Lars-Oliver Klotz

List of Publications by Year
in descending order

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134 papers	11,657 citations	36203 51 h-index	27345 106 g-index
145 all docs	145 docs citations	145 times ranked	16196 citing authors

#	Article	IF	Citations
1	Gadd153 Sensitizes Cells to Endoplasmic Reticulum Stress by Down-Regulating Bcl2 and Perturbing the Cellular Redox State. Molecular and Cellular Biology, 2001, 21, 1249-1259.	1.1	1,678
2	Reactive Oxygen Species (Ros-Induced) Ros Release. Journal of Experimental Medicine, 2000, 192, 1001-1014.	4.2	1,263
3	Redox regulation of FoxO transcription factors. Redox Biology, 2015, 6, 51-72.	3.9	566
4	Cellular responses to nanoparticles: Target structures and mechanisms. Nanotoxicology, 2007, 1, 52-71.	1.6	428
5	Glutathione Peroxidase Protects against Peroxynitrite-mediated Oxidations. Journal of Biological Chemistry, 1997, 272, 27812-27817.	1.6	421
6	Lightening up the UV response by identification of the arylhydrocarbon receptor as a cytoplasmatic target for ultraviolet B radiation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8851-8856.	3.3	394
7	Evidence that Singlet Oxygen-induced Human T Helper Cell Apoptosis Is the Basic Mechanism of Ultraviolet-A Radiation Phototherapy. Journal of Experimental Medicine, 1997, 186, 1763-1768.	4.2	271
8	Role of Copper, Zinc, Selenium and Tellurium in the Cellular Defense against Oxidative and Nitrosative Stress. Journal of Nutrition, 2003, 133, 1448S-1451S.	1.3	253
9	European contribution to the study of ROS: A summary of the findings and prospects for the future from the COST action BM1203 (EU-ROS). Redox Biology, 2017, 13, 94-162.	3.9	242
10	Free radicals and related reactive species as mediators of tissue injury and disease: implications for Health. Critical Reviews in Toxicology, 2015, 45, 765-798.	1.9	233
11	Selenoproteins: Antioxidant selenoenzymes and beyond. Archives of Biochemistry and Biophysics, 2016, 595, 113-119.	1.4	229
12	Mitogen-activated protein kinase (p38-, JNK-, ERK-) activation pattern induced by extracellular and intracellular singlet oxygen and UVA. FEBS Journal, 1999, 260, 917-922.	0.2	206
13	Central Role of Ferrous/Ferric Iron in the Ultraviolet B Irradiation-mediated Signaling Pathway Leading to Increased Interstitial Collagenase (Matrix-degrading Metalloprotease (MMP)-1) and Stromelysin-1 (MMP-3) mRNA Levels in Cultured Human Dermal Fibroblasts. Journal of Biological Chemistry, 1998, 273, 5279-5287.	1.6	204
14	1,4-Naphthoquinones: From Oxidative Damage to Cellular and Inter-Cellular Signaling. Molecules, 2014, 19, 14902-14918.	1.7	175
15	Singlet oxygen-induced signaling effects in mammalian cells. Photochemical and Photobiological Sciences, 2003, 2, 88-94.	1.6	155
16	Role of myoglobin in the antioxidant defense of the heart. FASEB Journal, 2004, 18, 1156-1158.	0.2	140
17	Defenses against peroxynitrite: selenocompounds and flavonoids. Toxicology Letters, 2003, 140-141, 125-132.	0.4	136
18	Linking Alzheimer's disease to insulin resistance: the FoxO response to oxidative stress. Molecular Psychiatry, 2010, 15, 1046-1052.	4.1	125

#	Article	IF	Citations
19	Peroxynitrite signaling: receptor tyrosine kinases and activation of stress-responsive pathways 1,2 1This article is part of a series of reviews on â€œReactive Nitrogen Species, Tyrosine Nitration and Cell Signaling.â€•The full list of papers may be found on the homepage of the journal. 2Guest Editor: Harry Ischiropoulos. Free Radical Biology and Medicine, 2002, 33, 737-743.	1.3	124
20	Activation pattern of mitogen-activated protein kinases elicited by peroxynitrite: attenuation by selenite supplementation. FEBS Letters, 1999, 448, 301-303.	1.3	120
