Shin-ichi Tsunoda

List of Publications by Year
in descending order

111	4,743	81900 39	102487 66
papers	citations	h-index	g-index

123	123	123	6452
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Silica and titanium dioxide nanoparticles cause pregnancy complications in mice. Nature Nanotechnology, 2011, 6, 321-328.	31.5	622
2	Amorphous nanosilica induce endocytosis-dependent ROS generation and DNA damage in human keratinocytes. Particle and Fibre Toxicology, 2011, 8, 1.	6.2	229
3	Silica nanoparticles as hepatotoxicants. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 72, 496-501.	4.3	209
4	The use of PVP as a polymeric carrier to improve the plasma half-life of drugs. Biomaterials, 2004, 25, 3259-3266.	11.4	175
5	Solution of the Structure of the TNF-TNFR2 Complex. Science Signaling, 2010, 3, ra83.	3.6	171
6	Systemic distribution, nuclear entry and cytotoxicity of amorphous nanosilica following topical application. Biomaterials, 2011, 32, 2713-2724.	11.4	161
7	Carbon Nanotubes Elicit DNA Damage and Inflammatory Response Relative to Their Size and Shape. Inflammation, 2010, 33, 276-280.	3.8	143
8	The effect of surface modification of amorphous silica particles on NLRP3 inflammasome mediated IL-1Î² production, ROS production and endosomal rupture. Biomaterials, 2010, 31, 6833-6842.	11.4	136
9	Interleukin-1 Family Cytokines as Mucosal Vaccine Adjuvants for Induction of Protective Immunity against Influenza Virus. Journal of Virology, 2010, 84, 12703-12712.	3.4	109
10	Creation and X-ray Structure Analysis of the Tumor Necrosis Factor Receptor-1-selective Mutant of a Tumor Necrosis Factor-Î± Antagonist. Journal of Biological Chemistry, 2008, 283, 998-1007.	3.4	89
11	Titanium dioxide induces different levels of IL-1Î² production dependent on its particle characteristics through caspase-1 activation mediated by reactive oxygen species and cathepsin B. Biochemical and Biophysical Research Communications, 2010, 392, 160-165.	2.1	83
12	Histological analysis of 70-nm silica particles-induced chronic toxicity in mice. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 72, 626-629.	4.3	80
13	Amorphous silica nanoparticles size-dependently aggravate atopic dermatitis-like skin lesions following an intradermal injection. Particle and Fibre Toxicology, 2012, 9, 3.	6.2	75
14	Domain mapping of a claudin-4 modulator, the C-terminal region of C-terminal fragment of Clostridium perfringens enterotoxin, by site-directed mutagenesis. Biochemical Pharmacology, 2008, 75, 1639-1648.	4.4	73
15	A Novel Tumor-Targeted Therapy Using a Claudin-4-Targeting Molecule. Molecular Pharmacology, 2009, 76, 918-926.	2.3	71
16	Effect of surface properties of silica nanoparticles on their cytotoxicity and cellular distribution in murine macrophages. Nanoscale Research Letters, 2011, 6, 93.	5.7	71
17	Distribution and histologic effects of intravenously administered amorphous nanosilica particles in the testes of mice. Biochemical and Biophysical Research Communications, 2012, 420, 297-301.	2.1	68
18	Structureâ€“Function Relationship of Tumor Necrosis Factor (TNF) and Its Receptor Interaction Based on 3D Structural Analysis of a Fully Active TNFR1-Selective TNF Mutant. Journal of Molecular Biology, 2009, 385, 1221-1229.	4.2	65

