Matthew M Bogyo

List of Publications by Citations

274 papers	18,585 citations	72 h-index	127 g-index
342 ext. papers	20,860 ext. citations	9.6 avg, IF	6.62 L-index

#	Paper	IF	Citations
274	Sec61-mediated transfer of a membrane protein from the endoplasmic reticulum to the proteasome for destruction. *Nature*, **1996**, 384, 432-8	50.4	970
273	The human cytomegalovirus US11 gene product dislocates MHC class I heavy chains from the endoplasmic reticulum to the cytosol. *Cell*, **1996**, 84, 769-79	56.2	941
272	Cathepsin cysteine proteases are effectors of invasive growth and angiogenesis during multistage tumorigenesis. *Cancer Cell*, **2004**, 5, 443-53	24.3	507
271	Epoxide electrophiles as activity-dependent cysteine protease profiling and discovery tools. *Chemistry and Biology*, **2000**, 7, 569-81		461
270	Noninvasive optical imaging of cysteine protease activity using fluorescently quenched activity-based probes. *Nature Chemical Biology*, **2007**, 3, 668-77	11.7	365
269	Ferri-liposomes as an MRI-visible drug-delivery system for targeting tumours and their microenvironment. *Nature Nanotechnology*, **2011**, 6, 594-602	28.7	321
268	Substrate profiling of cysteine proteases using a combinatorial peptide library identifies functionally unique specificities. *Journal of Biological Chemistry*, **2006**, 281, 12824-32	5.4	304
267	Activity-based probes that target diverse cysteine protease families. *Nature Chemical Biology*, **2005**, 1, 33-8	11.7	291
266	A cathepsin L isoform that is devoid of a signal peptide localizes to the nucleus in S phase and processes the CDP/Cux transcription factor. *Molecular Cell*, **2004**, 14, 207-19	17.6	288
265	Dynamic imaging of protease activity with fluorescently quenched activity-based probes. *Nature Chemical Biology*, **2005**, 1, 203-9	11.7	287
264	Tumor cell-derived and macrophage-derived cathepsin B promotes progression and lung metastasis of mammary cancer. *Cancer Research*, **2006**, 66, 5242-50	10.1	286
263	Noninvasive optical imaging of apoptosis by caspase-targeted activity-based probes. *Nature Medicine*, **2009**, 15, 967-73	50.5	248
262	A role for the protease falcipain 1 in host cell invasion by the human malaria parasite. *Science*, **2002**, 298, 2002-6	33.3	247
261	Chemical approaches for functionally probing the proteome. *Molecular and Cellular Proteomics*, **2002**, 1, 60-8	7.6	241
260	A proteolytic system that compensates for loss of proteasome function. *Nature*, **1998**, 392, 618-22	50.4	237
259	Nucleic acid recognition by Toll-like receptors is coupled to stepwise processing by cathepsins and asparagine endopeptidase. *Journal of Experimental Medicine*, **2011**, 208, 643-51	16.6	225
258	Activity-based profiling of proteases. *Annual Review of Biochemistry*, **2014**, 83, 249-73	29.1	218

257	Identification of proteases that regulate erythrocyte rupture by the malaria parasite Plasmodium falciparum. *Nature Chemical Biology*, **2008**, 4, 203-13	11.7	203
256	Tagging and detection strategies for activity-based proteomics. *Current Opinion in Chemical Biology* , **2007**, 11, 20-8	9.7	201
255	Chemical proteomics and its application to drug discovery. *Current Opinion in Biotechnology*, **2003**, 14, 87-95	11.4	191
254	Cathepsin L in secretory vesicles functions as a prohormone-processing enzyme for production of the enkephalin peptide neurotransmitter. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 9590-5	11.5	186
253	Selective targeting of lysosomal cysteine proteases with radiolabeled electrophilic substrate analogs. *Chemistry and Biology*, **2000**, 7, 27-38		182
252	Activity-based probes as a tool for functional proteomic analysis of proteases. *Expert Review of Proteomics*, **2008**, 5, 721-30	4.2	179
251	Inhibition of papain-like cysteine proteases and legumain by caspase-specific inhibitors: when reaction mechanism is more important than specificity. *Cell Death and Differentiation*, **2003**, 10, 881-8	12.7	174
250	Regulation of collagenase activities of human cathepsins by glycosaminoglycans. *Journal of Biological Chemistry*, **2004**, 279, 5470-9	5.4	171
249	A Bright Future for Precision Medicine: Advances in Fluorescent Chemical Probe Design and Their Clinical Application. *Cell Chemical Biology*, **2016**, 23, 122-136	8.2	155
248	Cathepsin B inhibition limits bone metastasis in breast cancer. *Cancer Research*, **2012**, 72, 1199-209	10.1	153
247	Substrate binding and sequence preference of the proteasome revealed by active-site-directed affinity probes. *Chemistry and Biology*, **1998**, 5, 307-20		153
246	Structure- and function-based design of Plasmodium-selective proteasome inhibitors. *Nature*, **2016**, 530, 233-6	50.4	150
245	Small molecule affinity fingerprinting. A tool for enzyme family subclassification, target identification, and inhibitor design. *Chemistry and Biology*, **2002**, 9, 1085-94		143
244	Improved quenched fluorescent probe for imaging of cysteine cathepsin activity. *Journal of the American Chemical Society*, **2013**, 135, 14726-30	16.4	142
243	Active site mapping, biochemical properties and subcellular localization of rhodesain, the major cysteine protease of Trypanosoma brucei rhodesiense. *Molecular and Biochemical Parasitology*, **2001**, 118, 61-73	1.9	138
242	Cathepsin V, a novel and potent elastolytic activity expressed in activated macrophages. *Journal of Biological Chemistry*, **2004**, 279, 36761-70	5.4	137
241	Multiple Cathepsins Promote Pro-IL-1β Synthesis and NLRP3-Mediated IL-1β Activation. *Journal of Immunology*, **2015**, 195, 1685-97	5.3	136
240	Functional imaging of proteases: recent advances in the design and application of substrate-based and activity-based probes. *Current Opinion in Chemical Biology*, **2011**, 15, 798-805	9.7	133