21	1,4-Naphthoquinones as inducers of oxidative damage and stress signaling in HaCaT human keratinocytes. Archives of Biochemistry and Biophysics, 2010, 496, 93-100.	1.4	119
22	Copper Ions Strongly Activate the Phosphoinositide-3-Kinase/Akt Pathway Independent of the Generation of Reactive Oxygen Species. Archives of Biochemistry and Biophysics, 2002, 397, 232-239.	1.4	117
23	Polyphenols of Cocoa: Inhibition of Mammalian 15-Lipoxygenase. Biological Chemistry, 2001, 382, 1687-96.	1.2	115
24	Stimulation of phosphoinositide 3-kinase/Akt signaling by copper and zinc ions: Mechanisms and consequences. Archives of Biochemistry and Biophysics, 2007, 463, 175-182.	1.4	115
25	Protein oxidation and proteolysis by the nonradical oxidants singlet oxygen or peroxynitrite. Free Radical Biology and Medicine, 2001, 30, 1243-1253.	1.3	114
26	Cellular adaptation to xenobiotics: Interplay between xenosensors, reactive oxygen species and FOXO transcription factors. Redox Biology, 2017, 13, 646-654.	3.9	113
27	Peroxynitrite activates the phosphoinositide 3-kinase/Akt pathway in human skin primary fibroblasts. Biochemical Journal, 2000, 352, 219-225.	1.7	111
28	Selenoprotein P expression is controlled through interaction of the coactivator PGC-1Î± with FoxO1a and hepatocyte nuclear factor 4Î± transcription factors. Hepatology, 2008, 48, 1998-2006.	3.6	111
29	Epidermal Growth Factor Receptor Is a Common Mediator of Quinone-induced Signaling Leading to Phosphorylation of Connexin-43. Journal of Biological Chemistry, 2003, 278, 38360-38367.	1.6	102
30	Zinc Fingers as Biologic Redox Switches?. Antioxidants and Redox Signaling, 2009, 11, 1015-1027.	2.5	102
31	Oxidative Modification and Nitration of Human Low-Density Lipoproteins by the Reaction of Hypochlorous Acid with Nitrite. Archives of Biochemistry and Biophysics, 1997, 343, 254-259.	1.4	99
32	Insulin suppresses the production of fibroblast growth factor 23 (FGF23). Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5804-5809.	3.3	96
33	Selenoprotein P Protects Low-density Lipoprotein Against Oxidation. Free Radical Research, 2004, 38, 123-128.	1.5	92
34	Chemokine receptors in head and neck cancer: Association with metastatic spread and regulation during chemotherapy. International Journal of Cancer, 2006, 118, 2147-2157.	2.3	91
35	Singlet oxygen mediates the activation of JNK by UVA radiation in human skin fibroblasts. FEBS Letters, 1997, 408, 289-291.	1.3	87
36	Phosphoinositide 3-kinase signaling in the cellular response to oxidative stress. Biological Chemistry, 2005, 386, 207-16.	1.2	86

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37	Epigallocatechin gallate-induced modulation of FoxO signaling in mammalian cells and C. elegans: FoxO stimulation is masked via PI3K/Akt activation by hydrogen peroxide formed in cell culture. Archives of Biochemistry and Biophysics, 2010, 501, 58-64.	1.4	85
38	Epicatechin Selectively Prevents Nitration but Not Oxidation Reactions of Peroxynitrite. Biochemical and Biophysical Research Communications, 2001, 285, 782-787.	1.0	83
39	Evaluation of sulfur, selenium and tellurium catalysts with antioxidant potential. Organic and Biomolecular Chemistry, 2003, 1, 4317.	1.5	75
40	Oxidant-Induced Signaling: Effects of Peroxynitrite and Singlet Oxygen. Biological Chemistry, 2002, 383, 443-56.	1.2	74
41	Critical Role ofl-Arginine in Endothelial Cell Survival During Oxidative Stress. Circulation, 2003, 107, 2607-2614.	1.6	73
42	Stimulation of selenoprotein P promoter activity in hepatoma cells by FoxO1a transcription factor. Biochemical and Biophysical Research Communications, 2008, 365, 316-321.	1.0	70