#	Article	IF	Citations
19	Carbon Nanomaterials: Efficacy and Safety for Nanomedicine. Materials, 2012, 5, 350-363.	2.9	65
20	Design of a pH-Sensitive Polymeric Carrier for Drug Release and Its Application in Cancer Therapy. Clinical Cancer Research, 2004, 10, 2545-2550.	7.0	64
21	Amorphous nanosilicas induce consumptive coagulopathy after systemic exposure. Nanotechnology, 2012, 23, 045101.	2.6	62
22	Intranasal exposure to amorphous nanosilica particles could activate intrinsic coagulation cascade and platelets in mice. Particle and Fibre Toxicology, 2013, 10, 41.	6.2	61
23	The targeting of anionized polyvinylpyrrolidone to the renal system. Biomaterials, 2004, 25, 4309-4315.	11.4	58
24	Acute phase proteins as biomarkers for predicting the exposure and toxicity of nanomaterials. Biomaterials, 2011, 32, 3-9.	11.4	54
25	Surface modification of amorphous nanosilica particles suppresses nanosilica-induced cytotoxicity, ROS generation, and DNA damage in various mammalian cells. Biochemical and Biophysical Research Communications, 2012, 427, 748-752.	2.1	51
26	The treatment of established murine collagen-induced arthritis with a TNFR1-selective antagonistic mutant TNF. Biomaterials, 2009, 30, 6638-6647.	11.4	50
27	Promotion of allergic immune responses by intranasally-administrated nanosilica particles in mice. Nanoscale Research Letters, 2011, 6, 195.	5.7	50
28	Identification and evaluation of metastasis-related proteins, oxysterol binding protein-like 5 and calumenin, in lung tumors. International Journal of Oncology, 2015, 47, 195-205.	3.3	50
29	Therapeutic effect of PEGylated TNFR1-selective antagonistic mutant TNF in experimental autoimmune encephalomyelitis mice. Journal of Controlled Release, 2011, 149, 8-14.	9.9	49
30	Suppression of nanosilica particle-induced inflammation by surface modification of the particles. Archives of Toxicology, 2012, 86, 1297-1307.	4.2	49
31	Liver-specific microRNAs as biomarkers of nanomaterial-induced liver damage. Nanotechnology, 2013, 24, 405102.	2.6	49
32	Intestinal absorption and biological effects of orally administered amorphous silica particles. Nanoscale Research Letters, 2014, 9, 532.	5.7	49
33	The therapeutic effect of TNFR1-selective antagonistic mutant TNF-Î± in murine hepatitis models. Cytokine, 2008, 44, 229-233.	3.2	47
34	Protein corona changes mediated by surface modification of amorphous silica nanoparticles suppress acute toxicity and activation of intrinsic coagulation cascade in mice. Nanotechnology, 2015, 26, 245101.	2.6	47
35	Bioconjugation of Laminin Peptide YIGSR with Poly(Styrene Co-maleic Acid) Increases Its Antimetastatic Effect on Lung Metastasis of B16-BL6 Melanoma Cells. Biochemical and Biophysical Research Communications, 1999, 255, 75-79.	2.1	45
36	Improved cytosolic translocation and tumor-killing activity of Tat-shepherdin conjugates mediated by co-treatment with Tat-fused endosome-disruptive HA2 peptide. Biochemical and Biophysical Research Communications, 2007, 363, 1027-1032.	2.1	45

