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## Structure and function of matrix metalloproteinases and TIMPs

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2305	Fibronectin increases matrix metalloproteinase 9 expression through activation of c-Fos via extracellular-regulated kinase and phosphatidylinositol 3-kinase pathways in human lung carcinoma cells. <b>2006</b> , 281, 29614-24		87
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2303	Is âscarless wound healingâ applicable to glaucoma surgery?. <b>2007</b> , 2, 79-90		5
2302	Crystal structure of the catalytic domain of matrix metalloproteinase-1 in complex with the inhibitory domain of tissue inhibitor of metalloproteinase-1. <b>2007</b> , 282, 364-71		51
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2292	Insulin augments matrix metalloproteinase-9 expression in monocytes. <i>Cardiovascular Research</i> , <b>2007</b> , 73, 841-8	9.9	31
2291	Myocardial matrix remodeling and the matrix metalloproteinases: influence on cardiac form and function. <b>2007</b> , 87, 1285-342		861
2290	Readers' choice: hot papers downloaded in 2006. <i>Cardiovascular Research</i> , <b>2007</b> , 73, 619-22	9.9	8
2289	Acute exacerbations of idiopathic pulmonary fibrosis. <b>2007</b> , 176, 636-43		823
2288	All-trans retinoic acid enhances murine dendritic cell migration to draining lymph nodes via the balance of matrix metalloproteinases and their inhibitors. <b>2007</b> , 179, 4616-25		59
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2278	High-level expression of a soluble and functional fibronectin type II domain from MMP-2 in the <i>Escherichia coli</i> cytoplasm for solution NMR studies. <b>2007</b> , 53, 124-31		10

2277	Transgenic MMP-2 expression induces latent cardiac mitochondrial dysfunction. <b>2007</b> , 358, 189-95	53
2276	Reduced secretion and expression of gelatinase profile in Toxoplasma gondii-infected human monocytic cells. <b>2007</b> , 359, 298-303	18
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2274	Visions for novel biophysical elucidations of extracellular matrix networks. <b>2007</b> , 39, 311-8	5
2273	Flexibility and variability of TIMP binding: X-ray structure of the complex between collagenase-3/MMP-13 and TIMP-2. <b>2007</b> , 366, 1222-31	45
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2270	Metaloproteasa-10 (estromelisina-2): un nuevo marcador de aterosclerosis subclílica. <b>2007</b> , 19, 122-128	
2269	Elastin-elastases and inflamm-aging. <b>2007</b> , 79, 99-155	139
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2267	Clinical trials and basic research: defining mechanisms and improving treatment in connective tissue disease. <b>2007</b> , 9 Suppl 2, S10	0
2266	How does endothelial cell injury start? The role of endothelin in systemic sclerosis. <b>2007</b> , 9 Suppl 2, S2	104
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2264	Chronic obstructive pulmonary disease: role of matrix metalloproteases and future challenges of drug therapy. <b>2007</b> , 16, 1069-78	29
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2262	Matrix metalloproteinases: influence on smooth muscle cells and atherosclerotic plaque stability. <b>2007</b> , 5, 265-82	118
2261	Genomic and proteomic profiling II: comparative assessment of gene expression profiles in leiomyomas, keloids, and surgically-induced scars. <b>2007</b> , 5, 35	25
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2259	Oxidative stress, inflammation and atherosclerotic plaque development. <b>2007</b> , 1303, 35-40	14
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2257	The role of matrix metalloproteinases in the oral environment. <b>2007</b> , 65, 1-13	245
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2255	Matrix metalloproteinases in inflammatory bowel disease: boon or a bane?. <b>2007</b> , 13, 97-107	108
2254	Matrix metalloproteinase activity is necessary for thymosin beta 4 promotion of epithelial cell migration. <b>2007</b> , 212, 165-73	29
2253	Signal transduction and cell-type specific regulation of matrix metalloproteinase gene expression: can MMPs be good for you?. <b>2007</b> , 213, 355-64	148
2252	Cell-matrix adhesion. <b>2007</b> , 213, 565-73	693
2251	Activation of Matrix Metalloproteinase-3 is altered at the frog neuromuscular junction following changes in synaptic activity. <b>2007</b> , 67, 1488-97	20
2250	The design of inhibitors for medically relevant metalloproteins. <b>2007</b> , 2, 152-71	116
2249	Targeting MMPs in acute and chronic neurological conditions. <b>2007</b> , 4, 580-9	53
2248	Immobilization of trypsin on polysaccharide film from <i>Anacardium occidentale</i> L. and its application as cutaneous dressing. <b>2007</b> , 42, 884-888	30
2247	Zinc in wound healing: theoretical, experimental, and clinical aspects. <b>2007</b> , 15, 2-16	404
2246	Independent association of matrix metalloproteinase-10, cardiovascular risk factors and subclinical atherosclerosis. <b>2007</b> , 5, 91-7	51
2245	Expression of MMP-9, MMP-10 and TNF-alpha and lack of epithelial MMP-1 and MMP-26 characterize pyoderma gangrenosum. <b>2007</b> , 34, 889-98	32
2244	Role of matrix metalloproteinases and their tissue inhibitor of metalloproteinases in myxomatous change of cardiac floppy valves. <b>2007</b> , 57, 251-9	20
2243	The evolution of the vertebrate metzincins; insights from <i>Ciona intestinalis</i> and <i>Danio rerio</i> . <b>2007</b> , 7, 63	79
2242	Big ET-1 processing into vasoactive peptides in arteries and veins. <b>2007</b> , 47, 302-12	16

2241	Low-molecular weight heparin induces in vitro trophoblast invasiveness: role of matrix metalloproteinases and tissue inhibitors. <b>2007</b> , 28, 298-304	67
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2237	Angiogenesis in melanoma. <b>2007</b> , 34, 555-65	105
2236	Expression of interstitial collagenase and its endogenous regulators in immortalized and transformed by HPV-16 E7 gene fibroblasts. <b>2007</b> , 1, 342-347	1
2235	Changes in the concentration of tissue inhibitor of type 1 metalloproteinases in blood serum and liver of mice with CCl4-induced hepatitis. <b>2007</b> , 143, 312-5	2
2234	Dicarbonyl-mediated protein modifications affect matrix metalloproteinase (MMP) activity. <b>2007</b> , 40, 357-61	4
2233	Matrix metalloproteinase-inhibitor interaction: the solution structure of the catalytic domain of human matrix metalloproteinase-3 with different inhibitors. <b>2007</b> , 12, 1197-206	28
2232	Imaging matrix metalloproteinases in cancer. <b>2008</b> , 27, 679-90	139
2231	Pervanadate-induced shedding of the intercellular adhesion molecule (ICAM)-1 ectodomain is mediated by membrane type-1 matrix metalloproteinase (MT1-MMP). <b>2008</b> , 314, 151-9	21
2230	Vascular adaptation and mechanical homeostasis at tissue, cellular, and sub-cellular levels. <b>2008</b> , 50, 53-78	290
2229	The importance of proline residues in the structure, stability and susceptibility to proteolytic degradation of collagens. <b>2008</b> , 35, 703-10	99
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2227	Cleavage and functional loss of human apolipoprotein E by digestion of matrix metalloproteinase-14. <b>2008</b> , 8, 2926-35	20
2226	Mediterranean diet and cardioprotection: wild artichoke inhibits metalloproteinase 9. <b>2008</b> , 52, 1147-52	8
2225	A macrophage cell model for selective metalloproteinase inhibitor design. <b>2008</b> , 9, 2087-95	10
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2222	Matrix metalloproteinases 2 and 9 in central nervous system and their modification after vanadium inhalation. <b>2008</b> , 28, 718-23	15
2221	Matrix metalloproteinases and their inhibitors in the foreign body reaction on biomaterials. <b>2008</b> , 84, 158-66	83
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2218	Modulation of aggrecan and ADAMTS expression in ovine tendinopathy induced by altered strain. <b>2008</b> , 58, 1055-66	63
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2216	Design, synthesis and preliminary evaluation of novel pyrrolidine derivatives as matrix metalloproteinase inhibitors. <b>2008</b> , 43, 2130-9	22
2215	Design, synthesis and evaluation of novel sulfonyl pyrrolidine derivatives as matrix metalloproteinase inhibitors. <b>2008</b> , 16, 5398-404	21
2214	Synthesis of new sulfonyl pyrrolidine derivatives as matrix metalloproteinase inhibitors. <b>2008</b> , 16, 7932-8	26
2213	Specific targeting of metzincin family members with small-molecule inhibitors: progress toward a multifarious challenge. <b>2008</b> , 16, 8781-94	81
2212	Defining the roles of inflammatory and anabolic cytokines in cartilage metabolism. <b>2008</b> , 67 Suppl 3, iii75-82	150
2211	Effect of MMP-1 promoter polymorphisms on GCF MMP-1 levels and outcome of periodontal therapy in patients with severe chronic periodontitis. <b>2008</b> , 35, 862-70	36
2210	Epilysin (MMP-28)--structure, expression and potential functions. <b>2008</b> , 17, 897-907	54
2209	Extracellular matrix profiles in the progression to heart failure. European Young Physiologists Symposium Keynote Lecture-Bratislava 2007. <b>2008</b> , 194, 3-21	77
2208	The absence of uPAR is associated with the progression of dermal fibrosis. <b>2008</b> , 128, 2792-7	36
2207	Protective action of doxycycline against diabetic cardiomyopathy in rats. <b>2008</b> , 155, 1174-84	52
2206	MT1-MMP regulates urothelial cell invasion via transcriptional regulation of Dickkopf-3. <b>2008</b> , 99, 663-9	24

2205	The ADAMs: signalling scissors in the tumour microenvironment. <b>2008</b> , 8, 929-41	389
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2203	Increased release and activity of matrix metalloproteinase-9 in patients with mandibuloacral dysplasia type A, a rare premature ageing syndrome. <b>2008</b> , 74, 374-83	13
2202	Comparison of MMP-2 and MMP-9 secretion from T helper 0, 1 and 2 lymphocytes alone and in coculture with macrophages. <b>2008</b> , 124, 42-50	49
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2197	Tissue inhibitor of metalloproteinases-3 (TIMP-3) expression is increased during serum deprivation-induced neuronal apoptosis in vitro and in the G93A mouse model of amyotrophic lateral sclerosis: a potential modulator of Fas-mediated apoptosis. <b>2008</b> , 30, 174-85	20
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2195	Prolonged increases in vein wall tension increase matrix metalloproteinases and decrease constriction in rat vena cava: Potential implications in varicose veins. <b>2008</b> , 48, 447-56	76
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2163	Advances in assays of matrix metalloproteinases (MMPs) and their inhibitors. <b>2008</b> , 23, 154-67	21
2162	The inactive 44-kDa processed form of membrane type 1 matrix metalloproteinase (MT1-MMP) enhances proteolytic activity via regulation of endocytosis of active MT1-MMP. <b>2008</b> , 283, 17391-405	27
2161	Calcium pentosan polysulfate is a multifaceted exosite inhibitor of aggrecanases. <b>2008</b> , 22, 3515-24	88
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2158	Epithelial expression of TIMP-1 does not alter sensitivity to bleomycin-induced lung injury in C57BL/6 mice. <b>2008</b> , 294, L572-81	10
2157	Mechanisms of arterial remodeling in hypertension: coupled roles of wall shear and intramural stress. <b>2008</b> , 52, 195-200	205
2156	Matrix metalloproteinase 9 (MMP9) expression in preeclamptic decidua and MMP9 induction by tumor necrosis factor alpha and interleukin 1 beta in human first trimester decidual cells. <b>2008</b> , 78, 1064-72	88
2155	Matrix metalloproteinases 2 and 9 are concentrated in the luminal aspect of the cricoid cartilage, diminish with loss of perichondrium, and are reinstated by transforming growth factor beta 3. <b>2008</b> , 117, 925-30	4
2154	Metastasis-associated C4.4A, a GPI-anchored protein cleaved by ADAM10 and ADAM17. <b>2008</b> , 389, 1075-84	26
2153	Selective progesterone receptor modulator asoprisnil down-regulates collagen synthesis in cultured human uterine leiomyoma cells through up-regulating extracellular matrix metalloproteinase inducer. <b>2008</b> , 23, 944-51	45
2152	Biological and pathobiological functions of gelatinase dimers and complexes. <b>2008</b> , 49, 180-4	43

2151	Interaction of pro-matrix metalloproteinase-9/proteoglycan heteromer with gelatin and collagen. <b>2008</b> , 283, 13652-65	29
2150	The role of megsin, a serine protease inhibitor, in diabetic mesangial matrix accumulation. <b>2008</b> , 74, 768-74	11
2149	The role of matrix metalloproteinases in the pathophysiology and progression of human nervous system malignancies: a chance for the development of targeted therapeutic approaches?. <b>2008</b> , 12, 1577-86	15
2148	Cardiac-restricted overexpression of extracellular matrix metalloproteinase inducer causes myocardial remodeling and dysfunction in aging mice. <b>2008</b> , 295, H1394-402	29
2147	IL-13 attenuates vascular tube formation via JAK2-STAT6 pathway. <b>2008</b> , 72, 469-75	31
2146	Unstable coronary plaques and cardiac events in myocardial infarction-prone Watanabe heritable hyperlipidemic rabbits: questions and quandaries. <b>2008</b> , 19, 631-6	34
2145	Effect of chlorhexidine on microtensile bond strength of dentin bonding systems. <b>2008</b> , 33, 148	1
2144	Hyaluronidases in Cancer Biology. <b>2008</b> , 207-220	7
2143	MMP19 is essential for T cell development and T cell-mediated cutaneous immune responses. <b>2008</b> , 3, e2343	36
2142	alpha-Lipoic acid modulates extracellular matrix and angiogenesis gene expression in non-healing wounds treated with hyperbaric oxygen therapy. <b>2008</b> , 14, 175-83	22
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2140	The Expression of Matrix Metalloproteinase according to Hydrostatic Pressure in Varicose Veins. <b>2009</b> , 77, 344	1
2139	Increased serum levels of tissue inhibitor of metalloproteinase-1 in patients with acute myocardial infarction. <b>2009</b> , 50, 421-31	7
2138	Increased motility and invasiveness in tumor cells that survive 10 Gy irradiation. <b>2009</b> , 34, 89-96	25
2137	Matrix metalloproteinases in the pathophysiology and progression of gynecological malignancies: could their inhibition be an effective therapeutic approach?. <b>2009</b> , 13, 1105-20	7
2136	MMP-2 and MMP-9 alteration in response to collaring in rabbits: the effects of endothelin receptor antagonism. <b>2009</b> , 14, 292-301	10
2135	Interdomain flexibility in full-length matrix metalloproteinase-1 (MMP-1). <b>2009</b> , 284, 12821-8	65
2134	The role of an MMP inhibitor in the regulation of mechanical tension by Dupuytren's disease fibroblasts. <b>2009</b> , 34, 783-7	8

2133	RECK forms cowbell-shaped dimers and inhibits matrix metalloproteinase-catalyzed cleavage of fibronectin. <b>2009</b> , 284, 3461-9	48
2132	MT1-MMP-mediated cleavage of decorin in corneal angiogenesis. <b>2009</b> , 46, 541-50	55
2131	Tumor necrosis factor-alpha--converting enzyme roles in hypertension-induced hypertrophy: look both ways when crossing the street. <b>2009</b> , 54, 471-2	1
2130	Secreted versus membrane-anchored collagenases: relative roles in fibroblast-dependent collagenolysis and invasion. <b>2009</b> , 284, 23001-11	114
2129	Regulation and function of tissue inhibitor of metalloproteinase (TIMP) 1 and TIMP3 in periovulatory rat granulosa cells. <b>2009</b> , 150, 3903-12	26
2128	Matrix metalloproteinases and tissue inhibitors of metalloproteinases in gingival crevicular fluid during orthodontic tooth movement. <b>2009</b> , 31, 529-35	42
2127	Peritumoral administration of GPI-anchored TIMP-1 inhibits colon carcinoma growth in Rag-2 gamma chain-deficient mice. <b>2009</b> , 390, 893-7	8
2126	CCAAT enhancer binding protein-beta regulates matrix metalloproteinase-1 expression in interleukin-1beta-stimulated A549 lung carcinoma cells. <b>2009</b> , 7, 1517-24	31
2125	Matrix metalloproteinase-7 and -13 expression associate to cisplatin resistance in head and neck cancer cell lines. <b>2009</b> , 45, 866-71	19
2124	Acrolein activates matrix metalloproteinases by increasing reactive oxygen species in macrophages. <b>2009</b> , 236, 194-201	56
2123	Expression of matrix metalloproteinases (MMPs) in primary human breast cancer and breast cancer cell lines: New findings and review of the literature. <b>2009</b> , 9, 188	251
2122	miR-221&222 regulate TRAIL resistance and enhance tumorigenicity through PTEN and TIMP3 downregulation. <b>2009</b> , 16, 498-509	672
2121	Effect of 1, 25 dihydroxyvitamin D(3) on matrix metalloproteinases MMP-7, MMP-9 and the inhibitor TIMP-1 in pulmonary tuberculosis. <b>2009</b> , 133, 126-31	61
2120	Age-dependent increases in interstitial collagenase and MAP Kinase levels are exacerbated by superoxide dismutase deficiencies. <b>2009</b> , 44, 503-10	8
2119	Matrix metalloproteinases and their tissue inhibitors as prognostic indicators for diagnostic and surgical recurrence in Crohn's disease. <b>2009</b> , 15, 84-92	18
2118	Neoepitopes reveal the features of type II collagen cleavage and the identity of a collagenase involved in the transformation of the epiphyses anlagen in development. <b>2009</b> , 238, 1547-63	17
2117	Contributions of different intraarticular tissues to the acute phase elevation of synovial fluid MMP-2 following rat ACL rupture. <b>2009</b> , 27, 243-8	53
2116	Calcaneal tendon regions exhibit different MMP-2 activation after vertical jumping and treadmill running. <b>2009</b> , 292, 1656-62	26

2115	Matrix metalloproteinase expression levels suggest distinct enzyme roles during lumbar disc herniation and degeneration. <b>2009</b> , 18, 1573-86	131
2114	Expression of matrix metalloproteinases and their inhibitors in cords and nodules of patients with Dupuytren's disease. <b>2009</b> , 129, 1453-9	28
2113	Walker 256 cancer cells secrete tissue inhibitor of metalloproteinase-free metalloproteinase-9. <b>2009</b> , 328, 189-99	6
2112	Montelukast inhibits matrix metalloproteinases expression in atherosclerotic rabbits. <b>2009</b> , 23, 431-7	8
2111	Matrix metalloproteinases: their potential role in the pathogenesis of diabetic nephropathy. <b>2009</b> , 35, 1-10	137
2110	Proteomics of acute coronary syndromes. <b>2009</b> , 11, 188-95	33
2109	A new redox-dependent mechanism of MMP-1 activity control comprising reduced low-molecular-weight thiols and oxidizing radicals. <b>2009</b> , 87, 261-72	26
2108	3D-QSAR study of pyrrolidine derivatives as matrix metalloproteinase-2 inhibitors. <b>2009</b> , 18, 683-701	8
2107	Effect of tissue inhibitors of metalloproteinases and matrix metalloproteinases on capsular formation around smooth and textured silicone gel implants. <b>2009</b> , 33, 555-62	17
2106	TGF-beta inhibits IL-1beta-activated PAR-2 expression through multiple pathways in human primary synovial cells. <b>2009</b> , 16, 97	15
2105	Novel transcriptional profile in wrist muscles from cerebral palsy patients. <b>2009</b> , 2, 44	76
2104	The role of matrix metalloproteinases in the pathogenesis of abdominal wall hernias. <b>2009</b> , 39, 953-9	44
2103	Matrix metalloproteinase inhibitors reduce collagen gel contraction and alpha-smooth muscle actin expression by periodontal ligament cells. <b>2009</b> , 44, 266-74	22
2102	Expression of metalloproteinases and their tissue inhibitors in gingiva affected by hereditary gingival fibromatosis: analysis of three cases within a family. <b>2009</b> , 44, 714-7	2
2101	Timp-3 deficiency impairs cognitive function in mice. <b>2009</b> , 89, 1340-7	11
2100	The membrane-anchored metalloproteinase regulator RECK stabilizes focal adhesions and anterior-posterior polarity in fibroblasts. <b>2009</b> , 28, 1454-64	40
2099	Immunoexpression of MMPs-1, -2, and -9 in ameloblastoma and odontogenic adenomatoid tumor. <b>2009</b> , 15, 472-7	37
2098	The Caucasian and African skin types differ morphologically and functionally in their dermal component. <b>2009</b> , 18, 704-11	34

2097	Proteases and antiproteases in chronic neutrophilic lung disease - relevance to drug discovery. <b>2009</b> , 158, 1048-58	103
2096	Immunohistochemical expression of matrix metalloproteinases 1, 2, and 9 in odontogenic myxoma and dental germ papilla. <b>2009</b> , 205, 458-65	8
2095	Expression of gelatinases A and B and their endogenous regulators in immortal and transformed fibroblasts. <b>2009</b> , 3, 266-271	1
2094	Regulation of osteoarthritis development by Wnt-beta-catenin signaling through the endochondral ossification process. <b>2009</b> , 24, 8-11	47
2093	Matrix metalloproteinases as novel biomarkers and potential therapeutic targets in human cancer. <b>2009</b> , 27, 5287-97	621
2092	Metalloproteinases and their inhibitors-diagnostic and therapeutic opportunities in orthopedics. <b>2009</b> , 80, 693-703	95
2091	Self-etching increases matrix metalloproteinase expression in the dentin-pulp complex. <b>2009</b> , 88, 77-82	68
2090	[Biology of arterial ageing and arteriosclerosis]. <b>2009</b> , 332, 433-47	1
2089	Proteases and bone remodelling. <b>2009</b> , 20, 29-41	39
2088	Angiotensin II-induced hypertension regulates AT1 receptor subtypes and extracellular matrix turnover in mouse retinal pigment epithelium. <b>2009</b> , 89, 109-18	22
2087	Angiotensin II receptor blockade improves matrix metalloproteinases/tissue inhibitor of matrix metalloproteinase-1 balance and restores fibronectin expression in rat infarcted myocardium. <b>2009</b> , 388, 606-11	23
2086	TIMP-3: a novel target for glucocorticoid signaling at the blood-brain barrier. <b>2009</b> , 390, 182-6	14
2085	Stromelysin-2 (MMP-10) deficiency does not affect adipose tissue formation in a mouse model of nutritionally induced obesity. <b>2009</b> , 389, 378-81	18
2084	Effect of tissue inhibitor of matrix metalloproteinases-1 on in vitro and in vivo adipocyte differentiation. <b>2009</b> , 124, 578-83	25
2083	Immunohistochemical expression of matrilysins (MMP-7 and MMP-26) in ameloblastomas and adenomatoid odontogenic tumors. <b>2009</b> , 108, 417-24	21
2082	Cloning and expression of ADAM-related metalloproteases in equine laminitis. <b>2009</b> , 129, 231-41	36
2081	Prevention of ischemia/reperfusion-induced accumulation of matrix metalloproteinases in rat lung by preconditioning with nitric oxide. <b>2009</b> , 152, 198-208	15
2080	Direct visualization of protease activity on cells migrating in three-dimensions. <b>2009</b> , 28, 3-10	70

2079	Invasive potential of human rheumatoid tenosynovial cells is in part MT1-MMP dependent. <b>2009</b> , 34, 1282-90	3
2078	Role of matrix metalloproteinases in skin ageing. <b>2009</b> , 50, 132-8	80
2077	Matrix metalloproteinases, T cell homing and beta-cell mass in type 1 diabetes. <b>2009</b> , 80, 541-62	12
2076	Pathogenesis of tendinopathies: inflammation or degeneration?. <b>2009</b> , 11, 235	309
2075	Hypoxia upregulates angiogenesis and synovial cell migration in rheumatoid arthritis. <b>2009</b> , 11, R64	77
2074	Potential implications of matrix metalloproteinase-9 in assessment and treatment of coronary artery disease. <b>2009</b> , 14, 118-29	31
2073	Combinatorial use of single nucleotide polymorphisms to help predict liver fibrosis in patients with hepatitis C infections. <b>2009</b> , 3, 355-70	1
2072	Metzincin's canonical methionine is responsible for the structural integrity of the zinc-binding site. <b>2009</b> , 390, 875-81	18
2071	Plasma levels of matrix metalloproteinase-9 are independently associated with psychosocial factors in a middle-aged normal population. <b>2009</b> , 71, 292-300	33
2070	Role of matrix metalloproteinases and their tissue inhibitors as potential biomarkers of left ventricular remodelling in the athlete's heart. <b>2009</b> , 117, 157-64	11
2069	Effects of novel semiselective matrix metalloproteinase inhibitors on ex vivo cardiac structure-function. <b>2009</b> , 53, 452-61	3
2068	Visualization of morphological and molecular features associated with chronic ischemia in bioengineered human skin. <b>2010</b> , 16, 117-31	2
2067	Differential gene expression profiling of metalloproteinases and their inhibitors: a comparison between bovine intervertebral disc nucleus pulposus cells and articular chondrocytes. <b>2010</b> , 35, 1101-8	24
2066	Update of human and mouse matrix metalloproteinase families. <b>2010</b> , 4, 194-201	60
2065	TIMP-3 recruits quiescent hematopoietic stem cells into active cell cycle and expands multipotent progenitor pool. <b>2010</b> , 116, 4474-82	28
2064	The activities of MMP-9 and total gelatinase respond differently to substrate coating and cyclic mechanical stretching in fibroblasts and myoblasts. <b>2010</b> , 34, 587-91	16
2063	Strontium fructose 1,6-diphosphate alleviates early diabetic testopathy by suppressing abnormal testicular matrix metalloproteinase system in streptozocin-treated rats. <b>2010</b> , 61, 229-236	11
2062	Dynamic interactions between cells and their extracellular matrix mediate embryonic development. <b>2010</b> , 77, 475-88	23

2061	Epidermal growth factor (EGF) induces motility and upregulates MMP-9 and TIMP-1 in bovine trophoblast cells. <b>2010</b> , 77, 622-9	19
2060	A review of tendon injury: why is the equine superficial digital flexor tendon most at risk?. <b>2010</b> , 42, 174-80	102
2059	Changes in tissue metalloproteinase inhibitor-1 and matrix metalloproteinases during tumor development and metastasizing in mice. <b>2010</b> , 150, 233-6	1
2058	Disease and gender-specific dysregulation of NGAL and MMP-9 in type 1 diabetes mellitus. <b>2010</b> , 37, 336-43	57
2057	Suppression of matrix metalloproteinase-9 expression by RNA interference inhibits SGC7901 gastric adenocarcinoma cell growth and invasion in vitro and in vivo. <b>2010</b> , 27, 774-84	16
2056	Combination gene therapy with PTEN and EGFR siRNA suppresses U251 malignant glioma cell growth in vitro and in vivo. <b>2010</b> , 27, 843-52	27
2055	Matrix metalloproteinase-induced epithelial-mesenchymal transition in breast cancer. <b>2010</b> , 15, 201-12	352
2054	HIF-2 $\alpha$ is a possible therapeutic target of osteoarthritis. <b>2010</b> , 18, 1552-6	43
2053	Matrix metalloproteinases, a disintegrin and metalloproteinases, and a disintegrin and metalloproteinases with thrombospondin motifs in non-neoplastic diseases. <b>2010</b> , 60, 477-96	178
2052	Expression pattern of matrix metalloproteinases in human gynecological cancer cell lines. <b>2010</b> , 10, 553	48
2051	Matrix metalloproteinases in the cervical mucus plug in relation to gestational age, plug compartment, and preterm labor. <b>2010</b> , 8, 113	35
2050	Comparative expression pattern of Matrix-Metalloproteinases in human glioblastoma cell-lines and primary cultures. <b>2010</b> , 3, 293	22
2049	Proteolytic and non-proteolytic roles of membrane type-1 matrix metalloproteinase in malignancy. <b>2010</b> , 1803, 133-41	83
2048	To bind zinc or not to bind zinc: an examination of innovative approaches to improved metalloproteinase inhibition. <b>2010</b> , 1803, 72-94	199
2047	Therapeutic opportunities in fibroblasts in inflammatory arthritis. <b>2010</b> , 24, 527-40	29
2046	MiRNA-451 plays a role as tumor suppressor in human glioma cells. <b>2010</b> , 1359, 14-21	146
2045	Lysophosphatidic acid (LPA) effects on endometrial carcinoma in vitro proliferation, invasion, and matrix metalloproteinase activity. <b>2010</b> , 117, 88-95	20
2044	Inhibition of matrix metalloproteinase-9 attenuates acute small-for-size liver graft injury in rats. <b>2010</b> , 10, 784-795	31



2043	Expression of matrix metalloproteinase-9 mRNA and vascular endothelial growth factor protein in gastric carcinoma and its relationship to its pathological features and prognosis. <b>2010</b> , 293, 2012-9	22
2042	BMP-2 regulates the formation of oral sulcus in mouse tongue by altering the balance between TIMP-1 and MMP-13. <b>2010</b> , 293, 1408-15	4
2041	Connective tissue alteration in abdominal wall hernia. <b>2011</b> , 98, 210-9	103
2040	Role of hypoxia and autophagy in MDA-MB-231 invasiveness. <b>2010</b> , 223, 359-68	45
2039	Ovarian matrix metalloproteinases are differentially regulated during the estrous cycle but not during short photoperiod induced regression in Siberian hamsters ( <i>Phodopus sungorus</i> ). <b>2010</b> , 8, 79	5
2038	Plasmin plays a key role in the regulation of profibrogenic molecules in hepatic stellate cells. <b>2010</b> , 30, 298-310	6
2037	Left ventricular extracellular matrix remodeling in dogs with right ventricular apical pacing. <b>2010</b> , 21, 1142-9	10
2036	Proteoglycans in health and disease: the multiple roles of syndecan shedding. <b>2010</b> , 277, 3876-89	212
2035	Momordica charantia leaf extract suppresses rat prostate cancer progression in vitro and in vivo. <b>2010</b> , 101, 2234-40	51
2034	Blood vessel density in de novo formed adipose tissue is decreased upon overexpression of TIMP-1. <b>2010</b> , 18, 638-40	10
2033	Analysis of matrix metalloproteinase (MMP-8 and MMP-2) activity in gingival crevicular fluid from children with Down's syndrome. <b>2010</b> , 45, 170-6	14
2032	The impact of the extracellular matrix on inflammation. <b>2010</b> , 10, 712-23	584
2031	Mechanical loading, cartilage degradation, and arthritis. <b>2010</b> , 1211, 37-50	173
2030	Cheminformatics-based drug design approach for identification of inhibitors targeting the characteristic residues of MMP-13 hemopexin domain. <b>2010</b> , 5, e12494	11
2029	Different activation forms of MMP-2 oppositely affect the fate of endothelial cells. <b>2010</b> , 298, C942-51	23
2028	Blood flow interplays with elastin: collagen and MMP: TIMP ratios to maintain healthy vascular structure and function. <b>2010</b> , 6, 215-28	27
2027	Prostaglandin E2 receptor subtype EP2- and EP4-regulated gene expression profiling in human ciliary smooth muscle cells. <b>2010</b> , 42, 348-60	5
2026	Rana catesbeiana, plvora e modula#o supramolecular cicatriza#o intestinal e progn#stico no c#ncer de c#lon: uma mesma origem biol#gica para o insucesso?. <b>2010</b> , 30, 141-151	2

2025	The effects of interferon alpha2b on chemically-induced peritoneal fibrosis and on peritoneal tissue MMP-2 and TIMP-2 levels in rats. <b>2010</b> , 38, 187-94	2
2024	14-3-3 sigma associates with cell surface aminopeptidase N in the regulation of matrix metalloproteinase-1. <b>2010</b> , 123, 2996-3005	28
2023	p53 dysfunction by xeroderma pigmentosum group C defects enhance lung adenocarcinoma metastasis via increased MMP1 expression. <b>2010</b> , 70, 10422-32	26
2022	Internal cleavages of the autoinhibitory prodomain are required for membrane type 1 matrix metalloproteinase activation, although furin cleavage alone generates inactive proteinase. <b>2010</b> , 285, 27726-36	18
2021	The regulatory mechanism of extracellular Hsp90{alpha} on matrix metalloproteinase-2 processing and tumor angiogenesis. <b>2010</b> , 285, 40039-49	85
2020	Spatiotemporal induction of matrix metalloproteinase-9 transcription after discrete myocardial injury. <b>2010</b> , 24, 3819-28	11
2019	Carcinomas contain a matrix metalloproteinase-resistant isoform of type I collagen exerting selective support to invasion. <b>2010</b> , 70, 4366-74	71
2018	Selective inhibition of ADAM12 catalytic activity through engineering of tissue inhibitor of metalloproteinase 2 (TIMP-2). <b>2010</b> , 430, 79-86	32
2017	Gelatin in situ zymography on fixed, paraffin-embedded tissue: zinc and ethanol fixation preserve enzyme activity. <b>2010</b> , 58, 29-39	57
2016	Role of the netrin-like domain of procollagen C-proteinase enhancer-1 in the control of metalloproteinase activity. <b>2010</b> , 285, 15950-9	30
2015	Rac1-mediated mitochondrial H2O2 generation regulates MMP-9 gene expression in macrophages via inhibition of SP-1 and AP-1. <b>2010</b> , 285, 25062-73	60
2014	Cholesterol sulfate alters substrate preference of matrix metalloproteinase-7 and promotes degradations of pericellular laminin-332 and fibronectin. <b>2010</b> , 285, 28862-73	16
2013	Cardiac function is not significantly diminished in hearts isolated from young caveolin-1 knockout mice. <b>2010</b> , 299, H1183-9	11
2012	Gene expression profiling of dilated cardiomyopathy in older male EP4 knockout mice. <b>2010</b> , 298, H623-32	33
2011	Cyclic AMP suppresses matrix metalloproteinase-1 expression through inhibition of MAPK and GSK-3beta. <b>2010</b> , 130, 2049-56	28
2010	Recombinant gelatin microspheres: novel formulations for tissue repair?. <b>2010</b> , 16, 1811-21	19
2009	Fibrosis in the liver: acute protection and chronic disease. <b>2010</b> , 97, 151-200	25
2008	Absence or inhibition of matrix metalloproteinase-8 decreases ventilator-induced lung injury. <b>2010</b> , 43, 555-63	52

2007	Macrophages and renal fibrosis. <b>2010</b> , 30, 302-17	100
2006	Intracellular substrate cleavage: a novel dimension in the biochemistry, biology and pathology of matrix metalloproteinases. <b>2010</b> , 45, 351-423	212
2005	Are proteinases the reason for keratoconus?. <b>2010</b> , 35, 185-91	79
2004	Hydroxamic Acids: Biological Properties and Potential Uses as Therapeutic Agents. <b>2010</b> ,	
2003	Role of platelets in neuroinflammation: a wide-angle perspective. <b>2010</b> , 7, 10	68
2002	Hydrogen sulfide mitigates matrix metalloproteinase-9 activity and neurovascular permeability in hyperhomocysteinemic mice. <b>2010</b> , 56, 301-7	34
2001	Investigation of tumor-peritoneal interactions in the pathogenesis of peritoneal metastases using a novel ex vivo peritoneal model. <b>2010</b> , 164, e265-72	6
2000	Inhibition of Na(+)/H(+) exchanger 1 by 5-(N-ethyl-N-isopropyl) amiloride reduces hypoxia-induced hepatocellular carcinoma invasion and motility. <b>2010</b> , 295, 198-204	59
1999	Identification and characterization of matrix metalloproteinase-13 sequence structure and expression during embryogenesis and infection in channel catfish ( <i>Ictalurus punctatus</i> ). <b>2010</b> , 34, 590-7	13
1998	Gq protein mediates UVB-induced cyclooxygenase-2 expression by stimulating HB-EGF secretion from HaCaT human keratinocytes. <b>2010</b> , 393, 190-5	9
1997	The regulatory mechanism of Hsp90alpha secretion from endothelial cells and its role in angiogenesis during wound healing. <b>2010</b> , 398, 111-7	28
1996	Myometrial cells undergo fibrotic transformation under the influence of transforming growth factor beta-3. <b>2010</b> , 93, 1500-8	63
1995	Matrix metalloproteinases: regulators of the tumor microenvironment. <b>2010</b> , 141, 52-67	3358
1994	Transcriptional regulation of TIMPs in ascending aorta aneurysms. <b>2010</b> , 126, 399-405	14
1993	HO-1 modified mesenchymal stem cells modulate MMPs/TIMPs system and adverse remodeling in infarcted myocardium. <b>2010</b> , 42, 217-22	31
1992	Silver nanoparticles induce cytotoxicity by a Trojan-horse type mechanism. <b>2010</b> , 24, 872-8	579
1991	Immunomodulation and matrix metalloproteinases in viral myocarditis. <b>2010</b> , 48, 468-73	38
1990	Design and validation of a novel splashing bioreactor system for use in mitral valve organ culture. <b>2010</b> , 38, 3280-94	11

1989	Regulation of interleukin-6 expression in human decidual cells and its potential role in chorioamnionitis. <b>2010</b> , 177, 1755-64	43
1988	Bone marrow-derived cells contribute to fibrosis in the chronically failing heart. <b>2010</b> , 176, 1735-42	82
1987	Molecular mechanism of type I collagen homotrimer resistance to mammalian collagenases. <b>2010</b> , 285, 22276-81	87
1986	Mouse models of MMP and TIMP function. <b>2010</b> , 622, 31-52	27
1985	Expression profiles of matrix metalloproteinases and their inhibitors in colonic inflammation related to pediatric inflammatory bowel disease. <b>2010</b> , 45, 862-71	46
1984	The extracellular matrix: an underexplored but important proteome. <b>2010</b> , 7, 803-6	15
1983	Ultrasensitive scanometric strategy for detection of matrix metalloproteinases using a histidine tagged peptide-Au nanoparticle probe. <b>2011</b> , 47, 2877-9	31
1982	Overcoming limitations of current antiplatelet drugs: a concerted effort for more profitable strategies of intervention. <b>2011</b> , 43, 531-44	32
1981	Chronic hyperhomocysteinemia causes vascular remodelling by instigating vein phenotype in artery. <b>2011</b> , 117, 270-82	7
1980	Anti-inflammatory effects of resveratrol and oligostilbenes from <i>Vitis thunbergii</i> var. <i>taiwaniana</i> against lipopolysaccharide-induced arthritis. <b>2011</b> , 59, 3649-56	55
1979	MMP- and TIMP-secretion by human cutaneous keratinocytes and fibroblasts--impact of coculture and hydration. <b>2011</b> , 64, 108-16	45
1978	Matrix metalloproteinase 14 overexpression reduces corneal scarring. <b>2011</b> , 18, 462-8	28
1977	Multitargeting by curcumin as revealed by molecular interaction studies. <b>2011</b> , 28, 1937-55	434
1976	Regulation of Endothelial Barrier Function. <b>2011</b> , 3, 1-146	21
1975	Matrix metalloproteinases: targets for doxycycline to prevent the vascular alterations of hypertension. <b>2011</b> , 64, 567-72	67
1974	IMMUNOLOGY AND RHEUMATIC DISEASES. <b>2011</b> , 16-52	
1973	Status of research on matrix metalloproteinases (MMPs) in India. <b>2011</b> , 15, 671-5	
1972	Abruption-associated prematurity. <b>2011</b> , 38, 407-21	25

1971	Suppression of tissue inhibitors of metalloproteinases may reverse severe pulmonary arterial hypertension. <b>2011</b> , 13, 499-502	3
1970	Biomarkers in aortic dissection. <b>2011</b> , 412, 688-95	39
1969	Gastric cancer - The role of matrix metalloproteinases in tumor progression. <b>2011</b> , 412, 1725-30	47
1968	Metalloproteinases in metabolic syndrome. <b>2011</b> , 412, 1731-9	37
1967	Interleukin-17F affects cartilage matrix turnover by increasing the expression of collagenases and stromelysin-1 and by decreasing the expression of their inhibitors and extracellular matrix components in chondrocytes. <b>2011</b> , 56, 376-86	22
1966	Titanium surface topography affects collagen biosynthesis of adherent cells. <b>2011</b> , 49, 463-72	45
1965	Opposing roles of PARP-1 in MMP-9 and TIMP-2 expression and mast cell degranulation in dyslipidemic dilated cardiomyopathy. <b>2011</b> , 20, e57-68	18
1964	Difference in expression of collagen type I and matrix metalloproteinase-1 in uterosacral ligaments of women with and without pelvic organ prolapse. <b>2011</b> , 155, 225-8	35
1963	ERK/MAPK pathways play critical roles in EGFR ligands-induced MMP1 expression. <b>2011</b> , 407, 680-6	35
1962	Cardiac extracellular matrix tenascin-C deposition during fibronectin degradation. <b>2011</b> , 409, 321-7	14
1961	The interface between catalytic and hemopexin domains in matrix metalloproteinase-1 conceals a collagen binding exosite. <b>2011</b> , 286, 45073-82	42
1960	The role of proteases, endoplasmic reticulum stress and SERPINA1 heterozygosity in lung disease and $\alpha$ 1 anti-trypsin deficiency. <b>2011</b> , 5, 395-411	15
1959	Differential in vivo zymography: a method for observing matrix metalloproteinase activity in the zebrafish embryo. <b>2011</b> , 30, 169-77	18
1958	Bovine endometrial metalloproteinases MMP14 and MMP2 and the metalloproteinase inhibitor TIMP2 participate in maternal preparation of pregnancy. <b>2011</b> , 332, 48-57	45
1957	Using 18F-FDG microPET imaging to measure the inhibitory effects of Clematis chinensis Osbeck on the pro-inflammatory and degradative mediators associated with inflammatory arthritis. <b>2011</b> , 136, 511-7	13
1956	Ancylostoma ceylanicum excretory-secretory protein 2 adopts a netrin-like fold and defines a novel family of nematode proteins. <b>2011</b> , 408, 9-17	12
1955	Deficient degradation of homotrimeric type I collagen, $\alpha$ 1(I)3 glomerulopathy in oim mice. <b>2011</b> , 104, 373-82	8
1954	Mast cells and matrix metalloproteinase 9 expression in actinic cheilitis and lip squamous cell carcinoma. <b>2011</b> , 112, 342-8	20

