

# Taeko Miyagi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3107334/publications.pdf>

Version: 2024-02-01

52  
papers

3,677  
citations

126907

33  
h-index

182427

51  
g-index

53  
all docs

53  
docs citations

53  
times ranked

2041  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mammalian sialidases: Physiological and pathological roles in cellular functions. <i>Glycobiology</i> , 2012, 22, 880-896.	2.5	320
2	Up-regulation of plasma membrane-associated ganglioside sialidase (Neu3) in human colon cancer and its involvement in apoptosis suppression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 10718-10723.	7.1	231
3	Asymmetric membrane ganglioside sialidase activity specifies axonal fate. <i>Nature Neuroscience</i> , 2005, 8, 606-615.	14.8	212
4	Molecular Cloning and Characterization of a Plasma Membrane-associated Sialidase Specific for Gangliosides. <i>Journal of Biological Chemistry</i> , 1999, 274, 5004-5011.	3.4	167
5	Limited Inhibitory Effects of Oseltamivir and Zanamivir on Human Sialidases. <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 3484-3491.	3.2	154
6	Cloning, Expression, and Chromosomal Mapping of a Human Ganglioside Sialidase. <i>Biochemical and Biophysical Research Communications</i> , 1999, 261, 21-27.	2.1	139
7	Evidence for mitochondrial localization of a novel human sialidase (NEU4). <i>Biochemical Journal</i> , 2005, 390, 85-93.	3.7	136
8	Sialidase and malignancy: A minireview. <i>Glycoconjugate Journal</i> , 2003, 20, 189-198.	2.7	132
9	Plasma Membrane Ganglioside Sialidase Regulates Axonal Growth and Regeneration in Hippocampal Neurons in Culture. <i>Journal of Neuroscience</i> , 2001, 21, 8387-8395.	3.6	130
10	Molecular Cloning of Mouse Ganglioside Sialidase and Its Increased Expression in Neuro2a Cell Differentiation. <i>Journal of Biological Chemistry</i> , 2000, 275, 8007-8015.	3.4	126
11	A Close Association of the Ganglioside-specific Sialidase Neu3 with Caveolin in Membrane Microdomains. <i>Journal of Biological Chemistry</i> , 2002, 277, 26252-26259.	3.4	112
12	Plasma Membrane-associated Sialidase Is Up-regulated in Renal Cell Carcinoma and Promotes Interleukin-6-induced Apoptosis Suppression and Cell Motility. <i>Journal of Biological Chemistry</i> , 2006, 281, 7756-7764.	3.4	109
13	Overexpression of Plasma Membrane-associated Sialidase Attenuates Insulin Signaling in Transgenic Mice. <i>Journal of Biological Chemistry</i> , 2003, 278, 27896-27902.	3.4	107
14	Plasma membrane production of ceramide from ganglioside GM3 in human fibroblasts. <i>FASEB Journal</i> , 2006, 20, 1227-1229.	0.5	106
15	Sialidase significance for cancer progression. <i>Glycoconjugate Journal</i> , 2012, 29, 567-577.	2.7	94
16	Plasma Membrane-associated Sialidase as a Crucial Regulator of Transmembrane Signalling. <i>Journal of Biochemistry</i> , 2008, 144, 279-285.	1.7	82
17	Plasma-membrane-associated sialidase (NEU3) differentially regulates integrin-mediated cell proliferation through laminin- and fibronectin-derived signalling. <i>Biochemical Journal</i> , 2006, 394, 647-656.	3.7	80
18	Overexpression of lysosomal-type sialidase leads to suppression of metastasis associated with reversion of malignant phenotype in murine B16 melanoma cells. <i>International Journal of Cancer</i> , 2001, 92, 797-804.	5.1	68

