous Emission of Organic-Molecule Conjugated Metal-Oxide Nanoparticles. ACS Nano, 2012, 6, 4854-4863.	14.6	10
90	Polymeric Composite Matrix with High Biobased Content as Pharmaceutically Relevant Molecular Encapsulation and Release Platform. ACS Applied Materials & Samp; Interfaces, 2021, 13, 40229-40248.	8.0	10

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91	Design and Synthesis of New Ligands for Positioning Two Metal Ions. Synlett, 1996, 1996, 734-736.	1.8	8
92	Selective recognition of carbonic anhydrase using transition metal complexes. Chemical Communications, 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/. Chemical Communications, 2003, , 2328.	4.1	8
94	Acoustic Characterization of Echogenic Polymersomes Prepared From Amphiphilic Block Copolymers. Ultrasound in Medicine and Biology, 2018, 44, 447-457.	1.5	8
95	Single-Molecule Force Probing of RGD-Binding Integrins on Pancreatic Cancer Cells. ACS Applied Materials & Samp; Interfaces, 2022, 14, 7671-7679.	8.0	8
96	Solid-Supported Synthesis of Polymerizable Lanthanide-Ion Chelating Lipids for Protein Detection. Inorganic Chemistry, 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. Journal of Negative Results in BioMedicine, 2014, 13, 5.	1.4	7
98	Synthesis of Conjugated Diacetylene, Metal-Chelating Monomers for Polymerizable Monolayer Assemblies. Organic Letters, 2001, 3, 1877-1879.	4.6	6
99	Fluorescent water soluble polymers for isozyme-selective interactions with matrix metalloproteinase-9. Bioorganic and Medicinal Chemistry Letters, 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. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 141-149.	2.4	6
101	Methods and Techniques to Facilitate the Development of Clostridium novyi NT as an Effective, Therapeutic Oncolytic Bacteria. Frontiers in Microbiology, 2021, 12, 624618.	3.5	6
102	Dynamic cellular biomechanics in responses to chemotherapeutic drug in hypoxia probed by atomic force spectroscopy. Oncotarget, 2021, 12, 1165-1177.	1.8	6
103	Targeting Estrogen Receptor-Positive Breast Microtumors with Endoxifen-Conjugated, Hypoxia-Sensitive Polymersomes. ACS Omega, 2021, 6, 27654-27667.	3.5	6
104	Glycosaminoglycan-Mediated Selective Changes in the Aggregation States, Zeta Potentials, and Intrinsic Stability of Liposomes. Langmuir, 2012, 28, 16115-16125.	<b>3.</b> 5	5
105	Role of the Substrate Specificity-Defining Residues of Human SIRT5 in Modulating the Structural Stability and Inhibitory Features of the Enzyme. PLoS ONE, 2016, 11, e0152467.	2.5	5
106	Energetic rationale for an unexpected and abrupt reversal of guanidinium chloride-induced unfolding of peptide deformylase. Protein Science, 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. Ultrasound in Medicine and Biology, 2022, 48, 1720-1732.	1.5	4
108	Recognition of isozymes via lanthanide ion incorporated polymerized liposomes. Chemical Communications, 2007, , 4495.	4.1	3

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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