43	Protein modification elicited by oxidized low-density lipoprotein (LDL) in endothelial cells: Protection by (â€“)-epicatechin. Free Radical Biology and Medicine, 2007, 42, 955-970.	1.3	64
44	Protection by Organotellurium Compounds against Peroxynitrite-Mediated Oxidation and Nitration Reactions. Biochemical Pharmacology, 1998, 55, 817-823.	2.0	63
45	Comparing Nitrosative Versus Oxidative Stress toward Zinc Finger-dependent Transcription. Journal of Biological Chemistry, 2002, 277, 13294-13301.	1.6	61
46	Modulation of FoxO signaling in human hepatoma cells by exposure to copper or zinc ions. Archives of Biochemistry and Biophysics, 2006, 454, 107-113.	1.4	60
47	The Proteasome Is an Integral Part of Solar Ultraviolet A Radiation-induced Gene Expression. Journal of Biological Chemistry, 2009, 284, 30076-30086.	1.6	59
48	2-Methyl-1,4-naphthoquinone, vitamin K(3), decreases gap-junctional intercellular communication via activation of the epidermal growth factor receptor/extracellular signal-regulated kinase cascade. Cancer Research, 2002, 62, 4922-8.	0.4	59
49	Modifications of Glyceraldehyde-3-Phosphate Dehydrogenase Induced by Increasing Concentrations of Peroxynitrite: Early Recognition by 20S Proteasome. Biological Chemistry, 2003, 384, 237-41.	1.2	58
50	Flavonoids as Putative Inducers of the Transcription Factors Nrf2, FoxO, and PPARÎ³. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-11.	1.9	58
51	Amphiphilic properties of (â^')-epicatechin and their significance for protection of cells against peroxynitrite. Biochemical and Biophysical Research Communications, 2003, 307, 69-73.	1.0	55
52	Contribution of UVB and UVA to UV-dependent stimulation of cyclooxygenase-2 expression in artificial epidermis. Photochemical and Photobiological Sciences, 2004, 3, 257-262.	1.6	53
53	Non-linear impact of glutathione depletion on C. elegans life span and stress resistance. Redox Biology, 2017, 11, 502-515.	3.9	53
54	Functional Analysis of the Glutathione S-transferase 3 from Onchocerca volvulus (Ov-GST-3): A Parasite GST Confers Increased Resistance to Oxidative Stress in Caenorhabditis elegans. Journal of Molecular Biology, 2003, 325, 25-37.	2.0	49

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55	Posttranscriptional regulation of FOXO expression: microRNAs and beyond. British Journal of Pharmacology, 2017, 174, 1514-1532.	2.7	49
56	Role of HuR and p38MAPK in Ultraviolet B-induced Post-transcriptional Regulation of COX-2 Expression in the Human Keratinocyte Cell Line HaCaT. Journal of Biological Chemistry, 2010, 285, 3896-3904.	1.6	48
57	Irradiation of Cells with Ultraviolet-A (320-400 nm) in the Presence of Cell Culture Medium Elicits Biological Effects Due to Extracellular Generation of Hydrogen Peroxide. Free Radical Research, 2003, 37, 391-397.	1.5	47
58	Peroxynitrite activates the phosphoinositide 3-kinase/Akt pathway in human skin primary fibroblasts. Biochemical Journal, 2000, 352, 219.	1.7	46
59	Protection against Peroxynitrite by Selenoproteins. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1998, 53, 228-232.	0.6	43
60	Peroxynitrite: From interception to signaling. Archives of Biochemistry and Biophysics, 2016, 595, 153-160.	1.4	43
61	The GID ubiquitin ligase complex is a regulator of AMPK activity and organismal lifespan. Autophagy, 2020, 16, 1618-1634.	4.3	43
62	Singlet Oxygen-induced Attenuation of Growth Factor Signaling: Possible Role of Ceramides. Free Radical Research, 2004, 38, 729-737.	1.5	42