1953	Comparative analysis of the immunohistochemical expression of collagen IV, MMP-9, and TIMP-2 in odontogenic cysts and tumors. <b>2011</b> , 112, 468-75	36
1952	Immunohistochemical expression of matrix metalloproteinases 1, 2, 7, 9, and 26 in the calcifying cystic odontogenic tumor. <b>2011</b> , 112, 609-15	6
1951	Influence of energy balance on the somatotrophic axis and matrix metalloproteinase expression in the endometrium of the postpartum dairy cow. <b>2011</b> , 141, 269-81	82
1950	Ethanol consumption increases the expression of endothelial nitric oxide synthase, inducible nitric oxide synthase and metalloproteinases in the rat kidney. <b>2012</b> , 64, 68-76	17
1949	Alterations in Ventricular Structure. <b>2011</b> , 232-253	1
1948	Role of Matrix Metalloproteinases in Tumor Invasion and Metastasis. 183-190	
1947	Molecular mechanisms and in vivo mouse models of skin aging associated with dermal matrix alterations. <b>2011</b> , 27, 1-8	78
1946	Relationship Between MMP-1, MMP-9, TIMP-1, IL-6 and Risk Factors, Clinical Presentation, Extent and Severity of Atherosclerotic Coronary Artery Disease. <b>2011</b> , 5, 110-6	22
1945	Myocardial Basis for Heart Failure. <b>2011</b> , 73-84	1
1944	Protein Signatures in Human MDA-MB-231 Breast Cancer Cells Indicating a More Invasive Phenotype Following Knockdown of Human Endometase/Matrilysin-2 by siRNA. <b>2011</b> , 2, 165-76	6
1943	Deletion of peroxiredoxin 6 potentiates lipopolysaccharide-induced acute lung injury in mice. <b>2011</b> , 39, 756-64	48
1942	[Approach for therapeutic targets of osteoarthritis]. <b>2011</b> , 138, 22-5	
1941	The gene expression profile of matrix metalloproteinases and their inhibitors in children with Henoch-Schölllein purpura. <b>2011</b> , 164, 1348-55	12
1940	Diverse patterns of cyclooxygenase-independent metalloproteinase gene regulation in human monocytes. <b>2011</b> , 163, 1679-90	30
1939	Localizing matrix metalloproteinase activities in the pericellular environment. <b>2011</b> , 278, 2-15	92
1938	Roles of matrix metalloproteinases in cancer progression and their pharmacological targeting. <b>2011</b> , 278, 16-27	1066
1937	Matrix metalloproteinases in health and disease: regulation by melatonin. <b>2011</b> , 50, 8-20	73
1936	The role of pro-inflammatory and immunoregulatory cytokines in tendon healing and rupture: new insights. <b>2011</b> , 21, 337-51	96

1935	Inhibition of matrix metalloproteinases reduces ischemia-reperfusion acute kidney injury. <b>2011</b> , 91, 170-80	69
1934	Mechanotransduction and cartilage integrity. <b>2011</b> , 1240, 32-7	65
1933	Type-specific dysregulation of matrix metalloproteinases and their tissue inhibitors in end-stage heart failure patients: relationship between MMP-10 and LV remodelling. <b>2011</b> , 15, 773-82	17
1932	Matrix metalloproteinases: protective roles in cancer. <b>2011</b> , 15, 1254-65	127
1931	Matrix metalloproteinase-8 overexpression prevents proper tissue repair. <b>2011</b> , 150, 897-906	33
1930	Expression of matrix metalloproteinases-2, -8, -13, -26, and tissue inhibitors of metalloproteinase-1 in human osteosarcoma. <b>2011</b> , 20, e18-22	48
1929	Assays for determination of matrix metalloproteinases and their activity. <b>2011</b> , 30, 1819-1832	27
1928	Altered matrix metalloproteinases and tissue inhibitors of metalloproteinases in embryos from diabetic rats during early organogenesis. <b>2011</b> , 32, 449-62	13
1927	The promise of cardiovascular biomarkers in assessing children with cardiac disease and in predicting cardiovascular events in adults. <b>2011</b> , 32, 25-34	6
1926	Matrix metalloproteinase-9 controls proliferation of NG2+ progenitor cells immediately after spinal cord injury. <b>2011</b> , 231, 236-46	34
1925	Plaque oxysterols induce unbalanced up-regulation of matrix metalloproteinase-9 in macrophagic cells through redox-sensitive signaling pathways: Implications regarding the vulnerability of atherosclerotic lesions. <b>2011</b> , 51, 844-55	38
1924	Inhibition of human leukocyte elastase, plasmin and matrix metalloproteinases by oleic acid and oleoyl-galardin derivative(s). <b>2011</b> , 81, 626-35	7
1923	Identification of novel plasmin inhibitors possessing nitrile moiety as warhead. <b>2011</b> , 21, 6305-9	9
1922	Identification of MMP-9 specific microRNA expression profile as potential targets of anti-invasion therapy in glioblastoma multiforme. <b>2011</b> , 1411, 108-15	111
1921	Structural basis for matrix metalloproteinase-2 (MMP-2)-selective inhibitory action of $\beta$ -amyloid precursor protein-derived inhibitor. <b>2011</b> , 286, 33236-43	39
1920	Intradomain cleavage of inhibitory prodomain is essential to protumorigenic function of membrane type-1 matrix metalloproteinase (MT1-MMP) in vivo. <b>2011</b> , 286, 34215-23	13
1919	Matrix Metalloproteinases and Their Inhibitors in Turnover and Degradation of Extracellular Matrix. <b>2011</b> , 1-22	4
1918	Expression of global oxidative stress and matrix metalloproteinases is associated with rett syndrome. <b>2011</b> , 5, 141-145	1

1917	CagA phosphorylation-dependent MMP-9 expression in gastric epithelial cells. <b>2011</b> , 16, 276-83	10
1916	Matrix metalloproteinases and membrane damage markers in sera of patients with acute myocardial infarction. <b>2011</b> , 350, 163-8	8
1915	The growth pattern of transplanted normal and nodular hepatocytes. <b>2011</b> , 135, 581-91	2
1914	Roles of matrix metalloproteinases in the etiology of inguinal hernia. <b>2011</b> , 15, 667-71	21
1913	Neutrophil granulocyte derived MMP-9 is a VEGF independent functional component of the angiogenic switch in pancreatic ductal adenocarcinoma. <b>2011</b> , 14, 235-43	92
1912	MT1-MMP and RECK: opposite and essential roles in hematopoietic stem and progenitor cell retention and migration. <b>2011</b> , 89, 1167-74	18
1911	The ins and outs of hematopoietic stem cells: studies to improve transplantation outcomes. <b>2011</b> , 7, 590-607	52
1910	Blood-brain barrier pathophysiology in traumatic brain injury. <b>2011</b> , 2, 492-516	400
1909	Novel association patterns of cardiac remodeling markers in patients with essential hypertension and atrial fibrillation. <b>2011</b> , 11, 77	23
1908	Impact of PINCH expression on survival in colorectal cancer patients. <b>2011</b> , 11, 103	8
1907	MMP-1 expression has an independent prognostic value in breast cancer. <b>2011</b> , 11, 348	65
1906	Ageing and smoking contribute to plasma surfactant proteins and protease imbalance with correlations to airway obstruction. <b>2011</b> , 11, 19	31
1905	Comprehensive gene expression profiling and functional analysis of matrix metalloproteinases and TIMPs, and identification of ADAM-10 gene expression, in a corneal model of epithelial resurfacing. <b>2011</b> , 226, 1461-70	33
1904	Regenerative Medicine: Reconstruction of Tracheal and Pharyngeal Mucosal Defects in Head and Neck Surgery. <b>2011</b> , 309-340	
1903	A peptidomimetic inhibitor of matrix metalloproteinases containing a tetherable linker group. <b>2011</b> , 96, 663-72	13
1902	Selective non zinc binding inhibitors of MMP13. <b>2011</b> , 21, 4215-9	19
1901	Nobiletin metabolites: synthesis and inhibitory activity against matrix metalloproteinase-9 production. <b>2011</b> , 21, 4540-4	24
1900	An overview of tissue and whole organ decellularization processes. <b>2011</b> , 32, 3233-43	2038



1899	The role of collagen receptors Endo180 and DDR-2 in the foreign body reaction against non-crosslinked collagen and gelatin. <b>2011</b> , 32, 1339-50	12
1898	Interleukin-6 promotes pulmonary emphysema associated with apoptosis in mice. <b>2011</b> , 45, 720-30	56
1897	Collagenase matrix metalloproteinase-8 expressed in atherosclerotic carotid plaques is associated with systemic cardiovascular outcome. <b>2011</b> , 32, 2314-25	53
1896	Release of matrix metalloproteinases-1 and -2, but not -9, from activated platelets measured by enzyme-linked immunosorbent assay. <b>2011</b> , 22, 572-8	23
1895	Reduced TIMP-2 in hypoxia enhances angiogenesis. <b>2011</b> , 300, C557-66	15
1894	Role of metalloproteinases in rotator cuff tear. <b>2011</b> , 19, 207-12	36
1893	MT1-MMP regulates the turnover and endocytosis of extracellular matrix fibronectin. <b>2011</b> , 124, 4039-50	86
1892	Characterization of the dimerization interface of membrane type 4 (MT4)-matrix metalloproteinase. <b>2011</b> , 286, 33178-89	18
1891	The effects of a plant proteinase inhibitor from <i>Enterolobium contortisiliquum</i> on human tumor cell lines. <b>2011</b> , 392, 327-36	24
1890	Epigenetic regulation of matrix metalloproteinases and their collagen substrates in cancer. <b>2011</b> , 2, 135-147	49
1889	Characterization of dense artificial connective tissues generated in a newly designed bioreactor. <b>2011</b> , 52, 340-52	4
1888	Matrix metalloproteinase (MMP)-3 activates MMP-9 mediated vascular smooth muscle cell migration and neointima formation in mice. <b>2011</b> , 31, e35-44	109
1887	Circulating levels of matrix metalloproteinase-9 and abdominal aortic pathology: from the Dallas Heart Study. <b>2011</b> , 16, 339-45	10
1886	Potential role of fibroblast-like synoviocytes in joint damage induced by <i>Brucella abortus</i> infection through production and induction of matrix metalloproteinases. <b>2011</b> , 79, 3619-32	54
1885	Functional genomics reveals the induction of inflammatory response and metalloproteinase gene expression during lethal Ebola virus infection. <b>2011</b> , 85, 9060-8	32
1884	Human leucine zipper protein sLZIP induces migration and invasion of cervical cancer cells via expression of matrix metalloproteinase-9. <b>2011</b> , 286, 42072-42081	20
1883	Dynamic interdomain interactions contribute to the inhibition of matrix metalloproteinases by tissue inhibitors of metalloproteinases. <b>2011</b> , 286, 21002-12	11
1882	Identification of hepsin and protein disulfide isomerase A3 as targets of gelatinolytic action in rat ovarian granulosa cells during the periovulatory period. <b>2011</b> , 85, 858-66	6

1881	Expression of matrix metalloproteinase-2 and -9 and membrane-type 1 matrix metalloproteinase in melanocytic tumors of dogs and canine melanoma cell lines. <b>2011</b> , 72, 1087-96	8
1880	Hyaluronic acid and thrombin upregulate MT1-MMP through PI3K and Rac-1 signaling and prime the homing-related responses of cord blood hematopoietic stem/progenitor cells. <b>2011</b> , 20, 19-30	36
1879	TGF- $\beta$ promoted MMP-2 mediated wound healing of anterior cruciate ligament fibroblasts through NF- $\kappa$ B. <b>2011</b> , 52, 218-25	48
1878	Doxycycline, a matrix metalloprotease inhibitor, reduces vascular remodeling and damage after cerebral ischemia in stroke-prone spontaneously hypertensive rats. <b>2011</b> , 301, H87-97	57
1877	Cigarette smoke-induced lung emphysema in mice is associated with prolyl endopeptidase, an enzyme involved in collagen breakdown. <b>2011</b> , 300, L255-65	62
1876	(-)-Epigallocatechin-3-gallate down-regulates EGFR, MMP-2, MMP-9 and EMMPRIN and inhibits the invasion of MCF-7 tamoxifen-resistant cells. <b>2011</b> , 31, 99-108	67
1875	Ixora parviflora Protects against UVB-Induced Photoaging by Inhibiting the Expression of MMPs, MAP Kinases, and COX-2 and by Promoting Type I Procollagen Synthesis. <b>2012</b> , 2012, 417346	27
1874	Structure-based design, synthesis, molecular docking, and biological activities of 2-(3-benzoylphenyl) propanoic acid derivatives as dual mechanism drugs. <b>2012</b> , 4, 43-50	14
1873	Involvement of matrix metalloproteinase-2 in the development of renal interstitial fibrosis in mouse obstructive nephropathy. <b>2012</b> , 92, 1149-60	66
1872	Diabetes mellitus and thoracic aortic disease: are people with diabetes mellitus protected from acute aortic dissection?. <b>2012</b> , 1, e001404	8
1871	Matrix metalloproteinase-9 activity detected in body fluids is the result of two different enzyme forms. <b>2012</b> , 151, 493-9	16
1870	Folic acid and safflower oil supplementation interacts and protects embryos from maternal diabetes-induced damage. <b>2012</b> , 18, 253-64	12
1869	Tissue remodeling in the female reproductive tract--a complex process becomes more complex: the role of Hox genes. <b>2012</b> , 86, 98	5
1868	MT5-MMP, ADAM-10, and N-cadherin act in concert to facilitate synapse reorganization after traumatic brain injury. <b>2012</b> , 29, 1922-40	44
1867	Monitoring sinew contraction during formation of tissue-engineered fibrin-based ligament constructs. <b>2012</b> , 18, 1596-607	15
1866	Domain specific overexpression of TIMP-2 and TIMP-3 reveals MMP-independent functions of TIMPs during <i>Xenopus laevis</i> development. <b>2012</b> , 90, 585-95	7
1865	Tumor microenvironment and breast cancer progression: a complex scenario. <b>2012</b> , 13, 14-24	41
1864	Tissue inhibitor of metalloproteinases-1 protects human neurons from staurosporine and HIV-1-induced apoptosis: mechanisms and relevance to HIV-1-associated dementia. <b>2012</b> , 3, e332	36

1863	MT1-MMP protects breast carcinoma cells against type I collagen-induced apoptosis. <b>2012</b> , 31, 480-93	49
1862	Multivalent pseudopeptides targeting cell surface nucleoproteins inhibit cancer cell invasion through tissue inhibitor of metalloproteinases 3 (TIMP-3) release. <b>2012</b> , 287, 43685-93	34
1861	Defining requirements for collagenase cleavage in collagen type III using a bacterial collagen system. <b>2012</b> , 287, 22988-97	53
1860	Dimerization of matrix metalloproteinase-2 (MMP-2): functional implication in MMP-2 activation. <b>2012</b> , 287, 22643-53	24
1859	Carbodiimide cross-linking inactivates soluble and matrix-bound MMPs, in vitro. <b>2012</b> , 91, 192-6	80
1858	Host-parasite interaction: parasite-derived and -induced proteases that degrade human extracellular matrix. <b>2012</b> , 2012, 748206	51
1857	Recent findings on the role of gelatinases (matrix metalloproteinase-2 and -9) in osteoarthritis. <b>2012</b> , 2012, 834208	38
1856	Contribution of circulating biomarkers to unravel the role of extracellular matrix in hypertensive cardiac remodelling. <b>2012</b> , 30, 34-7	2
1855	Urinary matrix metalloproteinase activity in diabetic kidney disease: a potential marker of disease progression. <b>2012</b> , 2, 219-32	21
1854	MiR-218 reverses high invasiveness of glioblastoma cells by targeting the oncogenic transcription factor LEF1. <b>2012</b> , 28, 1013-21	83
1853	Expression of ADAMTS-1, ADAMTS-4, ADAMTS-5 and TIMP3 by hepatocellular carcinoma cell lines. <b>2012</b> , 41, 1043-9	16
1852	Magnesium reduces matrix metalloproteinase-9, but not glial fibrillary acidic protein, in cardiac surgery patients. <b>2012</b> , 7, 349-359	2
1851	[Evaluation for antithrombotic agents by a thrombotic model in animals]. <b>2012</b> , 132, 1019-24	
1850	Effects of macelignan isolated from <i>Myristica fragrans</i> (Nutmeg) on expression of matrix metalloproteinase-1 and type I procollagen in UVB-irradiated human skin fibroblasts. <b>2012</b> , 35, 1669-75	17
1849	Matrix metalloproteinase-9 gene polymorphisms and chronic kidney disease. <b>2012</b> , 36, 444-50	9
1848	Matrix metalloproteinases in kidney homeostasis and diseases. <b>2012</b> , 302, F1351-61	156
1847	Matrix metalloproteinase-3 in the central nervous system: a look on the bright side. <b>2012</b> , 123, 203-16	72
1846	The Gelatinases and Their Inhibitors: The Structure-Activity Relationships. <b>2012</b> , 57-82	1

1845	Binding of amelogenin to MMP-9 and their co-expression in developing mouse teeth. <b>2012</b> , 43, 473-85	24
1844	A novel antimicrobial lectin from <i>Eugenia malaccensis</i> that stimulates cutaneous healing in mice model. <b>2012</b> , 20, 315-22	11
1843	Design and Synthesis of a Peptidyl-FRET Substrate for Tumor Marker Enzyme human Matrix Metalloprotease-2 (hMMP-2). <b>2012</b> , 18, 207-215	3
1842	META060 attenuates TNF- $\alpha$ -activated inflammation, endothelial-monocyte interactions, and matrix metalloproteinase-9 expression, and inhibits NF- $\kappa$ B and AP-1 in THP-1 monocytes. <b>2012</b> , 223, 130-6	30
1841	Meprins process matrix metalloproteinase-9 (MMP-9)/gelatinase B and enhance the activation kinetics by MMP-3. <b>2012</b> , 586, 4264-9	18
1840	Expression of soluble and functional full-length human matrix metalloproteinase-2 in <i>Escherichia coli</i> . <b>2012</b> , 157, 20-4	20
1839	Iatrogenic extracellular matrix disruption as a local trigger for postoperative ileus. <b>2012</b> , 178, 632-9	8
1838	Immunoreactivity for TIMP-2 is associated with a favorable prognosis in endometrial carcinoma. <b>2012</b> , 33, 935-41	12
1837	<i>Enterolobium contortisiliquum</i> trypsin inhibitor (EcTI), a plant proteinase inhibitor, decreases in vitro cell adhesion and invasion by inhibition of Src protein-focal adhesion kinase (FAK) signaling pathways. <b>2012</b> , 287, 170-182	27
1836	Matrix metalloproteinases: potential therapy to prevent the development of second malignancies after breast radiotherapy. <b>2012</b> , 21, e143-51	55
1835	Polymorphisms of Matrix Metalloproteinases (MMP) in COPD. <b>2012</b> , 26, 111-119	5
1834	Nascent vessel elongation rate is inversely related to diameter in in vitro angiogenesis. <b>2012</b> , 4, 1081-9	15
1833	Ingestion of proteoglycan fraction from shark cartilage increases serum inhibitory activity against matrix metalloproteinase-9 and suppresses development of N-nitrosobis(2-oxopropyl)amine-induced pancreatic duct carcinogenesis in hamster. <b>2012</b> , 60, 940-5	2
1832	Molecular and cellular targets of the MRI contrast agent P947 for atherosclerosis imaging. <b>2012</b> , 9, 850-61	27
1831	ECM roles in the function of metabolic tissues. <b>2012</b> , 23, 16-22	53
1830	Antibodies targeting the catalytic zinc complex of activated matrix metalloproteinases show therapeutic potential. <b>2011</b> , 18, 143-7	104
1829	Single nucleotide polymorphism -799C/T in matrix metalloproteinase-8 promoter region in arterial disease. <b>2012</b> , 18, 511-7	12
1828	Matrix metalloproteinase-9 in a unique proteoglycan form in avian embryonic growth plate cartilage. <b>2012</b> , 520, 42-50	

1827	Effect of strontium-substituted biphasic calcium phosphate on inflammatory mediators production by human monocytes. <b>2012</b> , 8, 3113-9	58
1826	Human matrix metalloproteinases: an ubiquitarian class of enzymes involved in several pathological processes. <b>2012</b> , 33, 119-208	157
1825	Drugs of the future for Peyronie's disease. <b>2012</b> , 78, 305-11	4
1824	Inhibition of endogenous dentin matrix metalloproteinases by ethylenediaminetetraacetic acid. <b>2012</b> , 38, 62-5	68
1823	Metalloproteases and rotator cuff disease. <b>2012</b> , 21, 200-8	86
1822	Proteases involved in cartilage matrix degradation in osteoarthritis. <b>2012</b> , 1824, 133-45	346
1821	Regulation of matrix metalloproteinases activity studied in human endometrium as a paradigm of cyclic tissue breakdown and regeneration. <b>2012</b> , 1824, 146-56	75
1820	Changes in plasma profiles of matrix metalloproteinases (MMPs) and tissue inhibitors of MMPs in stress-induced cardiomyopathy. <b>2012</b> , 18, 487-92	16
1819	Plasma concentrations of interleukin-6, C-reactive protein, tumor necrosis factor- $\alpha$ and matrix metalloproteinase-9 in aortic dissection. <b>2012</b> , 413, 198-202	49
1818	Circulating matrix metalloproteinases and their inhibitors in hypertension. <b>2012</b> , 413, 656-62	60
1817	Matrix metalloproteinase inhibitors as investigative tools in the pathogenesis and management of vascular disease. <b>2012</b> , 103, 209-79	105
1816	Specificity of binding with matrix metalloproteinases. <b>2012</b> , 103, 35-56	30
1815	Synthesis and evaluation of tripeptidic plasmin inhibitors with nitrile as warhead. <b>2012</b> , 18, 620-5	7
1814	Matrix metalloproteinases 2 and 9 increase permeability of sheep pleura in vitro. <b>2012</b> , 12, 2	3
1813	Immunodominant fragments of myelin basic protein initiate T cell-dependent pain. <b>2012</b> , 9, 119	43
1812	The effect of inositol hexaphosphate on the expression of selected metalloproteinases and their tissue inhibitors in IL-1 $\beta$ -stimulated colon cancer cells. <b>2012</b> , 27, 1419-28	27
1811	Inflammation in atherosclerosis: a cause or a result of vascular disorders?. <b>2012</b> , 16, 1978-90	95
1810	The relative contribution of calcium, zinc and oxidation-based cross-links to the stiffness of Arion subfuscus glue. <b>2013</b> , 216, 1475-83	28

1809	Molecular mechanisms of hookworm disease: stealth, virulence, and vaccines. <b>2012</b> , 130, 13-21	29
1808	Usefulness of admission matrix metalloproteinase 9 as a predictor of early mortality after cardiopulmonary resuscitation in cardiac arrest patients. <b>2012</b> , 30, 1804-9	9
1807	CIL-102 induces matrix metalloproteinase-2 (MMP-2)/MMP-9 down-regulation via simultaneous suppression of genetic transcription and mRNA stability. <b>2012</b> , 44, 2212-22	10
1806	Interleukin-1 beta and transforming growth factor-beta 3 cooperate to activate matrix metalloproteinase expression and invasiveness in A549 lung adenocarcinoma cells. <b>2012</b> , 325, 220-6	26
1805	Loss of epidermal MMP-14 expression interferes with angiogenesis but not with re-epithelialization. <b>2012</b> , 91, 748-56	25
1804	Cardiomyopathy in the dystrophin/utrophin-deficient mouse model of severe muscular dystrophy is characterized by dysregulation of matrix metalloproteinases. <b>2012</b> , 22, 1006-14	16
1803	The liver fluke <i>Opisthorchis viverrini</i> expresses nitric oxide synthase but not gelatinases. <b>2012</b> , 61, 112-7	5
1802	Protease-activated drug development. <b>2012</b> , 2, 156-78	187
1801	Inhibitors of zinc-dependent metalloproteases hinder sperm passage through the cumulus oophorus during porcine fertilization in vitro. <b>2012</b> , 144, 687-97	14
1800	Arsenic trioxide inhibits HCCLM3 cells invasion through de novo ceramide synthesis and sphingomyelinase-induced ceramide production. <b>2012</b> , 29, 2251-60	5
1799	Biomarkers. <b>2012</b> , 8, 207-24	7
1798	Changes in the myocardial interstitium and contribution to the progression of heart failure. <b>2012</b> , 8, 7-20	39
1797	Role of matrix metalloproteinase-2 in recovery after tubular damage in acute kidney injury in mice. <b>2012</b> , 122, 23-35	19
1796	The MMP-9/TIMP-1 axis controls the status of differentiation and function of myelin-forming Schwann cells in nerve regeneration. <b>2012</b> , 7, e33664	68
1795	Matrix metalloproteinase-2 promotes $\alpha 5$ integrin-mediated adhesion and migration of human melanoma cells by cleaving fibronectin. <b>2012</b> , 7, e41591	64
1794	Activity-based labeling of matrix metalloproteinases in living vertebrate embryos. <b>2012</b> , 7, e43434	13
1793	DIDS prevents ischemic membrane degradation in cultured hippocampal neurons by inhibiting matrix metalloproteinase release. <b>2012</b> , 7, e43995	8
1792	Plaque rupture complications in murine atherosclerotic vein grafts can be prevented by TIMP-1 overexpression. <b>2012</b> , 7, e47134	32

1791	Imbalances between matrix metalloproteinases (MMPs) and tissue inhibitor of metalloproteinases (TIMPs) in maternal serum during preterm labor. <b>2012</b> , 7, e49042	38
1790	Book review Bayes de Luna A, Fiol-Sala M, Antman M. The 12 Lead ECG in ST Elevation Myocardial Infarction: A practical approach for clinicians Wiley-Blackwell Publishing, 2006. 112 pages. ISBN-10:1405157860 RRP: £18.50 (paperback). <b>2012</b> , 4, 548-548	
1789	Assessment of apoptosis and MMP-1, MMP-3 and TIMP-2 expression in tibial hyaline cartilage after viable medial meniscus transplantation in the rabbit. <b>2012</b> , 8, 1108-14	8
1788	The role of inflammation and matrix metalloproteinases in equine endometriosis. <b>2012</b> , 13, 171-7	18
1787	Correlations between coronary plaque tissue composition assessed by virtual histology and blood levels of biomarkers for coronary artery disease. <b>2012</b> , 53, 508-16	10
1786	CysteinyI cathepsins: multifunctional enzymes in cardiovascular disease. <b>2012</b> , 48, 77-85	15
1785	Matrix metalloproteinase-10 (MMP-10) interaction with tissue inhibitors of metalloproteinases TIMP-1 and TIMP-2: binding studies and crystal structure. <b>2012</b> , 287, 15935-46	68
1784	Correlation between serum matrix metalloproteinase and antigenemia levels in patients infected with rotavirus. <b>2012</b> , 84, 986-91	4
1783	Association of MMP3 and TIMP2 promoter polymorphisms with nonsyndromic oral clefts. <b>2012</b> , 94, 540-8	25
1782	Molecular Pathology of Cancer Metastasis: Suggestions for Future Therapy. <b>2012</b> , 469-515	2
1781	Ovine synovial membrane-derived mesenchymal progenitor cells retain the phenotype of the original tissue that was exposed to in-vivo inflammation: evidence for a suppressed chondrogenic differentiation potential of the cells. <b>2012</b> , 61, 599-608	27
1780	Urinary matrix metalloproteinases-2/9 in healthy infants and haemangioma patients prior to and during propranolol therapy. <b>2012</b> , 171, 941-6	12
1779	Effect of gelatinase inhibition on adipogenesis and adipose tissue development. <b>2012</b> , 39, 49-56	16
1778	Matrix metalloproteinases in plants: a brief overview. <b>2012</b> , 145, 196-202	32
1777	Single-molecule tracking of collagenase on native type I collagen fibrils reveals degradation mechanism. <b>2012</b> , 22, 1047-56	66
1776	Histone deacetylase inhibitors upregulate MMP11 gene expression through Sp1/Smad complexes in human colon adenocarcinoma cells. <b>2012</b> , 1823, 570-81	15
1775	Molecular mechanism of force induced stabilization of collagen against enzymatic breakdown. <b>2012</b> , 33, 3852-9	51
1774	The endocrine and paracrine control of menstruation. <b>2012</b> , 358, 197-207	66

1773	Homocysteine enhances MMP-9 production in murine macrophages via ERK and Akt signaling pathways. <b>2012</b> , 260, 89-94	26
1772	Matrix metalloproteinases as therapeutic targets in protozoan parasitic infections. <b>2012</b> , 133, 257-79	75
1771	NUR77 inhibits the expression of TIMP2 and increases the migration and invasion of HTR-8/SVneo cells induced by CYR61. <b>2012</b> , 33, 561-7	16
1770	Matrix metalloproteinase inhibition therapy for vascular diseases. <b>2012</b> , 56, 232-44	123
1769	Overexpression of GRP78 in complete hydatidiform moles. <b>2012</b> , 125, 580-4	2
1768	Matrix metalloproteinase-2, -9, -12, and tissue inhibitor of metalloproteinase 2 gene polymorphisms and cutaneous expressions in patients with Behçet's disease. <b>2012</b> , 79, 333-9	8
1767	Regulation of myocardial matrix metalloproteinase expression and activity by cardiac fibroblasts. <b>2012</b> , 64, 143-50	35
1766	Mechanical forces-induced human osteoblasts differentiation involves MMP-2/MMP-13/MT1-MMP proteolytic cascade. <b>2012</b> , 113, 760-72	24
1765	MMP-3 provokes CTGF/CCN2 production independently of protease activity and dependently on dynamin-related endocytosis, which contributes to human dental pulp cell migration. <b>2012</b> , 113, 1348-58	21
1764	Matrix metalloproteinase-9 as new biomarkers of severity in multiple organ dysfunction syndrome caused by trauma and infection. <b>2012</b> , 360, 271-7	26
1763	Restoration of caveolin-1 expression suppresses growth, membrane-type-4 metalloproteinase expression and metastasis-associated activities in colon cancer cells. <b>2013</b> , 52, 859-70	25
1762	Triglyceride down-regulates matrix metalloproteinase-12 expression in THP-1 macrophages through activation of the NF- $\kappa$ B pathway. <b>2013</b> , 35, 405-409	2
1761	Matrix metalloproteinases in cancer: their value as diagnostic and prognostic markers and therapeutic targets. <b>2013</b> , 34, 2041-51	272
1760	Effect of metabolic syndrome risk factors and MMP-2 genetic variations on circulating MMP-2 levels in childhood obesity. <b>2013</b> , 40, 2697-704	20
1759	Development of Latent Cytokine Fusion Proteins. <b>2013</b> , 237-252	1
1758	Synergistic inhibition of breast cancer metastasis by silibinin-loaded lipid nanoparticles containing TPGS. <b>2013</b> , 454, 21-30	92
1757	Anti-cancer Potential of All-trans Retinoic Acid (ATRA): A Review. <b>2013</b> , 66, 1-7	5
1756	Effects of exercise on markers of venous remodeling in lungs of horses. <b>2013</b> , 74, 1231-8	5



1755	Metalloproteinases and their natural inhibitors in inflammation and immunity. <b>2013</b> , 13, 649-65	363
1754	Hydroxamic Acids: An Important Class of Metalloenzyme Inhibitors. <b>2013</b> , 683-708	5
1753	Zinc in Biology. <b>2013</b> , 179-205	1
1752	MMP-7 and TIMP-1, new targets in predicting poor wound healing in apical periodontitis. <b>2013</b> , 39, 1141-6	31
1751	Zinc deficiency and its management in the pediatric population: a literature review and proposed etiologic classification. <b>2013</b> , 69, 616-624.e1	63
1750	Collaborative overexpression of matrix metalloproteinase-1 and vascular endothelial growth factor-C predicts adverse prognosis in patients with gliomas. <b>2013</b> , 37, 697-702	13
1749	Increased circulating MMP-2 levels in infertile patients with moderate and severe pelvic endometriosis. <b>2013</b> , 20, 557-62	26
1748	In an in vitro model of human tuberculosis, monocyte-microglial networks regulate matrix metalloproteinase-1 and -3 gene expression and secretion via a p38 mitogen activated protein kinase-dependent pathway. <b>2013</b> , 10, 107	7
1747	In vitro reconstitution of complexes between pro-matrix metalloproteinase-9 and the proteoglycans serglycin and versican. <b>2013</b> , 280, 2870-87	38
1746	Collagen degradation by tumor-associated trypsins. <b>2013</b> , 535, 111-4	8
1745	Interstitial collagenase, gelatinases A and B and their endogenous inhibitors in squamous cell cervical carcinomas. <b>2013</b> , 7, 294-299	0
1744	Identification of autoantigens in body fluids by combining pull-downs and organic precipitations of intact immune complexes with quantitative label-free mass spectrometry. <b>2013</b> , 12, 5656-65	13
1743	Engineering biocompatible implant surfaces. <b>2013</b> , 58, 327-381	69
1742	Role of PKC- $\eta$ NF- $\kappa$ B-MT1-MMP-mediated activation of proMMP-2 by TNF- $\alpha$ in pulmonary artery smooth muscle cells. <b>2013</b> , 153, 289-302	13
1741	Matrix metalloproteases and PAR1 activation. <b>2013</b> , 121, 431-9	125
1740	Vascular fibrosis in atherosclerosis. <b>2013</b> , 22, 401-7	104
1739	Axonal growth towards <i>Xenopus</i> skin in vitro is mediated by matrix metalloproteinase activity. <b>2013</b> , 37, 519-31	8
1738	MT2-MMP expression during early avian morphogenesis. <b>2013</b> , 296, 64-70	7

1737	A pan photoaffinity probe for detecting active forms of matrix metalloproteinases. <b>2013</b> , 14, 107-14	11
1736	Immunohistological features in adenomatoid odontogenic tumor: review of the literature and first expression and mutational analysis of E-cadherin in this unusual lesion of the jaws. <b>2013</b> , 71, 706-13	13
1735	Evaluation of gelatinases, tissue inhibitor of matrix metalloproteinase-2, and myeloperoxidase protein in healthy and inflamed human dental pulp tissue. <b>2013</b> , 39, 879-82	20
1734	Expression and regulation of metalloproteinases and their inhibitors in intervertebral disc aging and degeneration. <b>2013</b> , 13, 331-41	226
1733	Bovine lactoferricin induces TIMP-3 via the ERK1/2-Sp1 axis in human articular chondrocytes. <b>2013</b> , 517, 12-8	15
1732	Macrophage elastase (MMP-12) in expanding murine adipose tissue. <b>2013</b> , 1830, 2954-9	12
1731	Circulating levels of matrix metalloproteinases and tissue inhibitors of metalloproteinases in patients with incisional hernia. <b>2013</b> , 21, 661-6	12
1730	Matrix metalloproteinase (MMP)-9: a proximal biomarker for cardiac remodeling and a distal biomarker for inflammation. <b>2013</b> , 139, 32-40	152
1729	Correlation of bacterial coinfection versus matrix metalloproteinase 9 and tissue inhibitor of metalloproteinase 1 expression in aortic aneurysm and atherosclerosis. <b>2013</b> , 27, 964-71	10
1728	MT1-MMP regulates MMP-2 expression and angiogenesis-related functions in human umbilical vein endothelial cells. <b>2013</b> , 437, 232-8	12
1727	Angiotensin II induces the production of MMP-3 and MMP-13 through the MAPK signaling pathways via the AT(1) receptor in osteoblasts. <b>2013</b> , 95, 922-33	32
1726	A disintegrin and metalloproteinase-12 (ADAM12): function, roles in disease progression, and clinical implications. <b>2013</b> , 1830, 4445-55	42
1725	Low transcriptional activity haplotype of matrix metalloproteinase 1 is less frequent in bicuspid aortic valve patients. <b>2013</b> , 524, 304-8	7
1724	Expression of MMP-9 in hepatic sinusoidal obstruction syndrome induced by <i>Gynura segetum</i> . <b>2013</b> , 14, 68-75	10
1723	Studies in mice reveal a role for anthrax toxin receptors in matrix metalloproteinase function and extracellular matrix homeostasis. <b>2013</b> , 5, 315-26	7
1722	3D QSAR pharmacophore-based virtual screening and molecular docking studies to identify novel matrix metalloproteinase 12 inhibitors. <b>2013</b> , 39, 385-396	11
1721	Detection of endogenous matrix metalloproteinase-12 active form with a novel broad spectrum activity-based probe. <b>2013</b> , 288, 5636-44	7
1720	Release of matrix metalloproteinase-8 during physiological trafficking and induced mobilization of human hematopoietic stem cells. <b>2013</b> , 22, 1307-18	19

1719	Cardiac resynchronization therapy in patients with chronic heart failure is associated with anti-inflammatory and anti-remodeling effects. <b>2013</b> , 46, 230-4	27
1718	Biochemistry and molecular biology of gelatinase B or matrix metalloproteinase-9 (MMP-9): the next decade. <b>2013</b> , 48, 222-72	465
1717	Dentin adhesion and MMPs: a comprehensive review. <b>2013</b> , 25, 219-41	109
1716	Matrix metalloproteinase, tissue inhibitor of metalloproteinase and transforming growth factor-beta 1 in frozen shoulder, and their changes as response to intensive stretching and supervised neglect exercise. <b>2013</b> , 18, 519-27	25
1715	Biocompatibility studies of low temperature nitrided and collagen-I coated AISI 316L austenitic stainless steel. <b>2013</b> , 24, 1501-13	15
1714	Matrix metalloproteinase-2 and -9 as promising benefactors in development, plasticity and repair of the nervous system. <b>2013</b> , 105, 60-78	115
1713	A conceptual framework for computational models of Achilles tendon homeostasis. <b>2013</b> , 5, 523-38	25
1712	The significance of matrix metalloproteinases in parasitic infections involving the central nervous system. <b>2013</b> , 2, 105-29	23
1711	A new face for old antibiotics: tetracyclines in treatment of amyloidoses. <b>2013</b> , 56, 5987-6006	63
1710	The matrix metalloproteinase inhibitor marimastat promotes neural progenitor cell differentiation into neurons by gelatinase-independent TIMP-2-dependent mechanisms. <b>2013</b> , 22, 345-58	20
1709	Lumbrokinase attenuates diabetic nephropathy through regulating extracellular matrix degradation in Streptozotocin-induced diabetic rats. <b>2013</b> , 100, 85-95	22
1708	Antifibrotic effects of a recombinant adeno-associated virus carrying small interfering RNA targeting TIMP-1 in rat liver fibrosis. <b>2013</b> , 182, 1607-16	31
1707	Effect of phosphoric acid on the degradation of human dentin matrix. <b>2013</b> , 92, 87-91	74
1706	Matrix metalloproteinases: a target in in-stent restenosis?. <b>2013</b> , 124, 49-50	0
1705	Substrate-guided proteomics enhances degradome resolution. <b>2013</b> , 6, 7-9	
1704	Matrix metalloproteinases: a dual role in breast cancer?. <b>2013</b> , 2, 353-356	1
1703	Sphingosine-1-phosphate induces VEGF-C expression through a MMP-2/FGF-1/FGFR-1-dependent pathway in endothelial cells in vitro. <b>2013</b> , 34, 360-6	15
1702	Abnormal recruitment of extracellular matrix proteins by excess Notch3 ECD: a new pathomechanism in CADASIL. <b>2013</b> , 136, 1830-45	134

1701	Tpl2 knockout keratinocytes have increased biomarkers for invasion and metastasis. <b>2013</b> , 34, 2789-98	9
1700	Extracellular matrix degradation and tissue remodeling in periprosthetic loosening and osteolysis: focus on matrix metalloproteinases, their endogenous tissue inhibitors, and the proteasome. <b>2013</b> , 2013, 230805	26
1699	Impaired coronary collateral growth in the metabolic syndrome is in part mediated by matrix metalloproteinase 12-dependent production of endostatin and angiostatin. <b>2013</b> , 33, 1339-49	16
1698	Critical role of transient activity of MT1-MMP for ECM degradation in invadopodia. <b>2013</b> , 9, e1003086	35
1697	Propolis Modifies Collagen Types I and III Accumulation in the Matrix of Burnt Tissue. <b>2013</b> , 2013, 423809	40
1696	LRP-1: a checkpoint for the extracellular matrix proteolysis. <b>2013</b> , 2013, 152163	59
1695	Circulating biomarkers of collagen metabolism in arterial hypertension: relevance of target organ damage. <b>2013</b> , 31, 1611-7	16
1694	Mycobacterial trehalose dimycolate reprograms macrophage global gene expression and activates matrix metalloproteinases. <b>2013</b> , 81, 764-76	34
1693	Matrix metalloproteinases 2 and 9 are differentially expressed in patients with indeterminate and cardiac clinical forms of Chagas disease. <b>2013</b> , 81, 3600-8	40
1692	Intracellular trafficking of the KV1.3 potassium channel is regulated by the prodomain of a matrix metalloprotease. <b>2013</b> , 288, 6451-64	16
1691	Vitamin D3 inhibits expression and activities of matrix metalloproteinase-2 and -9 in human uterine fibroid cells. <b>2013</b> , 28, 2407-16	75
1690	Metalloproteases meprin $\alpha$ and meprin $\beta$ are C- and N-procollagen proteinases important for collagen assembly and tensile strength. <b>2013</b> , 110, 14219-24	97
1689	Molecular design of a highly selective and strong protein inhibitor against matrix metalloproteinase-2 (MMP-2). <b>2013</b> , 288, 9066-76	21
1688	MicroRNA-127-5p regulates matrix metalloproteinase 13 expression and interleukin-1 $\beta$ -induced catabolic effects in human chondrocytes. <b>2013</b> , 65, 3141-52	77
1687	Intracellular regulation of matrix metalloproteinase-2 activity: new strategies in treatment and protection of heart subjected to oxidative stress. <b>2013</b> , 2013, 130451	20
1686	Matrix metalloproteinase-9: Many shades of function in cardiovascular disease. <b>2013</b> , 28, 391-403	248
1685	Fucosterol inhibits matrix metalloproteinase expression and promotes type-1 procollagen production in UVB-induced HaCaT cells. <b>2013</b> , 89, 911-8	64
1684	Altered relationship between MMP-8 and TIMP-2 in gingival crevicular fluid in adolescents with Down's syndrome. <b>2013</b> , 48, 553-62	5

