Nan-Shan Chang

List of Publications by Year
in descending order

109 papers	2,774 citations	159358 30 h-index	189595 50 g-index
111 all docs	111 docs citations	111 times ranked	2275 citing authors

#	Article	IF	Citations
1	Hyaluronidase Induction of a WW Domain-containing Oxidoreductase That Enhances Tumor Necrosis Factor Cytotoxicity. Journal of Biological Chemistry, 2001, 276, 3361-3370.	1.6	212
2	WW domain-containing oxidoreductase: a candidate tumor suppressor. Trends in Molecular Medicine, 2007, 13, 12-22.	3.5	129
3	WOX1 Is Essential for Tumor Necrosis Factor-, UV Light-, Staurosporine-, and p53-mediated Cell Death, and Its Tyrosine 33-phosphorylated Form Binds and Stabilizes Serine 46-phosphorylated p53. Journal of Biological Chemistry, 2005, 280, 43100-43108.	1.6	122
4	Complement C1q Activates Tumor Suppressor WWOX to Induce Apoptosis in Prostate Cancer Cells. PLoS ONE, 2009, 4, e5755.	1.1	120
5	JNK1 Physically Interacts with WW Domain-containing Oxidoreductase (WOX1) and Inhibits WOX1-mediated Apoptosis. Journal of Biological Chemistry, 2003, 278, 9195-9202.	1.6	119
6	Down-regulation of WW Domain-containing Oxidoreductase Induces Tau Phosphorylation in Vitro. Journal of Biological Chemistry, 2004, 279, 30498-30506.	1.6	119
7	WW Domain-Containing Proteins YAP and TAZ in the Hippo Pathway as Key Regulators in Stemness Maintenance, Tissue Homeostasis, and Tumorigenesis. Frontiers in Oncology, 2019, 9, 60.	1.3	116
8	Spatiotemporal focusing-based widefield multiphoton microscopy for fast optical sectioning. Optics Express, 2012, 20, 8939.	1.7	97
9	17Î²-Estradiol upregulates and activates WOX1/WWOXv1 and WOX2/WWOXv2 in vitro: potential role in cancerous progression of breast and prostate to a premetastatic state in vivo. Oncogene, 2005, 24, 714-723.	2.6	93
10	Molecular mechanisms underlying WOX1 activation during apoptotic and stress responses. Biochemical Pharmacology, 2003, 66, 1347-1354.	2.0	80
11	Transforming Growth Factor Î²1 Signaling via Interaction with Cell Surface Hyal-2 and Recruitment of WWOX/WOX1. Journal of Biological Chemistry, 2009, 284, 16049-16059.	1.6	77
12	WOX1 Is Essential for UVB Irradiationâ€“Induced Apoptosis and Down-Regulated via Translational Blockade in UVB-Induced Cutaneous Squamous Cell Carcinoma In vivo. Clinical Cancer Research, 2005, 11, 5769-5777.	3.2	74
13	Dramatic Co-Activation of WWOX/WOX1 with CREB and NF-ÎºB in Delayed Loss of Small Dorsal Root Ganglion Neurons upon Sciatic Nerve Transection in Rats. PLoS ONE, 2009, 4, e7820.	1.1	52
14	Signaling from membrane receptors to tumor suppressor WW domain-containing oxidoreductase. Experimental Biology and Medicine, 2010, 235, 796-804.	1.1	52
15	WWOX Phosphorylation, Signaling, and Role in Neurodegeneration. Frontiers in Neuroscience, 2018, 12, 563.	1.4	52
16	Trafficking protein particle complex 6A delta (TRAPPC6AÎ”) is an extracellular plaque-forming protein in the brain. Oncotarget, 2015, 6, 3578-3589.	0.8	52
17	The Non-ankyrin C Terminus of IÎºBÎ± Physically Interacts with p53 in Vivo and Dissociates in Response to Apoptotic Stress, Hypoxia, DNA Damage, and Transforming Growth Factor-Î²1-mediated Growth Suppression. Journal of Biological Chemistry, 2002, 277, 10323-10331.	1.6	49
18	Identification of an In Vivo MEK/WOX1 Complex as a Master Switch for Apoptosis in T Cell Leukemia. Genes and Cancer, 2011, 2, 550-562.	0.6	46