63	Nitrotyrosine and protein carbonyls are equally distributed in HT22 cells after nitrosative stress. Free Radical Biology and Medicine, 2007, 42, 773-786.	1.3	41
64	HuR regulates gap junctional intercellular communication by controlling Î²-catenin levels and adherens junction integrity. Hepatology, 2009, 50, 1567-1576.	3.6	41
65	Identification of Cytosolic Leucyl Aminopeptidase (EC 3.4.11.1) as the Major Cysteinylglycine-Hydrolysing Activity in Rat Liver. Biological Chemistry, 2003, 384, 213-8.	1.2	40
66	[32] Defenses against peroxynitrite. Methods in Enzymology, 1999, 301, 301-311.	0.4	38
67	Singlet oxygen inactivates protein tyrosine phosphatase-1B by oxidation of the active site cysteine. Biological Chemistry, 2006, 387, 1399-404.	1.2	37
68	Thalidomide Resistance Is Based on the Capacity of the Glutathione-Dependent Antioxidant Defense. Molecular Pharmaceutics, 2008, 5, 1138-1144.	2.3	34
69	Multifaceted functions of the forkhead box transcription factors FoxO1 and FoxO3 in skin. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 1057-1064.	1.1	33
70	Selenium-binding protein 1 (SELENBP1) is a marker of mature adipocytes. Redox Biology, 2019, 20, 489-495.	3.9	33
71	(â^')-Epicatechin Inhibits Nitration and Dimerization of Tyrosine in Hydrophilic as Well as Hydrophobic Environments. Biochemical and Biophysical Research Communications, 2001, 289, 1334-1338.	1.0	32
72	Activation of ErbB2 by 2-methyl-1,4-naphthoquinone (menadione) in human keratinocytes: Role of EGFR and protein tyrosine phosphatases. FEBS Letters, 2006, 580, 1859-1864.	1.3	32

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73	[13] Mitogen-activated protein kinase activation by singlet oxygen and ultraviolet A. Methods in Enzymology, 2000, 319, 130-143.	0.4	31
74	Posttranscriptional regulation of connexin-43 expression. Archives of Biochemistry and Biophysics, 2012, 524, 23-29.	1.4	31
75	Biologie des Alterns. , 2019, , 83-108.		31
76	Methylated pentavalent arsenic metabolites are bifunctional inducers, as they induce cytochrome P450 1A1 and NAD(P)H:quinone oxidoreductase through AhR- and Nrf2-dependent mechanisms. Free Radical Biology and Medicine, 2014, 67, 171-187.	1.3	30
77	Nickel and copper ion-induced stress signaling in human hepatoma cells: analysis of phosphoinositide 3â€²-kinase/Akt signaling. BioMetals, 2009, 22, 307-316.	1.8	29
78	Acute and long-term effects of arsenite in HepG2 cells: modulation of insulin signaling. BioMetals, 2014, 27, 317-332.	1.8	29
79	Signaling Effects of Menadione: From Tyrosine Phosphatase Inactivation to Connexin Phosphorylation. Methods in Enzymology, 2004, 378, 258-272.	0.4	28
80	Regulation of Glucose-6-Phosphatase Gene Expression by Insulin and Metformin. Hormone and Metabolic Research, 2009, 41, 730-735.	0.7	27
81	High efficiency of 5-aminolevulinate-photodynamic treatment using UVA irradiation. Carcinogenesis, 2001, 22, 879-883.	1.3	26
82	Doxorubicin induces EGF receptor-dependent downregulation of gap junctional intercellular communication in rat liver epithelial cells. Biological Chemistry, 2005, 386, 217-223.	1.2	25
83	Extracellular generation of hydrogen peroxide is responsible for activation of EGF receptor by ultraviolet A radiation. Free Radical Biology and Medicine, 2006, 41, 1478-1487.	1.3	25
84	Arsenite-induced stress signaling: Modulation of the phosphoinositide 3â€²-kinase/Akt/FoxO signaling cascade. Redox Biology, 2013, 1, 104-109.	3.9	24
85	Heavy metal ion-induced insulin-mimetic signaling. Redox Report, 2009, 14, 141-146.	1.4	23
86	Different Susceptibility of Malignant versus Nonmalignant Human T Cells Toward Ultraviolet A-1 Radiation-Induced Apoptosis. Journal of Investigative Dermatology, 2004, 122, 477-483.	0.3	22