1683	An acellular aortic matrix of buffalo origin crosslinked with 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride for the repair of inguinal hernia in horses. <b>2013</b> , 25, 398-402	8
1682	Incorporation of Bulky and Cationic Cyclam-Triazole Moieties into Marimastat Can Generate Potent MMP Inhibitory Activity without Inducing Cytotoxicity. <b>2013</b> , 2, 99-105	11
1681	Expression of both matrix metalloproteinase-2 and its tissue inhibitor-2 in tunica media of radial artery in uremic patients. <b>2013</b> , 35, 37-42	2
1680	Detection of a latent soluble form of membrane type 1 matrix metalloprotease bound with tissue inhibitor of matrix metalloproteinases-2 in periprosthetic tissues and fluids from loose arthroplasty endoprostheses. <b>2013</b> , 280, 6541-55	8
1679	Nicotine reduced MMP-9 expression in the primary porcine tenocytes exposed to cyclic stretch. <b>2013</b> , 31, 645-50	15
1678	Prospective potency of TGF- $\beta$ on maintenance and regeneration of periodontal tissue. <b>2013</b> , 304, 283-367	28
1677	Angiotensin-II induced hypertension and renovascular remodelling in tissue inhibitor of metalloproteinase 2 knockout mice. <b>2013</b> , 31, 2270-81; discussion 2281	30
1676	Role of Nitric Oxide Production and Matrix Protease Activity in Cruciate Ligament Degeneration. <b>2013</b> , 71-76	
1675	Suppression of carbonic anhydrase IX leads to aberrant focal adhesion and decreased invasion of tumor cells. <b>2013</b> , 29, 1147-53	45
1674	Role of matrix metalloproteinase-10 in the BMP-2 inducing osteoblastic differentiation. <b>2013</b> , 60, 1309-19	14
1673	Matrix Metalloproteinase 3/Stromelysin 1. <b>2013</b> , 763-774	6
1672	Circulating matrix metalloproteinase-2 and -9 enzyme activities in the children with ventricular septal defect. <b>2013</b> , 9, 557-63	7
1671	Effect of budesonide on fibroblast-mediated collagen gel contraction and degradation. <b>2013</b> , 6, 25-33	9
1670	Vascular Smooth Muscle. <b>2013</b> , 25-42	2
1669	Truncated active human matrix metalloproteinase-8 delivered by a chimeric adenovirus-hepatitis B virus vector ameliorates rat liver cirrhosis. <b>2013</b> , 8, e53392	19
1668	Irradiated riboflavin diminishes the aggressiveness of melanoma in vitro and in vivo. <b>2013</b> , 8, e54269	23
1667	Modeling the Insulin-Like Growth Factor System in Articular Cartilage. <b>2013</b> , 8, e66870	26
1666	CCN family member 2/connective tissue growth factor (CCN2/CTGF) has anti-aging effects that protect articular cartilage from age-related degenerative changes. <b>2013</b> , 8, e71156	33

1665	Natural haemozoin induces expression and release of human monocyte tissue inhibitor of metalloproteinase-1. <b>2013</b> , 8, e71468	15
1664	Folic acid mitigates angiotensin-II-induced blood pressure and renal remodeling. <b>2013</b> , 8, e83813	27
1663	Fluctuating roles of matrix metalloproteinase-9 in oral squamous cell carcinoma. <b>2013</b> , 2013, 920595	62
1662	Comparative effects of bone marrow mesenchymal stem cells on lipopolysaccharide-induced microglial activation. <b>2013</b> , 2013, 234179	11
1661	Metalloproteases and tendinopathy. <b>2013</b> , 3, 51-7	35
1660	DP-b99 modulates matrix metalloproteinase activity and neuronal plasticity. <b>2014</b> , 9, e99789	11
1659	Lung matrix metalloproteinase activation following partial hepatic ischemia/reperfusion injury in rats. <b>2014</b> , 2014, 867548	11
1658	Functional characterization of tissue inhibitor of metalloproteinase-1 (TIMP-1) N- and C-terminal domains during <i>Xenopus laevis</i> development. <b>2014</b> , 2014, 467907	5
1657	The effects of sulodexide on both clinical and molecular parameters in patients with mixed arterial and venous ulcers of lower limbs. <b>2014</b> , 8, 519-27	51
1656	Assessment of apoptosis, MMP-1, MMP-3, TIMP-2 expression and mechanical and biochemical properties of fresh rabbit's medial meniscus stored two weeks under tissue culture conditions. <b>2014</b> , 10, 167-73	5
1655	Application of cyclic phosphoramidate reagents in the total synthesis of natural products and biologically active molecules. <b>2014</b> , 10, 1848-77	9
1654	Effects of Egg Shell Membrane Hydrolysates on Anti-Inflammatory, Anti-Wrinkle, Anti-Microbial Activity and Moisture-Protection. <b>2014</b> , 34, 26-32	19
1653	Can vitamin D reduce the risk of uterine fibroids?. <b>2014</b> , 10, 353-8	15
1652	Effect of recombinant human keratinocyte growth factor in inducing Ras-Raf-Erk pathway-mediated cell proliferation in emphysematous mice lung. <b>2014</b> , 26, 761-71	7
1651	Developmental and extracellular matrix-remodeling processes in rosiglitazone-exposed neonatal rat cardiomyocytes. <b>2014</b> , 15, 759-74	9
1650	Matrix metalloproteinases (MMPs) and their tissue inhibitors (TIMPs) in amyotrophic lateral sclerosis (ALS). <b>2014</b> , 121, 1387-97	20
1649	Diagnostic and prognostic value of neutrophil gelatinase-associated lipocalin, matrix metalloproteinase-9, and tissue inhibitor of matrix metalloproteinases-1 for sepsis in the Emergency Department: an observational study. <b>2014</b> , 18, 634	42
1648	Soft matrix is a natural stimulator for cellular invasiveness. <b>2014</b> , 25, 457-69	43

1647	Matrix metalloproteinases in biologic samples. <b>2014</b> , 65, 199-219	8
1646	Dental Adhesives. <b>2014</b> , 199-215	
1645	Expression and vitamin D-mediated regulation of matrix metalloproteinases (MMPs) and tissue inhibitors of metalloproteinases (TIMPs) in healthy skin and in diabetic foot ulcers. <b>2014</b> , 306, 809-21	19
1644	The effects of alpha-lipoic acid on MMP-2 and MMP-9 activities in a rat renal ischemia and re-perfusion model. <b>2014</b> , 89, 304-14	21
1643	Role of MMP-2 and MMP-9 and their natural inhibitors in liver fibrosis, chronic pancreatitis and non-specific inflammatory bowel diseases. <b>2014</b> , 13, 570-9	46
1642	In vivo imaging of matrix metalloproteinase 12 and matrix metalloproteinase 13 activities in the mouse model of collagen-induced arthritis. <b>2014</b> , 66, 589-98	28
1641	Functional polymorphisms of matrix metalloproteinases 1 and 9 genes in women with spontaneous preterm birth. <b>2014</b> , 2014, 171036	12
1640	Common Matrix Metalloproteinases (MMP-8, -9, -25, and -26) Cannot Explain Dentigerous Cyst Expansion. <b>2014</b> , 8, ZC82-5	1
1639	Acknowledged signatures of matrix metalloproteinases in Takayasu's arteritis. <b>2014</b> , 2014, 827105	6
1638	Significance of semaphorin-3A and MMP-14 protein expression in non-small cell lung cancer. <b>2014</b> , 7, 1395-1400	36
1637	The extracellular matrix contributes to mechanotransduction in uterine fibroids. <b>2014</b> , 2014, 783289	52
1636	Involvement of conserved tryptophan residues for secretion of TIMP-2. <b>2014</b> , 7, 631-634	5
1635	Roles of matrix metalloproteinases and their natural inhibitors in prostate cancer progression. <b>2014</b> , 6, 1298-327	99
1634	A furin inhibitor downregulates osteosarcoma cell migration by downregulating the expression levels of MT1-MMP via the Wnt signaling pathway. <b>2014</b> , 7, 1033-1038	12
1633	Effects of glucosamine and nucleotide association on fibroblast: extracellular matrix gene expression. <b>2014</b> , 27, 689-93	11
1632	Epigenetic silencing of DACH1 induces the invasion and metastasis of gastric cancer by activating TGF- $\beta$ signalling. <b>2014</b> , 18, 2499-511	27
1631	Decellularized biological scaffolds for cardiac repair and regeneration. <b>2014</b> , 180-200	3
1630	Addressing psychosocial issues that impact women's health: proceedings of the 2014 Meeting of the North American Society for Psychosocial Obstetrics & Gynecology. <b>2014</b> , 10, 349-51	

1629	Investigation of the role of polymorphism in cutaneous malignant melanoma - a preliminary study. <b>2014</b> , 28, 904-910	5
1628	Study of the level of sputum matrix metalloproteinase-9 (MMP-9) and tissue inhibitor metalloproteinase-1 (TIMP-1) in COPD patients. <b>2014</b> , 63, 861-867	5
1627	Expression and activity of collagenases in the digital laminae of horses with carbohydrate overload-induced acute laminitis. <b>2014</b> , 28, 215-22	13
1626	Feline eosinophilic dermatoses: a retrospective immunohistochemical and ultrastructural study of extracellular matrix remodelling. <b>2014</b> , 25, 86-94, e26	3
1625	Functional relationship between matrix metalloproteinase-11 and matrix metalloproteinase-14. <b>2014</b> , 3, 1197-210	16
1624	Pericellular proteolysis by matrix metalloproteinase-7 is differentially modulated by cholesterol sulfate, sulfatide, and cardiolipin. <b>2014</b> , 281, 3346-56	7
1623	PGE2 reduces MMP-14 and increases plasminogen activator inhibitor-1 in cardiac fibroblasts. <b>2014</b> , 113-115, 62-8	9
1622	Antigen-specific B lymphocytes acquire proteoglycan aggrecan from cartilage extracellular matrix resulting in antigen presentation and CD4+ T-cell activation. <b>2014</b> , 141, 70-8	15
1621	IL-34 and macrophage colony-stimulating factor are overexpressed in hepatitis C virus fibrosis and induce profibrotic macrophages that promote collagen synthesis by hepatic stellate cells. <b>2014</b> , 60, 1879-90	89
1620	Matrix metalloproteinase (MMP)-2 and MMP-9 as inflammation markers of <i>Trichinella spiralis</i> and <i>Trichinella pseudospiralis</i> infections in mice. <b>2014</b> , 36, 540-9	19
1619	Matrix-assisted refolding, purification and activity assessment using a 'form invariant' assay for matrix metalloproteinase 2 (MMP2). <b>2014</b> , 56, 1121-32	4
1618	Matrix metalloproteinases in coronary artery disease. <b>2014</b> , 64, 1-72	38
1617	Anti-photoaging effect of aaptamine in UVB-irradiated human dermal fibroblasts and epidermal keratinocytes. <b>2014</b> , 16, 1139-47	20
1616	Approach to assessing determinants of glucose homeostasis in the conscious mouse. <b>2014</b> , 25, 522-38	28
1615	Predicting Novel Antitumor Agents: 3D-Pharmacophore Mapping of $\beta$ -biaryl Ether Sulfonamide-Based Hydroxamates as Potentially MMP-2 Inhibitors. <b>2014</b> , 33, 573-87	5
1614	Effects of reduced $\alpha$ -glycoprotein I on the expression of aortic matrix metalloproteinases and tissue inhibitor matrix metalloproteinases in diabetic mice. <b>2014</b> , 14, 114	6
1613	Downregulation of reversion-inducing cysteine-rich protein with Kazal motifs in malignant melanoma: inverse correlation with membrane-type 1-matrix metalloproteinase and tissue inhibitor of metalloproteinase 2. <b>2014</b> , 24, 32-9	8
1612	Morphofunctional characterization of decellularized vena cava as tissue engineering scaffolds. <b>2014</b> , 326, 103-11	16



1611	Proteinases and plaque rupture: unblocking the road to translation. <b>2014</b> , 25, 358-66	28
1610	Mechanisms that mediate the development of fibrosis in patients with Crohn's disease. <b>2014</b> , 20, 1250-8	77
1609	Targeted overexpression of tissue inhibitor of matrix metalloproteinase-4 modifies post-myocardial infarction remodeling in mice. <b>2014</b> , 114, 1435-45	35
1608	Evaluation of peripheral matrix metalloproteinase-1 in Parkinson's disease: a case-control study. <b>2014</b> , 124, 88-92	7
1607	Cleavage and reduced CD36 ectodomain density on heart and spleen macrophages in the spontaneously hypertensive rat. <b>2014</b> , 95, 131-42	9
1606	extract protects human skin fibroblasts against UVB-induced photoaging by inhibiting the expression of MMPs and increasing type I procollagen expression. <b>2014</b> , 1, 658-666	37
1605	Matrix metalloproteinase-1 (MMP-1) expression in rat spinal cord injury model. <b>2014</b> , 34, 1151-63	19
1604	Immunohistochemical expression of cathepsin D and matrix metalloproteinase-9 in common epidermal tumors. <b>2014</b> , 11, 87-94	
1603	Suxiaojiuxin pill enhances atherosclerotic plaque stability by modulating the MMPs/TIMPs balance in ApoE-deficient mice. <b>2014</b> , 64, 120-6	7
1602	Alcohol modulation of cardiac matrix metalloproteinases (MMPs) and tissue inhibitors of MMPs favors collagen accumulation. <b>2014</b> , 38, 448-56	38
1601	A unique C-terminal domain allows retention of matrix metalloproteinase-27 in the endoplasmic reticulum. <b>2014</b> , 15, 401-17	10
1600	Activity of MMP-9 after repair of abdominal wall defects with acellular and crosslinked bovine pericardium in rabbit. <b>2014</b> , 11, 5-13	8
1599	Matrix Metalloproteinases and Skin Inflammaging. <b>2014</b> , 255-265	
1598	Effect of insulin-resistance on circulating and adipose tissue MMP-2 and MMP-9 activity in rats fed a sucrose-rich diet. <b>2014</b> , 24, 294-300	22
1597	Down-regulation of inflammatory mediator synthesis and infiltration of inflammatory cells by MMP-3 in experimentally induced rat pulpitis. <b>2014</b> , 40, 1404-9	10
1596	Repeated exposure of mouse dermal fibroblasts at a sub-cytotoxic dose of UVB leads to premature senescence: a robust model of cellular photoaging. <b>2014</b> , 73, 49-56	24
1595	Targeting matrix metalloproteinases in heart disease: lessons from endogenous inhibitors. <b>2014</b> , 90, 7-15	36
1594	TIMP-1 polymorphisms in a Chinese Han population with intracerebral hemorrhage. <b>2014</b> , 124, 61-7	10

1593	Pacing-induced cardiomyopathy: pathophysiological insights through matrix metalloproteinases. <b>2014</b> , 19, 669-80	8
1592	The role of urinary TIMP1 and MMP9 levels in predicting vesicoureteral reflux in neonates with antenatal hydronephrosis. <b>2014</b> , 29, 871-8	7
1591	Expression profiles of angiogenesis-related proteins in prevascular three-dimensional tissues using cell-sheet engineering. <b>2014</b> , 35, 206-13	25
1590	Host matrix metalloproteinases in cerebral malaria: new kids on the block against blood-brain barrier integrity?. <b>2014</b> , 11, 1	38
1589	A systematic review of matrix metalloproteinase 9 as a biomarker of survival in patients with osteosarcoma. <b>2014</b> , 35, 5487-91	56
1588	Domain structure and function of matrix metalloprotease 23 (MMP23): role in potassium channel trafficking. <b>2014</b> , 71, 1191-210	22
1587	Molecular biomechanics of collagen molecules. <b>2014</b> , 17, 70-76	69
1586	Impaired mechanics and matrix metalloproteinases/inhibitors expression in female ascending thoracic aortic aneurysms. <b>2014</b> , 34, 154-64	33
1585	The role of metallothionein interactions with other proteins. <b>2014</b> , 14, 1343-56	50
1584	Effects of secreted factors in culture medium of annulus fibrosus cells on microvascular endothelial cells: elucidating the possible pathomechanisms of matrix degradation and nerve in-growth in disc degeneration. <b>2014</b> , 22, 344-54	31
1583	Matrix metalloproteinases and their role in psoriasis. <b>2014</b> , 540, 1-10	31
1582	EGFR and HER2 exert distinct roles on colon cancer cell functional properties and expression of matrix macromolecules. <b>2014</b> , 1840, 2651-61	17
1581	Cardiac matrix remodeling and heart failure. <b>2014</b> , 3-26	1
1580	Immunohistochemical analysis of matrix metalloproteinases (1, 2, and 9), Ki-67, and myofibroblasts in keratocystic odontogenic tumors and pericoronal follicles. <b>2014</b> , 43, 282-8	11
1579	Purification and characterization of a gelatinolytic matrix metalloproteinase from the skeletal muscle of grass carp ( <i>Ctenopharyngodon idellus</i> ). <b>2014</b> , 145, 632-8	6
1578	MMP-10 is required for efficient muscle regeneration in mouse models of injury and muscular dystrophy. <b>2014</b> , 32, 447-61	23
1577	Design, synthesis and preliminary evaluation of $\beta$ -sulfonyl $\alpha$ -(glycinyloxy)proline peptidomimetics as matrix metalloproteinase inhibitors. <b>2014</b> , 22, 3055-64	15
1576	The relationship between matrix metalloproteinases (MMP-3, -8, -9) in serum and peripheral lymphocytes (CD8+ , CD56+ ) in Down syndrome children with gingivitis. <b>2014</b> , 49, 742-50	10

1575	Tuberculosis, pulmonary cavitation, and matrix metalloproteinases. <b>2014</b> , 190, 9-18	127
1574	Natural Biomaterials for Regenerative Medicine Applications. <b>2014</b> , 101-112	8
1573	Matrix metalloproteinases (MMPs) and their tissue inhibitors (TIMPs) in the tumors of central nervous system (CNS). <b>2014</b> , 121, 469-77	7
1572	Activation of extracellular signal-regulated kinase 1/2 and Sp1 may contribute to the expression of tissue inhibitor of metalloproteinases-1 induced by transforming growth factor- $\beta$ in human pulmonary arterial smooth muscle cells. <b>2014</b> , 16, 225-33	2
1571	Myofibroblast differentiation: main features, biomedical relevance, and the role of reactive oxygen species. <b>2014</b> , 21, 768-85	32
1570	Is there new hope for therapeutic matrix metalloproteinase inhibition?. <b>2014</b> , 13, 904-27	488
1569	Reappraisal of quantitative gel zymography for matrix metalloproteinases. <b>2014</b> , 28, 374-80	5
1568	Pericellular proteolysis in cancer. <b>2014</b> , 28, 2331-47	124
1567	High serum level of matrix metalloproteinase 9 and promoter polymorphism - 1562 C:T as a new risk factor for metabolic syndrome. <b>2014</b> , 33, 816-22	15
1566	Effects of prostaglandin analogues on aqueous humor outflow pathways. <b>2014</b> , 30, 102-9	65
1565	Adiponectin predicts MMP-2 activity independently of obesity. <b>2014</b> , 44, 951-7	6
1564	Temporary inductions of matrix metalloprotease-3 (MMP-3) expression and cell apoptosis are associated with tendon degeneration or rupture after corticosteroid injection. <b>2014</b> , 32, 1297-304	31
1563	Matrix metalloproteinases are involved in cardiovascular diseases. <b>2014</b> , 115, 301-14	41
1562	p38 MAP kinase mediates transforming-growth factor- $\beta$ -induced upregulation of matrix metalloproteinase-9 but not -2 in human brain pericytes. <b>2014</b> , 1593, 1-8	20
1561	Metastasis review: from bench to bedside. <b>2014</b> , 35, 8483-523	99
1560	Endogenous MMP-9 and not MMP-2 promotes rheumatoid synovial fibroblast survival, inflammation and cartilage degradation. <b>2014</b> , 53, 2270-9	95
1559	Molecular concepts in the pathogenesis of ameloblastoma: implications for therapeutics. <b>2014</b> , 97, 345-53	26
1558	Aminoguanidine inhibits ventricular fibrosis and remodeling process in isoproterenol-induced hypertrophied rat hearts by suppressing ROS and MMPs. <b>2014</b> , 118, 15-26	22

1557	Mechanotransduction and extracellular matrix homeostasis. <b>2014</b> , 15, 802-12	1061
1556	Bone tissue remodeling and development: focus on matrix metalloproteinase functions. <b>2014</b> , 561, 74-87	116
1555	Relationship between left ventricular twist and circulating biomarkers of collagen turnover in hypertensive patients with heart failure. <b>2014</b> , 27, 1064-71	11
1554	Novel target genes of RUNX2 transcription factor and 1,25-dihydroxyvitamin D3. <b>2014</b> , 115, 1594-608	10
1553	Bioreducible polymer-delivered siRNA targeting MMP-9: suppression of granulation tissue formation after bare metallic stent placement in a rat urethral model. <b>2014</b> , 271, 87-95	8
1552	Expression of collagen I, collagen III and MMP-1 on the tension side of distracted tooth using periodontal ligament distraction osteogenesis in beagle dogs. <b>2014</b> , 59, 1217-25	10
1551	Molecular interaction network and pathway studies of ADAM33 potentially relevant to asthma. <b>2014</b> , 113, 418-24.e1	10
1550	In vitro biological evaluation of glyburide as potential inhibitor of collagenases. <b>2014</b> , 70, 187-92	3
1549	Cell-matrix interactions: focus on proteoglycan-proteinase interplay and pharmacological targeting in cancer. <b>2014</b> , 281, 5023-42	71
1548	PAC-1 and isatin derivatives are weak matrix metalloproteinase inhibitors. <b>2014</b> , 1840, 3162-9	12
1547	Association of tissue inhibitor of metalloproteinase gene polymorphisms and unexplained recurrent spontaneous abortions in Han Chinese couples. <b>2014</b> , 181, 84-8	6
1546	Interferon- $\beta$ protects first-trimester decidual cells against aberrant matrix metalloproteinases 1, 3, and 9 expression in preeclampsia. <b>2014</b> , 184, 2549-59	37
1545	Isolation and characterization of chicken bile matrix metalloproteinase. <b>2014</b> , 93, 1495-502	3
1544	Molecular and cellular basis of scleroderma. <b>2014</b> , 92, 913-24	27
1543	Gene expression profile of LPS-stimulated dendritic cells induced by a recombinant Sj16 (rSj16) derived from <i>Schistosoma japonicum</i> . <b>2014</b> , 113, 3073-83	9
1542	Anethole prevents hydrogen peroxide-induced apoptosis and collagen metabolism alterations in human skin fibroblasts. <b>2014</b> , 394, 217-24	24
1541	Macrophages and the regulation of adipose tissue remodeling. <b>2014</b> , 34, 57-76	68
1540	Matrix metalloproteinase-27 is expressed in CD163+/CD206+ M2 macrophages in the cycling human endometrium and in superficial endometriotic lesions. <b>2014</b> , 20, 767-75	48

1539	Effects of herbal compound 861 on collagen synthesis and degradation in rat mesangial cells exposed to high glucose. <b>2014</b> , 20, 209-15	
1538	TPM3, a strong prognosis predictor, is involved in malignant progression through MMP family members and EMT-like activators in gliomas. <b>2014</b> , 35, 9053-9	15
1537	The extracellular matrix in the kidney: a source of novel non-invasive biomarkers of kidney fibrosis?. <b>2014</b> , 7, 4	200
1536	Homocysteine in renovascular complications: hydrogen sulfide is a modulator and plausible anaerobic ATP generator. <b>2014</b> , 41, 27-37	13
1535	Functional characterization of Anopheles matrix metalloprotease 1 reveals its agonistic role during sporogonic development of malaria parasites. <b>2014</b> , 82, 4865-77	16
1534	RNA interference-mediated knockdown of Notch-1 inhibits migration and invasion, down-regulates matrix metalloproteinases and suppresses NF- $\kappa$ B signaling pathway in trophoblast cells. <b>2014</b> , 116, 911-9	17
1533	Proteomic protease specificity profiling of clostridial collagenases reveals their intrinsic nature as dedicated degraders of collagen. <b>2014</b> , 100, 102-14	49
1532	Expression and characterization of common carp ( <i>Cyprinus carpio</i> ) matrix metalloproteinase-2 and its activity against type I collagen. <b>2014</b> , 177, 45-52	14
1531	Membrane palmitoylated protein 3 promotes hepatocellular carcinoma cell migration and invasion via up-regulating matrix metalloproteinase 1. <b>2014</b> , 344, 74-81	14
1530	Matrix metalloproteinase levels in chronic thoracic aortic dissection. <b>2014</b> , 189, 348-58	36
1529	Manganese overload affects p38 MAPK phosphorylation and metalloproteinase activity during sea urchin embryonic development. <b>2014</b> , 93, 64-9	22
1528	Protective role of bortezomib in steatotic liver ischemia/reperfusion injury through abrogation of MMP activation and YKL-40 expression. <b>2014</b> , 30, 93-8	24
1527	Downregulation of miR-221/222 enhances sensitivity of breast cancer cells to tamoxifen through upregulation of TIMP3. <b>2014</b> , 21, 290-6	93
1526	Functional Significance of MMP3 and TIMP2 Polymorphisms in Cleft Lip/Palate. <b>2014</b> , 93, 651-6	12
1525	MicroRNA-429 induces tumorigenesis of human non-small cell lung cancer cells and targets multiple tumor suppressor genes. <b>2014</b> , 450, 154-9	36
1524	The clearance of misfolded proteins in neurodegenerative diseases by zinc metalloproteases: An inorganic perspective. <b>2014</b> , 260, 139-155	24
1523	Inflammatory reaction - communication of cells. <b>2014</b> , 25, 399-407	23
1522	Downregulation of CD147 by chitooligosaccharide inhibits MMP-2 expression and suppresses the metastatic potential of human gastric cancer. <b>2014</b> , 8, 361-366	21

1521	Mmp25 facilitates elongation of sensory neurons during zebrafish development. <b>2014</b> , 52, 833-48	9
1520	Extract of the mycelium of <i>T. matsutake</i> inhibits elastase activity and TPA-induced MMP-1 expression in human fibroblasts. <b>2014</b> , 34, 1613-21	19
1519	<i>Helicobacter pylori</i> induces cell migration and invasion through casein kinase 2 in gastric epithelial cells. <b>2014</b> , 19, 465-75	13
1518	Effect of Yangyinqingfei decoction on radiation-induced lung injury via downregulation of MMP12 and TIMP-1 expression. <b>2014</b> , 8, 9-14	4
1517	Identification of ApoA1, HPX and POTEE genes by omic analysis in breast cancer. <b>2014</b> , 32, 1078-86	34
1516	B-cell acquisition of antigen: Sensing the surface. <b>2015</b> , 45, 1600-4	8
1515	Increased activity of MMP-2 in hypertensive obese children is associated with hypoadiponectinemia. <b>2015</b> , 23, 177-82	8
1514	Functional Roles of N-Linked Glycosylation of Human Matrix Metalloproteinase 9. <b>2015</b> , 16, 1108-26	20
1513	Matrix Metalloproteinases: From Structure to Function. <b>2015</b> , 41-60	1
1512	Fibronectin remodelling: cell-mediated regulation of the microenvironment. <b>2015</b> , 43, 122-8	16
1511	MMPs in Biology and Medicine. <b>2015</b> , 183-214	2
1510	Subtracting Matrix Out of the Equation: New Key Roles of Matrix Metalloproteinases in Innate Immunity and Disease. <b>2015</b> , 131-152	3
1509	Expression profiling of lymph nodes in tuberculosis patients reveal inflammatory milieu at site of infection. <b>2015</b> , 5, 15214	28
1508	Design of Metalloprotease Inhibitors. <b>2015</b> , 143-154	
1507	Role of plasma matrix-metalloproteases (MMPs) and their polymorphisms (SNPs) in sepsis development and outcome in ICU patients. <b>2014</b> , 4, 5002	32
1506	Breast cancer cell adhesome and degradome interact to drive metastasis. <b>2015</b> , 1, 15017	29
1505	Signatures of positive selection at hemopexin (PEX) domain of matrix metalloproteinase-9 (MMP-9) gene. <b>2015</b> , 40, 885-90	5
1504	Effect of Matrine on HPAC cell migration by down-regulating the expression of MT1-MMP via Wnt signaling. <b>2015</b> , 15, 59	16

1503	Activating enhancer binding protein 2 epsilon (AP-2 $\epsilon$ )-deficient mice exhibit increased matrix metalloproteinase 13 expression and progressive osteoarthritis development. <b>2015</b> , 17, 119	9
1502	Spinal Glia Division Contributes to Conditioning Lesion-Induced Axon Regeneration Into the Injured Spinal Cord: Potential Role of Cyclic AMP-Induced Tissue Inhibitor of Metalloproteinase-1. <b>2015</b> , 74, 500-11	9
1501	Colorectal cancer DNA methylation patterns from patients in Manaus, Brazil. <b>2015</b> , 48, 50	6
1500	Cardiac Physiology of Aging: Extracellular Considerations. <b>2015</b> , 5, 1069-121	28
1499	Effect of suburethral prolene mesh for suburethral function and histology in a stress urinary incontinence mouse model. <b>2015</b> , 22, 1068-74	4
1498	Extracellular matrix communication and turnover in cardiac physiology and pathology. <b>2015</b> , 5, 687-719	74
1497	Degradation of MSCRAMM target macromolecules in VLU slough by <i>Lucilia sericata</i> chymotrypsin 1 (ISP) persists in the presence of tissue gelatinase activity. <b>2015</b> , 12, 414-21	14
1496	Tension Force Downregulates Matrix Metalloproteinase Expression and Upregulates the Expression of Their Inhibitors through MAPK Signaling Pathways in MC3T3-E1 cells. <b>2015</b> , 12, 905-13	6
1495	Regulation of MT1-MMP/MMP-2/TIMP-2 axis in human placenta. <b>2015</b> , 8, 193-200	9
1494	The Regulation of Matrix Metalloproteinase Expression and the Role of Discoidin Domain Receptor 1/2 Signalling in Zoledronate-treated PC3 Cells. <b>2015</b> , 6, 1020-9	13
1493	Variations in Matrix Metalloproteinase Expression by Disc Location in Patients with Sequestered Lumbar Disc Herniation. <b>2015</b> , 22, 160	
1492	In vitro alteration of physiological parameters do not hamper the growth of human multipotent vascular wall-mesenchymal stem cells. <b>2015</b> , 3, 36	10
1491	Mechanistic insight into the elastin degradation process by the metalloprotease myroilysin from the deep-sea bacterium <i>Myroides profundus</i> D25. <b>2015</b> , 13, 1481-96	5
1490	The Extracellular Matrix in Epithelial Ovarian Cancer - A Piece of a Puzzle. <b>2015</b> , 5, 245	63
1489	BubR1 Acts as a Promoter in Cellular Motility of Human Oral Squamous Cancer Cells through Regulating MMP-2 and MMP-9. <b>2015</b> , 16, 15104-17	8
1488	Role of MMP-2 and MMP-9 in resistance to drug therapy in patients with resistant hypertension. <b>2015</b> , 105, 168-75	4
1487	Curcumin binds in silico to anti-cancer drug target enzyme MMP-3 (human stromelysin-1) with affinity comparable to two known inhibitors of the enzyme. <b>2015</b> , 11, 387-92	8
1486	A membrane-type-1 matrix metalloproteinase (MT1-MMP)-discoidin domain receptor 1 axis regulates collagen-induced apoptosis in breast cancer cells. <b>2015</b> , 10, e0116006	35

1485	Fibrinolysis and proliferative endarteritis: two related processes in chronic infections? The model of the blood-borne pathogen <i>Dirofilaria immitis</i> . <b>2015</b> , 10, e0124445	14
1484	Selective Allosteric Inhibition of MMP9 Is Efficacious in Preclinical Models of Ulcerative Colitis and Colorectal Cancer. <b>2015</b> , 10, e0127063	116
1483	TIMP-2 Interaction with MT1-MMP Activates the AKT Pathway and Protects Tumor Cells from Apoptosis. <b>2015</b> , 10, e0136797	29
1482	Matrix Metalloproteinase-3 (MMP-3) Is an Endogenous Activator of the MMP-9 Secreted by Placental Leukocytes: Implication in Human Labor. <b>2015</b> , 10, e0145366	11
1481	Amyloid-beta protein clearance and degradation (ABCD) pathways and their role in Alzheimer's disease. <b>2015</b> , 12, 32-46	192
1480	NR4A receptors up-regulate the antiproteinase alpha-2 macroglobulin (A2M) and modulate MMP-2 and MMP-9 in vascular smooth muscle cells. <b>2015</b> , 113, 1323-34	26
1479	Use of Contrast-Enhanced Ultrasound in Carotid Atherosclerotic Disease: Limits and Perspectives. <b>2015</b> , 2015, 293163	26
1478	Fluorescent and Bioluminescent Nanoprobes for In Vitro and In Vivo Detection of Matrix Metalloproteinase Activity. <b>2015</b> , 48, 313-8	19
1477	Biology of colorectal cancer. <b>2015</b> , 9, 520	71
1476	Responsive cell-material interfaces. <b>2015</b> , 10, 849-71	43
1475	Inhibition of class I histone deacetylase activity represses matrix metalloproteinase-2 and -9 expression and preserves LV function postmyocardial infarction. <b>2015</b> , 308, H1391-401	35
1474	High-level expression of pseudolysin, the extracellular elastase of <i>Pseudomonas aeruginosa</i> , in <i>Escherichia coli</i> and its purification. <b>2015</b> , 113, 79-84	6
1473	MMP-14 in skeletal muscle repair. <b>2015</b> , 36, 215-25	26
1472	QSAR studies on hydroxamic acids: a fascinating family of chemicals with a wide spectrum of activities. <b>2015</b> , 115, 6427-90	32
1471	DNA-PKcs plays role in cancer metastasis through regulation of secreted proteins involved in migration and invasion. <b>2015</b> , 14, 1961-72	36
1470	Tamoxifen induces the development of hernia in mice by activating MMP-2 and MMP-13 expression. <b>2015</b> , 1852, 1038-48	14
1469	Localized, non-viral delivery of nucleic acids: Opportunities, challenges and current strategies. <b>2015</b> , 10, 159-175	14
1468	MMP and TIMP temporal gene expression during osteocytogenesis. <b>2015</b> , 18, 29-36	15



1467	Tissue Inhibitor of Metalloproteinase-2 Suppresses Collagen Synthesis in Cultured Keloid Fibroblasts. <b>2015</b> , 3, e520	16
1466	Collagenase Clostridium histolyticum for the Treatment of Peyronie's Disease: The Development of This Novel Pharmacologic Approach. <b>2015</b> , 12, 1481-9	17
1465	The Mechanobiology of Aging. <b>2015</b> , 17, 113-141	120
1464	Expression Levels of Myostatin and Matrix Metalloproteinase 14 mRNAs in Uterine Leiomyoma are Correlated With Dysmenorrhea. <b>2015</b> , 22, 1597-602	13
1463	Regulation of MMP-1 expression in response to hypoxia is dependent on the intracellular redox status of metastatic bladder cancer cells. <b>2015</b> , 1852, 2593-602	40
1462	Two classes of matrix metalloproteinases reciprocally regulate synaptogenesis. <b>2016</b> , 143, 75-87	28
1461	Hypoxia induced HIF-1/HIF-2 activity alters trophoblast transcriptional regulation and promotes invasion. <b>2015</b> , 94, 589-602	45
1460	LPS-mediated septic shock is augmented in ceramide synthase 2 null mice due to elevated activity of TNF $\alpha$ -converting enzyme. <b>2015</b> , 589, 2213-7	23
1459	Metalloproteinase expression is altered in cardiac and skeletal muscle in cancer cachexia. <b>2015</b> , 309, H685-91	23
1458	Binding of MMP-9-degraded fibronectin to $\beta$ integrin promotes invasion via the FAK-Src-related Erk1/2 and PI3K/Akt/Smad-1/5/8 pathways in breast cancer. <b>2015</b> , 34, 1345-52	43
1457	Evaluation of MMP-2, MMP-9, TIMP-1, TIMP-2, NGAL and MMP-9/NGAL complex in urine and sera from patients with bladder cancer. <b>2015</b> , 10, 2527-2532	28
1456	Fbxw7 regulates hepatocellular carcinoma migration and invasion via Notch1 signaling pathway. <b>2015</b> , 47, 231-43	28
1455	Matrix Metalloproteinase 2 as a Potential Mediator of Vascular Smooth Muscle Cell Migration and Chronic Vascular Remodeling in Hypertension. <b>2015</b> , 52, 221-31	84
1454	Poly (ADP-ribose) polymerase-1: an emerging target in right ventricle dysfunction associated with pulmonary hypertension. <b>2015</b> , 30, 66-79	14
1453	Delivery of lipid micelles into infarcted myocardium using a lipid-linked matrix metalloproteinase targeting peptide. <b>2015</b> , 12, 1150-7	32
1452	Multilevel regulation of matrix metalloproteinases in tissue homeostasis indicates their molecular specificity in vivo. <b>2015</b> , 44-46, 191-9	67
1451	Matrix metalloproteinases (MMP-1, MMP-2, MMP-3 and MMP-9, and TIMP-1, TIMP-2 and TIMP-3) and markers for vascularization in functioning and non-functioning bleb capsules of glaucoma drainage implants. <b>2015</b> , 93, 450-6	13
1450	Prognostic significance of MMP-7 expression in colorectal cancer: a meta-analysis. <b>2015</b> , 39, 135-42	41

1449	The role of PAPP-A in the IGF system: location, location, location. <b>2015</b> , 9, 177-87	101
1448	Targeting Matrix Metalloproteinases in Cancer: Bringing New Life to Old Ideas. <b>2015</b> , 2, 26-34	315
1447	Metalloproteinases promote plaque rupture and myocardial infarction: A persuasive concept waiting for clinical translation. <b>2015</b> , 44-46, 157-66	77
1446	The DNA hypomethylating agent, 5-aza-2'-deoxycytidine, enhances tumor cell invasion through a transcription-dependent modulation of MMP-1 expression in human fibrosarcoma cells. <b>2015</b> , 54, 24-34	10
1445	Matrix metalloproteinase-14 both sheds cell surface neuronal glial antigen 2 (NG2) proteoglycan on macrophages and governs the response to peripheral nerve injury. <b>2015</b> , 290, 3693-707	34
1444	Putative targeting of matrix metalloproteinase-8 in atherosclerosis. <b>2015</b> , 147, 111-22	15
1443	The gentle grip of a helping hand. <b>2015</b> , 23, 249-50	1
1442	A caged substrate peptide for matrix metalloproteinases. <b>2015</b> , 14, 300-7	7
1441	Regulatory mechanisms of anthrax toxin receptor 1-dependent vascular and connective tissue homeostasis. <b>2015</b> , 42, 56-73	19
1440	Implication of matrix metalloproteinases in regulating neuronal disorder. <b>2015</b> , 42, 1-11	23
1439	Spinal cord injury induced neuropathic pain: Molecular targets and therapeutic approaches. <b>2015</b> , 30, 645-58	11
1438	Interference of doxycycline pretreatment in a model of abdominal aortic aneurysms. <b>2015</b> , 24, 110-20	13
1437	Chitosan-shelled oxygen-loaded nanodroplets abrogate hypoxia dysregulation of human keratinocyte gelatinases and inhibitors: New insights for chronic wound healing. <b>2015</b> , 286, 198-206	29
1436	Possible role of endostatin in the antiangiogenic therapy of diabetic retinopathy. <b>2015</b> , 135, 131-7	22
1435	The impact of low-dose carcinogens and environmental disruptors on tissue invasion and metastasis. <b>2015</b> , 36 Suppl 1, S128-59	29
1434	The stereotypical molecular cascade in neovascular age-related macular degeneration: the role of dynamic reciprocity. <b>2015</b> , 29, 1416-26	1
1433	Circulating peptidome to indicate the tumor-resident proteolysis. <b>2015</b> , 5, 9327	10
1432	MicroRNA-148a reduces tumorigenesis and increases TRAIL-induced apoptosis in NSCLC. <b>2015</b> , 112, 8650-5	79

1431	Stability of peptide drugs in the colon. <b>2015</b> , 78, 31-6	28
1430	Sequential Amyloid- $\beta$ Degradation by the Matrix Metalloproteases MMP-2 and MMP-9. <b>2015</b> , 290, 15078-91	73
1429	Assessing the carcinogenic potential of low-dose exposures to chemical mixtures in the environment: the challenge ahead. <b>2015</b> , 36 Suppl 1, S254-96	176
1428	Youngiasides A and C Isolated from <i>Youngia denticulatum</i> Inhibit UVB-Induced MMP Expression and Promote Type I Procollagen Production via Repression of MAPK/AP-1/NF- $\kappa$ B and Activation of AMPK/Nrf2 in HaCaT Cells and Human Dermal Fibroblasts. <b>2015</b> , 63, 5428-38	54
1427	Neutrophil-Derived MMP-8 Drives AMPK-Dependent Matrix Destruction in Human Pulmonary Tuberculosis. <b>2015</b> , 11, e1004917	108
1426	Bio-Revitalization: Effects of NASHA on Genes Involving Tissue Remodeling. <b>2015</b> , 39, 459-64	3
1425	Chronic wound infections: the role of <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus aureus</i> . <b>2015</b> , 13, 605-13	261
1424	Novel expression and regulation of TIMP-1 in Epstein Barr virus-infected cells and its impact on cell survival. <b>2015</b> , 481, 24-33	8
1423	Matrix metalloproteinase-2 and -9 in the cerebellum of teleost fish: Functional implications for adult neurogenesis. <b>2015</b> , 68, 9-23	12
1422	Can the activation of plasminogen/plasmin system of the host by metabolic products of <i>Dirofilaria immitis</i> participate in heartworm disease endarteritis?. <b>2015</b> , 8, 194	17
1421	Disrupted Balance of MMPs/TIMPs in Gastric Carcinogenesis-Paradoxical Low MMP-2 Expression in Tumor and Stromal Compartments as a Potential Marker of Unfavorable Outcome. <b>2015</b> , 33, 286-93	3
1420	Biomarkers in electrophysiology: role in arrhythmias and resynchronization therapy. <b>2015</b> , 43, 31-44	6
1419	Local and systemic proteolytic responses in chronic rhinosinusitis with nasal polyposis and asthma. <b>2015</b> , 5, 294-302	7
1418	Accentuating and Opposing Factors Leading to Development of Thoracic Aortic Aneurysms Not Due to Genetic or Inherited Conditions. <b>2015</b> , 2, 21	7
1417	Characterization of matrix metalloproteinase-2 and -9, ADAM-10 and N-cadherin expression in human glioblastoma multiforme. <b>2015</b> , 362, 45-60	57
1416	Redox-sensitive mechanisms underlying vascular dysfunction in heart failure. <b>2015</b> , 49, 721-42	7
1415	The novel role of miRNAs for tamoxifen resistance in human breast cancer. <b>2015</b> , 72, 2575-84	17
1414	Juvenile idiopathic arthritis characteristics: Etiology and pathophysiology. <b>2015</b> , 21, 77-83	3