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19	Folate deficiency-induced oxidative stress contributes to neuropathy in young and aged zebrafish â€" Implication in neural tube defects and Alzheimer's diseases. Neurobiology of Disease, 2014, 71, 234-244.	2.1	45
20	Wwox deficiency leads to neurodevelopmental and degenerative neuropathies and glycogen synthase kinase 3Î²-mediated epileptic seizure activity in mice. Acta Neuropathologica Communications, 2020, 8, 6.	2.4	45
21	Zfra affects TNF-mediated cell death by interacting with death domain protein TRADD and negatively regulates the activation of NF-ÎºB, JNK1, p53 and WOX1 during stress response. BMC Molecular Biology, 2007, 8, 50.	3.0	43
22	MPP+-induced neuronal death in rats involves tyrosine 33 phosphorylation of WW domain-containing oxidoreductase WOX1. European Journal of Neuroscience, 2008, 27, 1634-1646.	1.2	43
23	Zfra restores memory deficits in Alzheimer's disease tripleâ€transgenic mice by blocking aggregation of TRAPPC6AÎ", SH3GLB2, tau, and amyloid Î², and inflammatory NFâ€Îº B activation. Alzheimer's and Dementia: Translational Research and Clinical Interventions, 2017, 3, 189-204.	1.8	43
24	Prc Contributes to Escherichia coli Evasion of Classical Complement-Mediated Serum Killing. Infection and Immunity, 2012, 80, 3399-3409.	1.0	42
25	A potential role of p53 and WOX1 in mitochondrial apoptosis (review). International Journal of Molecular Medicine, 2002, 9, 19-24.	1.8	39
26	WWOX suppresses prostate cancer cell progression through cyclin D1-mediated cell cycle arrest in the G1 phase. Cell Cycle, 2015, 14, 408-416.	1.3	38
27	Transforming growth factor-beta1 blocks the enhancement of tumor necrosis factor cytotoxicity by hyaluronidase Hyal-2 in L929 fibroblasts. , 2002, 3, 8.		35
28	UV irradiation/cold shock-mediated apoptosis is switched to bubbling cell death at low temperatures. Oncotarget, 2015, 6, 8007-8018.	0.8	35
29	Phosphorylation/de-phosphorylation in specific sites of tumor suppressor WWOX and control of distinct biological events. Experimental Biology and Medicine, 2018, 243, 137-147.	1.1	33
30	HYAL-2â€"WWOXâ€"SMAD4 Signaling in Cell Death and Anticancer Response. Frontiers in Cell and Developmental Biology, 2016, 4, 141.	1.8	32
31	A p53/TIAF1/WWOX triad exerts cancer suppression but may cause brain protein aggregation due to p53/WWOX functional antagonism. Cell Communication and Signaling, 2019, 17, 76.	2.7	31
32	Hyaluronidase enhancement of TNF-mediated cell death is reversed by TGF-Î²1. American Journal of Physiology - Cell Physiology, 1997, 273, C1987-C1994.	2.1	30
33	Cloning and Characterization of a Novel Transforming Growth Factor-Î²1-Induced TIAF1 Protein That Inhibits Tumor Necrosis Factor Cytotoxicity. Biochemical and Biophysical Research Communications, 1998, 253, 743-749.	1.0	30
34	Fabrication of three-dimensional multi-protein microstructures for cell migration and adhesion enhancement. Biomedical Optics Express, 2015, 6, 480.	1.5	30
35	Hyaluronan activates Hyal-2/WWOX/Smad4 signaling and causes bubbling cell death when the signaling complex is overexpressed. Oncotarget, 2017, 8, 19137-19155.	0.8	28
36	Investigation of two-photon excited fluorescence increment via crosslinked bovine serum albumin. Optics Express, 2012, 20, 13669.	1.7	27