#	Article	IF	Citations
37	Role of tyrosine residues in modulation of claudin-4 by the C-terminal fragment of Clostridium perfringens enterotoxin. Biochemical Pharmacology, 2007, 73, 206-214.	4.4	45
38	Ephrin receptor A10 is a promising drug target potentially useful for breast cancers including triple negative breast cancers. Journal of Controlled Release, 2014, 189, 72-79.	9.9	44
39	Amorphous silica nanoparticles enhance cross-presentation in murine dendritic cells. Biochemical and Biophysical Research Communications, 2012, 427, 553-556.	2.1	40
40	A Novel Bispecific Antibody against Human CD3 and Ephrin Receptor A10 for Breast Cancer Therapy. PLoS ONE, 2015, 10, e0144712.	2.5	39
41	Proteomic analysis of the hippocampus in Alzheimer's disease model mice by using two-dimensional fluorescence difference in gel electrophoresis. Neuroscience Letters, 2013, 534, 85-89.	2.1	38
42	Molecular Design of Conjugated Tumor Necrosis Factor-Î±: Synthesis and Characteristics of Polyvinyl Pyrrolidone Modified Tumor Necrosis Factor-Î±. Biochemical and Biophysical Research Communications, 1999, 257, 448-453.	2.1	34
43	Expression of Eph receptor A10 is correlated with lymph node metastasis and stage progression in breast cancer patients. Cancer Medicine, 2013, 2, 972-977.	2.8	34
44	Role of Tyr306 in the C-terminal fragment of Clostridium perfringens enterotoxin for modulation of tight junction. Biochemical Pharmacology, 2007, 73, 824-830.	4.4	33
45	The use of a mutant TNF-Î± as a vaccine adjuvant for the induction of mucosal immune responses. Biomaterials, 2009, 30, 5869-5876.	11.4	33
46	Creation of Novel Cell-Penetrating Peptides for Intracellular Drug Delivery Using Systematic Phage Display Technology Originated from Tat Transduction Domain. Biological and Pharmaceutical Bulletin, 2007, 30, 218-223.	1.4	32
47	Development of an antibody proteomics system using a phage antibody library for efficient screening of biomarker proteins. Biomaterials, 2011, 32, 162-169.	11.4	31
48	Robo4 is an effective tumor endothelial marker for antibody-drug conjugates based on the rapid isolation of the anti-Robo4 cell-internalizing antibody. Blood, 2013, 121, 2804-2813.	1.4	30
49	Eph receptor A10 has a potential as a target for a prostate cancer therapy. Biochemical and Biophysical Research Communications, 2014, 450, 545-549.	2.1	27
50	Quality Enhancement of the Non-immune Phage scFv Library to Isolate Effective Antibodies. Biological and Pharmaceutical Bulletin, 2006, 29, 1325-1330.	1.4	25
51	Creation of Novel Protein Transduction Domain (PTD) Mutants by a Phage Display-Based High-Throughput Screening System. Biological and Pharmaceutical Bulletin, 2006, 29, 1570-1574.	1.4	25
52	Annexin A4 is a possible biomarker for cisplatin susceptibility of malignant mesothelioma cells. Biochemical and Biophysical Research Communications, 2012, 421, 140-144.	2.1	25
53	Effective Cancer Targeting Using an Anti-tumor Tissue Vascular Endotheliumspecific Monoclonal Antibody (TES-23). Japanese Journal of Cancer Research, 2000, 91, 1319-1325.	1.7	24
54	Organelle-Targeted Delivery of Biological Macromolecules Using the Protein Transduction Domain: Potential Applications for Peptide Aptamer Delivery into the Nucleus. Journal of Molecular Biology, 2008, 380, 777-782.	4.2	24

#	Article	IF	Citations
55	Evaluation of silica nanoparticle binding to major human blood proteins. Nanoscale Research Letters, 2014, 9, 2493.	5.7	24
56	A gapmer antisense oligonucleotide targeting SRRM4 is a novel therapeutic medicine for lung cancer. Scientific Reports, 2019, 9, 7618.	3.3	24
57	Cutaneous exposure to agglomerates of silica nanoparticles and allergen results in IgE-biased immune response and increased sensitivity to anaphylaxis in mice. Particle and Fibre Toxicology, 2015, 12, 16.	6.2	22
58	Polyethylene glycol modification of interleukin-6 enhances its thrombopoietic activity. Journal of Controlled Release, 1995, 33, 447-451.	9.9	19
59	Effect of amorphous silica nanoparticles on in vitro RANKL-induced osteoclast differentiation in murine macrophages. Nanoscale Research Letters, 2011, 6, 464.	5.7	19
60	Aminopeptidase P3 (APP3), a novel member of the TNF/TNFR2 signaling complex, induces phosphorylation of JNK. Journal of Cell Science, 2015, 128, 656-69.	2.0	18
61	Neutrophil Depletion Exacerbates Pregnancy Complications, Including Placental Damage, Induced by Silica Nanoparticles in Mice. Frontiers in Immunology, 2018, 9, 1850.	4.8	17
62	In Vitro Remodeling of Tumor Vascular Endothelial Cells Using Conditioned Medium from Various Tumor Cells and Their Sensitivity to TNF-Î±. Biochemical and Biophysical Research Communications, 2000, 268, 809-813.	2.1	16
63	TNF superfamily member, TL1A, is a potential mucosal vaccine adjuvant. Biochemical and Biophysical Research Communications, 2009, 384, 296-300.	2.1	16
64	Generation and characterization of a bispecific diabody targeting both EPH receptor A10 and CD3. Biochemical and Biophysical Research Communications, 2015, 456, 908-912.	2.1	16
65	Fast Binding Kinetics and Conserved 3D Structure Underlie the Antagonistic Activity of Mutant TNF: Useful Information for Designing Artificial Proteo-Antagonists. Journal of Biochemistry, 2009, 146, 167-172.	1.7	15
66	Fine tuning of receptor-selectivity for tumor necrosis factor-Î± using a phage display system with one-step competitive panning. Biomaterials, 2011, 32, 5498-5504.	11.4	15
67	Hemopexin as biomarkers for analyzing the biological responses associated with exposure to silica nanoparticles. Nanoscale Research Letters, 2012, 7, 555.	5.7	15
68	Asian Dust Particles Induce Macrophage Inflammatory Responses via Mitogen-Activated Protein Kinase Activation and Reactive Oxygen Species Production. Journal of Immunology Research, 2014, 2014, 1-9.	2.2	15
69	Identifying a size-specific hazard of silica nanoparticles after intravenous administration and its relationship to the other hazards that have negative correlations with the particle size in mice. Nanotechnology, 2017, 28, 135101.	2.6	15
70	Antibody-Based Therapy Targeting Tumor Vascular Endothelial Cells Suppresses Solid Tumor Growth in Rats. Biochemical and Biophysical Research Communications, 1997, 236, 493-496.	2.1	14
71	Size and surface modification of amorphous silica particles determine their effects on the activity of human CYP3A4 in vitro. Nanoscale Research Letters, 2014, 9, 651.	5.7	14
72	A trimeric structural fusion of an antagonistic tumor necrosis factor-Î± mutant enhances molecular stability and enables facile modification. Journal of Biological Chemistry, 2017, 292, 6438-6451.	3.4	14