1413	Merging allosteric and active site binding motifs: de novo generation of target selectivity and potency via natural-product-derived fragments. <b>2015</b> , 10, 451-4	31
1412	Synthesis of chiral ND-322, ND-364 and ND-364 derivatives as selective inhibitors of human gelatinase. <b>2015</b> , 23, 6632-40	4
1411	Matrix Metalloproteinase 9 (MMP-9). <b>2015</b> , 237-259	1
1410	A human laterality disorder caused by a homozygous deleterious mutation in MMP21. <b>2015</b> , 52, 840-7	32
1409	High-Throughput Multiplexed Peptide-Centric Profiling Illustrates Both Substrate Cleavage Redundancy and Specificity in the MMP Family. <b>2015</b> , 22, 1122-33	21
1408	TOL19-001 reduces inflammation and MMP expression in monolayer cultures of tendon cells. <b>2015</b> , 15, 217	14
1407	Frequency of the common promoter polymorphism in a population from central Bulgaria. <b>2015</b> , 29, 351-356	3
1406	Reference intervals of plasma matrix metalloproteinases 2, 3, and 9 and serum asymmetric dimethylarginine levels. <b>2015</b> , 75, 508-13	6
1405	Matrix Metalloproteinase Expression in Contusional Traumatic Brain Injury: A Paired Microdialysis Study. <b>2015</b> , 32, 1553-9	48
1404	Computational Systems Biology of Psoriasis: Are We Ready for the Age of Omics and Systems Biomarkers?. <b>2015</b> , 19, 669-87	18
1403	67-kDa Laminin receptor contributes to hypoxia-induced migration and invasion of trophoblast-like cells by mediating matrix metalloproteinase-9. <b>2015</b> , 42, 549-58	11
1402	Myocardial interstitial remodelling in non-ischaemic dilated cardiomyopathy: insights from cardiovascular magnetic resonance. <b>2015</b> , 20, 731-49	30
1401	Tomato SL3-MMP, a member of the Matrix metalloproteinase family, is required for disease resistance against Botrytis cinerea and Pseudomonas syringae pv. tomato DC3000. <b>2015</b> , 15, 143	22
1400	The tissue inhibitor of metalloproteinases 1 increases the clonogenic efficiency of human hematopoietic progenitor cells through CD63/PI3K/Akt signaling. <b>2015</b> , 43, 974-985.e1	19
1399	Matrix metalloproteinases and their tissue inhibitor after reperfusion ST-elevation myocardial infarction treated with doxycycline. Insights from the TIPTOP trial. <b>2015</b> , 197, 147-53	20
1398	Inhibitory Effects of Isorhamnetin on the Invasion of Human Breast Carcinoma Cells by Downregulating the Expression and Activity of Matrix Metalloproteinase-2/9. <b>2015</b> , 67, 1191-200	25
1397	Matrix Metalloproteinases as Regulators of Vein Structure and Function: Implications in Chronic Venous Disease. <b>2015</b> , 355, 410-28	50
1396	Identification of matrix metalloproteinase inhibitors by chemical arrays. <b>2015</b> , 79, 1597-602	6

1395	Interleukin-1 $\alpha$ in intervertebral disk degeneration. <b>2015</b> , 450, 262-72	77
1394	Potential roles of matrix metalloproteinases and characteristics of ovarian development in neonatal guinea pigs. <b>2015</b> , 47, 478-88	2
1393	Hox10-regulated endodermal cell migration is essential for development of the ascidian intestine. <b>2015</b> , 403, 43-56	24
1392	Acceleration of diabetic wound healing using a novel protease-anti-protease combination therapy. <b>2015</b> , 112, 15226-31	83
1391	Magnetic chelating nanoprobe for enrichment and selective recovery of metalloproteinases from human saliva. <b>2015</b> , 3, 238-249	29
1390	Adamts1 mediates ethanol-induced alterations in collagen and elastin via a FoxO1-sestrin3-AMPK signaling cascade in myocytes. <b>2015</b> , 116, 91-101	19
1389	Matrix metalloproteinases: potential therapeutic target for diabetic neuropathic pain. <b>2015</b> , 19, 177-85	22
1388	Conjunctival matrix metalloproteinases and their inhibitors in glaucoma patients. <b>2015</b> , 93, 165-71	13
1387	The EGF signaling pathway influences cell migration and the secretion of metalloproteinases by myoepithelial cells in pleomorphic adenoma. <b>2015</b> , 36, 205-11	7
1386	A QSAR study on the inhibition mechanism of matrix metalloproteinase-12 by arylsulfone analogs based on molecular orbital calculations. <b>2015</b> , 13, 793-806	17
1385	Extracellular Matrix Reorganization During Wound Healing and Its Impact on Abnormal Scarring. <b>2015</b> , 4, 119-136	584
1384	Interactions of oxidative stress and neurovascular inflammation in the pathogenesis of traumatic brain injury. <b>2015</b> , 51, 966-79	248
1383	Tumor necrosis factor- $\alpha$ -accelerated degradation of type I collagen in human skin is associated with elevated matrix metalloproteinase (MMP)-1 and MMP-3 ex vivo. <b>2015</b> , 94, 12-21	46
1382	Molecular characterization of collagen IV evidences early transcription expression related to the immune response against bacterial infection in the red abalone ( <i>Haliotis rufescens</i> ). <b>2015</b> , 42, 241-8	7
1381	Tissue inhibitor of metalloproteinases-1 induces a pro-tumourigenic increase of miR-210 in lung adenocarcinoma cells and their exosomes. <b>2015</b> , 34, 3640-50	124
1380	Inhibitory effects of with phreatic water on melanin synthesis. <b>2015</b> , 4, 76-93	1
1379	MMPs: a novel drug target for schizophrenia. <b>2015</b> , 19, 77-85	17
1378	Extracellular matrix assessment of infected chronic venous leg ulcers: role of metalloproteinases and inflammatory cytokines. <b>2016</b> , 13, 53-8	55

1377	Bacterial collagenases - A review. <b>2016</b> , 42, 106-26	91
1376	Viruses Responsible for Hemorrhagic Fevers. <b>2016</b> , 161-181	
1375	Nucleophosmin Mutants Promote Adhesion, Migration and Invasion of Human Leukemia THP-1 Cells through MMPs Up-regulation via Ras/ERK MAPK Signaling. <b>2016</b> , 12, 144-55	26
1374	Aryl Hydrocarbon Receptor Activation by TCDD Modulates Expression of Extracellular Matrix Remodeling Genes during Experimental Liver Fibrosis. <b>2016</b> , 2016, 5309328	7
1373	Proteolytic receptor cleavage in the pathogenesis of blood rheology and co-morbidities in metabolic syndrome. Early forms of autodigestion. <b>2015</b> , 52, 337-52	9
1372	Inhibition of the MAPK Signaling Pathway by Red Rice Extract in UVB-irradiated Human Skin Fibroblasts. <b>2016</b> , 11, 1934578X1601101	8
1371	Identification of matrix metalloproteinase-12 as a candidate molecule for prevention and treatment of cardiometabolic disease. <b>2016</b> , 22, 487-496	9
1370	Regulation and involvement of matrix metalloproteinases in vascular diseases. <b>2016</b> , 21, 89-118	47
1369	Pathophysiology of colorectal peritoneal carcinomatosis: Role of the peritoneum. <b>2016</b> , 22, 7692-707	72
1368	Enzyme-Treated Asparagus Extract Attenuates Hydrogen Peroxide-Induced Matrix Metalloproteinase-9 Expression in Murine Skin Fibroblast L929 Cells. <b>2016</b> , 11, 1934578X1601100	3
1367	The Role of the Reactive Oxygen Species and Oxidative Stress in the Pathomechanism of the Age-Related Ocular Diseases and Other Pathologies of the Anterior and Posterior Eye Segments in Adults. <b>2016</b> , 2016, 3164734	659
1366	LTD4 and TGF- $\beta$ Induce the Expression of Metalloproteinase-1 in Chronic Rhinosinusitis via a Cysteinyl Leukotriene Receptor 1-Related Mechanism. <b>2016</b> , 1, 65-75	1
1365	The Mechanism of Regulated Release of Lasso/Teneurin-2. <b>2016</b> , 9, 59	28
1364	Exogenous C2 Ceramide Suppresses Matrix Metalloproteinase Gene Expression by Inhibiting ROS Production and MAPK Signaling Pathways in PMA-Stimulated Human Astrogloma Cells. <b>2016</b> , 17, 477	11
1363	Staphylococcal Superantigen-Like Protein 1 and 5 (SSL1 & SSL5) Limit Neutrophil Chemotaxis and Migration through MMP-Inhibition. <b>2016</b> , 17,	24
1362	Stimuli-Responsive Gold Nanoparticles for Cancer Diagnosis and Therapy. <b>2016</b> , 7,	26
1361	Red Grape Skin Polyphenols Blunt Matrix Metalloproteinase-2 and -9 Activity and Expression in Cell Models of Vascular Inflammation: Protective Role in Degenerative and Inflammatory Diseases. <b>2016</b> , 21,	32
1360	Prognostic Value of ADAMTS Proteases and Their Substrates in Epithelial Ovarian Cancer. <b>2016</b> , 83, 316-26	20

1359	Leptin and Pro-Inflammatory Stimuli Synergistically Upregulate MMP-1 and MMP-3 Secretion in Human Gingival Fibroblasts. <b>2016</b> , 11, e0148024	14
1358	The Dynamic Nature of Hypertrophic and Fibrotic Remodeling of the Fish Ventricle. <b>2015</b> , 6, 427	35
1357	Comparative mass spectrometric and immunoassay-based proteome analysis in serum of Duchenne muscular dystrophy patients. <b>2016</b> , 10, 290-9	21
1356	Metalloproteinase production from macrophages - a perfect storm leading to atherosclerotic plaque rupture and myocardial infarction. <b>2016</b> , 101, 1327-1337	86
1355	Interplay Between MMP-9 and TIMP-2 Regulates Ameloblastoma Behavior and Tooth Morphogenesis. <b>2016</b> , 24, 364-72	4
1354	Role of matrix metalloproteinases in the pathogenesis of childhood gastroenteritis. <b>2016</b> , 88, 1341-6	2
1353	Complement Membrane Attack and Tumorigenesis: A SYSTEMS BIOLOGY APPROACH. <b>2016</b> , 291, 14927-38	17
1352	Directed Dedifferentiation Using Partial Reprogramming Induces Invasive Phenotype in Melanoma Cells. <b>2016</b> , 34, 832-46	18
1351	Retinoic acid and sodium butyrate suppress the cardiac expression of hypertrophic markers and proinflammatory mediators in Npr1 gene-disrupted haplotype mice. <b>2016</b> , 48, 477-90	23
1350	Elastins from patients with Williams-Beuren syndrome and healthy individuals differ on the molecular level. <b>2016</b> , 170, 1832-42	7
1349	Functional characterization of selective exosite-binding inhibitors of matrix metalloproteinase-13 (MMP-13) - experimental validation in human breast and colon cancer. <b>2016</b> , 80, 2122-2131	2
1348	The molecular biology of matrix metalloproteinases and tissue inhibitors of metalloproteinases in inflammatory bowel diseases. <b>2016</b> , 51, 295-358	44
1347	Matrix metalloproteinases as promising regulators of axonal regrowth in the injured adult zebrafish retinotectal system. <b>2016</b> , 524, 1472-93	29
1346	Multidimensional Contribution of Matrix Metalloproteinases to Atherosclerotic Plaque Vulnerability: Multiple Mechanisms of Inhibition to Promote Stability. <b>2016</b> , 53, 1-16	29
1345	Unfractionated bone marrow cells attenuate paraquat-induced glomerular injury and acute renal failure by modulating the inflammatory response. <b>2016</b> , 6, 23287	15
1344	Biomaterials from Decellularized Tissues. <b>2016</b> , 190-210	3
1343	Increased Circulating Tissue Inhibitor of Metalloproteinase-2 Is Associated With Resistant Hypertension. <b>2016</b> , 18, 969-975	8
1342	Role of Proteases in Laminitis. <b>2016</b> , 115-133	

1341	Association between genetic polymorphisms of MMP8 and the risk of steroid-induced osteonecrosis of the femoral head in the population of northern China. <b>2016</b> , 95, e4794	29
1340	Metalloproteinases: a Functional Pathway for Myeloid Cells. <b>2016</b> , 4,	14
1339	Evolution of Cell-Autonomous Effector Mechanisms in Macrophages versus Non-Immune Cells. <b>2016</b> , 4,	15
1338	Development of a label-free SPR sensor for detection of matrixmetalloproteinase-9 by antibody immobilization on carboxymethyldextran chip. <b>2016</b> , 81, 510-516	37
1337	Matrix metalloproteinases (MMPs), the main extracellular matrix (ECM) enzymes in collagen degradation, as a target for anticancer drugs. <b>2016</b> , 31, 177-183	454
1336	A study of facial wrinkles improvement effect of veratric acid from cauliflower mushroom through photo-protective mechanisms against UVB irradiation. <b>2016</b> , 308, 183-92	3
1335	Suppression of PKC- $\delta$ attenuates TNF- $\alpha$ -evoked cerebral barrier breakdown via regulations of MMP-2 and plasminogen-plasmin system. <b>2016</b> , 1862, 1354-66	17
1334	Positional proteomics in the era of the human proteome project on the doorstep of precision medicine. <b>2016</b> , 122, 110-8	35
1333	PAPP-A and the IGF system. <b>2016</b> , 77, 90-6	24
1332	Protein pathways working in human follicular fluid: the future for tailored IVF?. <b>2016</b> , 18, e9	32
1331	Elevated levels of matrix metalloproteinases and chronic wound healing: an updated review of clinical evidence. <b>2016</b> , 25, 277-87	99
1330	Adipose extracellular matrix remodelling in obesity and insulin resistance. <b>2016</b> , 119, 8-16	117
1329	The role of matrix metalloproteinases in muscle and adipose tissue development and meat quality: A review. <b>2016</b> , 119, 138-46	23
1328	Study the level of sputum matrix metalloproteinase-9 and tissue inhibitor metaloprotienase-1 in patients with interstitial lung diseases. <b>2016</b> , 65, 303-309	3
1327	Thioredoxin fusion construct enables high-yield production of soluble, active matrix metalloproteinase-8 (MMP-8) in Escherichia coli. <b>2016</b> , 122, 64-71	7
1326	Effects of oxygen tension and dextran-shelled/2H,3H-decafluoropentane-cored oxygen-loaded nanodroplets on secretion of gelatinases and their inhibitors in term human placenta. <b>2016</b> , 80, 466-72	7
1325	Helicobacter pylori CagA protein induces factors involved in the epithelial to mesenchymal transition (EMT) in infected gastric epithelial cells in an EPIYA- phosphorylation-dependent manner. <b>2016</b> , 283, 206-20	34
1324	Cross-talk between macrophages and smooth muscle cells impairs collagen and metalloprotease synthesis and promotes angiogenesis. <b>2016</b> , 1863, 1568-78	42



1323	Matrix metalloproteinase (MMP)-9: A reliable marker for inflammation in early human trichinellosis. <b>2016</b> , 231, 132-136	9
1322	Fibroblast-Derived MMP-14 Regulates Collagen Homeostasis in Adult Skin. <b>2016</b> , 136, 1575-1583	46
1321	Expression, purification, refolding and in vitro recovery of active full length recombinant human gelatinase MMP-9 in Escherichia coli. <b>2016</b> , 126, 42-48	8
1320	Molecular Mechanisms of Stress-Responsive Changes in Collagen and Elastin Networks in Skin. <b>2016</b> , 29, 190-203	51
1319	The effect of local hyperglycemia on skin cells in vitro and on wound healing in euglycemic rats. <b>2016</b> , 206, 418-426	16
1318	Inhibition and Activity Regulation of Bacterial Collagenases. <b>2016</b> , 69-94	3
1317	Structural and functional insights into the interaction of sulfated glycosaminoglycans with tissue inhibitor of metalloproteinase-3 - A possible regulatory role on extracellular matrix homeostasis. <b>2016</b> , 45, 143-154	28
1316	The role of serum levels of microRNA-21 and matrix metalloproteinase-9 in patients with acute coronary syndrome. <b>2016</b> , 422, 51-60	17
1315	The impacts of age and frailty on heart rate and sinoatrial node function. <b>2016</b> , 594, 7105-7126	56
1314	Plasma Matrix Metalloproteinases in Patients With Stroke During Intensive Rehabilitation Therapy. <b>2016</b> , 97, 1832-1840	9
1313	Electroacupuncture alleviates nerve injury after cerebra ischemia in rats through inhibiting cell apoptosis and changing the balance of MMP-9/TIMP-1 expression. <b>2016</b> , 633, 158-164	13
1312	Modulation of Systemic Metabolism by MMP-2: From MMP-2 Deficiency in Mice to MMP-2 Deficiency in Patients. <b>2016</b> , 6, 1935-1949	19
1311	Minocycline attenuates cardiac dysfunction in tumor-burdened mice. <b>2016</b> , 100, 35-42	4
1310	Silver Nanoparticles (AgNP) in the Environment: a Review of Potential Risks on Human and Environmental Health. <b>2016</b> , 227, 1	82
1309	The CD147/MMP-2 signaling pathway may regulate early stage cardiac remodelling in spontaneously hypertensive rats. <b>2016</b> , 43, 1125-1133	2
1308	Matrix Metalloproteinase-1 Expression in Women With and Without Pelvic Organ Prolapse: A Systematic Review and Meta-analysis. <b>2016</b> , 9, 267-273	4
1307	Synovial fluid matrix metalloproteinase-2 and -9 activities in dogs suffering from joint disorders. <b>2016</b> , 78, 1051-4	2
1306	Basement membrane fragments in the context of the epithelial-to-mesenchymal transition. <b>2016</b> , 95, 427-440	31

1305	BMP-6 inhibits the metastasis of MDA-MB-231 breast cancer cells by regulating MMP-1 expression. <b>2016</b> , 35, 1823-30	25
1304	Role of matrix metalloproteinase-9 in chronic kidney disease: a new biomarker of resistant albuminuria. <b>2016</b> , 130, 525-38	28
1303	A personal journey with matrix metalloproteinases. <b>2016</b> , 397, 805-13	4
1302	Expression of metalloproteinases (MMP-2 and MMP-9) in basal-cell carcinoma. <b>2016</b> , 43, 1027-33	17
1301	Handling Metalloproteinases. <b>2016</b> , 83, 21.16.1-21.16.20	7
1300	Internal strain drives spontaneous periodic buckling in collagen and regulates remodeling. <b>2016</b> , 113, 8436-41	33
1299	Involvement of matrix metalloproteinases (MMP-2, -7, -9) and their tissue inhibitors (TIMP-2, -3) in the chicken oviduct regression and recrudescence. <b>2016</b> , 366, 443-454	16
1298	MMP-2 (-1306 C/T) Polymorphism Affects Serum Matrix Metalloproteinase (MMP)-2 Levels and Correlates with Chronic Obstructive Pulmonary Disease Severity: A Case-Control Study of MMP-1 and -2 in a Tunisian Population. <b>2016</b> , 20, 579-590	4
1297	Endothelin-1 down-regulates matrix metalloproteinase 14 and 15 expression in human first trimester trophoblasts via endothelin receptor type B. <b>2017</b> , 32, 46-54	19
1296	Biomarkers of skin aging. <b>2016</b> , 17, 433-442	22
1295	Pyrogallol abates VSMC migration via modulation of Caveolin-1, matrix metalloproteinase and intima hyperplasia in carotid ligation mouse. <b>2016</b> , 48, 63-75	3
1294	Density-dependent effects of <i>Caligus rogercresseyi</i> infestation on the immune responses of <i>Salmo salar</i> . <b>2016</b> , 59, 365-374	6
1293	Matrix metalloproteinases: an emerging role in regulation of actin microfilament system. <b>2016</b> , 7, 321-329	10
1292	Triptolide inhibits the migration and invasion of rheumatoid fibroblast-like synoviocytes by blocking the activation of the JNK MAPK pathway. <b>2016</b> , 41, 8-16	36
1291	Biochemical characterization and zinc binding group (ZBGs) inhibition studies on the catalytic domain of MMP7 (cdMMP7). <b>2016</b> , 165, 7-17	3
1290	ATRA mechanically reprograms pancreatic stellate cells to suppress matrix remodelling and inhibit cancer cell invasion. <b>2016</b> , 7, 12630	148
1289	Matrix Metalloproteinases and Tissue Inhibitor of Metalloproteinases in Inflammation and Fibrosis of Skeletal Muscles. <b>2016</b> , 3, 455-473	56
1288	Association between plasma ADAMTS-7 levels and severity of disease in patients with stable obstructive coronary artery disease. <b>2016</b> , 95, e5523	6

1287	Microvesicles shed from fibroblasts act as metalloproteinase carriers in a 3-D collagen matrix. <b>2016</b> , 5, 1849454416663660	18
1286	Knockdown of TACC3 inhibits trophoblast cell migration and invasion through the PI3K/Akt signaling pathway. <b>2016</b> , 14, 3437-42	14
1285	Constructing and Validating 3D-pharmacophore Models to a Set of MMP-9 Inhibitors for Designing Novel Anti-melanoma Agents. <b>2016</b> , 35, 238-52	6
1284	Vitamin D Receptor Activation Reduces Angiotensin-II-Induced Dissecting Abdominal Aortic Aneurysm in Apolipoprotein E-Knockout Mice. <b>2016</b> , 36, 1587-97	47
1283	Decreases in plasma MMP-2/TIMP-2 and MMP-9/TIMP-1 ratios in uremic patients during hemodialysis. <b>2016</b> , 20, 934-942	9
1282	Biochemical and spectroscopic characterization of the catalytic domain of MMP16 (cdMMP16). <b>2016</b> , 21, 523-35	1
1281	Matrix metalloproteinases in the brain and blood-brain barrier: Versatile breakers and makers. <b>2016</b> , 36, 1481-507	260
1280	Imbalance between matrix metalloproteinases and their tissue inhibitors in preeclampsia and gestational trophoblastic diseases. <b>2016</b> , 152, 11-22	38
1279	Cellular ageing mechanisms in osteoarthritis. <b>2016</b> , 27, 421-9	18
1278	MMP-2 Is Mainly Expressed in Arterioles and Contributes to Cerebral Vascular Remodeling Associated with TGF- $\beta$ Signaling. <b>2016</b> , 59, 317-25	7
1277	Matrix metalloproteinase 2 fused to GFP, expressed in E. coli, successfully tracked MMP-2 distribution in vivo. <b>2016</b> , 89, 737-45	4
1276	Bioresorption and Vessel Wall Integration of a Fully Bioresorbable Polymeric Everolimus-Eluting Scaffold: Optical Coherence Tomography, Intravascular Ultrasound, and Histological Study in a Porcine Model With 4-Year Follow-Up. <b>2016</b> , 9, 838-851	22
1275	Paraoxonase-1 arylesterase activity is an independent predictor of myeloperoxidase levels in overweight patients with or without cardiovascular complications. <b>2016</b> , 49, 862-7	4
1274	Morphology and MMP-9, AR and IGFR-1 responses of the seminal vesicle in TRAMP mice model. <b>2016</b> , 48, 217-23	3
1273	Glyceraldehyde 3-phosphate dehydrogenase and galectin from <i>Dirofilaria immitis</i> participate in heartworm disease endarteritis via plasminogen/plasmin system. <b>2016</b> , 223, 96-101	7
1272	Purification, characterization, and cDNA cloning of a matrix metalloproteinase from the skeletal muscle of silver carp ( <i>Hypophthalmichthys molitrix</i> ) with collagen degradation activity. <b>2016</b> , 51, 854-864	3
1271	l-glutamine regulates the expression of matrix proteins, pro-inflammatory cytokines and catabolic enzymes in interleukin-1 $\beta$ -stimulated human chondrocytes. <b>2016</b> , 51, 414-421	5
1270	Original Research: The expression of MMP2 and MMP9 in the hippocampus and cerebral cortex of newborn mice under maternal lead exposure. <b>2016</b> , 241, 1811-8	8

1269	Growth and repair factors, osteoactivin, matrix metalloproteinase and heat shock protein 72, increase with resolution of inflammation in musculetendinous tissues in a rat model of repetitive grasping. <b>2016</b> , 17, 34	13
1268	Novel roles of Src in cancer cell epithelial-to-mesenchymal transition, vascular permeability, microinvasion and metastasis. <b>2016</b> , 157, 52-61	84
1267	Inflammation and Its Mediators. <b>2016</b> , 14-32.e2	1
1266	Matrix metalloproteinases 2 and 9 and MMP9/NGAL complex activity in women with PCOS. <b>2016</b> , 151, 305-11	21
1265	MMP-9 facilitates selective proteolysis of the histone H3 tail at genes necessary for proficient osteoclastogenesis. <b>2016</b> , 30, 208-19	58
1264	Matrix Metalloproteinase 1 Causes Vasoconstriction and Enhances Vessel Reactivity to Angiotensin II via Protease-Activated Receptor 1. <b>2016</b> , 23, 542-8	30
1263	Extracellular matrix structure. <b>2016</b> , 97, 4-27	913
1262	Decellularized Renal Matrix and Regenerative Medicine of the Kidney: A Different Point of View. <b>2016</b> , 22, 183-92	19
1261	Mechanisms of cisplatin resistance and targeting of cancer stem cells: Adding glycosylation to the equation. <b>2016</b> , 24, 34-54	96
1260	Development of Vibrational Culture Model Mimicking Vocal Fold Tissues. <b>2016</b> , 44, 3136-3143	4
1259	Roles and regulation of the matrix metalloproteinase system in parturition. <b>2016</b> , 83, 276-86	18
1258	Extracellular matrix-mediated cellular communication in the heart. <b>2016</b> , 91, 228-37	91
1257	Mouse mesenchymal stem cells inhibit high endothelial cell activation and lymphocyte homing to lymph nodes by releasing TIMP-1. <b>2016</b> , 30, 1143-54	38
1256	Matrix metalloproteinases: new directions toward inhibition in the fight against cancers. <b>2016</b> , 8, 297-309	17
1255	The role of decidual cells in uterine hemostasis, menstruation, inflammation, adverse pregnancy outcomes and abnormal uterine bleeding. <b>2016</b> , 22, 497-515	92
1254	Sinusoidal obstruction syndrome (SOS): A light and electron microscopy study in human liver. <b>2016</b> , 84, 17-22	10
1253	Effect of Minocycline on the Durability of Dentin Bonding Produced with Etch-and-Rinse Adhesives. <b>2016</b> , 41, 511-519	9
1252	Developmental Bone Biology. <b>2016</b> , 1-158	

1251	Matrix metalloproteinase-10 is a target of T and B cell responses that correlate with synovial pathology in patients with antibiotic-refractory Lyme arthritis. <b>2016</b> , 69, 24-37	30
1250	Date syrup-derived polyphenols attenuate angiogenic responses and exhibits anti-inflammatory activity mediated by vascular endothelial growth factor and cyclooxygenase-2 expression in endothelial cells. <b>2016</b> , 36, 636-47	15
1249	Placental membrane-type metalloproteinases (MT-MMPs): Key players in pregnancy. <b>2016</b> , 10, 136-46	22
1248	Role of Matrix Metalloproteinases in the Pathogenesis of Traumatic Brain Injury. <b>2016</b> , 53, 6106-6123	54
1247	Matrix metalloproteinases as input and output signals for post-myocardial infarction remodeling. <b>2016</b> , 91, 134-40	67
1246	Collagen interactions: Drug design and delivery. <b>2016</b> , 97, 69-84	152
1245	Is chlorhexidine-methacrylate as effective as chlorhexidine digluconate in preserving resin dentin interfaces?. <b>2016</b> , 45, 7-13	14
1244	Neutrophil proteolytic activation cascades: a possible mechanistic link between chronic periodontitis and coronary heart disease. <b>2016</b> , 22, 85-99	42
1243	Aging and the cardiac collagen matrix: Novel mediators of fibrotic remodelling. <b>2016</b> , 93, 175-85	140
1242	Expression and localization of matrix metalloproteinases (MMP-2, -7, -9) and their tissue inhibitors (TIMP-2, -3) in the chicken oviduct during maturation. <b>2016</b> , 364, 185-97	20
1241	CDP-choline modulates matrix metalloproteinases in rat sciatic injury. <b>2016</b> , 200, 655-63	7
1240	Active site specificity profiling of the matrix metalloproteinase family: Proteomic identification of 4300 cleavage sites by nine MMPs explored with structural and synthetic peptide cleavage analyses. <b>2016</b> , 49, 37-60	113
1239	Cathepsin K Contributes to Cavitation and Collagen Turnover in Pulmonary Tuberculosis. <b>2016</b> , 213, 618-27	22
1238	Practical analysis of specificity-determining residues in protein families. <b>2016</b> , 17, 255-61	19
1237	Perturbations of the cerebrovascular matrisome: A convergent mechanism in small vessel disease of the brain?. <b>2016</b> , 36, 143-57	66
1236	Do matrix metalloproteinases play a role in degenerative disease of temporomandibular joint? A systematic review. <b>2016</b> , 34, 112-7	8
1235	Recent advances in self-assembled peptides: Implications for targeted drug delivery and vaccine engineering. <b>2017</b> , 110-111, 169-187	200
1234	The extracellular matrix glycoprotein tenascin-C and matrix metalloproteinases modify cerebellar structural plasticity by exposure to an enriched environment. <b>2017</b> , 222, 393-415	30

1233	Analysis of tryptase-positive mast cells and immunoexpression of MMP-9 and MMP-13 in periapical lesions. <b>2017</b> , 50, 446-454	12
1232	Polymorphic Variants 279R and 668Q Augment Activity of Matrix Metalloproteinase-9 in Breath Condensates of Children with Asthma. <b>2017</b> , 65, 183-187	7
1231	A mathematical model for the simulation of the formation and the subsequent regression of hypertrophic scar tissue after dermal wounding. <b>2017</b> , 16, 15-32	21
1230	Three-Dimensional Coculture of Meniscal Cells and Mesenchymal Stem Cells in Collagen Type I Hydrogel on a Small Intestinal Matrix-A Pilot Study Toward Equine Meniscus Tissue Engineering. <b>2017</b> , 23, 390-402	17
1229	Oestrus synchronisation and superovulation alter the cervicovaginal mucus proteome of the ewe. <b>2017</b> , 155, 1-10	7
1228	The effect of lysophosphatidic acid together with interferon tau on the global transcriptomic profile in bovine endometrial cells. <b>2017</b> , 92, 111-120	14
1227	Effect of benzalkonium chloride on trabecular meshwork cells in a new in vitro 3D trabecular meshwork model for glaucoma. <b>2017</b> , 41, 21-29	19
1226	Molecular pathogenesis of genetic and sporadic aortic aneurysms and dissections. <b>2017</b> , 54, 95-155	17
1225	Biomedical implications from a morphoelastic continuum model for the simulation of contracture formation in skin grafts that cover excised burns. <b>2017</b> , 16, 1187-1206	13
1224	Dynamics of MMP-9, MMP-2 and TIMP-1 in a rat model of brain injury combined with traumatic heterotopic ossification. <b>2017</b> , 15, 2129-2135	13
1223	The development of polymeric biomaterials inspired by the extracellular matrix. <b>2017</b> , 28, 1051-1069	15
1222	Feline Injection-Site Sarcoma. <b>2017</b> , 54, 204-211	22
1221	New biochemical insight of conserved water molecules at catalytic and structural Zn ions in human matrix metalloproteinase-I: a study by MD-simulation. <b>2017</b> , 23, 57	7
1220	Matrix Metalloproteinases. <b>2017</b> , 135-140	
1219	Low level laser therapy modulates viability, alkaline phosphatase and matrix metalloproteinase-2 activities of osteoblasts. <b>2017</b> , 169, 35-40	19
1218	Membrane-type matrix metalloproteases as diverse effectors of cancer progression. <b>2017</b> , 1864, 1974-1988	68
1217	Matrix metalloproteinases outside vertebrates. <b>2017</b> , 1864, 2026-2035	15
1216	High expression of matrix metalloproteinases 16 is associated with the aggressive malignant behavior and poor survival outcome in colorectal carcinoma. <b>2017</b> , 7, 46531	10

1215	Matrix metalloproteinase-2 -735C/T polymorphism is associated with resistant hypertension in a specialized outpatient clinic in Brazil. <b>2017</b> , 620, 23-29	9
1214	Basic Fibroblast Growth Factor Regulates Gene and Protein Expression Related to Proliferation, Differentiation, and Matrix Production of Human Dental Pulp Cells. <b>2017</b> , 43, 936-942	16
1213	All-trans retinoic acid enhances in vitro mesenchymal stem cells migration by targeting matrix metalloproteinases 2 and 9. <b>2017</b> , 39, 1263-1268	11
1212	Decreased homodimerization and increased TIMP-1 complexation of uteroplacental and uterine arterial matrix metalloproteinase-9 during hypertension-in-pregnancy. <b>2017</b> , 138, 81-95	11
1211	MMPs/TIMPs imbalances in the peripheral blood and cerebrospinal fluid are associated with the pathogenesis of HIV-1-associated neurocognitive disorders. <b>2017</b> , 65, 161-172	35
1210	Genetic and molecular factors and anterior cruciate ligament injuries: current concepts. <b>2017</b> , 2, 123-126	4
1209	Omega-3 fatty acids in prevention of diabetic retinopathy. <b>2017</b> , 69, 946-954	29
1208	Association of (rs55703767), (rs17576)and (rs6609533) gene polymorphisms with susceptibility to type 2 diabetes. <b>2017</b> , 6, 329-334	17
1207	Rationalized Computer-Aided Design of Matrix-Metalloprotease-Selective Prodrugs. <b>2017</b> , 60, 4496-4502	5
1206	Pathophysiology of hemophilic arthropathy and potential targets for therapy. <b>2017</b> , 115, 192-199	54
1205	Matrix metalloproteinases: their functional role in lung cancer. <b>2017</b> , 38, 766-780	93
1204	Biofluid Proteomics and Biomarkers in Traumatic Brain Injury. <b>2017</b> , 1598, 45-63	18
1203	Role of neural barriers in the pathogenesis and outcome of meningitis. <b>2017</b> , 13, 799-809	12
1202	Zymography as a Research Tool in the Study of Matrix Metalloproteinase Inhibitors. <b>2017</b> , 1626, 79-102	24
1201	Increased vascular and uteroplacental matrix metalloproteinase-1 and -7 levels and collagen type I deposition in hypertension in pregnancy: role of TNF- $\alpha$ . <b>2017</b> , 313, H491-H507	17
1200	Biochemical and Biological Attributes of Matrix Metalloproteinases. <b>2017</b> , 147, 1-73	394
1199	Next generation matrix metalloproteinase inhibitors - Novel strategies bring new prospects. <b>2017</b> , 1864, 1927-1939	97
1198	Dental Adhesives: From Earlier Products to Bioactive and Smart Materials. <b>2017</b> , 331-367	1

1197	Blood assessment of the expression levels of matrix metalloproteinase 9 (MMP9) and its natural inhibitor, TIMP1 genes in Iranian schizophrenic patients. <b>2017</b> , 32, 1537-1542	15
1196	Synergic and antagonistic relationship between MMP-2 and MMP-9 with fibrosis and inflammation in Chagas' cardiomyopathy. <b>2017</b> , 39, e12446	19
1195	G Protein Coupled Receptor-mediated Transactivation of Extracellular Proteases. <b>2017</b> , 70, 10-15	8
1194	Cleavage and phosphorylation: important post-translational modifications of galectin-3. <b>2017</b> , 36, 367-374	13
1193	Both Drosophila matrix metalloproteinases have released and membrane-tethered forms but have different substrates. <b>2017</b> , 7, 44560	21
1192	Expression and Influence of Matrix Metalloproteinase-9/Tissue Inhibitor of Metalloproteinase-1 and Vascular Endothelial Growth Factor in Diabetic Foot Ulcers. <b>2017</b> , 16, 6-13	12
1191	Expression and Purification of a Matrix Metalloprotease Transmembrane Domain in Escherichia coli. <b>2017</b> , 1579, 17-33	
1190	Matrix metalloproteinase 2 (MMP-2) levels are increased in active acromegaly patients. <b>2017</b> , 57, 148-155	1
1189	Immunocharacterization of matrix metalloproteinase-2 and matrix metalloproteinase-9 in canine transmissible venereal tumors. <b>2017</b> , 92, 100-106	8
1188	Expression and Purification of Matrix Metalloproteinases in Escherichia coli. <b>2017</b> , 1579, 3-16	
1187	Riding the metalloproteinase roller coaster. <b>2017</b> , 292, 7708-7718	19
1186	Matrix metalloproteinases in Vietnamese patients with colorectal cancer. <b>2017</b> , 13, 2097-2104	2
1185	Using Small Angle X-Ray Scattering (SAXS) to Characterize the Solution Conformation and Flexibility of Matrix Metalloproteinases (MMPs). <b>2017</b> , 1579, 87-108	
1184	Deciphering acute coronary syndrome biomarkers: High-resolution proteomics in platelets, thrombi and microparticles. <b>2017</b> , 54, 49-58	12
1183	Synthesis and binding monitoring of a new nanomolar PAMAM-based matrix metalloproteinases inhibitor (MMPIs). <b>2017</b> , 25, 523-527	3
1182	Processing of syndecan-2 by matrix metalloproteinase-14 and effect of its cleavage on VEGF-induced tube formation of HUVECs. <b>2017</b> , 474, 3719-3732	13
1181	Targeted Polypharmacology: Discovery of a Highly Potent Non-Hydroxamate Dual Matrix Metalloproteinase (MMP)-10/-13 Inhibitor. <b>2017</b> , 60, 9585-9598	14
1180	Structure-Based Design of Non-natural Macrocyclic Peptides That Inhibit Protein-Protein Interactions. <b>2017</b> , 60, 8982-8988	33



1179	Salivary MMP-13 gender differences in periodontitis: A cross-sectional study from Sweden. <b>2017</b> , 3, 165-170	3
1178	Matrix metalloproteinase-7 induces homotypic tumor cell aggregation via proteolytic cleavage of the membrane-bound Kunitz-type inhibitor HAI-1. <b>2017</b> , 292, 20769-20784	12
1177	Management of Moisture-Associated Skin Damage: A Scoping Review. <b>2017</b> , 30, 494-501	41
1176	Matrix Metalloproteinases in Kidney Disease: Role in Pathogenesis and Potential as a Therapeutic Target. <b>2017</b> , 148, 31-65	29
1175	Operculum bone carp (cyprinus carpio sp.) scaffold is a new potential xenograft material:a preliminary study. <b>2017</b> , 172, 012004	
1174	Regulation of Extracellular Matrix Remodeling and Epithelial-Mesenchymal Transition by Matrix Metalloproteinases: Decisive Candidates in Tumor Progression. <b>2017</b> , 159-194	0
1173	Protective effects of taurine against renal ischemia/reperfusion injury in rats by inhibition of gelatinases, MMP-2 and MMP-9, and p38 mitogen-activated protein kinase signaling. <b>2017</b> , 92, 524-535	14
1172	Gelatinases and physical exercise: A systematic review of evidence from human studies. <b>2017</b> , 96, e8072	19
1171	Differential proteomic profiling of endometrium and plasma indicate the importance of hydrolysis in bovine endometritis. <b>2017</b> , 100, 9324-9337	5
1170	Transcriptome modulation of bovine trophoblast cells in vitro by Neospora caninum. <b>2017</b> , 47, 791-799	19
1169	Metalloproteinases in atherosclerosis. <b>2017</b> , 816, 93-106	103
1168	An Overview of Dental Adhesive Systems and the Dynamic Tooth-Adhesive Interface. <b>2017</b> , 61, 713-731	29
1167	The Role Matrix Metalloproteinases in the Production of Aortic Aneurysm. <b>2017</b> , 147, 239-265	93
1166	Matrix Metalloproteinases in Bone Resorption, Remodeling, and Repair. <b>2017</b> , 148, 203-303	95
1165	Recent Advances in Adhesive Bonding - The Role of Biomolecules, Nanocompounds, and Bonding Strategies in Enhancing Resin Bonding to Dental Substrates. <b>2017</b> , 4, 215-227	13
1164	Knowledge-transfer learning for prediction of matrix metalloprotease substrate-cleavage sites. <b>2017</b> , 7, 5755	10
1163	Endoplasmic reticulum oxidase 1βs critical for collagen secretion from and membrane type 1-matrix metalloproteinase levels in hepatic stellate cells. <b>2017</b> , 292, 15649-15660	7
1162	Assessment of the involvement of the macrophage migration inhibitory factor-glucocorticoid regulatory dyad in the expression of matrix metalloproteinase-2 during periodontitis. <b>2017</b> , 125, 345-354	4

1161	Potential effect of compounds isolated from <i>Coffea arabica</i> against UV-B induced skin damage by protecting fibroblast cells. <b>2017</b> , 174, 323-332	22
1160	Discovery of a Potent Inhibitor Class with High Selectivity toward Clostridial Collagenases. <b>2017</b> , 139, 12696-12703	14
1159	Neuronal activity drives FMRP- and HSPG-dependent matrix metalloproteinase function required for rapid synaptogenesis. <b>2017</b> , 10,	14
1158	Dencichine ameliorates kidney injury in induced type II diabetic nephropathy via the TGF- $\beta$ /Smad signalling pathway. <b>2017</b> , 812, 196-205	21
1157	Monocyte Adhesion, Migration, and Extracellular Matrix Breakdown Are Regulated by Integrin $\alpha$ 5 $\beta$ 1 in Infection. <b>2017</b> , 199, 982-991	20
1156	Matrix Metalloproteinases in Remodeling of Lower Extremity Veins and Chronic Venous Disease. <b>2017</b> , 147, 267-299	30
1155	The effect of tomatine on metastasis related matrix metalloproteinase (MMP) activities in breast cancer cell model. <b>2017</b> , 627, 408-411	14
1154	Role of transforming growth factor $\beta$ 1 in the pathogenesis of pelvic organ prolapse: A potential therapeutic target. <b>2017</b> , 40, 347-356	14
1153	Photobiomodulation therapy action in wound repair skin induced in aged rats old: time course of biomarkers inflammatory and repair. <b>2017</b> , 32, 1769-1782	10
1152	Bioinspired Hydrogels to Engineer Cancer Microenvironments. <b>2017</b> , 19, 109-133	47
1151	Resveratrol protects against ICV collagenase-induced neurobehavioral and biochemical deficits. <b>2017</b> , 14, 14	11
1150	Genetic predisposition for chronic venous insufficiency in several genes for matrix metalloproteinases (MMP-2, MMP-9, MMP-12) and their inhibitor TIMP-2. <b>2017</b> , 31, 1746-1752	8
1149	The protective effects of bone morphogenetic protein-7 against epithelial injury and matrix metalloproteinases upregulation induced by silica in vitro. <b>2017</b> , 36, 892-900	3
1148	A mathematical model for the simulation of the contraction of burns. <b>2017</b> , 75, 1-31	6
1147	Crosstalk between obesity and MMP-9 in cardiac remodelling -a cross-sectional study in apparent treatment-resistant hypertension. <b>2017</b> , 26, 122-129	10
1146	Downregulation of MicroRNA-320d predicts poor overall survival and promotes the growth and invasive abilities in glioma. <b>2017</b> , 89, 806-814	16
1145	Location and gene-specific effects of methylprednisolone acetate on mitigating IL1 $\beta$ -induced inflammation in mature ovine explant knee tissue. <b>2017</b> , 66, 239-248	2
1144	May High MMP-2 and TIMP-2 Expressions Increase or Decrease the Aggressivity of Oral Cancer?. <b>2017</b> , 23, 197-206	17