#	ARTICLE	IF	CITATIONS
19	Regulation of Sialyl Lewis Antigen Expression in Colon Cancer Cells by Sialidase NEU4. <i>Journal of Biological Chemistry</i> , 2011, 286, 21052-21061.	3.4	66
20	Down-regulation of sialidase NEU4 may contribute to invasive properties of human colon cancers. <i>Cancer Science</i> , 2007, 98, 299-307.	3.9	61
21	Modulation of neuritogenesis by ganglioside-specific sialidase (Neu 3) in human neuroblastoma NB-1 cells. <i>Neurochemical Research</i> , 2002, 27, 841-846.	3.3	57
22	Suppression of pulmonary metastasis in murine B16 melanoma cells by transfection of a sialidase cDNA. , 1997, 73, 410-415.		53
23	Murine Sialidase Neu3 facilitates GM2 degradation and bypass in mouse model of Tay-Sachs disease. <i>Experimental Neurology</i> , 2018, 299, 26-41.	4.1	50
24	Purification and Characterization of a Membrane-Associated Ganglioside Sialidase from Bovine Brain. <i>Journal of Biochemistry</i> , 1998, 123, 899-905.	1.7	49
25	Reduced Susceptibility to Colitis-Associated Colon Carcinogenesis in Mice Lacking Plasma Membrane-Associated Sialidase. <i>PLoS ONE</i> , 2012, 7, e41132.	2.5	48
26	Increased hepatic expression of ganglioside-specific sialidase, NEU3, improves insulin sensitivity and glucose tolerance in mice. <i>Metabolism: Clinical and Experimental</i> , 2007, 56, 420-429.	3.4	47
27	Developmental Change of Sialidase Neu4 Expression in Murine Brain and Its Involvement in the Regulation of Neuronal Cell Differentiation. <i>Journal of Biological Chemistry</i> , 2009, 284, 21157-21164.	3.4	47
28	Plasma membrane-associated sialidase (NEU3) promotes formation of colonic aberrant crypt foci in azoxymethane-treated transgenic mice. <i>Cancer Science</i> , 2009, 100, 588-594.	3.9	47
29	Neuraminidases 3 and 4 regulate neuronal function by catabolizing brain gangliosides. <i>FASEB Journal</i> , 2017, 31, 3467-3483.	0.5	46
30	Epidermal growth factor-induced mobilization of a ganglioside-specific sialidase (NEU3) to membrane ruffles. <i>Biochemical and Biophysical Research Communications</i> , 2006, 346, 484-490.	2.1	44
31	Role of Neu4L sialidase and its substrate ganglioside GD3 in neuronal apoptosis induced by catechol metabolites. <i>FEBS Letters</i> , 2007, 581, 406-412.	2.8	44
32	Metastatic potential of transformed rat 3Y1 cell lines is inversely correlated with lysosomal-type sialidase activity. <i>FEBS Letters</i> , 1994, 349, 255-259.	2.8	41
33	Sialidase NEU4 Hydrolyzes Polysialic Acids of Neural Cell Adhesion Molecules and Negatively Regulates Neurite Formation by Hippocampal Neurons. <i>Journal of Biological Chemistry</i> , 2012, 287, 14816-14826.	3.4	41
34	Sialidase occurs in both membranes of the nuclear envelope and hydrolyzes endogenous GD1a. <i>Journal of Neurochemistry</i> , 2009, 111, 547-554.	3.9	33
35	Differential effect of various inhibitors on four types of rat sialidase. <i>Glycoconjugate Journal</i> , 1993, 10, 45-49.	2.7	32
36	Increased sialidase activity in serum of cancer patients: Identification of sialidase and inhibitor activities in human serum. <i>Cancer Science</i> , 2015, 106, 383-389.	3.9	32

#	ARTICLE	IF	CITATIONS
37	Site-directed mutagenesis of human membrane-associated ganglioside sialidase. <i>FEBS Journal</i> , 2001, 268, 2201-2208.	0.2	31
38	Human cytosolic sialidase NEU2-low general tissue expression but involvement in PC-3 prostate cancer cell survival. <i>Biochemical and Biophysical Research Communications</i> , 2012, 428, 142-149.	2.1	31
39	Upregulation of sialidase <sc>NEU</sc>3 in head and neck squamous cell carcinoma associated with lymph node metastasis. <i>Cancer Science</i> , 2015, 106, 1544-1553.	3.9	30
40	Biological and Pathological Roles of Ganglioside Sialidases. <i>Progress in Molecular Biology and Translational Science</i> , 2018, 156, 121-150.	1.7	27
41	Genomic organization and the 5'-upstream sequence of the rat cytosolic sialidase gene. <i>Glycobiology</i> , 1995, 5, 511-516.	2.5	26
42	Degradation of GM1 and GM2 by mammalian sialidases. <i>Biochemical Journal</i> , 2001, 360, 233-237.	3.7	26
43	Immunohistochemical evidence for the existence of rat cytosolic sialidase in rat skeletal muscles. <i>Histochemistry and Cell Biology</i> , 1997, 107, 495-503.	1.7	24
44	Regulation of plasma-membrane-associated sialidase <i>NEU3</i> gene by Sp1/Sp3 transcription factors. <i>Biochemical Journal</i> , 2010, 430, 107-117.	3.7	23
45	Phosphatidic acid-mediated activation and translocation to the cell surface of sialidase NEU3, promoting signaling for cell migration. <i>FASEB Journal</i> , 2015, 29, 2099-2111.	0.5	23
46	Sialidase <sc>NEU</sc>3 contributes neoplastic potential on colon cancer cells as a key modulator of gangliosides by regulating <sc>W</sc>nt signaling. <i>International Journal of Cancer</i> , 2015, 137, 1560-1573.	5.1	21
47	Potential of Epidermal Growth Factor-Mediated Oncogenic Transformation by Sialidase NEU3 Leading to Src Activation. <i>PLoS ONE</i> , 2015, 10, e0120578.	2.5	17
48	Sialidase NEU3 defines invasive potential of human glioblastoma cells by regulating calpain-mediated proteolysis of focal adhesion proteins. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017, 1861, 2778-2788.	2.4	16
49	A strategy for constructing C-sialosides based on Ireland-Claisen rearrangement and its application for synthesis of CF2-linked ganglioside GM4 analog. <i>Pure and Applied Chemistry</i> , 2009, 81, 205-215.	1.9	11
50	The sialidase inhibitor 2,3-dehydro-2-deoxy-N-acetylneuraminic acid is a glucose-dependent potentiator of insulin secretion. <i>Scientific Reports</i> , 2020, 10, 5198.	3.3	11
51	Sialidase NEU3 and its pathological significance. <i>Glycoconjugate Journal</i> , 2022, 39, 677-683.	2.7	10
52	Prognostic model for patients with advanced cancer using a combination of routine blood test values. <i>Supportive Care in Cancer</i> , 2021, 29, 4431-4437.	2.2	7