87	Quinone-induced Cdc25A inhibition causes ERK-dependent connexin phosphorylation. Biochemical and Biophysical Research Communications, 2005, 327, 1016-1023.	1.0	22
88	Selenenyl iodide: a new substrate for mammalian thioredoxin reductaseElectronic supplementary information (ESI) available: additional data. See http://www.rsc.org/suppdata/ob/b3/b302220j/. Organic and Biomolecular Chemistry, 2003, 1, 2848.	1.5	20
89	Inhibition of Heme Oxygenase-1 Partially Reverses the Arsenite-Mediated Decrease of CYP1A1, CYP1A2, CYP3A23, and CYP3A2 Catalytic Activity in Isolated Rat Hepatocytes. Drug Metabolism and Disposition, 2012, 40, 504-514.	1.7	19
90	Loss of gap junctional intercellular communication in rat lung epithelial cells exposed to carbon or silica-based nanoparticles. Biological Chemistry, 2010, 391, 1333-9.	1.2	18

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91	Ceruloplasmin Expression in Rat Liver Cells is Attenuated by Insulin: Role of FoxO Transcription Factors. Hormone and Metabolic Research, 2011, 43, 268-274.	0.7	18
92	Insulin-like modulation of Akt/FoxO signaling by copper ions is independent of insulin receptor. Archives of Biochemistry and Biophysics, 2014, 558, 42-50.	1.4	17
93	A Caenorhabditis elegans ortholog of human selenium-binding protein 1 is a pro-aging factor protecting against selenite toxicity. Redox Biology, 2020, 28, 101323.	3.9	17
94	Dicumarol is a potent reversible inhibitor of gap junctional intercellular communication. Archives of Biochemistry and Biophysics, 2005, 434, 241-247.	1.4	16
95	Rac upregulates tissue inhibitor of metalloproteinase-1 expression by redox-dependent activation of extracellular signal-regulated kinase signaling. FEBS Journal, 2006, 273, 4754-4769.	2.2	14
96	Epidermal growth factor- and stress-induced loss of gap junctional communication is mediated by ERK-1/ERK-2 but not ERK-5 in rat liver epithelial cells. Biochemical and Biophysical Research Communications, 2007, 364, 313-317.	1.0	14
97	<scp>FOXO</scp> transcription factors in antioxidant defense. IUBMB Life, 2022, 74, 53-61.	1.5	14
98	Sugar-derived AGEs accelerate pharyngeal pumping rate and increase the lifespan of Caenorhabditis elegans. Free Radical Research, 2019, 53, 1056-1067.	1.5	12
99	Nuclear trapping of inactive FOXO1 by the Nrf2 activator diethyl maleate. Redox Biology, 2019, 20, 19-27.	3.9	12
100	Detection of a functional xenobiotic response element in a widely employed FoxO-responsive reporter construct. Archives of Biochemistry and Biophysics, 2011, 516, 138-145.	1.4	11
101	Differential capability of metabolic substrates to promote hepatocellular lipid accumulation. European Journal of Nutrition, 2019, 58, 3023-3034.	1.8	11
102	FOXO1 cysteine-612 mediates stimulatory effects of the coregulators CBP and PGC1Î± on FOXO1 basal transcriptional activity. Free Radical Biology and Medicine, 2018, 118, 98-107.	1.3	10
103	A coupled enzyme assay for detection of selenium-binding protein 1 (SELENBP1) methanethiol oxidase (MTO) activity in mature enterocytes. Redox Biology, 2021, 43, 101972.	3.9	9
104	<scp>SEMO</scp>â€1, a novel methanethiol oxidase in Caenorhabditis elegans, is a proâ€aging factor conferring selective stress resistance. BioFactors, 2022, 48, 699-706.	2.6	9
105	Signaling by Singlet Oxygen in Biological Systems. , 2000, , 3-20.		8
106	Selenoprotein P. Methods in Enzymology, 2002, 347, 121-125.	0.4	8
107	Loss of gap junctional intercellular communication in rat lung epithelial cells exposed to quartz particles. Biochemical and Biophysical Research Communications, 2009, 390, 44-47.	1.0	8