1143	Dynamic remodeling of endometrial extracellular matrix regulates embryo receptivity in cattle. <b>2016,</b>	14
1142	Matrix metalloproteinase-8 activity in gingival crevicular fluid: development of a novel assay. <b>2017,</b> 52, 556-561	11
1141	Dissecting the interaction between tissue inhibitor of metalloproteinases-3 (TIMP-3) and low density lipoprotein receptor-related protein-1 (LRP-1): Development of a "TRAP" to increase levels of TIMP-3 in the tissue. <b>2017,</b> 59, 69-79	16
1140	The role of the kallikrein-kinin system, matrix metalloproteinases, and tissue inhibitors of metalloproteinases in the early restenosis of covered stents in the femoropopliteal arterial segment. <b>2017,</b> 65, 119-127	2
1139	Biological and proteomic characterization of a composite mesh for abdominal wall hernia treatment: Reference Study. <b>2017,</b> 105, 2045-2052	2
1138	Protein-protein interaction analysis to identify biomarker networks for endometriosis. <b>2017,</b> 14, 4647-4654	6
1137	Matrix Metalloproteinases and Synovial Joint Pathology. <b>2017,</b> 148, 305-325	59
1136	MMP8 polymorphism is associated with susceptibility to osteonecrosis of the femoral head in a Chinese Han population. <b>2017,</b> 8, 21561-21566	8
1135	Evolution of Cell-Autonomous Effector Mechanisms in Macrophages versus Non-Immune Cells. <b>2017,</b> 615-635	
1134	Sphingosine 1-Phosphate Receptors: Do They Have a Therapeutic Potential in Cardiac Fibrosis?. <b>2017,</b> 8, 296	26
1133	Ferulaldehyde Improves the Effect of Methotrexate in Experimental Arthritis. <b>2017,</b> 22,	11
1132	Roadmap to Organ Printing. <b>2017,</b> 243-269	1
1131	Implications of Extracellular Matrix Production by Adipose Tissue-Derived Stem Cells for Development of Wound Healing Therapies. <b>2017,</b> 18,	40
1130	Multi-Approach Analysis for the Identification of Proteases within Birch Pollen. <b>2017,</b> 18,	11
1129	New Insights into the Role of Matrix Metalloproteinases in Preeclampsia. <b>2017,</b> 18,	56
1128	The Balance Between Metalloproteinases and TIMPs: Critical Regulator of Microvascular Endothelial Cell Function in Health and Disease. <b>2017,</b> 147, 101-131	22
1127	Manipulates Innate Immunity through Own and Host-Expressed Proteases. <b>2017,</b> 7, 166	59
1126	Challenge Increases Matrix Metalloproteinase-8 Expression in Fallopian Tube Explants. <b>2017,</b> 7, 399	3

1125	Rapid, Automated, and Specific Immunoassay to Directly Measure Matrix Metalloproteinase-9-Tissue Inhibitor of Metalloproteinase-1 Interactions in Human Plasma Using AlphaLISA Technology: A New Alternative to Classical ELISA. <b>2017</b> , 8, 853	9
1124	Matrix Metalloproteinase Inhibitors as Investigational and Therapeutic Tools in Unrestrained Tissue Remodeling and Pathological Disorders. <b>2017</b> , 148, 355-420	69
1123	Regulation of Matrix Metalloproteinase in the Pathogenesis of Diabetic Retinopathy. <b>2017</b> , 148, 67-85	31
1122	Lectins, Interconnecting Proteins with Biotechnological/Pharmacological and Therapeutic Applications. <b>2017</b> , 2017, 1594074	82
1121	Quercetin inhibits epithelial-mesenchymal transition, decreases invasiveness and metastasis, and reverses IL-6 induced epithelial-mesenchymal transition, expression of MMP by inhibiting STAT3 signaling in pancreatic cancer cells. <b>2017</b> , 10, 4719-4729	46
1120	Effects of C-reactive protein on the expression of matrix metalloproteinases and their inhibitors via Fcγ receptors on 3T3-L1 adipocytes. <b>2017</b> , 14, 484-493	6
1119	Matrix Metalloproteinases are required for membrane motility and lumenogenesis during Drosophila heart development. <b>2017</b> , 12, e0171905	10
1118	Novel molecular imaging ligands targeting matrix metalloproteinases 2 and 9 for imaging of unstable atherosclerotic plaques. <b>2017</b> , 12, e0187767	15
1117	Differential Expression of Matrix Metalloproteinases 2, 9 and Cytokines by Neutrophils and Monocytes in the Clinical Forms of Chagas Disease. <b>2017</b> , 11, e0005284	31
1116	Myosin isoform expressed in metastatic prostate cancer stimulates cell invasion. <b>2017</b> , 7, 8476	12
1115	MMP-9 Levels and IMT of Carotid Arteries are Elevated in Obese Children and Adolescents Compared to Non-Obese. <b>2017</b> , 108, 198-203	6
1114	Biological Activity and Implications of the Metalloproteinases in Diabetic Foot Ulcers. <b>2017</b> ,	0
1113	Baicalein decreases uric acid and prevents hyperuricemic nephropathy in mice. <b>2017</b> , 8, 40305-40317	17
1112	Proprotein convertase subtilisin/kexin type 6 promotes in vitro proliferation, migration and inflammatory cytokine secretion of synovial fibroblast-like cells from rheumatoid arthritis via nuclear- $\beta$ , signal transducer and activator of transcription 3 and extracellular signal regulated 1/2 pathways. <b>2017</b> , 16, 8477-8484	11
1111	Dissecting the Role of the Extracellular Matrix in Heart Disease: Lessons from the Drosophila Genetic Model. <b>2017</b> , 4,	14
1110	Narrowband ultraviolet B light treatment changes plasma concentrations of MMP-3, MMP-9 and TIMP-3 in psoriatic patients. <b>2017</b> , 13, 575-582	4
1109	Current diagnostics and treatment of fibrosarcoma -perspectives for future therapeutic targets and strategies. <b>2017</b> , 8, 104638-104653	45
1108	Determination of Genes Related to Uveitis by Utilization of the Random Walk with Restart Algorithm on a Protein-Protein Interaction Network. <b>2017</b> , 18,	14

1107	Development of a Non-Hydroxamate Dual Matrix Metalloproteinase (MMP)-7/-13 Inhibitor. <b>2017</b> , 22,	4
1106	Influence of Matrix Metalloproteinases MMP-2, -3 and on Age- Related Macular Degeneration Development. <b>2017</b> ,	
1105	Skin Wound Healing Effects and Action Mechanism of Acai Berry Water Extracts. <b>2017</b> , 33, 149-156	13
1104	Distinct Requirements for Extracellular and Intracellular MMP12 in the Development of the Adult V-SVZ Neural Stem Cell Niche. <b>2018</b> , 10, 984-999	9
1103	Urinary metalloproteinases and tissue inhibitors of metalloproteinases as potential early biomarkers for renal fibrosis in children with nephrotic syndrome. <b>2018</b> , 97, e9964	8
1102	Circulating matrix metalloproteinases and procollagen propeptides in inguinal hernia. <b>2018</b> , 22, 541-547	6
1101	Nesfatin-1 and visfatin expression is associated with reduced atherosclerotic disease risk in patients with rheumatoid arthritis. <b>2018</b> , 102, 31-37	18
1100	Hydroxamates. <b>2018</b> , 435-480	
1099	Stability of matrix metalloproteinase-9 as biological marker in colorectal cancer. <b>2018</b> , 35, 50	8
1098	Extracellular Matrix: Immunity and Inflammation. <b>2018</b> , 83-109	2
1097	Bioresponsive release of insulin-like growth factor-I from its PEGylated conjugate. <b>2018</b> , 279, 17-28	19
1096	Does the dysregulation of matrix metalloproteinases contribute to recurrent implantation failure?. <b>2018</b> , 15, 311-323	8
1095	Human beta defensin 3 alters matrix metalloproteinase production in human dendritic cells exposed to Porphyromonas gingivalis hemagglutinin B. <b>2018</b> , 89, 361-369	2
1094	Matrix Metalloproteinases, Vascular Remodeling, and Vascular Disease. <b>2018</b> , 81, 241-330	188
1093	A survey of metastasis suppressors in Metazoa. <b>2018</b> , 98, 554-570	4
1092	Gasdermin C is induced by ultraviolet light and contributes to MMP-1 expression via activation of ERK and JNK pathways. <b>2018</b> , 90, 180-189	20
1091	Cathepsin B inhibition attenuates cardiovascular pathology in mucopolysaccharidosis I mice. <b>2018</b> , 196, 102-109	20
1090	Rice matrix metalloproteinase OsMMP1 plays pleiotropic roles in plant development and symplastic-apoplastic transport by modulating cellulose and callose depositions. <b>2018</b> , 8, 2783	9

1089	Vasoactive Peptides. <b>2018</b> , 107-126	1
1088	Java Tea ( <i>Orthosiphon stamineus</i> ) protected against osteoarthritis by mitigating inflammation and cartilage degradation: a preclinical study. <b>2018</b> , 26, 939-949	13
1087	Encyclopedia of Signaling Molecules. <b>2018</b> , 3005-3013	
1086	Soybean Matrix Metalloproteinase Gm2-MMP Relates to Growth and Development and Confers Enhanced Tolerance to High Temperature and Humidity Stress in Transgenic Arabidopsis. <b>2018</b> , 36, 94-106	8
1085	Restoring balance: biofilms and wound dressings. <b>2018</b> , 27, 102-113	9
1084	New photodynamic molecular beacons (PMB) as potential cancer-targeted agents in PDT. <b>2018</b> , 26, 688-702	9
1083	Prevalence of MMP-8 gene polymorphisms in HIV-infected individuals and its association with HIV-associated neurocognitive disorder. <b>2018</b> , 646, 83-90	6
1082	Proteolytic Cleavage-Mechanisms, Function, and "Omic" Approaches for a Near-Ubiquitous Posttranslational Modification. <b>2018</b> , 118, 1137-1168	99
1081	The role of inflammatory cytokines and tumor associated macrophages (TAMs) in microenvironment of pancreatic cancer. <b>2018</b> , 39, 46-61	60
1080	Evaluation on covalent and noncovalent linking of peptide to graphene oxide for MMP-9 detection. <b>2018</b> , 26, 38-41	2
1079	Cysteine Protease Cathepsins in Atherosclerotic Cardiovascular Diseases. <b>2018</b> , 25, 111-123	45
1078	Betulinic, oleanolic and ursolic acids inhibit the enzymatic and biological effects induced by a P-I snake venom metalloproteinase. <b>2018</b> , 279, 219-226	12
1077	Characteristics and Responses of Human Vocal Fold Cells in a Vibrational Culture Model. <b>2018</b> , 128, E258-E264	2
1076	Macro- and micromechanical remodelling in the fish atrium is associated with regulation of collagen 1 alpha 3 chain expression. <b>2018</b> , 470, 1205-1219	6
1075	A matrix metalloproteinase 9 (MMP9) gene single nucleotide polymorphism is associated with predisposition to tick-borne encephalitis virus-induced severe central nervous system disease. <b>2018</b> , 9, 763-767	13
1074	Enlarged Size and Impaired Elastic Properties of the Ascending Aorta are Associated with Endothelial Dysfunction and Elevated Plasma Matrix Metalloproteinase-2 Level in Patients with Bicuspid Aortic Valve. <b>2018</b> , 44, 955-962	7
1073	Matrix metalloproteinase multiplex screening identifies increased MMP-2 urine concentrations in women predicted to develop preeclampsia. <b>2018</b> , 23, 18-24	12
1072	Systemic and ocular fluid compounds as potential biomarkers in age-related macular degeneration. <b>2018</b> , 63, 9-39	64

1071	Effect of matrix metalloproteinase inhibitor on disrupted E-cadherin after acid exposure in the human nasal epithelium. <b>2018</b> , 128, E1-E7	8
1070	Gelatin promotes rapid restoration of the blood brain barrier after acute brain injury. <b>2018</b> , 65, 137-149	22
1069	Relationship between matrix metalloproteinase-3 serum level and pulmonary artery systolic pressure in patients with rheumatoid arthritis. <b>2018</b> , 33, 191-197	2
1068	Combination Therapy with Pirfenidone plus Prednisolone Ameliorates Paraquat-Induced Pulmonary Fibrosis. <b>2018</b> , 41, 134-142	18
1067	Capsaicin prevents mitochondrial damage, protects cardiomyocytes subjected to anoxia/reoxygenation injury mediated by 14-3-3 $\sigma$ /Bcl-2. <b>2018</b> , 819, 43-50	25
1066	Molecular pathology of total knee arthroplasty instability defined by RNA-seq. <b>2018</b> , 110, 247-256	5
1065	The anti-photoaging and moisturizing effects of extract in UVB-irradiated hairless mice. <b>2018</b> , 27, 147-157	11
1064	Effect of different resistance-training protocols on the extracellular matrix of the calcaneal tendon of rats. <b>2018</b> , 216, 75-81	3
1063	Higher levels of circulating TIMP-4 in preeclampsia is strongly associated with clinical parameters and microRNA. <b>2018</b> , 40, 609-612	6
1062	Exploration about changes of IL-10, NF- $\kappa$ B and MMP-3 in a rat model of cervical spondylosis. <b>2018</b> , 93, 184-188	5
1061	Treponema denticola increases MMP-2 expression and activation in the periodontium via reversible DNA and histone modifications. <b>2018</b> , 20, e12815	12
1060	A systematic review on silver nanoparticles-induced cytotoxicity: Physicochemical properties and perspectives. <b>2018</b> , 9, 1-16	488
1059	Inhibition of Skin Wound Contraction by Nanofibrillar Cellulose Hydrogel. <b>2018</b> , 141, 357e-366e	16
1058	Gelatinase inhibitors: a patent review (2011-2017). <b>2018</b> , 28, 31-46	4
1057	Phase-contrast microtomography: are the tracers necessary for stem cell tracking in infarcted hearts?. <b>2018</b> , 4, 055008	2
1056	MMP-8 single-nucleotide polymorphisms are related to ankylosing spondylitis in Chinese Han population. <b>2018</b> , 97, e12136	2
1055	Prognostic significance of matrix metalloproteinase 9 expression in osteosarcoma: A meta-analysis of 16 studies. <b>2018</b> , 97, e13051	20
1054	Age-Related Dynamics of the Content of Matrix Metalloproteinases (MMP-1, -2, -3, and -9) and Tissue Inhibitors of Matrix Metalloproteinases (TIMP-1, -2, and -4) in Blood Plasma of Residents of the European Part of Russia—Arctic Zone. <b>2018</b> , 8, 339-346	3

1053	Scopoletin downregulates MMP-1 expression in human fibroblasts via inhibition of p38 phosphorylation. <b>2018</b> , 42, 2285-2293	4
1052	DNA Methylation and Uveal Melanoma. <b>2018</b> , 131, 845-851	5
1051	Proteomic landscape of seminal plasma associated with dairy bull fertility. <b>2018</b> , 8, 16323	50
1050	Zinc: A Necessary Ion for Mammalian Sperm Fertilization Competency. <b>2018</b> , 19,	40
1049	Matrix Metalloproteinase Response of Dendritic Cell, Gingival Epithelial Keratinocyte, and T-Cell Transwell Co-Cultures Treated with Hemagglutinin-B. <b>2018</b> , 19,	8
1048	Anti-metastatic and anti-proliferative activity of eugenol against triple negative and HER2 positive breast cancer cells. <b>2018</b> , 18, 321	23
1047	MMP-9 inhibition promotes anti-tumor immunity through disruption of biochemical and physical barriers to T-cell trafficking to tumors. <b>2018</b> , 13, e0207255	35
1046	Association of CILP, COL9A2 and MMP3 Gene Polymorphisms with Lumbar Disc Degeneration in an Indian Population. <b>2018</b> , 66, 378-382	3
1045	Matrix Metalloproteinase-9 (MMP-9) as a Cancer Biomarker and MMP-9 Biosensors: Recent Advances. <b>2018</b> , 18,	235
1044	Matrix metalloproteinase-12 inhibitors: synthesis, structure-activity relationships and intestinal absorption of novel sugar-based biphenylsulfonamide carboxylates. <b>2018</b> , 26, 5804-5815	7
1043	Effect of nanoparticles on the expression and activity of matrix metalloproteinases. <b>2018</b> , 7, 541-553	5
1042	Metalloproteinases in disease: identification of biomarkers of tissue damage through proteomics. <b>2018</b> , 15, 967-982	10
1041	Expression of matrix metalloproteinases (MMPs-2, -7, -9, and -26) and tissue inhibitors of metalloproteinases (TIMPs-1 and -2) in pleomorphic adenomas and adenoid cystic carcinomas. <b>2018</b> , 275, 3075-3082	2
1040	Polyphenolic Flavonoids and Metalloprotease Inhibition: Applications to Health and Disease. <b>2018</b> , 33-40	1
1039	Matrix Metalloproteinase-8 as an Inflammatory and Prevention Biomarker in Periodontal and Peri-Implant Diseases. <b>2018</b> , 2018, 7891323	38
1038	Dynamic matrisome: ECM remodeling factors licensing cancer progression and metastasis. <b>2018</b> , 1870, 207-228	57
1037	A Potential Role for MMPs during the Formation of Non-Neurogenic Placodes. <b>2018</b> , 6,	1
1036	Vesicular systems employing natural substances as promising drug candidates for MMP inhibition in glioblastoma: A nanotechnological approach. <b>2018</b> , 551, 339-361	11



1035	Agonist-Biased Signaling via Matrix Metalloproteinase-9 Promotes Extracellular Matrix Remodeling. <b>2018</b> , 7,	16
1034	Matrix metalloproteinase (MMP) and immunosuppressive biomarker profiles of seven head and neck squamous cell carcinoma (HNSCC) cell lines. <b>2018</b> , 7, 533-542	14
1033	Incretin drugs as modulators of atherosclerosis. <b>2018</b> , 278, 29-38	23
1032	Chemical Tools for Selective Activity Profiling of Endogenously Expressed MMP-14 in Multicellular Models. <b>2018</b> , 13, 2645-2654	9
1031	Gel aloe vera reduces MMP-9 in diabetic wounds. <b>2018</b> , 47, 07008	2
1030	Effects of flexibility of the $\alpha$ chain of type I collagen on collagenase cleavage. <b>2018</b> , 203, 247-254	9
1029	Increasing Cardiomyocyte Atrogin-1 Reduces Aging-Associated Fibrosis and Regulates Remodeling in Vivo. <b>2018</b> , 188, 1676-1692	5
1028	Matrix metalloproteinase 9 (MMP9) in wound healing of diabetic foot ulcer: Molecular target and structure-based drug design. <b>2018</b> , 22, 1-13	17
1027	Matrix metalloproteinase-9 gene polymorphisms and their interaction with environment on subarachnoid hemorrhage risk. <b>2018</b> , 243, 749-753	6
1026	Multiple Architectures and Mechanisms of Latency in Metallopeptidase Zymogens. <b>2018</b> , 118, 5581-5597	16
1025	MicroRNA-21 up-regulates metalloprotease by down-regulating TIMP3 during cumulus cell-oocyte complex in vitro maturation. <b>2018</b> , 477, 29-38	13
1024	PM2.5 exposure significantly improves the exacerbation of A549 tumor-bearing CB17-SCID mice. <b>2018</b> , 60, 169-175	7
1023	Anthrax Bacterium: Its Etiology and Possible Therapeutics Against Cancer. <b>2018</b> , 211-228	
1022	Matrix metalloproteinase expression is altered in the small and large intestine following fractionated radiation in vivo. <b>2018</b> , 26, 3873-3882	6
1021	Effects of increasing supplemental dietary Zn concentration on growth performance and carcass characteristics in finishing steers fed ractopamine hydrochloride. <b>2018</b> , 96, 1903-1913	7
1020	Matrix metalloproteinase-13 unlucky for the forming thrombus. <b>2018</b> , 2, 525-528	1
1019	The association of matrix metalloproteinases polymorphisms and interleukins in advanced age-related macular degeneration. <b>2018</b> , 39, 463-472	7
1018	functions downstream of anti-Müllerian hormone signaling to regulate Müllerian duct regression. <b>2018</b> , 115, 8382-8387	9

1017	Quantitative assessment of intestinal stiffness and associations with fibrosis in human inflammatory bowel disease. <b>2018</b> , 13, e0200377	28
1016	The Role of Biomaterials as Angiogenic Modulators of Spinal Cord Injury: Mimetics of the Spinal Cord, Cell and Angiogenic Factor Delivery Agents. <b>2018</b> , 9, 164	16
1015	Biomarkers for Pulmonary Vascular Remodeling in Systemic Sclerosis: A Pathophysiological Approach. <b>2018</b> , 9, 587	16
1014	Placental growth factor reverses decreased vascular and uteroplacental MMP-2 and MMP-9 and increased MMP-1 and MMP-7 and collagen types I and IV in hypertensive pregnancy. <b>2018</b> , 315, H33-H47	20
1013	Alterations of the Extracellular Matrix of the Connective Tissue in Inguinal Herniogenesis. <b>2018</b> , 13-25	
1012	Integrin $\alpha 1$ Expression Regulates Matrix Metalloproteinase-1-Dependent Bronchial Epithelial Repair in Pulmonary Tuberculosis. <b>2018</b> , 9, 1348	3
1011	Altered Expression of Matrix Metalloproteinases and Their Endogenous Inhibitors in a Human Isogenic Stem Cell Model of Huntington's Disease. <b>2017</b> , 11, 736	13
1010	Exploring the In Vivo Anti-Inflammatory Actions of Simvastatin-Loaded Porous Microspheres on Inflamed Tenocytes in a Collagenase-Induced Animal Model of Achilles Tendinitis. <b>2018</b> , 19,	20
1009	Reviewing Mechanistic Peptidomics in Body Fluids Focusing on Proteases. <b>2018</b> , 18, e1800187	10
1008	Injectable and protease-degradable hydrogel for siRNA sequestration and triggered delivery to the heart. <b>2018</b> , 285, 152-161	48
1007	Tissue Inhibitor of Metalloproteinase-3 (TIMP-3) induces FAS dependent apoptosis in human vascular smooth muscle cells. <b>2018</b> , 13, e0195116	10
1006	Multifaced Roles of the $\alpha 3$ Integrin in Ehlers-Danlos and Arterial Tortuosity Syndromes' Dermal Fibroblasts. <b>2018</b> , 19,	14
1005	Some Biological Consequences of the Inhibition of Na,K-ATPase by Translationally Controlled Tumor Protein (TCTP). <b>2018</b> , 19,	8
1004	Interleukin 6 Plays a Role in the Migration of Magnetically Levitated Mesenchymal Stem Cells Spheroids. <b>2018</b> , 8, 412	7
1003	Rational Engineering a Multichannel Upconversion Sensor for Multiplex Detection of Matrix Metalloproteinase Activities. <b>2018</b> , 3, 1522-1530	20
1002	Gene expression of matrix metalloproteinase 9 (MMP9), matrix metalloproteinase 13 (MMP13), vascular endothelial growth factor (VEGF) and fibroblast growth factor 23 (FGF23) in femur and vertebra tissues of the hypovitaminosis D kyphotic pig model. <b>2018</b> , 120, 404-414	4
1001	MMP-Responsive 'Smart' Drug Delivery and Tumor Targeting. <b>2018</b> , 39, 766-781	122
1000	Retinoic acid-induced 2 (RAI2) is a novel tumor suppressor, and promoter region methylation of RAI2 is a poor prognostic marker in colorectal cancer. <b>2018</b> , 10, 69	10

999	Curcumin Analog CH-5 Suppresses the Proliferation, Migration, and Invasion of the Human Gastric Cancer Cell Line HGC-27. <b>2018</b> , 23,	20
998	The effect of tubeimoside-1 on the proliferation, metastasis and apoptosis of oral squamous cell carcinoma in vitro. <b>2018</b> , 11, 3989-4000	12
997	Matrix Metalloproteinase Inhibitors in Cancer Therapy: Turning Past Failures Into Future Successes. <b>2018</b> , 17, 1147-1155	254
996	Targeting matrix metalloproteinases with novel diazepine substituted cinnamic acid derivatives: design, synthesis, in vitro and in silico studies. <b>2018</b> , 12, 41	6
995	Changes in the secretome of tri-dimensional spheroid-cultured human mesenchymal stem cells in vitro by interleukin-1 priming. <b>2018</b> , 9, 11	56
994	Acute- and late-phase matrix metalloproteinase (MMP)-9 activity is comparable in female and male rats after peripheral nerve injury. <b>2018</b> , 15, 89	16
993	Chitin synthesis inhibitors promote liver cancer cell metastasis via interfering with hypoxia-inducible factor 1 $\beta$ . <b>2018</b> , 206, 231-237	16
992	New insights into the roles of myofibroblasts and innervation during skin healing and innovative therapies to improve scar innervation. <b>2018</b> , 27, 950-958	28
991	Triumph and tumult of matrix metalloproteinases and their crosstalk with eicosanoids in cancer. <b>2018</b> , 37, 279-288	6
990	Epitope-specific affinity maturation improved stability of potent protease inhibitory antibodies. <b>2018</b> , 115, 2673-2682	4
989	Transplantation of human matrix metalloproteinase-1 gene-modified bone marrow-derived mesenchymal stem cell attenuates CCL4-induced liver fibrosis in rats. <b>2018</b> , 41, 3175-3184	12
988	TLR2 Ligand Pam3CSK4 Regulates MMP-2/9 Expression by MAPK/NF- $\kappa$ B Signaling Pathways in Primary Brain Microvascular Endothelial Cells. <b>2018</b> , 43, 1897-1904	17
987	Mechanics of Soft Tissue Reactions to Textile Mesh Implants. <b>2018</b> , 251-275	2
986	Design, Synthesis, and Biological Evaluation of Tetrahydro- $\beta$ -carboline Derivatives as Selective Sub-Nanomolar Gelatinase Inhibitors. <b>2018</b> , 13, 1343-1352	3
985	C>T (rs17035945) polymorphism of TIMP-4 protects against preeclampsia. <b>2019</b> , 39, 135-137	2
984	Epidermal growth factor receptor-mediated regulation of matrix metalloproteinase-2 and matrix metalloproteinase-9 in MCF-7 breast cancer cells. <b>2019</b> , 452, 111-121	15
983	A new role for the ginsenoside RG3 in antiaging via mitochondria function in ultraviolet-irradiated human dermal fibroblasts. <b>2019</b> , 43, 431-441	22
982	Prediction of matrix metal proteinases-12 inhibitors by machine learning approaches. <b>2019</b> , 37, 2627-2640	4

981	Ultrastructural analysis of collagen fibril diameter distribution in cleft lip. <b>2019</b> , 25, 206-214	2
980	Matrix Metalloproteinase in Abdominal Aortic Aneurysm and Aortic Dissection. <b>2019</b> , 12,	45
979	Prospective Application of Activity-Based Proteomic Profiling in Vision Research-Potential Unique Insights into Ocular Protease Biology and Pathology. <b>2019</b> , 20,	0
978	Transcriptomic Profiling of Adipose Derived Stem Cells Undergoing Osteogenesis by RNA-Seq. <b>2019</b> , 9, 11800	16
977	Beyond proteases: Basement membrane mechanics and cancer invasion. <b>2019</b> , 218, 2456-2469	73
976	Association between Serum Matrix Metalloproteinase- (MMP-) 3 Levels and Systemic Lupus Erythematosus: A Meta-analysis. <b>2019</b> , 2019, 9796735	5
975	Myocardial MMP-2 contributes to SERCA2a proteolysis during cardiac ischaemia-reperfusion injury. <i>Cardiovascular Research</i> , <b>2020</b> , 116, 1021-1031	9.9 7
974	The effects of zinc treatment on matrix metalloproteinases: A systematic review. <b>2019</b> , 56, 107-115	10
973	Molecular Imaging Probes Based on Matrix Metalloproteinase Inhibitors (MMPIs). <b>2019</b> , 24,	15
972	Treponema pallidum enhances human monocyte migration and invasion by dysregulating the MMP/TIMP balance. <b>2019</b> , 75, 105744	5
971	Mechanochemical Signaling of the Extracellular Matrix in Epithelial-Mesenchymal Transition. <b>2019</b> , 7, 135	47
970	Pharmacological Protection of Kidney Grafts from Cold Perfusion-Induced Injury. <b>2019</b> , 2019, 9617087	7
969	Myometrial progesterone hyper-responsiveness associated with increased risk of human uterine fibroids. <b>2019</b> , 19, 92	8
968	Association of the 81 G->A polymorphism in the MMP-7 gene promoter and gastric cancer: A case-control study. <b>2019</b> , 21, 100594	
967	Distribution and activation of matrix metalloproteinase-2 in skeletal muscle fibers. <b>2019</b> , 317, C613-C625	11
966	Post-Translational Modification-Dependent Activity of Matrix Metalloproteinases. <b>2019</b> , 20,	30
965	The role of smooth muscle cells in plaque stability: Therapeutic targeting potential. <b>2019</b> , 176, 3741-3753	34
964	Low-dose doxycycline inhibits hydrogen peroxide-induced oxidative stress, MMP-2 up-regulation and contractile dysfunction in human saphenous vein grafts. <b>2019</b> , 13, 1791-1801	4

963	Inhibitory Antibodies Designed for Matrix Metalloproteinase Modulation. <b>2019</b> , 24,	23
962	Matrix-metalloproteinase expression and gelatinase activity in the avian retina and their influence on Müller glia proliferation. <b>2019</b> , 320, 112984	9
961	TIMP-1 Attenuates the Development of Inflammatory Pain Through MMP-Dependent and Receptor-Mediated Cell Signaling Mechanisms. <b>2019</b> , 12, 220	18
960	Polymorphism Affects Plasma Matrix Metalloproteinase (MMP)-2 Levels, and Correlates with the Decline in Lung Function in Hypersensitivity Pneumonitis Positive to Autoantibodies Patients. <b>2019</b> , 9,	3
959	TET2-interacting long noncoding RNA promotes active DNA demethylation of the MMP-9 promoter in diabetic wound healing. <b>2019</b> , 10, 813	14
958	N-Terminal Acetylation and C-Terminal Amidation of -Derived Hexapeptide: Anti-Photoaging Activity and Proteomic Analysis. <b>2019</b> , 17,	3
957	Effect of Mycoplasma bovis on expression of inflammatory cytokines and matrix metalloproteinases mRNA in bovine synovial cells. <b>2019</b> , 216, 109920	6
956	Recombinant porcine NK-lysin inhibits the invasion of hepatocellular carcinoma cells in vitro. <b>2019</b> , 140, 1249-1259	2
955	MMP14 in Sarcoma: A Regulator of Tumor Microenvironment Communication in Connective Tissues. <b>2019</b> , 8,	30
954	Collagenase Nanoparticles Enhance the Penetration of Drugs into Pancreatic Tumors. <b>2019</b> , 13, 11008-11021	116
953	The Human Papillomavirus (HPV) E1 protein regulates the expression of cellular genes involved in immune response. <b>2019</b> , 9, 13620	11
952	Gene dysregulation in peripheral blood of moyamoya disease and comparison with other vascular disorders. <b>2019</b> , 14, e0221811	5
951	Functional disparities within the TIMP family in cancer: hints from molecular divergence. <b>2019</b> , 38, 469-481	19
950	Acute molecular biological responses during spontaneous anterior cruciate ligament healing in a rat model. <b>2019</b> , 15, 659-666	0
949	Chimeric antigen receptor macrophage therapy for breast tumours mediated by targeting the tumour extracellular matrix. <b>2019</b> , 121, 837-845	56
948	Oncological Risk in Autologous Stem Cell Donation for Novel Tissue-Engineering Approaches to Postmastectomy Breast Regeneration. <b>2019</b> , 13, 1178223419864896	1
947	MMP-2 and MMP-9 plasma levels are potential biomarkers for indeterminate and cardiac clinical forms progression in chronic Chagas disease. <b>2019</b> , 9, 14170	11
946	Advances in Management of Pulmonary Hypertension Associated with Systemic Sclerosis. <b>2019</b> ,	1

945	Extracellular Matrix Remodeling of Adipose Tissue in Obesity and Metabolic Diseases. <b>2019</b> , 20,	69
944	Design, synthesis and biological evaluation of some new 1,3,4-thiadiazine-thiourea derivatives as potential antitumor agents against non-small cell lung cancer cells. <b>2019</b> , 93, 103323	8
943	Resveratrol Inhibits MMP3 and MMP9 Expression and Secretion by Suppressing TLR4/NF-B/STAT3 Activation in Ox-LDL-Treated HUVECs. <b>2019</b> , 2019, 9013169	12
942	Mechanism and Inhibition of Matrix Metalloproteinases. <b>2019</b> , 26, 2609-2633	19
941	Curcumin inhibits the TGF- $\beta$ -dependent differentiation of lung fibroblasts via PPAR $\delta$ -driven upregulation of cathepsins B and L. <b>2019</b> , 9, 491	26
940	Collagen changes in pelvic support tissues in women with pelvic organ prolapse. <b>2019</b> , 234, 185-189	27
939	The N-terminal p.(Ser38Cys) TIMP3 mutation underlying Sorsby fundus dystrophy is a founder mutation disrupting an intramolecular disulfide bond. <b>2019</b> , 40, 539-551	5
938	Lapachol and synthetic derivatives: in vitro and in vivo activities against Bothrops snake venoms. <b>2019</b> , 14, e0211229	9
937	Design and Structural Evolution of Matrix Metalloproteinase Inhibitors. <b>2019</b> , 25, 7960-7980	24
936	Hypoxia-targeted drug delivery. <b>2019</b> , 48, 771-813	210
935	A pan-cancer perspective of matrix metalloproteases (MMP) gene expression profile and their diagnostic/prognostic potential. <b>2019</b> , 19, 581	88
934	Tear Cocktail: Composition of Tears. <b>2019</b> , 21-49	1
933	Improvement in post-partum uterine involution in rats treated with <i>Apios americana</i> . <b>2019</b> , 20, 576-587	2
932	Additional evidence supports association of common genetic variants in MMP3 and TIMP2 with increased risk of chronic Achilles tendinopathy susceptibility. <b>2019</b> , 22, 1074-1078	14
931	Skullcapflavone II Inhibits Degradation of Type I Collagen by Suppressing MMP-1 Transcription in Human Skin Fibroblasts. <b>2019</b> , 20,	11
930	Effects and Mechanisms of Tea for the Prevention and Management of Diabetes Mellitus and Diabetic Complications: An Updated Review. <b>2019</b> , 8,	65
929	Association study between matrix metalloproteinase-3 gene (MMP3) polymorphisms and ankylosing spondylitis susceptibility. <b>2019</b> , 7, e00752	3
928	Investigations on the Role of the Fibrinolytic Pathway on Outflow Facility Regulation. <b>2019</b> , 60, 1571-1580	7

927	Identification and integrative analysis of microRNAs and mRNAs involved in proliferation and invasion of pressure-treated human liver cancer cell lines. <b>2019</b> , 20, 375-387	6
926	Proteolytic Regulation of Parathyroid Hormone-Related Protein: Functional Implications for Skeletal Malignancy. <b>2019</b> , 20,	3
925	Geraniin inhibits oral cancer cell migration by suppressing matrix metalloproteinase-2 activation through the FAK/Src and ERK pathways. <b>2019</b> , 34, 1085-1093	20
924	Matrix Metalloproteinases in Renal Diseases: A Critical Appraisal. <b>2019</b> , 44, 298-330	45
923	Role of the PI3K/AKT/mTOR signaling pathway in ovarian cancer: Biological and therapeutic significance. <b>2019</b> , 59, 147-160	169
922	Pathological and therapeutic aspects of matrix metalloproteinases: Implications in osteosarcoma. <b>2019</b> , 15, 218-224	8
921	Maternal High-Sucrose Diet Accelerates Vascular Stiffness in Aged Offspring via Suppressing Ca 1.2 and Contractile Phenotype of Vascular Smooth Muscle Cells. <b>2019</b> , 63, e1900022	5
920	Potential roles of aquaporin 9 in the pathogenesis of endometriosis. <b>2019</b> , 25, 373-384	8
919	Identification of circular RNA Hsa_circ_0001879 and Hsa_circ_0004104 as novel biomarkers for coronary artery disease. <b>2019</b> , 286, 88-96	74
918	Evaluation of two distinct placental-derived membranes and their effect on tenocyte responses in vitro. <b>2019</b> , 13, 1316-1330	3
917	Macroenvironment-gene-microenvironment interactions in ultraviolet radiation-induced melanomagenesis. <b>2019</b> , 144, 1-54	5
916	Dynamic urinary proteomic analysis in a Walker 256 intracerebral tumor model. <b>2019</b> , 8, 3553-3565	9
915	MT1-MMP-dependent cell migration: proteolytic and non-proteolytic mechanisms. <b>2019</b> , 47, 811-826	33
914	Matrix stiffness modulates the activity of MMP-9 and TIMP-1 in hepatic stellate cells to perpetuate fibrosis. <b>2019</b> , 9, 7299	43
913	Association Study between the Polymorphisms of Matrix Metalloproteinase (MMP) Genes and Idiopathic Recurrent Pregnancy Loss. <b>2019</b> , 10,	5
912	MMP targeting in the battle for vision: Recent developments and future prospects in the treatment of diabetic retinopathy. <b>2019</b> , 229, 149-156	16
911	Effects of Oxygen Concentration and Culture Time on Porcine Nucleus Pulposus Cell Metabolism: An Study. <b>2019</b> , 7, 64	5
910	Tumor-Associated Neutrophils in Cancer: Going Pro. <b>2019</b> , 11,	145

909	Proteomic analysis of the secretome of adipose tissue-derived murine mesenchymal cells overexpressing telomerase and myocardin. <b>2019</b> , 131, 171-186	11
908	Application of nanotechnology to target and exploit tumour associated proteases. <b>2019</b> , 166, 112-131	2
907	Glycolic acid attenuates UVB-induced aquaporin-3, matrix metalloproteinase-9 expression, and collagen degradation in keratinocytes and mouse skin. <b>2019</b> , 476, 1387-1400	10
906	Characterizing the dynamic rheology in the pericellular region by human mesenchymal stem cell re-engineering in PEG-peptide hydrogel scaffolds. <b>2019</b> , 58, 421-437	7
905	Molecular Mechanisms of Dermal Aging and Antiaging Approaches. <b>2019</b> , 20,	139
904	Impact of proteolysis on cancer stem cell functions. <b>2019</b> , 166, 214-222	6
903	Identification of fibrinogen as a natural inhibitor of MMP-2. <b>2019</b> , 9, 4340	9
902	Involvement of matrix metalloproteinases in capillary degeneration following NMDA-induced neurotoxicity in the neonatal rat retina. <b>2019</b> , 182, 101-108	1
901	Ageing and Osteoarthritis. <b>2019</b> , 91, 123-159	73
900	Ascorbic Acid Is a Potential Inhibitor of Collagenasesâ€”In Silico and In Vitro Biological Studies. <b>2019</b> , 649-677	
899	Novel potential biomarkers for pancreatic cancer - A systematic review. <b>2019</b> , 64, 252-257	6
898	Relationship Between Plasma GH, Metabolites, Lipogenic Genes, and MMP3 Expression in PD3 Chicken Line and Role of Fermented Yeast Culture in Alleviating Heat Stress. <b>2019</b> , 28, 669-678	1
897	Novel Approaches for Extracellular Matrix Targeting in Disease Treatment. <b>2019</b> , 1952, 261-275	6
896	Spatial clustering and common regulatory elements correlate with coordinated gene expression. <b>2019</b> , 15, e1006786	10
895	Divergent proteomics response of Apostichopus japonicus suffering from skin ulceration syndrome and pathogen infection. <b>2019</b> , 30, 196-205	3
894	The Complex Work of Proteases and Secretases in Wallerian Degeneration: Beyond Neuregulin-1. <b>2019</b> , 13, 93	8
893	Designing Ruthenium Anticancer Drugs: What Have We Learnt from the Key Drug Candidates?. <b>2019</b> , 7, 31	60
892	Stroma in normal and cancer wound healing. <b>2019</b> , 286, 2909-2920	19



891	High-Throughput Three-Dimensional Hydrogel Cell Encapsulation Assay for Measuring Matrix Metalloproteinase Activity. <b>2019</b> , 17, 100-115	1
890	MMP-9 selectively cleaves non-D-banded material on collagen fibrils with discrete plasticity damage in mechanically-overloaded tendon. <b>2019</b> , 95, 67-75	6
889	Ursolic acid modulates MMPs, collagen-I, $\alpha$ 1(SMA), and TGF- $\beta$ expression in isoproterenol-induced myocardial infarction in rats. <b>2019</b> , 38, 785-793	15
888	The extracellular matrix in tumor progression and metastasis. <b>2019</b> , 36, 171-198	192
887	Chronic Intermittent Ethanol Exposure Induces Upregulation of Matrix Metalloproteinase-9 in the Rat Medial Prefrontal Cortex and Hippocampus. <b>2019</b> , 44, 1593-1601	4
886	EN-Oxalyl-L-Hydiaminopropionic acid from <i>Panax notoginseng</i> plays a major role in the treatment of type 2 diabetic nephropathy. <b>2019</b> , 114, 108801	4
885	Tumor microenvironment as the "regulator" and "target" for gene therapy. <b>2019</b> , 21, e3088	27
884	Association of Matrix Metalloproteinase 9 () Polymorphisms with Asthma Risk: A Meta-Analysis. <b>2019</b> , 2019, 9260495	3
883	Therapeutic efficacy of anti-MMP9 antibody in combination with nab-paclitaxel-based chemotherapy in pre-clinical models of pancreatic cancer. <b>2019</b> , 23, 3878-3887	11
882	Neutrophil-to-Lymphocyte Ratio: A Comparative Study of Rupture to Nonruptured Infrarenal Abdominal Aortic Aneurysm. <b>2019</b> , 58, 270-275	11
881	Regulation of MMP and TIMP expression in synovial fibroblasts from knee osteoarthritis with flexion contracture using adenovirus-mediated relaxin gene therapy. <b>2019</b> , 26, 317-329	11
880	Behavior of Metalloproteinases in Adipose Tissue, Liver and Arterial Wall: An Update of Extracellular Matrix Remodeling. <b>2019</b> , 8,	31
879	Transcriptome analysis provides insights into the molecular mechanisms responsible for evisceration behavior in the sea cucumber <i>Apostichopus japonicus</i> . <b>2019</b> , 30, 143-157	6
878	MMP-9 and MMP-2 regulation in patients undergoing non-oncological and non-vascular elective surgery independent of the use of propofol or sevoflurane. <b>2019</b> , 71, 528-534	1
877	Breast Tumor-Associated Metalloproteases Restrict Reovirus Oncolysis by Cleaving the $\alpha$ 5 Cell Attachment Protein and Can Be Overcome by Mutation of $\alpha$ 5. <b>2019</b> , 93,	7
876	Effects of exercise training on markers of adipose tissue remodeling in patients with coronary artery disease and type 2 diabetes mellitus: sub study of the randomized controlled EXCAD1 trial. <b>2019</b> , 11, 109	2
875	Tuning the matrix metalloproteinase-1 degradability of peptide amphiphile nanofibers through supramolecular engineering. <b>2019</b> , 7, 5132-5142	13
874	Extracellular matrix, regional heterogeneity of the aorta, and aortic aneurysm. <b>2019</b> , 51, 1-15	56