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37	Role of WWOX and NF-Î¹B in lung cancer progression. Translational Respiratory Medicine, 2013, 1, 15.	3.8	26
38	Tumor Suppressor WWOX and p53 Alterations and Drug Resistance in Glioblastomas. Frontiers in Oncology, 2013, 3, 43.	1.3	25
39	Strategies by which WWOX-deficient metastatic cancer cells utilize to survive via dodging, compromising, and causing damage to WWOX-positive normal microenvironment. Cell Death Discovery, 2019, 5, 97.	2.0	25
40	Role of WW Domain-containing Oxidoreductase WWOX in Driving T Cell Acute Lymphoblastic Leukemia Maturation. Journal of Biological Chemistry, 2016, 291, 17319-17331.	1.6	24
41	Zfra is an inhibitor of Bcl-2 expression and cytochrome c release from the mitochondria. Cellular Signalling, 2008, 20, 1303-1312.	1.7	21
42	Overexpression of WW domain-containing oxidoreductase WOX1 preferentially induces apoptosis in human glioblastoma cells harboring mutant p53. Biomedicine and Pharmacotherapy, 2012, 66, 433-438.	2.5	21
43	Bubbling cell death: A hot air balloon released from the nucleus in the cold. Experimental Biology and Medicine, 2016, 241, 1306-1315.	1.1	21
44	Zfra activates memory Hyal-2+ CD3â^' CD19â^' spleen cells to block cancer growth, stemness, and metastasisin vivo. Oncotarget, 2015, 6, 3737-3751.	0.8	20
45	TIAF1 and p53 Functionally Interact in Mediating Apoptosis and Silencing of TIAF1 Abolishes Nuclear Translocation of Serine 15-Phosphorylated p53. DNA and Cell Biology, 2004, 23, 67-74.	0.9	18
46	Functional role of WW domainâ€containing proteins in tumor biology and diseases: Insight into the role in ubiquitinâ€proteasome system. FASEB BioAdvances, 2020, 2, 234-253.	1.3	18
47	Self-aggregating TIAF1 in lung cancer progression. Translational Respiratory Medicine, 2013, 1, 5.	3.8	16
48	Natural zeolite for adsorbing and release of functional materials. Journal of Biomedical Optics, 2018, 23, 1.	1.4	16
49	Cloning and characterization of a small-size peptide Zfra that regulates the cytotoxic function of tumor necrosis factor by interacting with JNK1. Biochemical and Biophysical Research Communications, 2005, 327, 415-423.	1.0	15
50	Introduction to a Thematic Issue for WWOX. Experimental Biology and Medicine, 2015, 240, 281-284.	1.1	15
51	TIAF1 Participates in the Transforming Growth Factor Î²1â€Mediated Growth Regulation. Annals of the New York Academy of Sciences, 2003, 995, 11-21.	1.8	14
52	WW domain-containing oxidoreductase is involved in upregulation of matrix metalloproteinase 9 by Epsteinâ€“Barr virus latent membrane protein 2A. Biochemical and Biophysical Research Communications, 2013, 436, 672-676.	1.0	13
53	Chasing the signaling run by tri-molecular time-lapse FRET microscopy. Cell Death Discovery, 2018, 4, 45.	2.0	13
54	Visualization of Subunit Interactions and Ternary Complexes of Protein Phosphatase 2A in Mammalian Cells. PLoS ONE, 2014, 9, e116074.	1.1	13