108	Reactivity of lipophilic diSchiff-base coordinated copper in rat hepatocytes. Biochemical Pharmacology, 1996, 51, 919-929.	2.0	7

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109	Stress and biological aging. Zeitschrift Fur Gerontologie Und Geriatrie, 2015, 48, 505-510.	0.8	6
110	Label-free molecular mapping and assessment of glycogen inC. elegans. Analyst, The, 2019, 144, 2367-2374.	1.7	6
111	Activation of Nrf2 by Electrophiles Is Largely Independent of the Selenium Status of HepG2 Cells. Antioxidants, 2021, 10, 167.	2.2	5
112	Reversible conversion of nitroxyl anion to nitric oxide. Methods in Enzymology, 2002, 349, 101-106.	0.4	4
113	Loss of the tyrosyl radical in mouse ribonucleotide reductase by (â˜)-epicatechin. Biochemical and Biophysical Research Communications, 2005, 326, 614-617.	1.0	4
114	Highlight: Oxidative Stress and Senescence. Biological Chemistry, 2008, 389, 201-201.	1.2	4
115	FoxO transcription factors in the control of redox homeostasis and fuel metabolism. , 2020, , 315-330.		4
116	On the Biochemistry of Antioxidants: Current Aspects. Oxidative Stress in Applied Basic Research and Clinical Practice, 2015, , 383-396.	0.4	4
117	Selenite-induced Expression of a Caenorhabditis elegans Pro-aging Factor and Ortholog of Human Selenium-binding Protein 1. Current Nutraceuticals, 2020, 1, 73-79.	0.1	3
118	Activation of JNK and P38 but not ERK map kinases in human skin cells by 5-aminolevulinate PDT, UVA and singlet oxygen. Journal of Dermatological Science, 1998, 16, S153.	1.0	2
119	Oxidative Stress, Antioxidants, and Chemoprevention: On the Role of Oxidant-Induced Signaling in Cellular Adaptation. , 2014, , 119-146.		2
120	Highlight section: Copper and zinc in cell signaling and disease. Archives of Biochemistry and Biophysics, 2007, 463, 133.	1.4	1
121	Signal transduction, receptors, mediators and genes: younger than ever - the 13th meeting of the Signal Transduction Society focused on aging and immunology. Cell Communication and Signaling, 2010, 8, 2.	2.7	1
122	Modulation of cellular thiol status affects FoxO activity and life span. Free Radical Biology and Medicine, 2014, 75, S53.	1.3	1
123	Two putative selenium binding proteins as modulators of C. elegans stress response and life span. Free Radical Biology and Medicine, 2017, 108, S77.	1.3	1
124	Selenium for Prevention and Mitigation of Oxidative Stress-related Diseases in the Gastrointestinal Tract. , 2017, , 229-242.		1
125	A New Function for Selenoproteins. , 1999, , 87-101.		0
126	Selenium and the Protection Against Peroxynitrite. , 2002, , 71-76.		0

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127	Ultrafine but not fine carbon particles cause loss of gap junctional intercellular communication in rat lung epithelial cells. Toxicology Letters, 2009, 189, S184.	0.4	0
128	Highlight: Xenobiotics and Cell Signaling. Biological Chemistry, 2010, 391, 1233-4.	1.2	0
129	An Overview of Free Radicals as Causes and Consequences of Toxicity. Oxidative Stress in Applied Basic Research and Clinical Practice, 2015, , 21-27.	0.4	0
130	Cellular Aging and Tumor Regulation. Healthy Ageing and Longevity, 2016, , 187-201.	0.2	0
131	Contributions of cysteine residues to the modulation of FoxO1a activity under oxidative stress. Free Radical Biology and Medicine, 2016, 96, S15-S16.	1.3	0
132	FOXO Transcription Factors: Regulators of Metabolism and Stress Resistance. Proceedings (mdpi), 2019, 11, .	0.2	0
133	Modulation and Determination of Cellular Glutathione Concentrations. , 2008, , 45-54.		0
134	UV-induced Signaling: Role of Reactive Oxygen Species. Oxidative Stress in Applied Basic Research and Clinical Practice, 2015, , 335-345.	0.4	0