873	Association of MMP-1 (rs1799750)-1607 2G/2G and MMP-3 (rs3025058)-1612 6A/6A Genotypes With Coronary Artery Disease Risk Among Iranian Turks. <b>2019</b> , 74, 420-425	2
872	The E-Cadherin Cleavage Associated to Pathogenic Bacteria Infections Can Favor Bacterial Invasion and Transmigration, Dysregulation of the Immune Response and Cancer Induction in Humans. <b>2019</b> , 10, 2598	17
871	Statin treatment increases the clinical risk of tendinopathy through matrix metalloproteinase release - a cohort study design combined with an experimental study. <b>2019</b> , 9, 17958	6
870	Matrix metalloproteinase 7 promoted Schwann cell migration and myelination after rat sciatic nerve injury. <b>2019</b> , 12, 101	10
869	Expression and Activity of Matrix Metalloproteinases in Leukemia. <b>2019</b> , 41, 87-95	1
868	Role of Matrix Metalloproteinases in Angiogenesis and Cancer. <b>2019</b> , 9, 1370	242
867	Betaglycan (TRIII) is a Key Factor in TGF- $\beta$ Signaling in Prepubertal Rat Sertoli Cells. <b>2019</b> , 20,	4
866	Mechanistic Understanding of Curcumin's Therapeutic Effects in Lung Cancer. <b>2019</b> , 11,	42
865	Localised non-viral delivery of nucleic acids for nerve regeneration in injured nervous systems. <b>2019</b> , 319, 112820	7
864	Physicochemical and biological properties of novel chlorhexidine-loaded nanotube-modified dentin adhesive. <b>2019</b> , 107, 868-875	6
863	Recent advances in understanding the roles of matrix metalloproteinases in tumour invasion and metastasis. <b>2019</b> , 247, 629-640	75
862	Oxaprozin: A new hope in the modulation of matrix metalloproteinase 9 activity. <b>2019</b> , 93, 811-817	3
861	Myeloid cell IRF4 signaling protects neonatal brains from hypoxic ischemic encephalopathy. <b>2019</b> , 127, 148-157	8
860	Comprehensive review of mechanisms of pathogenesis involved in Alzheimer's disease and potential therapeutic strategies. <b>2019</b> , 174, 53-89	137
859	Role of polymorphisms in MMP-9 and TIMP-1 as biomarkers for susceptibility to systemic lupus erythematosus patients. <b>2019</b> , 13, 33-43	2
858	Betulinic acid induces apoptosis and suppresses metastasis in hepatocellular carcinoma cell lines in vitro and in vivo. <b>2019</b> , 23, 586-595	19
857	Pathologies of matrix metalloproteinase-2 underactivity: a perspective on a neglected condition. <b>2019</b> , 97, 486-492	4
856	Tamoxifen mechanically reprograms the tumor microenvironment via HIF-1A and reduces cancer cell survival. <b>2019</b> , 20,	28

855	Phorbol ester-induced angiogenesis of endothelial progenitor cells: The role of NADPH oxidase-mediated, redox-related matrix metalloproteinase pathways. <b>2019</b> , 14, e0209426	3
854	Design, cyclization, and optimization of MMP13-TIMP1 interaction-derived self-inhibitory peptides against chondrocyte senescence in osteoarthritis. <b>2019</b> , 121, 921-929	10
853	Biosensors for measuring matrix metalloproteinases: An emerging research field. <b>2019</b> , 110, 35-50	18
852	Functional characterization of a matrix metalloproteinase 2 gene in <i>Litopenaeus vannamei</i> . <b>2019</b> , 84, 404-413	4
851	Characterization of the Kinetics and Mechanism of Degradation of Human Mesenchymal Stem Cell-Laden Poly(ethylene glycol) Hydrogels. <b>2019</b> , 2, 81-92	11
850	Design, synthesis and biological evaluation of bifunctional inhibitors of membrane type 1 matrix metalloproteinase (MT1-MMP). <b>2019</b> , 27, 196-207	3
849	Dysregulation of human miRNAs and increased prevalence of HHV miRNAs in obese periodontitis subjects. <b>2019</b> , 46, 51-61	16
848	MMP-9-1562 C/T single nucleotide polymorphism associates with increased MMP-9 level and activity during papillary thyroid carcinoma progression. <b>2019</b> , 51, 55-61	7
847	Developing an Antibody-Drug Conjugate Approach to Selective Inhibition of an Extracellular Protein. <b>2019</b> , 20, 754-758	4
846	Decidual leucocytes infiltrating human spiral arterioles are rich source of matrix metalloproteinases and degrade extracellular matrix in vitro and in situ. <b>2019</b> , 81, e13054	17
845	The gelatinases, MMP-2 and MMP-9, as fine tuners of neuroinflammatory processes. <b>2019</b> , 75-76, 102-113	61
844	Neuroinflammation and blood-brain barrier disruption following traumatic brain injury: Pathophysiology and potential therapeutic targets. <b>2020</b> , 98, 19-28	55
843	Membrane insertion and intercellular transfer of glycosylphosphatidylinositol-anchored proteins: potential therapeutic applications. <b>2020</b> , 126, 139-156	3
842	Metalloproteinases and their roles in human cancer. <b>2020</b> , 303, 1557-1572	19
841	Sixty years in the making: collagenase <i>Clostridium histolyticum</i> , from benchtop to FDA approval and beyond. <b>2020</b> , 38, 269-277	4
840	Regulation of matrix metalloproteinases 2 and 9 in corneal neovascularization. <b>2020</b> , 95, 485-492	10
839	Roles of matrix metalloproteinases (MMPs) in SM-induced pathologies. <b>2020</b> , 39, 24-33	1
838	Zinc Deficiency Promoted Fibrosis via ROS and TIMP/MMPs in the Myocardium of Mice. <b>2020</b> , 196, 145-152	14

837	Antimetastatic Properties of Tea Polyphenols. <b>2020</b> , 72, 365-376	2
836	Immuohistochemical score of matrix metalloproteinase-1 may indicate the severity of symptomatic cervical and lumbar disc degeneration. <b>2020</b> , 20, 124-137	6
835	Myocardial Basis for Heart Failure. <b>2020</b> , 62-75.e7	
834	Type I collagen structure, synthesis, and regulation. <b>2020</b> , 295-337	6
833	Activation of ALDH2 attenuates high glucose induced rat cardiomyocyte fibrosis and necroptosis. <b>2020</b> , 146, 198-210	17
832	Development of anti-matrix metalloproteinase-2 (MMP-2) nanobodies as potential therapeutic and diagnostic tools. <b>2020</b> , 24, 102103	9
831	Asiatic Acid Glucosamine Salt Alleviates Ultraviolet B-induced Photoaging of Human Dermal Fibroblasts and Nude Mouse Skin. <b>2020</b> , 96, 124-138	8
830	Maintenance of Pregnancy and Parturition. <b>2020</b> , 169-187	4
829	A study of chewing muscles: Age-related changes in type I collagen and matrix metalloproteinase-2 expression. <b>2020</b> , 109, 104583	1
828	An Insight into Structural and Mechanical Properties of Ideal-Networked Poly(Ethylene Glycol)-Peptide Hydrogels from Molecular Dynamics Simulations. <b>2020</b> , 221, 1900326	4
827	Multifunctional Nano and Collagen-Based Therapeutic Materials for Skin Repair. <b>2020</b> , 6, 1124-1134	9
826	Meroterpenoid-Rich Fraction of the Ethanol Extract of Sargassum Serratifolium Suppresses Collagen-Induced Rheumatoid Arthritis in DBA/1J Mice Via Inhibition of Nuclear Factor B Activation. <b>2020</b> , 64, e1900373	6
825	Matrix Metalloproteinases (MMP-2,-3,-9) Gene Polymorphisms in Cases of Benign Vocal Fold Lesions and Laryngeal Carcinoma. <b>2020</b> , 34, 267-274	3
824	Decreased uterine vascularization and uterine arterial expansive remodeling with reduced matrix metalloproteinase-2 and -9 in hypertensive pregnancy. <b>2020</b> , 318, H165-H180	11
823	Matrix metalloproteinase: An upcoming therapeutic approach for idiopathic pulmonary fibrosis. <b>2020</b> , 152, 104591	30
822	Transcriptome analysis of human periodontal ligament fibroblasts exposed to Porphyromonas gingivalis LPS. <b>2020</b> , 110, 104632	3
821	The effects of statins on microglial cells to protect against neurodegenerative disorders: A mechanistic review. <b>2020</b> , 46, 309-325	43
820	Arylamide as Potential Selective Inhibitor for Matrix Metalloproteinase 9 (MMP9): Design, Synthesis, Biological Evaluation, and Molecular Modeling. <b>2020</b> , 60, 349-359	11

819	Role of telomerase in the tumour microenvironment. <b>2020</b> , 47, 357-364	6
818	Dual and multi-targeted nanoparticles for site-specific brain drug delivery. <b>2020</b> , 317, 195-215	39
817	The Diverse Roles of TIMP-3: Insights into Degenerative Diseases of the Senescent Retina and Brain. <b>2019</b> , 9,	8
816	Roles of Biomarkers in Myocardial Fibrosis. <b>2020</b> , 11, 1157-1174	5
815	Dynamics of Matrix Metalloproteinase Activity and Extracellular Matrix Proteins Content in the Process of Replicative Senescence of Human Mesenchymal Stem Cells. <b>2020</b> , 14, 349-357	1
814	Study of bilateral elbow joint osteoarthritis treatment using conditioned medium from allogeneic adipose tissue-derived MSCs in Labrador retrievers. <b>2020</b> , 132, 513-520	8
813	Effects of High-Dose Rosuvastatin on Ventricular Remodelling and Cardiac Function in ST-Segment Elevation Myocardial Infarction. <b>2020</b> , 14, 3891-3898	8
812	Skin Microbiome Alterations in Skin Diseases. <b>2020</b> , 59-78	
811	Overexpression of NDRG2 promotes the therapeutic effect of pazopanib on ovarian cancer. <b>2021</b> , 41, 546-552	1
810	Bioguided Fractionation of Local Plants against Matrix Metalloproteinase9 and Its Cytotoxicity against Breast Cancer Cell Models: In Silico and In Vitro Study. <b>2020</b> , 25,	6
809	The Role of Matrix Metalloproteinase-9 in Atherosclerotic Plaque Instability. <b>2020</b> , 2020, 3872367	19
808	Enzyme-Responsive Peptide-Based AIE Bioprobes. <b>2020</b> , 378, 47	10
807	Signalling pathways linking cysteine cathepsins to adverse cardiac remodelling. <b>2020</b> , 76, 109770	1
806	Age- and Phenotype-Dependent Changes in Circulating MMP-2 and MMP-9 Activities in Normotensive and Hypertensive Rats. <b>2020</b> , 21,	1
805	The role of IL-1 $\beta$ and TNF- $\alpha$ in intervertebral disc degeneration. <b>2020</b> , 131, 110660	87
804	The role of miR-21 in nickel nanoparticle-induced MMP-2 and MMP-9 production in mouse primary monocytes: In vitro and in vivo studies. <b>2020</b> , 267, 115597	7
803	Matrix metalloproteinases deregulation in amyotrophic lateral sclerosis. <b>2020</b> , 419, 117175	1
802	The role of extracellular vesicles in neointima formation post vascular injury. <b>2020</b> , 76, 109783	3

801	Comprehensive analysis of genomic alterations, clinical outcomes, putative functions and potential therapeutic value of MMP11 in human breast cancer. <b>2020</b> , 21, 100852	
800	Matrix metalloproteinase MMP1 and MMP9 genes expression in breast cancer tissue. <b>2020</b> , 21, 100906	2
799	Protection against UVB-Induced Photoaging by via Inhibition of MAPK/AP-1/MMP-1 Signaling. <b>2020</b> , 2020, 2905362	7
798	Identification of key genes in calcific aortic valve disease by integrated bioinformatics analysis. <b>2020</b> , 99, e21286	5
797	Apatinib Inhibits the Invasion and Metastasis of Liver Cancer Cells by Downregulating MMP-Related Proteins via Regulation of the NF-B Signaling Pathway. <b>2020</b> , 2020, 3126182	2
796	Development of Brain Targeting Peptide Based MMP-9 Inhibiting Nanoparticles for the Treatment of Brain Diseases with Elevated MMP-9 Activity. <b>2020</b> , 109, 3134-3144	3
795	Matrix metalloproteinase 15 plays a pivotal role in human first trimester cytotrophoblast invasion and is not altered by maternal obesity. <b>2020</b> , 34, 10720-10730	6
794	Serum Matrix Metalloproteinases and Left Atrial Remodeling-The Hoorn Study. <b>2020</b> , 21,	4
793	The prognostic value and potential mechanism of Matrix Metalloproteinases among Prostate Cancer. <b>2020</b> , 17, 1550-1560	6
792	The Extracellular Matrix and CellâBiomaterial Interactions. <b>2020</b> , 701-715	1
791	Collagenases MMP-1, MMP-13, and Tissue Inhibitors TIMP-1, TIMP-2: Their Role in Healthy and Complicated Pregnancy and Potential as Preeclampsia BiomarkersâA Brief Review. <b>2020</b> , 10, 7731	2
790	Intermedin Alleviates Renal Ischemia-Reperfusion Injury and Enhances Neovascularization in Wistar Rats. <b>2020</b> , 14, 4825-4834	4
789	Thermodynamic and Mechanistic Insights into Coupled Binding and Unwinding of Collagen by Matrix Metalloproteinase 1. <b>2020</b> , 432, 5985-5993	2
788	A Complete and Versatile Protocol: Decoration of Cell-Derived Matrices with Mass-Encoded Peptides for Multiplexed Protease Activity Detection. <b>2020</b> , 6, 6598-6617	0
787	The regulation of trophoblast invasion and decidual reaction by matrix metalloproteinase-2, metalloproteinase-7, and metalloproteinase-9 expressions in the rat endometrium. <b>2020</b> , 19, 385-397	6
786	Silver nanoparticles induce cellular cytotoxicity, genotoxicity, DNA damage, and cell death. <b>2020</b> , 589-622	1
785	Role of MMP-9 in epithelial-mesenchymal transition of thyroid cancer. <b>2020</b> , 18, 181	11
784	TWIST1 upregulates matrix metalloproteinase (MMP) genes family in esophageal squamous carcinoma cells. <b>2020</b> , 37, 119127	2

783	TIMP-3 facilitates binding of target metalloproteinases to the endocytic receptor LRP-1 and promotes scavenging of MMP-1. <b>2020</b> , 10, 12067	10
782	Effects of Cryogenic Storage on Human Amnion Epithelial Cells. <b>2020</b> , 9,	6
781	Matrix Metalloproteinases (MMP-2) and Tissue Inhibitors of Metalloproteinases (TIMP-2) in Patients with Inguinal Hernias. <b>2020</b> , 44, 3679-3686	3
780	Selected Metal Matrix Metalloproteinases and Tissue Inhibitors of Metalloproteinases as Potential Biomarkers for Tubulointerstitial Fibrosis in Children with Unilateral Hydronephrosis. <b>2020</b> , 2020, 9520309	5
779	Targeting Dysregulation of Metalloproteinase Activity in Osteoarthritis. <b>2021</b> , 109, 277-290	9
778	Peptidomic analysis of pilose antler and its inhibitory effect on triple-negative breast cancer at multiple sites. <b>2020</b> , 11, 7481-7494	4
777	C. perfringens challenge reduces matrix metalloproteinase activity in the jejunal mucosa of Eimeria-infected broiler chickens. <b>2020</b> , 51, 100	7
776	Exploring epidermal mucus protease activity as an indicator of stress in Atlantic sturgeon ( <i>Acipenser oxyrinchus oxyrinchus</i> ). <b>2020</b> , 97, 1354-1362	2
775	Virtual Screening and Discovery of Matrix Metalloproteinase-12 Inhibitors by Swarm Intelligence Optimization Algorithm-Based Machine Learning. <b>2020</b> , 5, 11112-11119	2
774	Transcriptome analysis of the epididymis from Plag1 deficient mice suggests dysregulation of sperm maturation and extracellular matrix genes. <b>2020</b> , 249, 1500-1513	0
773	Oxidative Stress: A Possible Trigger for Pelvic Organ Prolapse. <b>2020</b> , 2020, 3791934	2
772	Influence of obesity on remodeling of lung tissue and organization of extracellular matrix after blunt thorax trauma. <b>2020</b> , 21, 238	4
771	The Role of Extracellular Proteases in Tumor Progression and the Development of Innovative Metal Ion Chelators that Inhibit their Activity. <b>2020</b> , 21,	3
770	Matrix Metalloproteinases in Age-Related Macular Degeneration (AMD). <b>2020</b> , 21,	9
769	Lessons learned from the hypovitaminosis D kyphotic pig model. <b>2020</b> , 98, S52-S57	2
768	Study of Osteoarthritis-Related Hub Genes Based on Bioinformatics Analysis. <b>2020</b> , 2020, 2379280	4
767	Combination of serum matrix metalloproteinase-3 activity and EBV antibodies improves the diagnostic performance of nasopharyngeal carcinoma. <b>2020</b> , 11, 6009-6018	2
766	Protective Effects of Mycelium on the Development of Osteoarthritis after Monosodium Iodoacetate Injection. <b>2020</b> , 2020, 7240858	3

765	Co-cultured bone marrow mesenchymal stem cells repair thioacetamide-induced hepatocyte damage. <b>2020</b> , 44, 2459-2472	2
764	Specific Inhibitor of Matrix Metalloproteinase Decreases Tumor Invasiveness After Radiofrequency Ablation in Liver Tumor Animal Model. <b>2020</b> , 10, 561805	1
763	Unravelling the Network of Nuclear Matrix Metalloproteinases for Targeted Drug Design. <b>2020</b> , 9,	1
762	The Roles of Matrix Metalloproteinases and Their Inhibitors in Human Diseases. <b>2020</b> , 21,	122
761	Biology and Biomechanics of the Heart Valve Extracellular Matrix. <b>2020</b> , 7,	14
760	MicroRNA-18a-5p Suppresses Tumor Growth Targeting Matrix Metalloproteinase-3 in Cisplatin-Resistant Ovarian Cancer. <b>2020</b> , 10, 602670	5
759	A glitch in the matrix: Age-dependent changes in the extracellular matrix facilitate common sites of metastasis. <b>2020</b> , 1, 19-29	0
758	Development of an antibacterial and anti-metalloproteinase dental adhesive for long-lasting resin composite restorations. <b>2020</b> , 8, 10797-10811	6
757	Matrilysins and Stromelysins in Pathogenesis and Diagnostics of Cancers. <b>2020</b> , 12, 10949-10964	3
756	Preseeding of Mesenchymal Stem Cells Increases Integration of an iPSC-Derived CM Sheet into a Cardiac Matrix. <b>2020</b> , 6, 6808-6818	1
755	Structure and Function of Human Matrix Metalloproteinases. <b>2020</b> , 9,	89
754	Challenges in Matrix Metalloproteinases Inhibition. <b>2020</b> , 10,	17
753	Association between the polymorphisms in MMP-2 and MMP-9 with adiposity and mammographic features. <b>2020</b> , 182, 169-179	0
752	Knockout of MMP3 Weakens Solid Tumor Organoids and Cancer Extracellular Vesicles. <b>2020</b> , 12,	19
751	In vitro selenium supplementation suppresses key mediators involved in myometrial activation and rupture of fetal membranes. <b>2020</b> , 12, 935-951	1
750	Fluorescence and Multiphoton Imaging for Tissue Characterization of a Model of Postmenopausal Ovarian Cancer. <b>2020</b> , 52, 993-1009	1
749	Functional Roles of Matrix Metalloproteinases and Their Inhibitors in Melanoma. <b>2020</b> , 9,	31
748	Multiple particle tracking microrheological characterization: Fundamentals, emerging techniques and applications. <b>2020</b> , 127, 201101	12



747	Inhibiting Matrix Metalloproteinase-2 Activation by Perturbing Protein-Protein Interactions Using a Cyclic Peptide. <b>2020</b> , 63, 6979-6990	7
746	Icariside II attenuates cerebral ischemia/reperfusion-induced blood-brain barrier dysfunction in rats via regulating the balance of MMP9/TIMP1. <b>2020</b> , 41, 1547-1556	13
745	Proteolytic Volatile Profile and Electrophoretic Analysis of Casein Composition in Milk and Cheese Derived from Mironutrient-Fed Cows. <b>2020</b> , 25,	1
744	Analysis of the inhibiting activity of reversion-inducing cysteine-rich protein with Kazal motifs (RECK) on matrix metalloproteinases. <b>2020</b> , 10, 6317	6
743	Dysregulation of the MMP/TIMP Proteolytic System in Subependymal Giant Cell Astrocytomas in Patients With Tuberous Sclerosis Complex: Modulation of MMP by MicroRNA-320d In Vitro. <b>2020</b> , 79, 777-790	9
742	Matrix Metalloproteinases as New Targets in Alzheimer's Disease: Opportunities and Challenges. <b>2020</b> , 63, 10705-10725	18
741	Human mesenchymal stem cells respond differentially to platelet preparations and synthesize hyaluronic acid in nucleus pulposus extracellular matrix. <b>2020</b> , 20, 1850-1860	4
740	Molecular Interactions Stabilizing the Promatrix Metalloprotease-9[Ser]glycin Heteromer. <b>2020</b> , 21,	2
739	A Tale of Two Proteolytic Machines: Matrix Metalloproteinases and the Ubiquitin-Proteasome System in Pulmonary Fibrosis. <b>2020</b> , 21,	7
738	Matrix Metalloproteinases as Biomarkers of Atherosclerotic Plaque Instability. <b>2020</b> , 21,	36
737	Mycoplasma bovis induces matrix metalloproteinase-3 expression in bovine synovial cells via up-regulation of interleukin-1[alpha] expression in mononuclear cells. <b>2020</b> , 227, 110057	2
736	Small Ones to Fight a Big Problem-Intervention of Cancer Metastasis by Small Molecules. <b>2020</b> , 12,	1
735	RNA-Seq Analyses Reveal That Endothelial Activation and Fibrosis Are Induced Early and Progressively by Host Cell Invasion and Proliferation. <b>2020</b> , 10, 218	4
734	Serum biomarkers that predict lean mass loss over bed rest in older adults: An exploratory study. <b>2020</b> , 509, 72-78	1
733	Homocysteine Disrupts Balance between MMP-9 and Its Tissue Inhibitor in Diabetic Retinopathy: The Role of DNA Methylation. <b>2020</b> , 21,	12
732	Host-directed therapies targeting the tuberculosis granuloma stroma. <b>2020</b> , 78,	9
731	Ultraviolet-B radiation induces transcriptional modulation of components associated with the extracellular matrix in embryos of decapod Macrobrachium olfersii. <b>2020</b> , 222, 105468	1
730	The expression, purification, and substrate analysis of matrix metalloproteinases in Drosophila melanogaster. <b>2020</b> , 171, 105629	1

729	β integrin-mediated signaling regulates MT1-MMP phosphorylation to promote tumor cell invasion. <b>2020</b> , 133,	8
728	Matrix metalloproteinase-9 (MMP-9) and its inhibitors in cancer: A minireview. <b>2020</b> , 194, 112260	84
727	Engineering of fluorescent or photoactive Trojan probes for detection and eradication of βAmyloids. <b>2020</b> , 27, 917-926	
726	Neuronal MT1-MMP mediates ECM clearance and Lrp4 cleavage for agrin deposition and signaling in presynaptic development. <b>2020</b> , 133,	2
725	The Many Faces of Matrix Metalloproteinase-7 in Kidney Diseases. <b>2020</b> , 10,	14
724	Disturbed balance in the expression of MMP9 and TIMP3 in cerebral amyloid angiopathy-related intracerebral haemorrhage. <b>2020</b> , 8, 99	7
723	Transcriptome analysis of the adipose tissue in a mouse model of metabolic syndrome identifies gene signatures related to disease pathogenesis. <b>2020</b> , 112, 4053-4062	0
722	A novel mechanism in wound healing: Laminin 332 drives MMP9/14 activity by recruiting syndecan-1 and CD44. <b>2020</b> , 94, 1-17	12
721	Inflammation and matrix metalloproteinase 9 (Mmp-9) regulate photoreceptor regeneration in adult zebrafish. <b>2020</b> , 68, 1445-1465	22
720	Destroy to Rebuild: The Connection Between Bone Tissue Remodeling and Matrix Metalloproteinases. <b>2020</b> , 11, 47	26
719	Matrix metalloproteinases regulate ECM accumulation but not larval heart growth in Drosophila melanogaster. <b>2020</b> , 140, 42-55	3
718	MMP24 as a Target of YAP is a Potential Prognostic Factor in Cancer Patients. <b>2020</b> , 7,	5
717	Human Adventitial Fibroblast Phenotype Depends on the Progression of Changes in Substrate Stiffness. <b>2020</b> , 9, e1901593	7
716	Rumen-Protected Glucose Stimulates the Insulin-Like Growth Factor System and mTOR/AKT Pathway in the Endometrium of Early Postpartum Dairy Cows. <b>2020</b> , 10,	1
715	Matrix metalloproteinase-8 (MMP-8) regulates the activation of hepatic stellate cells (HSCs) through the ERK-mediated pathway. <b>2020</b> , 467, 107-116	2
714	MMP-14 regulates innate immune responses to Eriocheir sinensis via tissue degradation. <b>2020</b> , 99, 301-309	5
713	New phenylethanoid from the flower of Osmanthus fragrans and their bioactivities on human dermal fibroblasts. <b>2020</b> , 36, 127-133	4
712	Immunoreactivity of Kisspeptin and Kisspeptin Receptor in Eutopic and Ectopic Endometrial Tissue of Women With and Without Endometriosis. <b>2020</b> , 27, 1731-1741	1

711	The compendium of matrix metalloproteinase expression in the left ventricle of mice following myocardial infarction. <b>2020</b> , 318, H706-H714	7
710	Whole body hypothermia extends tissue plasminogen activator treatment window in the rat model of embolic stroke. <b>2020</b> , 256, 117450	2
709	Predifferentiated Smooth Muscle-Like Adipose-Derived Stem Cells for Bladder Engineering. <b>2020</b> , 26, 979-992	4
708	Type-I interferon regulates matrix metalloproteinases clearance of the bovine endometrial spheroid. <b>2020</b> , 91, e13350	2
707	Interactions Between Tumor Biology and Targeted Nanoplatfoms for Imaging Applications. <b>2020</b> , 30, 1910402	15
706	Matrix Metalloproteinases in Diabetic Kidney Disease. <b>2020</b> , 9,	35
705	Critical Role of Matrix Metalloproteinase 14 in Adipose Tissue Remodeling during Obesity. <b>2020</b> , 40,	23
704	Hypoxic-ischemic-related cerebrovascular changes and potential therapeutic strategies in the neonatal brain. <b>2020</b> , 98, 1468-1484	20
703	Microglial responses after phagocytosis: Escherichia coli bioparticles, but not cell debris or amyloid beta, induce matrix metalloproteinase-9 secretion in cultured rat primary microglial cells. <b>2020</b> , 68, 1435-1444	2
702	Expression of MMP-14 and prognosis in digestive system carcinoma: a meta-analysis and databases validation. <b>2020</b> , 11, 1141-1150	7
701	Collagenases and gelatinases and their inhibitors as anticancer agents. <b>2020</b> , 265-294	4
700	Structure-based design and optimization of pyrimidine- and 1,2,4-triazolo[4,3-a]pyrimidine-based matrix metalloproteinase-10/13 inhibitors via Dimroth rearrangement towards targeted polypharmacology. <b>2020</b> , 96, 103616	13
699	Generation of fluorescent cell-derived-matrix to study 3D cell migration. <b>2020</b> , 156, 185-203	0
698	The Association of Matrix Metalloproteinases with Chronic Kidney Disease and Peripheral Vascular Disease: A Light at the End of the Tunnel?. <b>2020</b> , 10,	31
697	A conceptualized model linking matrix metalloproteinase-9 to schizophrenia pathogenesis. <b>2020</b> , 218, 28-35	10
696	Anti-Photoaging Effect of Plant Extract Fermented with on CCD-986sk Fibroblasts and HaCaT Keratinocytes. <b>2020</b> , 11,	5
695	Matrix Metalloproteinase 13 Activity is Required for Normal and Hypoxia-Induced Precocious Hatching in Zebrafish Embryos. <b>2020</b> , 8,	5
694	Plasma Glycosaminoglycan Profiles in Systemic Sclerosis: Associations with MMP-3, MMP-10, TIMP-1, TIMP-2, and TGF-Beta. <b>2020</b> , 2020, 6416514	3

693	MMPs and ADAMs/ADAMTS inhibition therapy of abdominal aortic aneurysm. <b>2020</b> , 253, 117659	11
692	Expression of Matrix Metalloproteinases and Their Inhibitors in Endometrium: High Levels in Endometriotic Lesions. <b>2020</b> , 21,	6
691	Variations in Circulating Active MMP-9 Levels During Renal Replacement Therapy. <b>2020</b> , 10,	2
690	Mechanisms in blood-brain barrier opening and metabolism-challenged cerebrovascular ischemia with emphasis on ischemic stroke. <b>2020</b> , 35, 851-868	19
689	Receptor-interacting serine/threonine kinase 1- and 3-dependent inflammation induced in lungs of chicken infected with <i>Pasteurella multocida</i> . <b>2020</b> , 10, 6340	1
688	Protease propeptide structures, mechanisms of activation, and functions. <b>2020</b> , 55, 111-165	16
687	Matrix Metalloproteinases and Glaucoma Treatment. <b>2020</b> , 36, 208-228	27
686	Elevated MMP2 abundance and activity in mdx mice are alleviated by prenatal taurine supplementation. <b>2020</b> , 318, C1083-C1091	2
685	Neutrophils in Biomaterial-Guided Tissue Regeneration: Matrix Reprogramming for Angiogenesis. <b>2021</b> , 27, 95-106	13
684	Biomineralization process in hard tissues: The interaction complexity within protein and inorganic counterparts. <b>2021</b> , 120, 20-37	24
683	Uncovering molecular targets for regenerative therapy in degenerative disc disease: do small leucine-rich proteoglycans hold the key?. <b>2021</b> , 21, 5-19	5
682	Co-administration of Aluminum Sulfate and Propolis Regulates Matrix Metalloproteinases-2/9 Expression and Improves the Uterine Leiomyoma in Adult Rat Model. <b>2021</b> , 199, 1002-1012	1
681	Stimuli responsive co-delivery of celecoxib and BMP2 from micro-scaffold for periodontal disease treatment. <b>2021</b> , 75, 216-224	6
680	Hyperhomocysteinemia: an instigating factor for periodontal disease. <b>2021</b> , 99, 115-123	5
679	NPY promotes macrophage migration by upregulating matrix metalloproteinase-8 expression. <b>2021</b> , 236, 1903-1912	7
678	Human mesenchymal stem cell-engineered length scale dependent rheology of the pericellular region measured with bi-disperse multiple particle tracking microrheology. <b>2021</b> , 121, 405-417	3
677	Progress in research on effect of PM on occurrence and development of atherosclerosis. <b>2021</b> , 41, 668-682	2
676	Matrix metalloproteinase-2, -7, and -9 activities in dogs with idiopathic pulmonary fibrosis compared to healthy dogs and dogs with other respiratory diseases. <b>2021</b> , 35, 462-471	4

675	Alternations in the expression of selected matrix metalloproteinases (MMP-2, -9, -10, and -13) and their tissue inhibitors (TIMP-2 and -3) and MMP-2 and -9 activity in the chicken ovary during pause in laying induced by fasting. <b>2021</b> , 161, 176-186	6
674	Addition of platelet-rich plasma supports immune modulation and improved mechanical integrity in Alloderm mesh for ventral hernia repair in a rat model. <b>2021</b> , 15, 3-13	3
673	Periodontal health and disease: The contribution of genetics. <b>2021</b> , 85, 161-181	10
672	miRNA expression profile in chicken ovarian follicles throughout development and miRNA-mediated MMP expression. <b>2021</b> , 160, 116-127	8
671	Senescence Reprogramming by TIMP1 Deficiency Promotes Prostate Cancer Metastasis. <b>2021</b> , 39, 68-82.e9	16
670	Morin hydrate attenuates adenine-induced renal fibrosis via targeting cathepsin D signaling. <b>2021</b> , 90, 107234	2
669	Outline of gelatinase inhibitors as anti-cancer agents: A patent mini-review for 2010-present. <b>2021</b> , 213, 113044	5
668	Cellular Senescence and the Senescence-Associated Secretory Phenotype as Drivers of Skin Photoaging. <b>2021</b> , 141, 1119-1126	21
667	First-in-Man Safety, Tolerability, and Pharmacokinetics of a Novel and Highly Selective Inhibitor of Matrix Metalloproteinase-12, FP-025: Results from Two Randomized Studies in Healthy Subjects. <b>2021</b> , 41, 65-76	0
666	Challenges with matrix metalloproteinase inhibition and future drug discovery avenues. <b>2021</b> , 16, 75-88	6
665	Retinal capillary basement membrane thickening: Role in the pathogenesis of diabetic retinopathy. <b>2021</b> , 82, 100903	18
664	Responses of matrix metalloproteinases to hyperbaric oxygen treatment: changing for good or ill?. <b>2021</b> , 62, 249-262	2
663	Collagenase-loaded pH-sensitive nanocarriers efficiently remodeled tumor stroma matrixes and improved the enrichment of nanomedicines. <b>2021</b> , 13, 9402-9414	0
662	The double-edged roles of ROS in cancer prevention and therapy. <b>2021</b> , 11, 4839-4857	60
661	Characteristics of matrix metalloproteinases and their role in embryogenesis of the mammalian respiratory system. <b>2021</b> , 75, 24-34	1
660	Recent advances in stimuli-responsive theranostic systems with aggregation-induced emission characteristics. <b>2021</b> , 2, 48-65	36
659	Scopoletin Attenuates Intracerebral Hemorrhage-Induced Brain Injury and Improves Neurological Performance in Rats. <b>2021</b> , 28, 74-81	3
658	Mechanisms of Lower Extremity Vein Dysfunction in Chronic Venous Disease and Implications in Management of Varicose Veins. <b>2021</b> , 5,	2

657	Ruthenium(ii)-arene complexes as anti-metastatic agents, and related techniques.. <b>2022</b> , 13, 22-38	2
656	Investigating the anti-inflammatory effects of high molecular weight secretions from <i>Limosilactobacillus reuteri</i> PTCC 1655 on LPS-stimulated PMA-differentiated THP-1 cells. <b>2021</b> , 131, 938-948	1
655	Comparison of bond strength of universal adhesives using different etching modes: A systematic review and meta-analysis. <b>2021</b> ,	1
654	Label-free electrochemical immunosensor based on gold nanoparticle/polyethyleneimine/reduced graphene oxide nanocomposites for the ultrasensitive detection of cancer biomarker matrix metalloproteinase-1. <b>2021</b> , 146, 4066-4079	9
653	[Contribution of endopeptidases to changes in scleral biomechanics in axial elongation of the eye]. <b>2021</b> , 137, 102-107	
652	Potential Role of Phytochemicals Against Matrix Metalloproteinase Induced Breast Cancer; An Explanatory Review. <b>2020</b> , 8, 592152	4
651	Investigation of association between genetic polymorphisms of MMP2, MMP8, MMP9 and TIMP2 and development of varicose veins in the Slovak Population - pilot study. <b>2020</b> , 69, S443-S454	1
650	Multifunctional intracellular matrix metalloproteinases: implications in disease. <b>2021</b> ,	33
649	Natural Marine and Terrestrial Compounds as Modulators of Matrix Metalloproteinases-2 (MMP-2) and MMP-9 in Alzheimer's Disease. <b>2021</b> , 14,	9
648	Targeting Matrix Metalloproteinases: A Potential Strategy for Improving Cell Transplantation for Nervous System Repair. <b>2021</b> , 30, 9636897211012909	1
647	Strategies to Target ADAM17 in Disease: From its Discovery to the iRhom Revolution. <b>2021</b> , 26,	19
646	Quantitative Proteomics Reveals Changes Induced by TIMP-3 on Cell Membrane Composition and Novel Metalloprotease Substrates. <b>2021</b> , 22,	1
645	The Wonderful Activities of the Genus : Not Only Antioxidant Properties. <b>2021</b> , 26,	17
644	A new MMP-mediated prodomain cleavage mechanism to activate bone morphogenetic proteins from the extracellular matrix. <b>2021</b> , 35, e21353	4
643	Biochemical characterisation of a collagenase from <i>Bacillus cereus</i> strain Q1. <b>2021</b> , 11, 4187	4
642	Cisatracurium attenuates LPS-induced modulation of MMP3 and junctional protein expression in human microvascular endothelial cells. <b>2021</b> , 15, 50-54	1
641	Resveratrol Confers Vascular Protection by Suppressing TLR4/Syk/NLRP3 Signaling in Oxidized Low-Density Lipoprotein-Activated Platelets. <b>2021</b> , 2021, 8819231	0
640	Prognostic values of tumoral MMP2 and MMP9 overexpression in breast cancer: a systematic review and meta-analysis. <b>2021</b> , 21, 149	11

639	Pilot study investigating diagnostic utility of serum MMP-1 and TGF- $\beta$ in asthma in 'real world' clinical practice in India. <b>2021</b> ,	
638	Association Between , , Gene Polymorphisms and Risk of Hypertensive Disorders of Pregnancy in the Northern Chinese Population. <b>2021</b> , 40, 393-404	1
637	Syndecans and Pancreatic Ductal Adenocarcinoma. <b>2021</b> , 11,	4
636	Alterations of Extracellular Matrix Components in the Course of Juvenile Idiopathic Arthritis. <b>2021</b> , 11,	5
635	Overview of MMP-13 as a Promising Target for the Treatment of Osteoarthritis. <b>2021</b> , 22,	30
634	The matrix in cancer. <b>2021</b> , 21, 217-238	104
633	Metalloproteinases in Ovarian Cancer. <b>2021</b> , 22,	10
632	Role of Gelatinases MMP-2 and MMP-9 in Healthy and Complicated Pregnancy and Their Future Potential as Preeclampsia Biomarkers. <b>2021</b> , 11,	9
631	Inorganic polyphosphates stimulates matrix production in human annulus fibrosus cells. <b>2021</b> , 4, e1143	1
630	Proteases and Their Modulators in Cancer Therapy: Challenges and Opportunities. <b>2021</b> , 64, 2851-2877	3
629	Metalloproteinases in Inflammatory Bowel Diseases. <b>2021</b> , 14, 1029-1041	7
628	A common SNP risk variant MT1-MMP causative for Dupuytren's disease has a specific defect in collagenolytic activity. <b>2021</b> , 97, 20-39	2
627	Polymerizable Matrix Metalloproteinases' Inhibitors with Potential Application for Dental Restorations. <b>2021</b> , 9,	1
626	Telocytes are major constituents of the angiogenic apparatus. <b>2021</b> , 11, 5775	8
625	Effects of metal nanoparticles on tight junction-associated proteins via HIF-1 $\alpha$ /miR-29b/MMPs pathway in human epidermal keratinocytes. <b>2021</b> , 18, 13	9
624	Stepwise candidate drug screening for myopia control by using zebrafish, mouse, and Golden Syrian Hamster myopia models. <b>2021</b> , 65, 103263	2
623	Phosphonate as a Stable Zinc-Binding Group for "Pathoblocker" Inhibitors of Clostridial Collagenase H (ColH). <b>2021</b> , 16, 1257-1267	2
622	Simultaneous targeting of CD44 and MMP9 catalytic and hemopexin domains as a therapeutic strategy. <b>2021</b> , 478, 1139-1157	1

621	Omics Approaches in Adipose Tissue and Skeletal Muscle Addressing the Role of Extracellular Matrix in Obesity and Metabolic Dysfunction. <b>2021</b> , 22,	7
620	Degradable and Removable Tough Adhesive Hydrogels. <b>2021</b> , 33, e2008553	22
619	Pathomechanisms in the Kidneys in Selected Protozoan Parasitic Infections. <b>2021</b> , 22,	0
618	Regulation of matrix metalloproteinases-8, -9 and endogenous tissue inhibitor-1 in oral biofluids during pregnancy and postpartum. <b>2021</b> , 124, 105065	3
617	Determining MMP-2 and MMP-9 reductive activities of bovine and equine amniotic membranes homogenates using fluorescence resonance energy transfer. <b>2021</b> , 24, 279-287	2
616	One-step, wash-free, bead-based immunoassay employing bound-free phase detection. <b>2021</b> , 1153, 338280	4
615	Alkaline phosphatase downregulation promotes lung adenocarcinoma metastasis via the c-Myc/RhoA axis. <b>2021</b> , 21, 217	0
614	Sodium alginate-bioglass-encapsulated hAECs restore ovarian function in premature ovarian failure by stimulating angiogenic factor secretion. <b>2021</b> , 12, 223	2
613	Rose Extract Treatment on the CD4+ T lymphocytes.	
612	Pathogenesis of Abdominal Aortic Aneurysm.	0
611	Plasma Concentrations of Matrilysins MMP-7 and MMP-26 as Diagnostic Biomarkers in Breast Cancer. <b>2021</b> , 10,	3
610	Curcumin and cancer biology: Focusing regulatory effects in different signalling pathways. <b>2021</b> , 35, 4913-4929	5
609	The Charming World of the Extracellular Matrix: A Dynamic and Protective Network of the Intestinal Wall. <b>2021</b> , 8, 610189	7
608	Matrix Metalloproteinases and Arterial Hypertension: Role of Oxidative Stress and Nitric Oxide in Vascular Functional and Structural Alterations. <b>2021</b> , 11,	6
607	Matrix metalloproteinases and their inhibitors in Fuchs endothelial corneal dystrophy. <b>2021</b> , 205, 108500	3
606	Key metalloproteinase-mediated pathways in the kidney. <b>2021</b> , 17, 513-527	8
605	ROS-Degradable Polythioketal Urethane Foam Dressings to Promote Porcine Skin Wound Repair.	0
604	PI3K/AKT/mTOR signaling participates in insulin-mediated regulation of pathological myopia-related factors in retinal pigment epithelial cells. <b>2021</b> , 21, 218	2