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55	Zfra is a small wizard in the mitochondrial apoptosis. Aging, 2010, 2, 1023-1029.	1.4	13
56	High-throughput fabrication of gray-level biomicrostructures via temporal focusing excitation and laser pulse control. Journal of Biomedical Optics, 2013, 18, 1.	1.4	12
57	Assessing Current Therapeutic Approaches to Decode Potential Resistance Mechanisms in Glioblastomas. Frontiers in Oncology, 2013, 3, 59.	1.3	11
58	WWOX Possesses N-Terminal Cell Surface-Exposed Epitopes WWOX7-21 and WWOX7-11 for Signaling Cancer Growth Suppression and Prevention In Vivo. Cancers, 2019, 11, 1818.	1.7	10
59	WWOX and Its Binding Proteins in Neurodegeneration. Cells, 2021, 10, 1781.	1.8	10
60	Strategies of oncogenic microbes to deal with WW domain-containing oxidoreductase. Experimental Biology and Medicine, 2015, 240, 329-337.	1.1	9
61	Therapeutic Zfra4-10 or WWOX7-21 Peptide Induces Complex Formation of WWOX with Selective Protein Targets in Organs that Leads to Cancer Suppression and Spleen Cytotoxic Memory Z Cell Activation In Vivo. Cancers, 2020, 12, 2189.	1.7	9
62	Expression of WW domain-containing oxidoreductase WOX1 in human nervous system tumors. Analytical Cellular Pathology, 2013, 36, 133-47.	0.7	9
63	Expression of WW Domain-Containing Oxidoreductase WOX1 in Human Nervous System Tumors. Analytical Cellular Pathology, 2013, 36, 133-147.	0.7	7
64	Editorial: WW Domain Proteins in Signaling, Cancer Growth, Neural Diseases, and Metabolic Disorders. Frontiers in Oncology, 2019, 9, 719.	1.3	7
65	Zfra induction of memory anticancer response via a novel immune cell. OncoImmunology, 2016, 5, e1213935.	2.1	6
66	Wwox Deficiency Causes Downregulation of Prosurvival ERK Signaling and Abnormal Homeostatic Responses in Mouse Skin. Frontiers in Cell and Developmental Biology, 2020, 8, 558432.	1.8	6
67	Normal cells repel WWOX-negative or -dysfunctional cancer cells via WWOX cell surface epitope 286-299. Communications Biology, 2021, 4, 753.	2.0	6
68	Fast and improved bioimaging via temporal focusing multiphoton excitation microscopy with binary digital-micromirror-device holography. Journal of Biomedical Optics, 2018, 23, 1.	1.4	5
69	Expression of WW domain-containing oxidoreductase WWOX in pterygium. Molecular Vision, 2015, 21, 711-7.	1.1	5
70	WWOX is a Risk Factor for Alzheimerâ€™s Disease: How and Why?. Proceedings of the Singapore National Academy of Science, 2020, 14, 31-45.	0.1	3
71	WWOX Controls Cell Survival, Immune Response and Disease Progression by pY33 to pS14 Transition to Alternate Signaling Partners. Cells, 2022, 11, 2137.	1.8	1
72	Zfra and its activated Z cell suppress traumatic brain injury to Alzheimer's disease transition. FASEB Journal, 2021, 35, .	0.2	0

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73	Zfra suppresses seizure and progression of Alzheimer's disease via activated Z lymphocytes. FASEB Journal, 2021, 35, .	0.2	0
74	Cell surface epitope WWOX286â€299 in normal cells is responsible for repelling invading WWOXâ€negative or â€dysfunctional cancer cells. FASEB Journal, 2021, 35, .	0.2	0
75	Zfra invokes a novel mitochondrial pathway of cell death bypassing cytochrome c release. FASEB Journal, 2007, 21, A1345.	0.2	0
76	TIAF1 selfâ€aggregation is essential for AÎ² plaque formation in the human hippocampus. FASEB Journal, 2010, 24, 1053.1.	0.2	0
77	C1q/WOX1 signaling for superinduction of microvillus cluster formation. FASEB Journal, 2010, 24, 711.2.	0.2	0
78	TIAF1 is an essential partner for tumor suppressors p53â€and WWOXâ€mediated apoptosis. FASEB Journal, 2011, 25, 943.4.	0.2	0
79	TIAF1 selfâ€aggregation causes spontaneous activation of SMADâ€responsive promoter in p53â€deficient environment and cell death. FASEB Journal, 2012, 26, 797.3.	0.2	0
80	Selfâ€aggregating mutant TRAPPC6A from partial exon 1 gene deletion activates caspases, binds TIAF1, and generates amyloid beta in hippocampus. FASEB Journal, 2012, 26, 752.2.	0.2	0
81	A Copper Complex, ghnâ€12, as a sensitization of DNA to UVA offers potential for a novel photochemotherapy. FASEB Journal, 2012, 26, 999.5.	0.2	0
82	WWOX/WOX1 is essential in UV irradiation/frostbiteâ€induced membrane bubbling. FASEB Journal, 2012, 26, 798.8.	0.2	0
83	Utilizing Twoâ€Photon Imaging and Tracking Algorithm to Study TGFâ€beta1â€Regulated SH3GLB2 Protein Assembly. FASEB Journal, 2012, 26, .	0.2	0
84	Evidence for a role of p53, WWOX and TIAF1 as tumor suppression axis. FASEB Journal, 2012, 26, 782.3.	0.2	0
85	Physically modified hyaluronan in cancer prevention. FASEB Journal, 2013, 27, 592.5.	0.2	0
86	Tumor suppressor WWOX participates in cell/cell recognition and migration. FASEB Journal, 2013, 27, 765.1.	0.2	0
87	Immunization against hyaluronidase Hyalâ€2 provides longâ€term cancer prevention. FASEB Journal, 2013, 27, 592.4.	0.2	0
88	Role of WWOX and NFâ€ºB in lung cancer progression (1049.2). FASEB Journal, 2014, 28, 1049.2.	0.2	0
89	UV irradiation/cold shockâ€induced NOS2 expression for causing nuclear bubbling is WWOX and p53 dependent (1010.11). FASEB Journal, 2014, 28, 1010.11.	0.2	0
90	WWOX Regulation of Cancer Stem Cell Sphere Formation. FASEB Journal, 2015, 29, 629.1.	0.2	0