#	Article	IF	Citations
73	Creation of a LIGHT mutant with the capacity to evade the decoy receptor for cancer therapy. Biomaterials, 2010, 31, 3357-3363.	11.4	13
74	Intravenous Administration of Polyethylene Glycol-modified Tumor Necrosis Factor-Î±Completely Regressed Solid Tumor in Meth-A Murine Sarcoma Model. Japanese Journal of Cancer Research, 1994, 85, 1185-1188.	1.7	12
75	Bioconjugation of Tumor Necrosis Factor-Î± with the Copolymer of Divinyl Ether and Maleic Anhydride Increasing Its Antitumor Potency. Biochemical and Biophysical Research Communications, 1997, 239, 160-165.	2.1	12
76	Identification of tumor vascular antigens by monoclonal antibodies prepared from rat-tumor-derived endothelial cells. , 1998, 77, 561-566.		12
77	Effective accumulation of poly(vinylpyrrolidone-co-vinyl laurate) into the spleen. Journal of Biomedical Materials Research Part B, 2004, 70A, 219-223.	3.1	12
78	Creation of lysine-deficient mutant lymphotoxin-Î± with receptor selectivity by using a phage display system. Biomaterials, 2010, 31, 1935-1943.	11.4	12
79	Characterization of a TNFR2-Selective Agonistic TNF-Î± Mutant and Its Derivatives as an Optimal Regulatory T Cell Expander. Journal of Immunology, 2021, 206, 1740-1751.	0.8	12
80	Tumor Vascular Targeting Using a Tumor-Tissue Endothelium-Specific Monoclonal Antibody as an Effective Strategy for Cancer Chemotherapy. Biochemical and Biophysical Research Communications, 1999, 260, 346-350.	2.1	11
81	Simple and highly sensitive assay system for TNFR2-mediated soluble- and transmembrane-TNF activity. Journal of Immunological Methods, 2008, 335, 71-78.	1.4	11
82	Crystallization and preliminary X-ray analysis of the tumour necrosis factor Î±â€“tumour necrosis factor receptor type 2 complex. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 295-298.	0.7	10
83	Creation of a lysine-deficient LIGHT mutant with the capacity for site-specific PEGylation and low affinity for a decoy receptor. Biochemical and Biophysical Research Communications, 2010, 393, 888-893.	2.1	10
84	The augmentation of intracellular delivery of peptide therapeutics by artificial protein transduction domains. Biomaterials, 2009, 30, 3318-3323.	11.4	9
85	LIGHT protein suppresses tumor growth by augmentation of immune response. Immunology Letters, 2009, 127, 33-38.	2.5	9
86	Development of a novel DDS for site-specific PEGylated proteins. Chemistry Central Journal, 2011, 5, 25.	2.6	9
87	Suppression of solid tumor growth by a monoclonal antibody against tumor vasculature in rats: Involvement of intravascular thrombosis and fibrinogenesis. , 1999, 82, 853-859.		8
88	Promotion of Optimized Protein Therapy by Bioconjugation as a Polymeric DDS. Anti-Cancer Agents in Medicinal Chemistry, 2006, 6, 251-258.	1.7	8
89	Limited expression of reticulocalbin-1 in lymphatic endothelial cells in lung tumor but not in normal lung. Biochemical and Biophysical Research Communications, 2011, 405, 610-614.	2.1	8
90	Role of amino acid residue 90 in bioactivity and receptor binding capacity of tumor necrosis factor mutants. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2007, 1774, 1029-1035.	2.3	7