603	Small leucine zipper protein promotes the metastasis of castration-resistant prostate cancer through transcriptional regulation of matrix metalloproteinase-13. <b>2021</b> , 42, 1089-1099	0
602	Inspired by vitamin A for anti-ageing: Searching for plant-derived functional retinoid analogues. <b>2021</b> , 1, e36	0
601	Combination of endothelial progenitor cells and BB-94 significantly alleviates brain damage in a mouse model of diabetic ischemic stroke. <b>2021</b> , 22, 789	1
600	Matrix metalloproteinases in children with uncomplicated compression fractures of the spine. <b>2021</b> , 24, 96-101	
599	Expression of Drosophila Matrix Metalloproteinases in Cultured Cell Lines Alters Neural and Glial Cell Morphology. <b>2021</b> , 9, 610887	
598	Mitogen-activated protein kinases contribute to temperature induced cardiac remodelling in rainbow trout ( <i>Oncorhynchus mykiss</i> ) heart.	
597	Effect of anti-tuberculosis treatment on the systemic levels of tissue inhibitors of metalloproteinases in tuberculosis - Diabetes co-morbidity. <b>2021</b> , 23, 100237	0
596	Inhibitory effects on chondrosarcoma cell metastasis by <i>Senna alata</i> extract. <b>2021</b> , 137, 111337	1
595	Polymorphism of IL-1 $\beta$ s16944(T/C) Associated with Serum Levels of IL-1 $\beta$ and Subsequent Stimulation of Extracellular Matrix Degradation Affects Intervertebral Disk Degeneration Susceptibility. <b>2021</b> , 17, 453-461	
594	Effect of voluntary running activity on mRNA expression of extracellular matrix genes in a mouse model of intervertebral disc degeneration. <b>2021</b> , 4, e1148	
593	Interleukin-1 $\beta$ and cathepsin D modulate formation of the terminal complement complex in cultured human disc tissue. <b>2021</b> , 30, 2247-2256	5
592	Macrophage depletion induces edema through release of matrix-degrading proteases and proteoglycan deposition. <b>2021</b> , 13,	5
591	Pro- and Antiangiogenic Factors in Gliomas: Implications for Novel Therapeutic Possibilities. <b>2021</b> , 22,	2
590	Mechanisms of angiogenic incompetence in Hutchinson-Gilford progeria via downregulation of endothelial NOS. <b>2021</b> , 20, e13388	2
589	Prostaglandin E induces dual-specificity phosphatase-1, thereby attenuating inflammatory genes expression in human osteoarthritic synovial fibroblasts. <b>2021</b> , 154, 106550	1
588	Structural and functional role of invariant water molecules in matrix metalloproteinases: a data-mining approach. <b>2021</b> , 1-12	1
587	Matrix Metalloproteinases (MMP-2) and Tissue Inhibitors of Metalloproteinases (TIMP-2) in Male Inguinal Hernia Patients at Different Ages. <b>2021</b> , 45, 2747-2751	
586	Toxic Metal Species and 'Endogenous' Metalloproteins at the Blood-Organ Interface: Analytical and Bioinorganic Aspects. <b>2021</b> , 26,	3

- 585 Collective Cell Migration in a Fibrous Environment: A Hybrid Multiscale Modelling Approach. **2021**, 7, 2
- 584 SARS-CoV-2 and pathological matrix remodeling mediators. **2021**, 70, 847-858 3
- 583 Matrix Metalloproteinase 3: A Promoting and Destabilizing Factor in the Pathogenesis of Disease and Cell Differentiation. **2021**, 12, 663978 2
- 582 Bimodal Effects of P2Y Antagonism on Matrix Metalloproteinase-Associated Contractile Dysfunction in Insulin-Resistant Mammalian Heart. **2021**, 1
- 581 Matrix Metalloproteinases (MMPs) and Inhibitors of MMPs in the Avian Reproductive System: An Overview. **2021**, 22, 4
- 580 Response of the matrix metalloproteinase system of the chicken ovary to prolactin treatment. **2021**, 169, 21-28 3
- 579 Extracellular matrix remodeling and inflammatory pathway in human endometrium: insights from uterine leiomyomas. **2021**, 116, 1404-1414 1
- 578 Synthesis and experimental/computational characterization of sorghum procyanidins-gelatin nanoparticles. **2021**, 42, 116240 1
- 577 Associations between Exposure to Organochlorine Chemicals and Endometriosis: A Systematic Review of Experimental Studies and Integration of Epidemiological Evidence. **2021**, 129, 76003 2
- 576 Circular RNAs in Lung Cancer: Recent Advances and Future Perspectives. **2021**, 11, 664290 5
- 575 An overview of human pericardial space and pericardial fluid. **2021**, 53, 107346 1
- 574 Mesenchymal stem cell transplantation for vaginal repair in an ovariectomized rhesus macaque model. **2021**, 12, 406 1
- 573 Expression of Matrix Metalloproteinases and Tissue Inhibitor of Matrix Metalloproteinases during Apical Periodontitis Development. **2021**, 47, 1118-1125 0
- 572 Proteases Regulate Cancer Stem Cell Properties and Remodel Their Microenvironment. **2021**, 69, 775-794 1
- 571 Matrix metalloproteinase-9 (MMP-9) and tissue inhibitor of metalloproteinases 1 (TIMP-1) are localized in the nucleus of retinal Müller glial cells and modulated by cytokines and oxidative stress. **2021**, 16, e0253915 0
- 570 Antitumor Effects of Carvacrol and Thymol: A Systematic Review. **2021**, 12, 702487 7
- 569 Clinical influence of calcium hydroxide intracanal medications on matrix metalloproteinases and tissue inhibitors of metalloproteinases in apical periodontitis. **2021**, 1 1
- 568 Inhibitory activity of gintonin on inflammation in human IL-1 $\beta$ -stimulated fibroblast-like synoviocytes and collagen-induced arthritis in mice. **2021**, 45, 510-518 0

567	Compressive force regulates cementoblast migration via downregulation of autophagy. <b>2021</b> , 92, 128-138	2
566	Matrix metalloproteinase contribution in management of cancer proliferation, metastasis and drug targeting. <b>2021</b> , 48, 6525-6538	3
565	Distinct Metalloproteinase Expression and Functions in Systemic Sclerosis and Fibrosis: What We Know and the Potential for Intervention. <b>2021</b> , 12, 727451	2
564	Extracellular Matrix Enzymes and Immune Cell Biology. <b>2021</b> , 8, 703868	7
563	Inflammation in the Pathogenesis of Rheumatoid Arthritis and in Experimental Arthritis: Evaluation of Combinations of Carnosic Acid and Extract of <i>Rhodiola rosea</i> L. with Methotrexate.	
562	Coxsackievirus A2 Leads to Heart Injury in a Neonatal Mouse Model. <b>2021</b> , 13,	3
561	Decellularized xenogeneic scaffolds in transplantation and tissue engineering: Immunogenicity versus positive cell stimulation. <b>2021</b> , 127, 112203	5
560	Matrix Metalloproteinases as Biomarkers and Treatment Targets in Mesothelioma: A Systematic Review. <b>2021</b> , 11,	0
559	Status of biomarkers for the identification of stable or vulnerable plaques in atherosclerosis. <b>2021</b> , 135, 1981-1997	1
558	TYK2 in Cancer Metastases: Genomic and Proteomic Discovery. <b>2021</b> , 13,	2
557	Screening Collagenase Activity in Bacterial Lysate for Directed Enzyme Applications. <b>2021</b> , 22,	0
556	Activated matrix metalloproteinase 8 in serum predicts severity of acute pancreatitis. <b>2021</b> , 21, 862-869	1
555	Cardiac Fibrosis and Changes in Left Ventricle Function in Patients with Chronic Chagas Heart Disease. <b>2021</b> , 117, 1081-1090	2
554	The function of matrix metalloproteinase-9 (MMP-9) and its tissue inhibitor (TIMP-1) in several clinical conditions: Results and analysis of our survey. <b>2021</b> , 78, 401-416	2
553	Epigenetic Regulation of Angiogenesis in Development and Tumors Progression: Potential Implications for Cancer Treatment. <b>2021</b> , 9, 689962	6
552	Matrix Metalloproteinases and Tissue Inhibitors of Metalloproteinases in Echinoderms: Structure and Possible Functions. <b>2021</b> , 10,	4
551	Pharmacological Inhibition of MMP3 as a Potential Therapeutic Option for COVID-19 Associated Acute Respiratory Distress Syndrome. <b>2021</b> , 21, e170721187996	2
550	Dynamic Crosstalk between Vascular Smooth Muscle Cells and the Aged Extracellular Matrix. <b>2021</b> , 22,	4

549	Skin Aging: Implications of UV Radiation, Reactive Oxygen Species and Natural Antioxidants.	1
548	Potent therapeutic targets for treatment of Alzheimer's disease: Amyloid degrading enzymes.	0
547	Polymorphisms of matrix metalloproteinases affect the susceptibility of esophageal cancer: Evidence from 20412 subjects, systematic review and updated meta-analysis. <b>2021</b> , 100, e27229	0
546	Colony-stimulating factor-1 receptor blockade attenuates inflammation in inflamed gingival tissue explants. <b>2021</b> , 56, 1141-1153	1
545	Luteolin inhibits the proliferation, adhesion, migration and invasion of choroidal melanoma cells in vitro. <b>2021</b> , 210, 108643	2
544	A randomised controlled trial of succinylated gelatin (4%) fluid on urinary acute kidney injury biomarkers in cardiac surgical patients. <b>2021</b> , 9, 48	1
543	Mitogen-activated protein kinases contribute to temperature-induced cardiac remodelling in rainbow trout ( <i>Oncorhynchus mykiss</i> ). <b>2021</b> , 1	1
542	MMP-2 knockdown blunts age-dependent carotid stiffness by decreasing elastin degradation and augmenting eNOS activation. <i>Cardiovascular Research</i> , <b>2021</b> ,	9.9 2
541	The paradoxical role of matrix metalloproteinase-11 in cancer. <b>2021</b> , 141, 111899	2
540	Betanin Prevents Experimental Abdominal Aortic Aneurysm Progression by Modulating the TLR4/NF- $\kappa$ B and Nrf2/HO-1 Pathways. <b>2021</b> , 44, 1254-1262	1
539	TNF $\alpha$ blockade reverses vascular and uteroplacental matrix metalloproteinases imbalance and collagen accumulation in hypertensive pregnant rats. <b>2021</b> , 193, 114790	
538	Preventative treatment of red light-emitting diode protected osteoarthritis-like chondrocytes from oxidative stress-induced inflammation and promoted matrix gene expression. <b>2021</b> , 127, 23-31	1
537	Increased Nectin-4 levels in chronic ketamine abusers and the relationship with lower urinary tract symptoms. <b>2021</b> , 87, 103714	2
536	Indices of connective tissue metabolism, their interconnection in patients with 5D stage chronic kidney disease and in patients with anterior abdominal wall hernias. <b>2021</b> , 86-93	
535	Expression of soluble recombinant human matrix metalloproteinase 9 and generation of its monoclonal antibody. <b>2021</b> , 187, 105931	
534	Matrix metalloproteinases inhibitors in idiopathic pulmonary fibrosis: Medicinal chemistry perspectives. <b>2021</b> , 224, 113714	5
533	Increasing of matrix metalloproteinase 3 in bovine endometritis. <b>2021</b> , 175, 83-88	0
532	Molecular biological findings of ameloblastoma. <b>2021</b> , 57, 27-32	4

531	Targeting matrix metalloproteinase MMP3 greatly enhances oncolytic virus mediated tumor therapy. <b>2021</b> , 14, 101221	1
530	Integrin $\beta$ Targeting Biomaterial Preferentially Promotes Secretion of bFGF and Proliferation of iPSC-Derived Vascular Smooth Muscle Cells.	0
529	Platelet Membrane Receptor Proteolysis: Implications for Platelet Function. <b>2020</b> , 7, 608391	5
528	Integrin $\beta$ targeting biomaterial preferentially promotes secretion of bFGF and viability of iPSC-derived vascular smooth muscle cells. <b>2021</b> , 9, 5319-5329	1
527	Matrix metalloproteinases and tissue inhibitors of matrix metalloproteinases in kidney disease. <b>2021</b> , 105, 141-212	2
526	Interleukin-1 $\alpha$ Induced Matrix Metalloproteinase Expression in Human Periodontal Ligament-Derived Mesenchymal Stromal Cells under In Vitro Simulated Static Orthodontic Forces. <b>2021</b> , 22,	7
525	The skeletome of the red coral <i>Corallium rubrum</i> indicates an independent evolution of biomineralization process in octocorals. <b>2021</b> , 21, 1	22
524	Recent progress in functional peptides designed for tumor-targeted imaging and therapy. <b>2021</b> , 9, 3749-3772	2
523	Pulsed electromagnetic fields reduce acute inflammation in the injured rat-tail intervertebral disc. <b>2019</b> , 2, e1069	6
522	Matrix Metalloproteinases and Their Endogenous Inhibitors. <b>2008</b> , 55-62	1
521	Metalloproteinases in Acute Venous Occlusion. <b>2013</b> , 141-151	1
520	Fish metalloproteins as biomarkers of environmental contamination. <b>2012</b> , 218, 101-23	19
519	Application of Gelatin Zymography in Nanotoxicity Research. <b>2019</b> , 1894, 133-143	3
518	Analysis of matrix metalloproteinase secretion by macrophages. <b>2009</b> , 531, 253-65	25
517	Zymographical techniques for detection of matrix metalloproteinases. <b>2008</b> , 477, 113-21	4
516	Methods to assess pericyte-endothelial cell interactions in a coculture model. <b>2011</b> , 686, 379-99	14
515	Analysis of aggrecan catabolism by immunoblotting and immunohistochemistry. <b>2012</b> , 836, 219-37	2
514	Neutrophils in the Tumor Microenvironment. <b>2020</b> , 1224, 1-20	34

513	Hemodynamics and Mechanobiology of Aortic Valve Calcification. <b>2016</b> , 237-261	2
512	Pathogenesis of Pulmonary Arterial Hypertension. <b>2017</b> , 385-401	0
511	Zinc and Zinc-Dependent Proteins in Cancer and Chemotherapeutics. <b>2017</b> , 69-94	2
510	A Primer of Collagen Biology: Synthesis, Degradation, Subtypes, and Role in Dupuytren's Disease. <b>2012</b> , 131-142	3
509	Oxidative Stress and Pulmonary Fibrosis. <b>2014</b> , 1611-1631	3
508	MMP-Mediated Collagen Remodeling and Vessel Functions. <b>2013</b> , 471-489	1
507	Skeletal Muscle Collagen: Age, Injury and Disease. <b>2011</b> , 159-172	3
506	Matrix Metalloproteinases (MMPs) in Cancer Initiation and Progression. <b>2017</b> , 207-236	1
505	Small Molecule-Targeted Therapies for GI Cancers: Success and Failures. <b>2020</b> , 43-57	1
504	Elevated MMP9 expression in breast cancer is a predictor of shorter patient survival. <b>2020</b> , 182, 267-282	12
503	Selective toxicity of antibacterial agents-still a valid concept or do we miss chances and ignore risks?. <b>2021</b> , 49, 29-56	6
502	CHAPTER 4:Designing Enzyme-responsive Biomaterials. <b>2020</b> , 76-125	1
501	Mithramycin has inhibitory effects on gliostatin and matrix metalloproteinase expression induced by gliostatin in rheumatoid fibroblast-like synoviocytes. <b>2018</b> , 28, 495-505	4
500	Matrix Metalloproteinase Expression in the Rat Myometrium During Pregnancy, Term Labor, and Postpartum. <b>2016</b> , 95, 24	18
499	Effects of exercise training on renal interstitial fibrosis and renin-angiotensin system in rats with chronic renal failure. <b>2021</b> , 39, 143-152	4
498	Dynamic urinary proteomic analysis in a Walker 256 intracerebral tumor model.	5
497	Breast tumor-associated metalloproteases restrict reovirus oncolysis by cleaving the $\alpha$ cell-attachment protein, and can be overcome by mutation of $\alpha$ .	1
496	Anti-Inflammatory and Photoaging-Protective Effects of through Inhibition of AP-1 and NF-[Formula: see text] B Pathways. <b>2020</b> , 48, 1895-1913	3

495	Soluble RARRES1 induces podocyte apoptosis to promote glomerular disease progression. <b>2020</b> , 130, 5523-5535	13
494	ECM remodeling in hypertensive heart disease. <b>2007</b> , 117, 568-75	642
493	Ectodomain shedding of EGFR ligands and TNFR1 dictates hepatocyte apoptosis during fulminant hepatitis in mice. <b>2010</b> , 120, 2731-44	68
492	Aspirin potentiates celecoxib-induced growth inhibition and apoptosis in human non-small cell lung cancer by targeting GRP78 activity. <b>2020</b> , 12, 1758835920947976	8
491	Matrix metalloproteinase9 as the protein target in anti-breast cancer drug discovery: an approach by targeting hemopexin domain. <b>2019</b> , 5,	10
490	Olive Oil Phenols, Basic Cell Mechanisms, and Cancer. <b>2008</b> , 129-171	1
489	Wounds, Enzymes, and Proteases. <b>2010</b> , 249-270	2
488	Age-related macular degeneration and changes in the extracellular matrix. <b>2014</b> , 20, 1003-16	64
487	Influence of ranibizumab treatment on the extracellular matrix in patients with neovascular age-related macular degeneration. <b>2014</b> , 20, 875-83	5
486	Bioinformatics Analysis of Prognostic Tumor Microenvironment-Related Genes in the Tumor Microenvironment of Hepatocellular Carcinoma. <b>2020</b> , 26, e922159	6
485	Activation of AMPK Prevents Monocrotaline-Induced Extracellular Matrix Remodeling of Pulmonary Artery. <b>2016</b> , 22, 27-33	17
484	The significance of matrix metalloproteinases in the immunopathogenesis and treatment of multiple sclerosis. <b>2014</b> , 14, e13-25	42
483	Matrix metalloproteinase and tissue inhibitor of metalloproteinase responses to muscle damage after eccentric exercise. <b>2016</b> , 12, 260-5	6
482	Adaptive Remodeling of Achilles Tendon: A Multi-scale Computational Model. <b>2016</b> , 12, e1005106	11
481	Chikungunya virus dissemination from the midgut of <i>Aedes aegypti</i> is associated with temporal basal lamina degradation during bloodmeal digestion. <b>2017</b> , 11, e0005976	36
480	Resistance to bleomycin-induced lung fibrosis in MMP-8 deficient mice is mediated by interleukin-10. <b>2010</b> , 5, e13242	69
479	Phenotypic overlap between MMP-13 and the plasminogen activation system during wound healing in mice. <b>2011</b> , 6, e16954	25
478	Acute endotoxin-induced thymic atrophy is characterized by intrathymic inflammatory and wound healing responses. <b>2011</b> , 6, e17940	49

477	Biosynthesis of promatrix metalloproteinase-9/chondroitin sulphate proteoglycan heteromer involves a Rottlerin-sensitive pathway. <b>2011</b> , 6, e20616	7
476	Diffusion of MMPs on the surface of collagen fibrils: the mobile cell surface-collagen substratum interface. <b>2011</b> , 6, e24029	58
475	Classical macrophage activation up-regulates several matrix metalloproteinases through mitogen activated protein kinases and nuclear factor- $\kappa$ B. <b>2012</b> , 7, e42507	117
474	Relaxin signals through a RXFP1-pERK-nNOS-NO-cGMP-dependent pathway to up-regulate matrix metalloproteinases: the additional involvement of iNOS. <b>2012</b> , 7, e42714	82
473	Site specific cleavage mediated by MMPs regulates function of agrin. <b>2012</b> , 7, e43669	17
472	Novel genes and pathways modulated by syndecan-1: implications for the proliferation and cell-cycle regulation of malignant mesothelioma cells. <b>2012</b> , 7, e48091	35
471	Planarians as a model to assess in vivo the role of matrix metalloproteinase genes during homeostasis and regeneration. <b>2013</b> , 8, e55649	24
470	EMMPRIN is an independent negative prognostic factor for patients with astrocytic glioma. <b>2013</b> , 8, e58069	24
469	Macrophage migration and invasion is regulated by MMP10 expression. <b>2013</b> , 8, e63555	60
468	Pyruvate kinase M2 plays a dual role on regulation of the EGF/EGFR signaling via E-cadherin-dependent manner in gastric cancer cells. <b>2013</b> , 8, e67542	24
467	Matrix metalloproteinase 7 is associated with symptomatic lesions and adverse events in patients with carotid atherosclerosis. <b>2014</b> , 9, e84935	45
466	Remodeling of aorta extracellular matrix as a result of transient high oxygen exposure in newborn rats: implication for arterial rigidity and hypertension risk. <b>2014</b> , 9, e92287	18
465	Kisspeptin regulation of genes involved in cell invasion and angiogenesis in first trimester human trophoblast cells. <b>2014</b> , 9, e99680	37
464	Alterations of Dermal Connective Tissue Collagen in Diabetes: Molecular Basis of Aged-Appearing Skin. <b>2016</b> , 11, e0153806	42
463	Simvastatin and atorvastatin reduce the mechanical properties of tendon constructs in vitro and introduce catabolic changes in the gene expression pattern. <b>2017</b> , 12, e0172797	9
462	Matrix metalloproteinases operate redundantly in Arabidopsis immunity against necrotrophic and biotrophic fungal pathogens. <b>2017</b> , 12, e0183577	7
461	[Characteristics of immune response and inflammatory reaction in atherothrombotic stroke and myocardial infarction]. <b>2015</b> , 115, 48-53	3
460	Targeting metalloproteinases in cardiac remodeling. <b>2019</b> , 6, 051-060	2



459	The role of matrix metalloproteinases in glaucoma pathogenesis. <b>2015</b> , 8, 28-43	4
458	[Interstitial collagenase, gelatinases A and B and their endogenous inhibitors in squamous cell cervical carcinomas]. <b>2013</b> , 59, 55-64	5
457	Time-dependent matrix metalloproteinases and tissue inhibitor of metalloproteinases expression change in fusarium solani keratitis. <b>2016</b> , 9, 512-8	1
456	Loss of Klotho contributes to cartilage damage by derepression of canonical Wnt/ $\beta$ -catenin signaling in osteoarthritis mice. <b>2019</b> , 11, 12793-12809	11
455	Regulation of matrix metalloproteinases (MMPs) expression and secretion in MDA-MB-231 breast cancer cells by LIM and SH3 protein 1 (LASP1). <b>2016</b> , 7, 64244-64259	31
454	Selective function-blocking monoclonal human antibody highlights the important role of membrane type-1 matrix metalloproteinase (MT1-MMP) in metastasis. <b>2017</b> , 8, 2781-2799	29
453	Filamin C promotes lymphatic invasion and lymphatic metastasis and increases cell motility by regulating Rho GTPase in esophageal squamous cell carcinoma. <b>2017</b> , 8, 6353-6363	15
452	Ensnaring membrane type 1-matrix metalloproteinase (MT1-MMP) with tissue inhibitor of metalloproteinase (TIMP)-2 using the haemopexin domain of the protease as a carrier: a targeted approach in cancer inhibition. <b>2017</b> , 8, 22685-22699	6
451	Hydrogen peroxide/ATR-Chk2 activation mediates p53 protein stabilization and anti-cancer activity of cheliensisin A in human cancer cells. <b>2014</b> , 5, 841-52	18
450	Polymorphisms in matrix metalloproteinases 2, 3, and 8 increase recurrence and mortality risk by regulating enzyme activity in gastric adenocarcinoma. <b>2017</b> , 8, 105971-105983	4
449	A novel action mechanism for MPT0G013, a derivative of arylsulfonamide, inhibits tumor angiogenesis through up-regulation of TIMP3 expression. <b>2014</b> , 5, 9838-50	10
448	Divergent behaviors and underlying mechanisms of cell migration and invasion in non-metastatic T24 and its metastatic derivative T24T bladder cancer cell lines. <b>2015</b> , 6, 522-36	43
447	A glimpse of matrix metalloproteinases in diabetic nephropathy. <b>2014</b> , 21, 3244-60	59
446	Collagenolytic Enzymes and their Applications in Biomedicine. <b>2019</b> , 26, 487-505	10
445	Medicinal Plants As Natural Polarizers of Macrophages: Phytochemicals and Pharmacological Effects. <b>2019</b> , 25, 3225-3238	10
444	Computational and Experimental Progress on the Structure and Chemical Reactivity of Procyanidins: Their Potential as Metalloproteinases Inhibitors. <b>2019</b> , 23, 1403-1420	1
443	Molecular Mechanisms of Complement System Proteins and Matrix Metalloproteinases in the Pathogenesis of Age-Related Macular Degeneration. <b>2019</b> , 19, 705-718	9
442	Lipid raft in cardiac health and disease. <b>2009</b> , 5, 105-11	22

441	Ginsenoside Rh2 Inhibits Migration of Lung Cancer Cells under Hypoxia mir-491. <b>2019</b> , 19, 1633-1641	17
440	The MMP-2/TIMP-2 System in Alzheimer Disease. <b>2020</b> , 19, 402-416	4
439	Insight on Ameliorative Role of Selenium Nanoparticles and Niacin in Wound Healing on Adult Female Albino Mice. <b>2020</b> , 14, 169-186	1
438	Coconut shell derived bioactive compound Oxyresveratrol mediates regulation of Matrix metalloproteinase 9. <b>2017</b> , 8,	1
437	Influence of Compressive Force and IL-1 $\beta$ on Metabolism of the Extracellular Matrix in Human Chondrocytes. <b>2012</b> , 21, 217-230	2
436	Polymeric implant materials for the reconstruction of tracheal and pharyngeal mucosal defects in head and neck surgery. <b>2009</b> , 8, Doc06	2
435	Metallothionein 1E Enhances Glioma Invasion through Modulation Matrix Metalloproteinases-2 and 9 in U87MG Mouse Brain Tumor Model. <b>2016</b> , 59, 551-558	7
434	The unwounded skin remodeling in animal models of diabetes types 1 and 2. <b>2013</b> , 62, 519-26	9
433	Cardiac connexin-43 and PKC signaling in rats with altered thyroid status without and with omega-3 fatty acids intake. <b>2016</b> , 65 Suppl 1, S77-90	12
432	Therapeutic Potential of the Molecular Chaperone and Matrix Metalloproteinase Inhibitor Clusterin for Dry Eye. <b>2020</b> , 22,	3
431	Hold on or Cut? Integrin- and MMP-Mediated Cell-Matrix Interactions in the Tumor Microenvironment. <b>2020</b> , 22,	18
430	Stimuli-Responsive Gold Nanoparticles for Cancer Diagnosis and Therapy. <b>2016</b> , 7, 19	15
429	Effects of Ehwa Makgeolli Containing Oriental Herbs on Skin Whitening and Wrinkles. <b>2013</b> , 42, 550-555	8
428	Filtrate of fermented mycelia from Antrodia camphorata reduces liver fibrosis induced by carbon tetrachloride in rats. <b>2006</b> , 12, 2369-74	29
427	Targeting collagen expression in alcoholic liver disease. <b>2011</b> , 17, 2473-81	30
426	Estradiol agonists inhibit human LoVo colorectal-cancer cell proliferation and migration through p53. <b>2014</b> , 20, 16665-73	16
425	Role of matrix metalloproteinases in cholestasis and hepatic ischemia/reperfusion injury: A review. <b>2015</b> , 21, 12114-24	19
424	Production and Roles of Glial Tissue Inhibitor of Metalloproteinases-1 in Human Immunodeficiency Virus-1-Associated Dementia Neuroinflammation: A Review. <b>2009</b> , 5, 314-320	15

423	Decreased collagen type III synthesis in skin fibroblasts is associated with parastomal hernia following colostomy. <b>2019</b> , 44, 1609-1618	2
422	Correlation Between Matrix Metalloproteinase 8 in Gingival Crevicular Fluid and Zinc Consumption. <b>2015</b> , 15, 72-75	2
421	Effects of interleukin-1 receptor antagonist on collagen and matrix metalloproteinases in stress-shielded achilles tendons of rats. <b>2012</b> , 35, e1238-44	6
420	Effects of Tumor Necrosis Factor Inhibitor on Stress-Shielded Tendons. <b>2017</b> , 40, 49-55	5
419	Synergistic effect of blocking cancer cell invasion revealed by computer simulations. <b>2015</b> , 12, 1189-202	3
418	Matrix Metalloproteinase 3 Polymorphisms: Emerging genetic Markers in Human Breast Cancer Metastasis. <b>2020</b> , 23, 1-9	8
417	Matrix metalloproteinases in neural development: a phylogenetically diverse perspective. <b>2016</b> , 11, 357-62	21
416	Differential temporal expression of matrix metalloproteinases following sciatic nerve crush. <b>2016</b> , 11, 1165-71	18
415	Molecular biology of frozen shoulder-induced limitation of shoulder joint movements. <b>2017</b> , 22, 61	10
414	Role of ESR Pathway Genes in Breast Cancer: A Review. <b>2018</b> , 07, 134-186	2
413	Effect of Black Tea Polyphenol on Cell-ECM Interaction and MMP. <b>2017</b> , 08, 856-866	2
412	Decidual cell expressed tissue factor promotes endometrial hemostasis while mediating abruption associated preterm birth. <b>2013</b> , 01, 44-50	2
411	Bortezomib and Arsenic Trioxide Activity on a Myelodysplastic Cell Line (P39): A Gene Expression Study. <b>2015</b> , 32, 206-12	3
410	Gelatin degradation assay reveals MMP-9 inhibitors and function of O-glycosylated domain. <b>2011</b> , 2, 14-24	51
409	Siyah zehir ekstresinin meme kanseri hücrelerinde MMP-9 gen ekspresyonuna etkisi. <b>2020</b> , 13, 194-199	1
408	Polymorphisms of exon 5, exon 7 and intron 10 of MMP2 gene and their association with wool density in Rex rabbits. <b>2017</b> , 25, 181	2
407	Histone tail cleavage as a novel epigenetic regulatory mechanism for gene expression. <b>2018</b> , 51, 211-218	19
406	Characterization of a Collagenase-1 Inhibitory Peptide Purified from Skate <i>Dipturus chilensis</i> Skin. <b>2011</b> , 44, 456-463	5

405	Effects of Acellular Amniotic Membrane Matrix and Bone Marrow-Derived Mesenchymal Stem Cells in Improving Random Skin Flap Survival in Rats. <b>2016</b> , 18, e25588	20
404	Effects of Physical Training on the Myocardium of Oxariectomized LDLr Knockout Mice: MMP 2/9, Collagen I/III, Inflammation and Oxidative Stress. <b>2020</b> , 114, 100-105	2
403	Lead identification and optimization of novel collagenase inhibitors; pharmacophore and structure based studies. <b>2012</b> , 8, 301-8	7
402	Curcumin effect on MMPs and TIMPs genes in a breast cancer cell line. <b>2012</b> , 13, 3259-64	39
401	Matrix metalloproteinases and cancer - roles in threat and therapy. <b>2014</b> , 15, 1085-91	149
400	MMP-9 reinforces radiation-induced delayed invasion and metastasis of neuroblastoma cells through second-signaling positive feedback with NFB via both ERK and IKK activation. <b>2021</b> , 1	0
399	Galectin-3, metalloproteinase-2 and cardiovascular disease were independently associated with metalloproteinase-14 in patients with type 1 diabetes: a cross sectional study. <b>2021</b> , 13, 118	
398	Therapeutic nanocarriers comprising extracellular matrix-inspired peptides and polysaccharides. <b>2021</b> , 18, 1723-1740	1
397	MMPs and TIMPs levels are correlated with anthropometric parameters, blood pressure, and endothelial function in obesity. <b>2021</b> , 11, 20052	2
396	Collagen Fragments Produced in Cancer Mediate T Cell Suppression Through Leukocyte-Associated Immunoglobulin-Like Receptor 1. <b>2021</b> , 12, 733561	0
395	The $\beta$ 5 Integrin-MMP9 Axis Regulates Pulmonary Inflammatory Response and Endothelial Leakage in Acute Lung Injury. <b>2021</b> , 14, 5079-5094	1
394	Down regulation of Pinkbar/pAKT and MMP2/MMP9 expression in MDA-MB-231 breast cancer cells as potential targets in cancer therapy by hAMSCs secretome. <b>2021</b> ,	0
393	FNC inhibits non-small cell lung cancer by activating the mitochondrial apoptosis pathway. <b>2021</b> , 1	
392	Mechanisms of cardiovascular toxicity induced by PM: a review. <b>2021</b> , 28, 65033-65051	3
391	Pro-angiogenic activity and vasculogenic mimicry in the tumor microenvironment by leptin in cancer. <b>2021</b> , 62, 23-41	3
390	Fibrillar Collagen: A Review of the Mechanical Modeling of Strain Mediated Enzymatic Turnover. <b>2021</b> ,	2
389	Ligand-based design of anticancer MMP2 inhibitors: a review. <b>2021</b> , 13, 1987-2013	2
388	Metalloproteases in gonad formation and ovulation. <b>2021</b> , 314, 113924	1

- 387 Matrix Metalloproteinases in Acute Lung Injury. **2007**, 291-298 0
- 386 Theaflavin-3, 3'-digallate Inhibits Tube Formation in Cocultured Endothelial Cells with Fibroblasts. **2007**, 19, 59-72 5
- 385 Effect of Green Tea on the mRNA Expression of Matrix Metalloproteinases in the Liver and Kidney of Diabetic Rats. **2008**, 20, 11-20 1
- 384 Metalloproteinases, Biophysics and Chemistry of. 1
- 383 Metastasis-associated C4.4A, a GPI-anchored protein cleaved by ADAM10 and ADAM17. **2008**, 080808065800257-24
- 382 Statins and the Kidney. **2009**, 1711-1713
- 381 Effect of fibrinolytic factors in tissue fibrosis. **2009**, 20, 23-26
- 380 [Bench to bedside of osteoarthritis: where we are and to go]. **2009**, 46, 121-4
- 379 Cellular repopulation of the retina. **2010**, 607-611
- 378 Tissue-type plasminogen activator (t-PA) induces stromelysin-1 (MMP-3) in endothelial cells through activation of lipoprotein receptor-related protein. **2010**, 21, 308-313
- 377 Results of Biocompatibility Testing of Novel, Multifunctional Polymeric Implant Materials In-Vitro and In-Vivo. **2010**, 285-300
- 376 Structure-Function Relationship of Neutrophil Collagenase (MMP-8). **2011**, 57, 504-511
- 375 Tissue destruction and repair. **2011**, 153-162
- 374 Tissue Inhibitors of Matrix Metalloproteinase-3, Potential Therapeutic Target against Multiple Sclerosis. **2012**, 2, 195-199 1
- 373 Biomaterials and Stem Cells for Myocardial Repair. **2012**, 345-366
- 372 New Prospects for Matrix Metalloproteinase Targeting in Cancer Therapy. 373-387
- 371 Role of Proteases and Their Tissue Inhibitors in Pregnancy Outcome. **2013**, 277-287
- 370 Metalloproteinases in Cartilage Matrix Breakdown: The Roles in Rheumatoid Arthritis and Osteoarthritis. **2013**, 433-469 1

- 369 Role of Inflammation and Matrix Proteinases in Cardiac Remodeling Following Stress and Injury. **2013**, 179-200
- 368 Regulatory role of mesenchymal stem cells in osteoclast differentiation. **2013**, 33, 217-222
- 367 Proteases as Potential Targets in Left Ventricular Remodeling After Myocardial Infarction. **2014**, 383-405
- 366 Role of Matrix Metalloproteinases in Atherosclerosis. **2014**, 247-262
- 365 MMPs in Cardiovascular Diseases: Emerging Pharmacological Targets. **2014**, 407-426 1
- 364 Matrix Metalloprotease-2 in the Development and Progression of Cardiovascular Diseases. **2014**, 351-364
- 363 Proteases as Clinical Markers of Adverse Remodeling for Heart Failure in the Aging Population. **2014**, 427-458
- 362 Implications of Intracellular Proteolytic Activation of MMP-2 in the Heart. **2014**, 335-349
- 361 Proteases and Their Role in Drug Development with an Emphasis in Cancer. **2014**, 227-244
- 360 Cancer Development in Competitive and Hostile Environments. **2014**, 205-227
- 359 Applications of Molecular Small-Animal Imaging in Cardiology. **2014**, 547-584
- 358 Participaci3n de las metaloproteinasas de matriz extracelular en la EPOC. **2014**, 73, 128-137
- 357 In vivo Corrosion Environment and Biomaterials. **2014**, 63, 290-294
- 356 Growth Factor Delivery Matrices for Cardiovascular Regeneration. **2015**, 159-214
- 355 Tissue destruction and repair. **2015**, 152-159
- 354 Effects of Bisphosphonate on the Expression of Matrix Enzymes during Endochondral Ossification. **2015**, 28, 155
- 353 Biomarkers of Oxidative Stress, Proliferation, Inflammation and Invasivity in Saliva from Oral Cancer Patients. **2015**, 4, 52-57
- 352 Redu3o da atividade proteol3tica da dentina ap3s curtos per3odos de aplica3o de proantocianidina. **2015**, 44, 355-359

351 Encyclopedia of Signaling Molecules. **2016**, 1-9

350 Myocardial Repair: Biomaterials and Stem Cells for. 5027-5038

349 Discoidin Domain Receptors in Liver Fibrosis. **2016**, 293-313

348 Deregulated Levels of the NF- $\kappa$ B1, NF- $\kappa$ B2, and Rel Genes in Ukrainian Patients with Leukemia and Lymphoma in the Post-Chernobyl Period. **2016**, 33, 8-14

1

347 Orthopedic Sports Disorders: Genetic and Molecular Aspects. **2017**, 135-138

346 ProteasesâThe Sharp Scissors in Human Diseases. **2017**, 635-645

345 Role of Matrix Metalloproteinases in the Development and Progression of Atherosclerosis. **2017**, 425-446

2

344 Complex Mechanisms of Matrix Metalloproteinases Involvement in Endometrial Physiology and PathologyâAn Update. **2017**, 41-67

343 Matrix Metalloproteinases in Parasitic Infections. **2017**, 321-352

342 Association of Matrix Metalloproteinases with CVD: Functional Aspects. **2017**, 473-496

341 Metalloproteinases: a Functional Pathway for Myeloid Cells. 649-658

340 Structural Remodeling in the Development of Chronic Systolic Heart Failure: Implication for Treatment. **2017**, 247-265

339 Features of expression matrix metalloproteinases, their tissue inhibitors and renal cancer. **2017**, 6, 6

338 Melanin Synthesis Inhibitory Effect of Eriobotryae Folium Extracts & Eriobotryae Folium and Phreatic Water Mixture. **2017**, 38, 62-81

337 Osterix functions downstream of anti-Müllerian hormone signaling to regulate Müllerian duct regression.

336 Roles of Pericellular Proteases in Tumor Angiogenesis: Therapeutic Implications. 411-446

o

335 Matrix Metalloproteinase-2 and -9 Expression in the Epiligament of the Medial Collateral and Anterior Cruciate Ligament in Human Knees: A Comparative Study. **2018**, 10, e3550

7

334 Pro-Metastatic Matrix Metalloproteinase Expression is Induced by the Invadopodial and Cytoskeletal Regulators Glycine- and Cysteine-Rich Proteins 1 and 2.

333 Substrate Remodeling in Heart Failure. **2019**, 155-166

332 CLINICAL AND PROGNOSTIC VALUE OF PROTEOLYSIS FACTORS IN CHILDREN WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE. **2019**, 23, 91-99

331 The Epiligament: Structure, Postnatal Development and Role in Ligament Healing. **2019**, 11, e4836

1

330 Structural studies of MMP-3 interaction with triple-helical collagen introduce the enzyme's new roles in tissue remodelling.

329 Generation of fluorescent cell-derived-matrix to study 3D cell migration.

328 TIMP-3 facilitates binding of target metalloproteinases to the endocytic receptor LRP-1 and promotes scavenging of MMP-1.

327 The role of obesity in the implementation of genetic predisposition to the development of essential hypertension in men. **2019**, 16, 66-72

326 Sex Related Differences in Retinal Pigment Epithelium and Retinal Disease. **2020**, 185-201

1

325 TIMP-2 Polymorphisms Define Subtypes of Hypertensive Intracerebral Hemorrhage with Distinct Perihematomal Edema Development Patterns. **2020**, 17, 44-49

2

324 An SNP variant MT1-MMP with a defect in its collagenolytic activity confers the fibrotic phenotype of Dupuytren's Disease.