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91	Hyalâ€2 antibody mediates cancer suppression via Hyalâ€2/WWOX/Smad4 signaling. FASEB Journal, 2015, 29, 897.29.	0.2	0
92	Role of WWOX and ERK in Controlling Cancer Cell Migration. FASEB Journal, 2015, 29, 577.3.	0.2	0
93	Abstract A25: WWOX phosphorylation at Ser14 enhances melanoma docking and growth in the lung and liver in mice. , 2015, , .		0
94	WWOX coordinates with type II TGFâ€beta receptor in regulating cellâ€toâ€cell recognition and immune cell differentiation. FASEB Journal, 2016, 30, 1108.9.	0.2	0
95	Hyaluronan signals release and nuclear accumulation of WWOX and Smad from membrane Hyalâ€2. FASEB Journal, 2016, 30, .	0.2	0
96	Induction of cancer stem cell sphere explosion by UV irradiation/cold shock or therapeutic chemicals: detection of autofluorescence using visible wavelength. FASEB Journal, 2018, 32, 664.4.	0.2	0
97	Converting the tumor suppressor function of WWOX to tumor promoting by Serine 14 phosphorylation. FASEB Journal, 2018, 32, 668.11.	0.2	0
98	TRAPPC6AÎ”, TIAF1 and SH3GLB2 are initiators for amyloid beta plaque formation and tau aggregation in vivo. FASEB Journal, 2018, 32, 674.9.	0.2	0
99	Extracellular MIF and Wnt and eph/ephrin signaling are involved in WWOXâ€regulated cellâ€cell recognition and migration. FASEB Journal, 2019, 33, 790.2.	0.2	0
100	WWOX drives UV/cold shockâ€induced bubbling cell death whereas without WWOX cells pop out. FASEB Journal, 2019, 33, 646.4.	0.2	0
101	Role of WWOX and Zfra in limiting neurodegeneration. FASEB Journal, 2019, 33, lb253.	0.2	0
102	A potential role of Zfra in mitigating traumatic brain injury transition to Alzheimerâ€™s diseaseâ€like symptom in mice. FASEB Journal, 2020, 34, 1-1.	0.2	0
103	Functional antagonism between p53 and WWOX in vivo leads to protein aggregation in the brain. FASEB Journal, 2020, 34, 1-1.	0.2	0
104	Role of Zfra in mitigating epileptic seizure due to WWOX downregulation. FASEB Journal, 2020, 34, 1-1.	0.2	0
105	WWOX possesses N â€terminal cell surfaceâ€exposed epitopes WWOX7â€21 and WWOX7â€11 for signaling cancer growth suppression and prevention in vivo. FASEB Journal, 2020, 34, 1-1.	0.2	0
106	Conformationally altered hyaluronan mitigates the symptoms of Parkinson disease in mice. FASEB Journal, 2022, 36, .	0.2	0
107	The strength of WWOX binding with protein partners correlates with cancer suppression and potentially with inhibition of Alzheimer's disease progression. FASEB Journal, 2022, 36, .	0.2	0
108	Sonicated hyaluronan is a potent inhibitor of Alzheimer's disease progression. FASEB Journal, 2022, 36, .	0.2	0

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109	WWOX regulates UV/cold shockâ€mediated calcium influx and nuclear bubbling in frostbite. FASEB Journal, 2022, 36, .	0.2	0