#	Article	IF	Citations
91	Novel protein engineering strategy for creating highly receptor-selective mutant TNFs. Biochemical and Biophysical Research Communications, 2009, 388, 667-671.	2.1	7
92	Creation of mouse TNFR2-selective agonistic TNF mutants using a phage display technique. Biochemistry and Biophysics Reports, 2016, 7, 309-315.	1.3	7
93	Modifying the Surface of Silica Nanoparticles with Amino or Carboxyl Groups Decreases Their Cytotoxicity to Parenchymal Hepatocytes. Biological and Pharmaceutical Bulletin, 2017, 40, 726-728.	1.4	7
94	Structural optimization of a TNFR1-selective antagonistic TNFÎ± mutant to create new-modality TNF-regulating biologics. Journal of Biological Chemistry, 2020, 295, 9379-9391.	3.4	7
95	Selective Enhancer of Tumor Vascular Permeability for Optimization of Cancer Chemotherapy. Biological and Pharmaceutical Bulletin, 2004, 27, 437-439.	1.4	5
96	Generation of mouse macrophages expressing membrane-bound TNF variants with selectivity for TNFR1 or TNFR2. Cytokine, 2010, 50, 75-83.	3.2	5
97	Anti-inflammatory Effects of a Novel TNFR1-Selective Antagonistic TNF Mutant on Established Murine Collagen-Induced Arthritis. Advances in Experimental Medicine and Biology, 2011, 691, 493-500.	1.6	5
98	Ligand-independent assembly of purified soluble magic roundabout (Robo4), a tumor-specific endothelial marker. Protein Expression and Purification, 2008, 61, 78-82.	1.3	4
99	Modifying the antigen-immunization schedule improves the variety of monoclonal antibodies obtained from immune-phage antibody libraries against HIV-1 Nef and Vif. Journal of Bioscience and Bioengineering, 2011, 111, 597-599.	2.2	4
100	Mutants of lymphotoxin-Î± with augmented cytotoxic activity via TNFR1 for use in cancer therapy. Cytokine, 2013, 61, 578-584.	3.2	4
101	The Absorption, Distribution, Metabolism, and Excretion Profile of Nanoparticles. Nanomedicine and Nanotoxicology, 2014, , 259-271.	0.2	4
102	Lysine-deficient lymphotoxin-Î± mutant for site-specific PEGylation. Cytokine, 2011, 56, 489-493.	3.2	3
103	Arsenic Trioxide Inhibits Human T Cell-Lymphotropic Virus-1-Induced Syncytiums by Down-Regulating gp46. Biological and Pharmaceutical Bulletin, 2009, 32, 1286-1288.	1.4	2
104	Comparison of the anti-tumor activity of native, secreted, and membrane-bound LIGHT in mouse tumor models. International Immunopharmacology, 2010, 10, 26-33.	3.8	2
105	Structureâ€“activity relationship of T-cell receptors based on alanine scanning. Biochemical and Biophysical Research Communications, 2011, 415, 558-562.	2.1	2
106	Characterization of PEG-IL-6 and its thrombopoietic activity in vivo.. Drug Delivery System, 1995, 10, 175-180.	0.0	2
107	Cell array coupled with laser scanning cytometry allows easy analysis of changes in cyclin expression during the cell cycle. An application of cell array system. Cytotechnology, 2002, 24, 41-47.	0.7	1
108	Identification of New Candidates as Mucosal Vaccine Adjuvant in TNF Family Cytokines. Advances in Experimental Medicine and Biology, 2011, 691, 299-304.	1.6	1

#	Article	IF	Citations
109	Development of functional cytokines as novel mucosal vaccine adjuvants. Drug Delivery System, 2010, 25, 22-28.	0.0	1
110	3P-081 Creation of TNFR1-selective mutant lymphotoxin alpha using phage display system(The 46th) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.1	0
111	Development of functional cytokine mutants bymolecular evolution and drug delivery technology. Drug Delivery System, 2011, 26, 604-610.	0.0	0