323 Thermodynamic and mechanistic insights into coupled binding and unwinding of collagen by matrix metalloproteinase 1.

322 Bidirectional Mechanical Response Between Cells and Their Microenvironment. **2021**, 9,

1

321 Tumor-Responsive Drug Release Strategies. **2020**, 57-86

320 Identification of a 6-Gene Signature Associated with Resistance to Tyrosine Kinase Inhibitors: Prognosis for Clear Cell Renal Cell Carcinoma. **2020**, 26, e927078

1

319 Identification of Potential Antibody Epitopes in MMP-15.

318 Proteolytic signaling in cutaneous wound healing. **2022**, 131-164

1

317 A novel glyceroglycolipid from brown algae *Ishige okamurae* improve photoaging and counteract inflammation in UVB-induced HaCaT cells. **2021**, 351, 109737

0

316 Tissue inhibitor of metalloproteinases 1 is involved in ROS-mediated inflammation via regulating matrix metalloproteinase 1 expression in the sea cucumber *Apostichopus japonicus*. **2022**, 127, 104298

1



315	Maternal Serum Matrix Metalloproteinase 14 (MMP14) in Early Onset Preeclampsia and Normal Pregnancy. <b>2020</b> , 86, 01004	
314	Prognostic meaning of tissue inhibitors of matrix metalloproteinases TIMP-1 and TIMP-2 in patients with colorectal cancer. <b>2020</b> , 66, 25-32	
313	The role of metalloproteinases in the exchange of endometrial extracellular matrix proteins in normal and pathological conditions. <b>2020</b> , 26, 22	1
312	Parasite Secretory Molecules in Host-Parasite Interaction. <b>2020</b> , 193-212	
311	Metastasis: A Major Driver of Cancer Pathogenesis. <b>2020</b> , 185-211	
310	Role of Granulocyte-colony Stimulating Factor in the Protection of Cerebral Vascular Endothelium, White Matter, and Cognition. <b>2019</b> , 16, 425-432	1
309	Pathophysiology of Corneal Endothelial Cell Loss in Dry Eye Disease and Other Inflammatory Ocular Disorders. <b>2021</b> , 1-11	3
308	Evaluation of anti-epithelial-mesenchymal transition property of Garcinia mangostana rind extract. <b>2021</b> , 7,	
307	Quercetin Impact in Pancreatic Cancer: An Overview on Its Therapeutic Effects. <b>2021</b> , 2021, 4393266	6
306	Circular RNA hsa_circ_0002360 promotes non-small cell lung cancer progression through upregulating matrix metalloproteinase 16 and sponging multiple micorRNAs. <b>2021</b> ,	2
305	Matrix Metalloproteinases in Acute Lung Injury. <b>2007</b> , 291-298	
304	Revisiting matrix metalloproteinase 12: its role in pathophysiology of asthma and related pulmonary diseases. <b>2021</b> , 27, 54-60	4
303	Presence and distribution of 14-3-3 proteins in human ocular surface tissues. <b>2008</b> , 14, 2604-15	17
302	Vulnerable atherosclerotic plaque metalloproteinases and foam cell phenotypes. <b>2009</b> , 101, 1006-11	49
301	Matrix metalloproteinases as potential targets in the venous dilation associated with varicose veins. <b>2013</b> , 14, 287-324	52
300	Tenocytes, pro-inflammatory cytokines and leukocytes: a relationship?. <b>2011</b> , 1, 68-76	24
299	Polymorphisms in the promoters of MMP-2 and TIMP-2 genes in patients with acne vulgaris. <b>2013</b> , 6, 967-72	12
298	Role of matrix metalloproteinases in physiological processes & disease. <b>2014</b> , 140, 585-7	5

297	Mechanisms regulating the degradation of dentin matrices by endogenous dentin proteases and their role in dental adhesion. A review. <b>2014</b> , 27, 203-14	39
296	Budesonide ameliorates lung function of the cigarette smoke-exposed rats through reducing matrix metalloproteinase-1 content. <b>2015</b> , 8, 5137-44	4
295	Role of SDF-1 and Wnt signaling pathway in the myocardial fibrosis of hypertensive rats. <b>2015</b> , 7, 1345-56	8
294	Distribution and activity levels of matrix metalloproteinase 2 and 9 in canine and feline osteosarcoma. <b>2016</b> , 80, 66-73	1
293	Investigation of MMP-2 and MMP-9 activities in canine sera with dilated cardiomyopathy. <b>2015</b> , 16, 182-7	1
292	Molecular Dynamics and Docking Investigations of Several Zoanthamine-Type Marine Alkaloids as Matrix Metalloproteinase-1 Inhibitors. <b>2017</b> , 16, 173-186	8
291	Endothelial MMP-9 drives the inflammatory response in abdominal aortic aneurysm (AAA). <b>2017</b> , 9, 5485-5495	14
290	Matrix Metalloproteinases Are Differentially Regulated and Responsive to Compression Therapy in a Red Duroc Model of Hypertrophic Scar. <b>2018</b> , 18, e1	4
289	Silencing PARG decreases invasion in CT26 cells. <b>2019</b> , 12, 3847-3854	1
288	Comprehensive Analysis of Zinc Derivatives Pro-proliferative, Anti-Apoptotic and Antimicrobial Effect on Human Fibroblasts and Keratinocytes in a Simulated, Nutrient-deficient Environment. <b>2020</b> , 9, 165-178	1
287	Endothelial cell CD36 deficiency prevents normal angiogenesis and vascular repair. <b>2020</b> , 12, 7737-7761	2
286	Does Galectin-3 (Myocardial Fibrosis Biomarker) Predict Progression in Chagas Disease?. <b>2021</b> , 116, 257-258	
285	The role of matrix metalloproteinase-9 and its inhibitor TIMP-1 in burn injury: a systematic review. <b>2021</b> , 11, 275-288	0
284	Recent progress in preventive effect of collagen peptides on photoaging skin and action mechanism. <b>2022</b> , 11, 218-229	4
283	Mechanism-Based Biomarker Prediction for Low-Grade Inflammation in Liver and Adipose Tissue. <b>2021</b> , 12, 703370	1
282	Compliance of the fish outflow tract is altered by thermal acclimation through connective tissue remodelling. <b>2021</b> , 18, 20210492	1
281	Role of Salivary MicroRNA and Cytokines in the Diagnosis and Prognosis of Oral Squamous Cell Carcinoma. <b>2021</b> , 22,	1
280	Metalloproteinases in Endometrial Cancer-Are They Worth Measuring?. <b>2021</b> , 22,	0

279	Protease Activated Receptor 1 and Its Ligands as Main Regulators of the Regeneration of Peripheral Nerves. <b>2021</b> , 11,	2
278	Roles of matrix metalloproteinases in development, immunology, and ovulation in fruit Fly ( <i>Drosophila</i> ). <b>2021</b> , e21849	1
277	Caffeic acid phenethyl ester mitigates infertility: A crucial role of metalloproteinase and angiogenic factor in cadmium-induced testicular damage. <b>2021</b> , e22960	0
276	MMP-9 drives the melanomagenic transcription program through histone H3 tail proteolysis. <b>2021</b> ,	1
275	Curdione and Schisandrin C Synergistically Reverse Hepatic Fibrosis via Modulating the TGF- $\beta$ Pathway and Inhibiting Oxidative Stress. <b>2021</b> , 9, 763864	0
274	Nanostring-Based Identification of the Gene Expression Profile in Trigger Finger Samples. <b>2021</b> , 9,	
273	The Loop of Phenotype: Dynamic Reciprocity Links Tenocyte Morphology to Tendon Tissue Homeostasis.	
272	Adipose Extracellular Matrix Remodeling in Obesity and Insulin Resistance. <b>2021</b> , 215-229	
271	Changes in the expression of membrane type-matrix metalloproteinases genes (MMP14, MMP15, MMP16, MMP24) during treatment and their potential impact on the survival of patients with non-small cell lung cancer (NSCLC).. <b>2022</b> , 146, 112559	0
270	There and back again: Intracellular trafficking, release and recycling of matrix metalloproteinases.. <b>2021</b> , 119189	3
269	Salidroside Inhibits Proliferation, Migration and Invasion via Akt and ERK1/2 Signaling Pathways in Renal Cell Carcinoma Cells.	
268	Role of matrix metalloproteinases in placental angiogenesis. <b>2021</b> , 38, 78-92	
267	Urine peptidome in combination with transcriptomics analysis highlights MMP7, MMP14 and PCSK5 for further investigation in chronic kidney disease.. <b>2022</b> , 17, e0262667	0
266	The Role of Matrix Proteins in Cardiac Pathology.. <b>2022</b> , 23,	3
265	Landscape Analysis of Matrix Metalloproteinases Unveils Key Prognostic Markers for Patients With Breast Cancer.. <b>2021</b> , 12, 809600	2
264	Tumor-specific imaging probes in preclinical applications and clinical trials. <b>2022</b> , 49-138	
263	Adrenergic signaling in skin cancer.. <b>2022</b> , 4, 225-234	0
262	CD26 Induces Colorectal Cancer Angiogenesis and Metastasis through CAV1/MMP1 Signaling.. <b>2022</b> , 23,	2

261	Bi-allelic null variant in matrix metalloproteinase-15, causes congenital cardiac defect, cholestasis jaundice, and failure to thrive.. <b>2022</b> ,	0
260	Matrix metalloproteinases and tissue inhibitors of metalloproteinases in murine Coronavirus-induced neuroinflammation.. <b>2022</b> , 566, 122-135	0
259	Activatable molecular probes for fluorescence-guided surgery, endoscopy and tissue biopsy.. <b>2021</b> ,	11
258	Dynamics of fibrotic and vascular endothelial dysfunction markers in elderly hypertensive patients after ischemic stroke receiving beta-blockers. <b>2022</b> , 20, 3087	0
257	The role of cell-matrix interactions in connective tissue mechanics.. <b>2021</b> ,	1
256	Structure of Vibrio collagenase VhaC provides insight into the mechanism of bacterial collagenolysis.. <b>2022</b> , 13, 566	1
255	Antimicrobial oxygen-loaded nanobubbles as promising tools to promote wound healing in hypoxic human keratinocytes.. <b>2022</b> , 9, 154-162	2
254	New chemistries for the control of human head lice, <i>Pediculus humanus capitis</i> : A mini-review.. <b>2022</b> , 181, 105013	
253	p38MAPK Signaling Pathway in Osteoarthritis: Pathological and Therapeutic Aspects.. <b>2022</b> , 15, 723-734	4
252	MT2-MMP is differentially expressed in multiple myeloma cells and mediates their growth and progression.. <b>2022</b> , 110248	0
251	The expression of metalloproteinases in the lumbar disc correlates strongly with Pfirrmann MRI grades in lumbar spinal fusion patients. <b>2022</b> , 2, 100872	0
250	Betulonic Acid, as One of the Active Components of the Extract, Inhibits the Invasion and Metastasis of Gastric Cancer Cells by Mediating Cytoskeleton Rearrangement In Vitro.. <b>2022</b> , 27,	0
249	An Optimized Purification Design for Extracting Active ADAMTS13 from Conditioned Media. <b>2022</b> , 10, 322	
248	Extracellular Matrix Synthesis and Remodeling by Mesenchymal Stromal Cells Is Context-Sensitive.. <b>2022</b> , 23,	0
247	The Role of Matrix Metalloproteinases (MMP-8, MMP-9, MMP-13) in Periodontal and Peri-Implant Pathological Processes.. <b>2022</b> , 23,	11
246	Nickel nanoparticles affect the migration and invasion of HTR-8/SVneo cells by downregulating MMP2 through the PI3K/AKT pathway.. <b>2022</b> , 105328	0
245	Decidual macrophage derived MMP3 contributes to extracellular matrix breakdown in spiral artery remodeling in early human pregnancy.. <b>2022</b> , 150, 103494	0
244	Effects of metformin on human bone-derived mesenchymal stromal cell-breast cancer cell line interactions.. <b>2022</b> , 39, 54	0

- 243 Maternal blood metal concentrations are associated with matrix metalloproteinases (MMPs) among pregnant women in Puerto Rico.. **2022**, 209, 112874 0
- 242 Aberrance of Zinc Metalloenzymes-Induced Human Diseases and Its Potential Mechanisms.. **2021**, 13, 1
- 241 Overview of Lectins. **2021**, 1-25
- 240 A multi-modal exploration of heterogeneous physico-chemical properties of DCIS breast microcalcifications.. **2022**, 1
- 239 Matrix Metalloproteinases (MMPs) in Cancer Immunotherapy. **2022**, 1-26 0
- 238 Transcriptomic mapping of the metzincin landscape in human trophoblasts. 0
- 237 Doxycycline Decreases Atherosclerotic Lesions in the Aorta of and Ovariectomized Mice with Correlation to Reduced MMP-2 Activity.. **2022**, 23,
- 236 Zebrafish her3 knockout impacts developmental and cancer-related gene signatures.
- 235 Potential Antioxidant and Antiphotaging Effects of Fagopyrum esculentum Honey on Human Dermal Fibroblasts. **2022**, 20, 43-58
- 234 Matrix Metalloproteinase 2 and 9 Enzymatic Activities are Selectively Increased in the Myocardium of Chronic Chagas Disease Cardiomyopathy Patients: Role of TIMPs.. **2022**, 12, 836242 3
- 233 Sheet to Random Coil Transition in Self-Assembling Peptide Scaffolds Promotes Proteolytic Degradation.. **2022**, 12, 1
- 232 Chemerin Effect on the Endometrial Proteome of the Domestic Pig during Implantation Obtained by LC-MS/MS Analysis.. **2022**, 11, 0
- 231 The role of tissue inhibitor of metalloproteinases in the aetiology of inguinal and incisional hernias.. **2022**,
- 230 Identification of Zinc-Binding Inhibitors of Matrix Metalloproteinase-9 to Prevent Cancer Through Deep Learning and Molecular Dynamics Simulation Approach.. **2022**, 9, 857430
- 229 Changes in Serum Levels of Matrix Metalloproteinase-1 and Tissue Inhibitor of Metalloproteinases-1 in Patients with Essential Hypertension.. **2022**, 9, 1
- 228 Exploiting protease activation for therapy.. **2022**, 0
- 227 Tumor microenvironment in salivary gland carcinomas: An orchestrated state of chaos.. **2022**, 127, 105777 1
- 226 Altered gene expression of selected matrix metalloproteinase system proteins in the broiler chicken gastrointestinal tract during post-hatch development and coccidia infection\*. **2022**, 101915

225	Tumor-Activated Carrier-Free Prodrug Nanoparticles for Targeted Cancer Immunotherapy: Preclinical Evidence for Safe and Effective Drug Delivery.. <b>2022</b> , 114177	9
224	Mechanical characterization of articular cartilage degraded combinedly with MMP-1 and MMP-9.. <b>2022</b> , 129, 105131	0
223	Molecular Patho-mechanisms of cervical cancer (MMP1).. <b>2022</b> , 77, 103415	1
222	Differential mitochondrial and cellular responses between H vs. J mtDNA haplogroup-containing human RPE transmitochondrial cybrid cells.. <b>2022</b> , 109013	1
221	Chsy1 deficiency reduces extracellular matrix productions and aggravates cartilage injury in osteoarthritis.. <b>2022</b> , 827, 146466	0
220	Exosomal microRNAs synergistically trigger stromal fibroblasts in breast cancer.. <b>2022</b> , 28, 17-31	1
219	The role of matrix metalloproteinases in patients with pulmonary hypertension: data from a prospective study.. <b>2021</b> , 21, 607	
218	Matrix metalloproteinase 2 and 9 enzymatic activities are selectively increased in the myocardium of Chronic Chagas Disease cardiomyopathy patients: role of TIMPs.	
217	Matrix Metalloproteinases Shape the Tumor Microenvironment in Cancer Progression.. <b>2021</b> , 23,	18
216	Novel Expansion of Matrix Metalloproteases in the Laboratory Axolotl ( <i>Ambystoma mexicanum</i> ) and Other Salamander Species. <b>2021</b> , 9,	
215	The dual roles of three MMPs and TIMP in innate immunity and metamorphosis in the silkworm, <i>Bombyx mori</i> . <b>2021</b> ,	0
214	The activity of matrix metalloproteinases and the concentration of their tissue inhibitors in the blood serum of patients with type 2 diabetes mellitus, depending on the stage of compensation of the disease. <b>2021</b> , 41, 61-67	
213	Unveiling a Hidden Biomarker of Inflammation and Tumor Progression: The 65 kDa Isoform of MMP-9 New Horizons for Therapy. <b>2022</b> , 44, 105-116	
212	Identification of the Resveratrol Potential Targets in the Treatment of Osteoarthritis.. <b>2021</b> , 2021, 9911286	1
211	Zinc, its biological role and use in dermatology. <b>2013</b> , 89, 100-116	9
210	Tensin 2-deficient nephropathy - mechanosensitive nephropathy, genetic susceptibility.. <b>2022</b> ,	
209	Molecular Imaging of Aortic Aneurysm and Its Translational Power for Clinical Risk Assessment.. <b>2022</b> , 9, 814123	0
208	Reactive oxygen species-degradable polythioketal urethane foam dressings to promote porcine skin wound repair.. <b>2022</b> , 14, eabm6586	5

207	Molecular characterization of matrix metalloproteinase gene family across primates.. <b>2022</b> , 14,	o
206	Image_1.JPEG. <b>2020</b> ,	
205	Image_2.JPEG. <b>2020</b> ,	
204	Image_3.JPEG. <b>2020</b> ,	
203	Table_1.DOC. <b>2020</b> ,	
202	Table_10.XLSX. <b>2020</b> ,	
201	Table_11.XLSX. <b>2020</b> ,	
200	Table_12.XLSX. <b>2020</b> ,	
199	Table_2.DOC. <b>2020</b> ,	
198	Table_3.XLSX. <b>2020</b> ,	
197	Table_4.XLSX. <b>2020</b> ,	
196	Table_5.XLSX. <b>2020</b> ,	
195	Table_6.XLSX. <b>2020</b> ,	
194	Table_7.XLSX. <b>2020</b> ,	
193	Table_8.XLSX. <b>2020</b> ,	
192	Table_9.XLSX. <b>2020</b> ,	
191	Table_1.XLSX. <b>2021</b> ,	
190	Image_1.PDF. <b>2018</b> ,	

189 Image\_2.PDF. **2018**,

188 Image\_3.PDF. **2018**,

187 Table\_1.PDF. **2018**,

186 DataSheet1.docx. **2018**,

185 DataSheet\_1.docx. **2020**,

184 Bioorthogonal PEGylation Prolongs the Elimination Half-Life of N-TIMP2 While Retaining MMP Inhibition.. **2022**,

o

183 A genetic investigation of equine recurrent uveitis in the Icelandic horse breed.. **2022**,

o

182 Tissue plasminogen activator rescues steroid-induced outflow facility reduction via non-enzymatic action.. **2021**, 27, 691-705

181 Small Molecules as Modulators of Active Forms of MMPs.

180 Pathophysiology of Hemophilia. **2022**, 1-9

179 Concentration of Serum Matrix Metalloproteinase-3 in Patients With Primary Biliary Cholangitis.. **2022**, 13, 885229

1

178 Novel Biomarkers of Atherosclerotic Vascular Disease-Latest Insights in the Research Field.. **2022**, 23,

2

177 lncRNA GHET1 Promotes the Progression of Triple-Negative Breast Cancer Regulation of miR-377-3p/GRSF1 Signaling Axis.. **2022**, 2022, 8366569

o

176 Tumor Stimulus-Responsive Biodegradable Diblock Copolymer Conjugates as Efficient Anti-Cancer Nanomedicines. **2022**, 12, 698

175 Impact of different shades of light-emitting diode on fecal microbiota and gut health in broiler chickens.. **2022**,

174 Downregulation of MMP-2 and MMP-9 genes in obesity patients and their relation with obesity-related phenotypes. **2022**,

173 Matrix Metalloproteinases in Chemoresistance: Regulatory Roles, Molecular Interactions, and Potential Inhibitors.. **2022**, 2022, 3249766

1

172 Extracellular Vesicles Derived from Adipose Mesenchymal Stem Cells Promote Peritoneal Healing by Activating MAPK-ERK1/2 and PI3K-Akt to Alleviate Postoperative Abdominal Adhesion.. **2022**, 2022, 1940761

o



171	Novel nanotechnological approaches for treatment of skin-aging.. <b>2022</b> ,	3
170	The loop of phenotype: Dynamic reciprocity links tenocyte morphology to tendon tissue homeostasis.. <b>2022</b> ,	
169	Myeloid CD40 deficiency reduces atherosclerosis by impairing macrophages' transition into a pro-inflammatory state.. <i>Cardiovascular Research</i> , <b>2022</b> ,	9.9 0
168	Single cell transcriptomic analysis of human amnion identifies cell-specific signatures associated with membrane rupture and parturition.. <b>2022</b> , 12, 64	0
167	Advances and Challenges in the Investigation of Metastasis in Diffuse Large B-Cell Lymphoma.. <b>2022</b> ,	
166	Revisiting laminin and extracellular matrix remodeling in metastatic squamous cell carcinoma: What have we learned after more than four decades of research?.	0
165	Leukocyte subtypes, gelatinases, and their tissue inhibitors in a group of subjects with asymptomatic carotid atherosclerosis. <b>2022</b> , 1-15	1
164	In-vitro antioxidant activity of oxalis corniculata linn and investigation of plausible mechanism of photo-protection by molecular modeling study. <b>2022</b> , 1843-1851	
163	Geraniol enhances peroxiredoxin-1, and prevents isoproterenol-induced oxidative stress and inflammation associated with myocardial infarction in experimental animal models.	0
162	Plasma Concentrations of New Biochemical Markers of Atherosclerosis in Patients with DyslipidemiaâA Pilot Study. <b>2022</b> , 58, 717	
161	Transcriptomic Profiling of Intracranial Arteries in Adult Patients With Moyamoya Disease Reveals Novel Insights Into Its Pathogenesis. <b>2022</b> , 15,	0
160	Particulate matter 2.5 exposure induces epithelial-mesenchymal transition via PI3K/AKT/mTOR pathway in human retinal pigment epithelial ARPE-19 cells. <b>2022</b> ,	0
159	Molecular Mechanisms of Changes in Homeostasis of the Dermal Extracellular Matrix: Both Involutional and Mediated by Ultraviolet Radiation. <b>2022</b> , 23, 6655	3
158	Matrix Metalloproteinases and Their Inhibitors in Pulmonary Fibrosis: EMMPRIN/CD147 Comes into Play. <b>2022</b> , 23, 6894	4
157	Tiki proteins are substrates of membrane-type matrix metalloproteinases.	1
156	Matrix Metalloproteinases: From Molecular Mechanisms to Physiology, Pathophysiology, and Pharmacology. <b>2022</b> , 74, 712-768	5
155	Effect of Growth Hormone Treatment on the Concentration of Selected Metabolic Markers in Girls With Turner Syndrome. 13,	
154	Stem Cell Based Approaches to Modulate the Matrix Milieu in Vascular Disorders. 9,	

- 153 Eggshell membrane in skin tissue engineering and wound healing. **2022**, 417-435
- 152 Laminins and Matrix Metalloproteinases Connection: A Subtle Relationship That Can Go Wrong in a Tumor Context, Particularly If CD44 Gets Involved. **2022**, 219-246 0
- 151 Die Rolle der Matrix-Metalloproteinasen 2 und 9 in der Pathogenese des Aortenaneurysmas.
- 150 Activation of the GTPase ARF6 regulates invasion of human vascular smooth muscle cells by stimulating MMP14 activity. **2022**, 12, 1
- 149 Could inhibition of metalloproteinases be used to block the process of metastasis?. 0
- 148 Modulation of matrix metalloproteases by ciliary neurotrophic factor in human placental development. 0
- 147 Treatment-Monitoring Capabilities of Serum and Urine Biomarkers for Meniscal Allograft Transplantation in a Preclinical Canine Model. 036354652211054 0
- 146 Expression of CD44, Transforming Growth Factor- $\beta$  and Matrix Metalloproteinases in Women With Pelvic Organ Prolapse. 9,
- 145 Protective effects of Evodiae Fructus extract against ultraviolet-induced MMP-1 and MMP-3 expression in human dermal fibroblasts. **2022**, 35, 100586
- 144 NLRC5 modulates phenotypic transition and inflammation of human venous smooth muscle cells by activating Wnt/ $\beta$ -catenin pathway via TLR4 in varicose veins. **2022**, 143, 104405 0
- 143 Deficiency of cystathionine gamma-lyase promotes aortic elastolysis and medial degeneration in aged mice. **2022**, 171, 30-44 1
- 142 Matrix metalloproteinase-9 activity in ewes' milk and its relationship to somatic cell counts. **2022**, 134, 105438
- 141 Matrix metalloproteinase-induced cervical extracellular matrix remodelling in pregnancy and cervical cancer. **2022**,
- 140 Sex-Related Differences of Matrix Metalloproteinases (MMPs): New Perspectives for These Biomarkers in Cardiovascular and Neurological Diseases. **2022**, 12, 1196 1
- 139 Time to go: neural crest cell epithelial-to-mesenchymal transition. **2022**, 149, 1
- 138 Matrix Metalloproteinase 2 as a Pharmacological Target in Heart Failure. **2022**, 15, 920 2
- 137 The Problem of Wound Healing in Diabetes—From Molecular Pathways to the Design of an Animal Model. **2022**, 23, 7930 1
- 136 How in vitro maturation changes the proteome of ovine cumulus oocyte complexes?.

135	Theories and Molecular Basis of Vascular Aging: A Review of the Literature from VascAgeNet Group on Pathophysiological Mechanisms of Vascular Aging. <b>2022</b> , 23, 8672	1
134	Peptide-Functionalized Nanoparticles for the Targeted Delivery of Cytotoxins to MMP-14-Expressing Cancer Cells. <b>2022</b> , 2, 203-220	
133	Modelling acute myeloid leukemia (AML): What's new? A transition from the classical to the modern.	1
132	Near-Infrared Optical Sensing of Biomacromolecules with Upconversion Nanoplatforms. 2200175	
131	Anti-inflammatory potential of stevia residue extract against uric acid-associated renal injury in mice.	0
130	The synovial fluid fibroblast-like synoviocyte: A long-neglected piece in the puzzle of rheumatoid arthritis pathogenesis. 13,	2
129	A pro-inflammatory and fibrous cap thinning transcriptome profile accompanies carotid plaque rupture leading to stroke. <b>2022</b> , 12,	0
128	Biophotonic Effects of Low-Level Laser Therapy at Different Wavelengths for Potential Wound Healing. <b>2022</b> , 9, 591	0
127	Melanoma Mediated Disruption of Brain Endothelial Barrier Integrity Is Not Prevented by the Inhibition of Matrix Metalloproteinases and Proteases. <b>2022</b> , 12, 660	2
126	Segment-Long-Spacing (SLS) and the Polymorphic Structures of Fibrillar Collagen. <b>2022</b> , 495-521	0
125	Measuring human mesenchymal stem cell remodeling in hydrogels with a step-change in elastic modulus. <b>2022</b> , 18, 6340-6352	1
124	Urinary Biomarkers for the Noninvasive Detection of Gastric Cancer. 22,	0
123	Matrix Metalloproteinases (MMPs) in Cancer Immunotherapy. <b>2022</b> , 3707-3732	0
122	Performances and Biocompatibility of Prepared pH-Sensitive Cotton/Polyamide 6 Medical Dressings Dyed with Halochromic Dyes. <b>2022</b> , 23, 2123-2131	0
121	Metzincin metalloproteases in PGC migration and gonadal sex conversion. <b>2023</b> , 330, 114137	0
120	Extracellular vesicles secreted by human uterine stromal cells regulate decidualization, angiogenesis, and trophoblast differentiation. <b>2022</b> , 119,	0
119	Removal of extracellular human amyloid beta aggregates by extracellular proteases in <i>C. elegans</i> .	0
118	Membrane-type 1 matrix metalloproteinase as predictor of survival and candidate therapeutic target in Ewing sarcoma.	0

- 117 Proteolytic modulation of tumor microenvironment signals during cancer progression. 12, 1
- 116 Adipose-Derived Mesenchymal Stem Cell-Derived Extracellular Vesicles Rescue Tendon Injury in Rat via the miR-19 a/IGFBP3 Axis. **2022**, 2022, 1-15 0
- 115 ZDF (fa/fa) rats show increasing heterogeneity in main parameters during ageing, as confirmed by biometrics, oxidative stress markers and MMP activity. 0
- 114 Increased Matrix Metalloproteinase-2 and Matrix Metalloproteinase-3 Concentrations in Corneal Epithelium of Patients with Recurrent Corneal Erosions. **2022**, 2022, 1-9 0
- 113 Matrix Metalloproteinases and Glaucoma. **2022**, 12, 1368 0
- 112 Fluorescent peptomer substrates for differential degradation by metalloproteases. 0
- 111 De novo disruptive heterozygous MMP21 variants are potential predisposing genetic risk factors in Chinese Han heterotaxy children. **2022**, 16, 0
- 110 Cancer cells produce liver metastasis via gap formation in sinusoidal endothelial cells through proinflammatory paracrine mechanisms. **2022**, 8, 0
- 109 Role of MMP3 and fibroblast-MMP14 in skin homeostasis and repair. **2022**, 101, 151276 0
- 108 Germline gain-of-function MMP11 variant results in an aggressive form of colorectal cancer. 0
- 107 A review of MMP-2 structures and binding mode analysis of its inhibitors to strategize structure-based drug design. **2022**, 117044 1
- 106 Migraine as an inflammatory disorder with microglial activation as a prime candidate. 1-16 0
- 105 The synergistic regulation of chondrogenesis by collagen-based hydrogels and cell co-culture. **2022**, 0
- 104 Fluorescent Peptomer Substrates for Differential Degradation by Metalloproteases. 0
- 103 Natural acylated flavonoids: their chemistry and biological merits in context to molecular docking studies. 1
- 102 Role of matrix metalloproteinases in diabetic foot ulcers: Potential therapeutic targets. 13, 0
- 101 Extracellular Vesicles Secreted by Mouse Decidual Cells Carry Critical Information for the Establishment of Pregnancy. **2022**, 163, 0
- 100 Matrix metalloproteinases in preterm prelabor rupture of membranes in the setting of chorioamnionitis: a scoping review. 0

99	Multiscale Modeling of MT1-MMP-Mediated Cell Migration: Destabilization of Cell-Matrix Adhesion.	0
98	Assessment of Tissue Oxidative Stress, Antioxidant Parameters, and Zinc and Copper Levels in Patients with Breast Cancer.	0
97	Dual anti-angiogenic and anti-metastatic activity of myriocin synergistically enhances the anti-tumor activity of cisplatin.	0
96	Platelet factor 4 (CXCL4/PF4) upregulates matrix metalloproteinase-2 (MMP-2) in gingival fibroblasts. <b>2022</b> , 12,	0
95	Transcriptomic mapping of the metzincin landscape in human trophoblasts. <b>2022</b> , 46, 119283	0
94	Chondroitin Sulfate Proteoglycan 4 as a Marker for Aggressive Squamous Cell Carcinoma. <b>2022</b> , 14, 5564	0
93	Biological function and therapeutic perspective of targeting PI3K/Akt signaling in hepatocellular carcinoma: promises and challenges. <b>2022</b> , 106553	2
92	At the forefront of basic and translational Cardiovascular Research for fifty-five years and counting.	0
91	Plasma proteomic signature of decline in gait speed and grip strength.	1
90	Targeting matrix metalloproteases: A promising strategy for herbal medicines to treat rheumatoid arthritis. 13,	0
89	Expression of Matrix Metalloproteinase-2,-7,-9 in Serum during Pregnancy in Patients with Pre-Eclampsia: A Prospective Study. <b>2022</b> , 19, 14500	0
88	Serum Level of MMP-3 and MMP-9 in Patients with Diabetes Mellitus Type 2 Infected with Epstein-Barr Virus. <b>2022</b> , 23, 13599	0
87	Evaluating the Impact of a Biomimetic Mechanical Environment on Cancer Invasion and Matrix Remodelling. 2201749	1
86	Impact of Dentine Pretreatment with Matrix Metalloproteinase Inhibitors on Bond Strength of Coronal Composite Restorations: A Systematic Review and Meta-analysis of In Vitro Studies.	0
85	A unique network of attack, defence and competence on the outer membrane of the periodontitis pathogen Tannerella forsythia.	0
84	Formation of low-density electrospun fibrous network integrated mesenchymal stem cell sheet.	0
83	Proprotein convertases regulate trafficking and maturation of key proteins within the secretory pathway. <b>2022</b> ,	0
82	Utility of Matrix Metalloproteinases in the Diagnosis, Monitoring and Prognosis of Ovarian Cancer Patients. Volume 14, 3359-3382	0

- 8<sup>1</sup> Dynamics of matrix metalloproteinases when correcting immature hypertrophic scars with pulsed dye laser and fermencol phonophoresis. **2022**, 48-58 o
- 8<sup>0</sup> Investigating the Anticancer Activity of G-Rh1 Using In Silico and In Vitro Studies (A549 Lung Cancer Cells). **2022**, 27, 8311 1
- 7<sup>9</sup> Factors of proteolysis in blood and urine as prognostic markers of progression of Alport syndrome in children. **2022**, 26, 80-88 o
- 7<sup>8</sup> Molecular Background of Toxic-Substances-Induced Morphological Alterations in the Umbilical Cord Vessels and Fetal Red Blood Cells. **2022**, 23, 14673 o
- 7<sup>7</sup> Zinc in Prostate Health and Disease: A Mini Review. **2022**, 10, 3206 1
- 7<sup>6</sup> Klotho Protein Decreases MMP-Mediated Degradation of Contractile Proteins during Ischaemia/Reperfusion Injury to the Cardiomyocytes. **2022**, 23, 15450 o
- 7<sup>5</sup> Muscle Regeneration in Holothurians without the Upregulation of Muscle Genes. **2022**, 23, 16037 o
- 7<sup>4</sup> Cancer Immunotherapy: The Checkpoint between Chronic Colitis and Colorectal Cancer. **2022**, 14, 6131 1
- 7<sup>3</sup> Microglia and Cholesterol Handling: Implications for Alzheimer's Disease. **2022**, 10, 3105 o
- 7<sup>2</sup> Immunomodulatory role of metalloproteases in cancers: Current progress and future trends. 13, o
- 7<sup>1</sup> Metabolic crosstalk between skeletal muscle and liver through IRF4-FSTL1 in NASH. o
- 7<sup>0</sup> The Role of Molecular and Hormonal Factors in Obesity and the Effects of Physical Activity in Children. **2022**, 23, 15413 o
- 6<sup>9</sup> The Use of Salivary Levels of Matrix Metalloproteinases as an Adjuvant Method in the Early Diagnosis of Oral Squamous Cell Carcinoma: A Narrative Literature Review. **2022**, 44, 6306-6322 1
- 6<sup>8</sup> Salvianolic Acid B Strikes Back: New Evidence in the Modulation of Expression and Activity of Matrix Metalloproteinase 9 in MDA-MB-231 Human Breast Cancer Cells. **2022**, 27, 8514 o
- 6<sup>7</sup> Relation of salivary MMP-8 with oral submucous fibrosis and oral squamous cell carcinoma: a cross sectional analytical study. **2022**, 12, e060738 o
- 6<sup>6</sup> Inhibitory Effects of Varespladib, CP471474, and Their Potential Synergistic Activity on Bothrops asper and Crotalus durissus cumanensis Venoms. **2022**, 27, 8588 o
- 6<sup>5</sup> Extracellular Matrix Remodeling Enzymes as Targets for Natural Antiangiogenic Compounds. **2023**, 139-173 o
- 6<sup>4</sup> Insights into the immunomodulatory regulation of matrix metalloproteinase at the maternal-fetal interface during early pregnancy and pregnancy-related diseases. 13, o

63	Mechanism of action and therapeutic effects of oxidative stress and stem cell-based materials in skin aging: Current evidence and future perspectives. 10,	o
62	Experimental approaches for altering the expression of Abeta-degrading enzymes.	1
61	siRNA-Mediated Timp1 Silencing Inhibited the Inflammatory Phenotype during Acute Lung Injury. <b>2023</b> , 24, 1641	o
60	Single and Combined Effects of Short-Term Selenium Deficiency and T-2 Toxin-Induced Kidney Pathological Injury Through the MMPs/TIMPs System.	o
59	Metal Complexes as Promising Matrix Metalloproteinases Regulators. <b>2023</b> , 24, 1258	o
58	Is Curcumine Useful in the Treatment and Prevention of the Tendinopathy and Myotendinous Junction Injury? A Scoping Review. <b>2023</b> , 15, 384	o
57	Matrix Metalloproteinase-9 Level in Synovial Fluid—Association with Joint Destruction in Early Rheumatoid Arthritis. <b>2023</b> , 59, 167	o
56	Rational optimizations of the marine-derived peptide Sungsanpin as novel inhibitors of cell invasion.	o
55	In situ quantitative measurements on MMP-9 activity in single living cells by single molecule fluorescence correlation spectroscopy.	o
54	Role of the extracellular matrix in COVID-19. 11, 73-83	2
53	Effect of a diet based on the dietary guidelines for americans on inflammation markers in women at risk for cardiometabolic disease: results of a randomized, controlled trial. <b>2022</b> , 8,	o
52	Early Phase Increase in Serum TIMP-1 in Patients with Acute Encephalopathy with Biphasic Seizures and Late Reduced Diffusion. <b>2023</b> , 10, 78	o
51	Cytokine Imbalance as a Biomarker of Intervertebral Disk Degeneration. <b>2023</b> , 24, 2360	o
50	Oxidative Stress in the Anterior Ocular Diseases: Diagnostic and Treatment. <b>2023</b> , 11, 292	o
49	Decreased ratios of matrix metalloproteinases to tissue-type inhibitors in cerebrospinal fluid in sporadic and hereditary cerebral amyloid angiopathy. <b>2023</b> , 15,	o
48	Extracellular Matrix (ECM) and Fibrosis in Adipose Tissue: Overview and Perspectives. 4387-4407	o
47	Compound 48/80 increases murine bladder wall compliance independent of mast cells. <b>2023</b> , 13,	o
46	Epigenetic regulation of placental function. <b>2023</b> , 155-191	o

- 45 Identification and characterization of an HtrA sheddase produced by *Coxiella burnetii*. o
- 44 Zebrafish her3 knockout impacts developmental and cancer-related gene signatures. **2023**, 496, 1-14 o
- 43 Diagnostic and prognostic biomarkers reflective of cardiac remodelling in diabetes mellitus: A scoping review. **2023**, 40, o
- 42 Matrix metalloproteinases induce extracellular matrix degradation through various pathways to alleviate hepatic fibrosis. **2023**, 161, 114472 o
- 41 Investigating the effect of vandetanib and celecoxib combination on angiogenesis. **2023**, 18, 1011-1017 o
- 40 Characterization and in vitro expression studies of a potential xenogeneic DNA vaccine against canine mammary tumours. **2018**, 87, o
- 39 Impact of air pollution on ischemic heart disease: Evidence, mechanisms, clinical perspectives. **2023**, 366, 22-31 1
- 38 The immunomodulatory role of matrix metalloproteinases in colitis-associated cancer. 13, o
- 37 Recent Development and Applications of Sensors for the Detection of Matrix Metalloproteinases. 2201786 o
- 36 Matrix metalloproteinase 9 modulates immune response along with the formation of extracellular traps in flounder (*Paralichthys olivaceus*). **2023**, 133, 108570 o
- 35 Novel Strategies for Metformin as an Anti-aging Drug in Skin Aging. **2023**, 99-116 o
- 34 The Relationship Between MMP17 Variants and Ischemic Stroke Risk in the Population from Shaanxi Province in China. Volume 16, 59-66 o
- 33 The mechanism and therapy of aortic aneurysms. **2023**, 8, o
- 32 The association of vitamin D status with oxidative stress biomarkers and matrix metalloproteinases in patients with knee osteoarthritis. 10, o
- 31 Biological basis and proposed mechanism of action of CSL112 (Apolipoprotein A-I [Human]) for prevention of major adverse cardiovascular events in patients with myocardial infarction. o
- 30 Matrix Metalloproteinases in Cardioembolic Stroke: From Background to Complications. **2023**, 24, 3628 o
- 29 Targeting matrix metalloproteases in diabetic wound healing. 14, o
- 28 MMP2 is a immunotherapy related biomarker and correlated with cancer-associated fibroblasts infiltrate in melanoma. **2023**, 23, o



- 27 Matrix metalloproteinase profiling and their roles in disease. **2023**, 13, 6304-6316 ○
- 26 Ketosis Prevents Abdominal Aortic Aneurysm Rupture Through CCR2 Downregulation and Enhanced MMP Balance. ○
- 25 Chorioallantoic membrane assay revealed the role of TIPARP (2,3,7,8-tetrachlorodibenzo-p-dioxin-inducible poly (ADP-ribose) polymerase) in lung adenocarcinoma-induced angiogenesis. **2023**, 23, ○
- 24 3D Printed Hollow Microneedles for Treating Skin Wrinkles Using Different Anti-Wrinkle Agents: A Possible Futuristic Approach. **2023**, 10, 41 ○
- 23 Protease-Activatable Porphyrin Molecular Beacon for Osteoarthritis Management. ○
- 22 Cytoplasmic Tail of MT1-MMP: A Hub of MT1-MMP Regulation and Function. **2023**, 24, 5068 ○
- 21 The Progression of Pathophysiology of Moyamoya Disease. **2023**, Publish Ahead of Print, ○
- 20 Abnormal trophoblast invasion in early onset preeclampsia: involvement of cystathionine Synthase, specificity protein 1 and miR-22. ○
- 19 The role of long non-coding RNA in abdominal aortic aneurysm. 14, ○
- 18 Bioinformatics analysis reveals the potential role of matrix metalloproteinases in immunity and urolithiasis. 14, ○
- 17 hUMSCs Restore Uterine Function by Inhibiting Endometrial Fibrosis via Regulation of the MMP-9/TIMP-1 Ratio in CDDP-Induced Injury Rats. **2023**, 2023, 1-13 ○
- 16 Role of Sialyl-Tn Antigen in Cancer Metastasis. **2023**, 53-78 ○
- 15 Potential of Neuroinflammation-Modulating Strategies in Tuberculous Meningitis: Targeting Microglia. **2023**, 0 ○
- 14 Tumor Microenvironment in Sporadic Vestibular Schwannoma: A Systematic, Narrative Review. **2023**, 24, 6522 ○
- 13 Characterization of regeneration initiating cells duringXenopus laevis tail regeneration. ○
- 12 The Extracellular Matrix: Its Composition, Function, Remodeling, and Role in Tumorigenesis. **2023**, 8, 146 ○
- 11 Recent Research on Matrix Metalloproteinase-9 and Its Inhibitors in Central Nervous System Immune Diseases. **2023**, 13, 5165-5169 ○
- 10 Correlation between CXCR4 and MMP-2 Expression with T Stage in Clear Cell Renal Cell Carcinoma. **2023**, 821-829 ○

- 9 Connecting islet-specific hub genes and pathways in type 2 diabetes mellitus through the bioinformatics lens. **2023**, 36, 201177 ○
- 8 Matrix Metalloproteinases Contribute to the Calcification Phenotype in Pseudoxanthoma Elasticum. **2023**, 13, 672 ○
- 7 Hypoxia and Extracellular Matrix-Major Drivers of Tumor Metastasis. **2023**, 217-244 ○
- 6 ADAM10 and ADAM17, Major Regulators of Chronic Kidney Disease Induced Atherosclerosis?. **2023**, 24, 7309 ○
- 5 Identification of Small Molecule Inhibitors against MMP-14 via High-Throughput Screening. **2023**, 117289 ○
- 4 Signaling pathways in vascular function and hypertension: molecular mechanisms and therapeutic interventions. **2023**, 8, ○
- 3 Characterizing the function-related specific assembly pattern of matrix metalloproteinase-14 by dSTORM imaging. **2023**, 124523 ○
- 2 The anti-lipopolysaccharide effect of glycine via fibroblastic cell culture from the embryonic calipash tissue of Chinese soft-shelled turtle *Pelodiscus sinensis*. **2023**, 30, 101575 ○
- 1 Combinational Treatment Involving Decellularized Extracellular Matrix Hydrogels With Mesenchymal Stem Cells Increased the Efficacy of Cell Therapy in Pancreatitis. **2023**, 32, 096368972311704 ○