239	Functional expression and characterization of Schistosoma mansoni cathepsin B and its trans-activation by an endogenous asparaginyl endopeptidase. *Molecular and Biochemical Parasitology*, **2003**, 131, 65-75	1.9	128
238	Hemoglobin digestion in blood-feeding ticks: mapping a multipeptidase pathway by functional proteomics. *Chemistry and Biology*, **2009**, 16, 1053-63		126
237	Subclassification and biochemical analysis of plant papain-like cysteine proteases displays subfamily-specific characteristics. *Plant Physiology*, **2012**, 158, 1583-99	6.6	121
236	New approaches for dissecting protease functions to improve probe development and drug discovery. *Nature Structural and Molecular Biology*, **2012**, 19, 9-16	17.6	120
235	How an inhibitor of the HIV-I protease modulates proteasome activity. *Journal of Biological Chemistry*, **1999**, 274, 35734-40	5.4	118
234	Target deconvolution techniques in modern phenotypic profiling. *Current Opinion in Chemical Biology*, **2013**, 17, 118-26	9.7	117
233	Enzyme activity--it's all about image. *Trends in Cell Biology*, **2004**, 14, 29-35	18.3	117
232	Activity profiling of papain-like cysteine proteases in plants. *Plant Physiology*, **2004**, 135, 1170-8	6.6	116
231	Vasohibins/SVBP are tubulin carboxypeptidases (TCPs) that regulate neuron differentiation. *Science*, **2017**, 358, 1448-1453	33.3	113
230	Functional imaging of legumain in cancer using a new quenched activity-based probe. *Journal of the American Chemical Society*, **2013**, 135, 174-82	16.4	111
229	Inhibition of cathepsin B reduces beta-amyloid production in regulated secretory vesicles of neuronal chromaffin cells: evidence for cathepsin B as a candidate beta-secretase of Alzheimer's disease. *Biological Chemistry*, **2005**, 386, 931-40	4.5	110
228	O-sulfonation of serine and threonine: mass spectrometric detection and characterization of a new posttranslational modification in diverse proteins throughout the eukaryotes. *Molecular and Cellular Proteomics*, **2004**, 3, 429-40	7.6	108
227	Individuals with progranulin haploinsufficiency exhibit features of neuronal ceroid lipofuscinosis. *Science Translational Medicine*, **2017**, 9,	17.5	107
226	Rab35 controls actin bundling by recruiting fascin as an effector protein. *Science*, **2009**, 325, 1250-4	33.3	107
225	Identification of early intermediates of caspase activation using selective inhibitors and activity-based probes. *Molecular Cell*, **2006**, 23, 509-21	17.6	107
224	Caspase-8 association with the focal adhesion complex promotes tumor cell migration and metastasis. *Cancer Research*, **2009**, 69, 3755-63	10.1	104
223	Increased expression and activity of nuclear cathepsin L in cancer cells suggests a novel mechanism of cell transformation. *Molecular Cancer Research*, **2007**, 5, 899-907	6.6	103
222	Activity based probes for proteases: applications to biomarker discovery, molecular imaging and drug screening. *Current Pharmaceutical Design*, **2007**, 13, 253-61	3.3	102

221	Inhibition of cysteine cathepsin protease activity enhances chemotherapy regimens by decreasing tumor growth and invasiveness in a mouse model of multistage cancer. *Cancer Research*, **2007**, 67, 7378-85	10.1	102
220	Successful Translation of Fluorescence Navigation During Oncologic Surgery: A Consensus Report. *Journal of Nuclear Medicine*, **2016**, 57, 144-50	8.9	101
219	Release of signal peptide fragments into the cytosol requires cleavage in the transmembrane region by a protease activity that is specifically blocked by a novel cysteine protease inhibitor. *Journal of Biological Chemistry*, **2000**, 275, 30951-6	5.4	101
218	Disruption of glycolytic flux is a signal for inflammasome signaling and pyroptotic cell death. *ELife*, **2016**, 5, e13663	8.9	101
217	Small molecule-induced allosteric activation of the Vibrio cholerae RTX cysteine protease domain. *Science*, **2008**, 322, 265-8	33.3	100
216	A small-molecule antivirulence agent for treating Clostridium difficile infection. *Science Translational Medicine*, **2015**, 7, 306ra148	17.5	99
215	VEGF-A induces angiogenesis by perturbing the cathepsin-cysteine protease inhibitor balance in venules, causing basement membrane degradation and mother vessel formation. *Cancer Research*, **2009**, 69, 4537-44	10.1	97
214	Activity-based protein profiling: applications to biomarker discovery, in vivo imaging and drug discovery. *Molecular Diagnosis and Therapy*, **2004**, 4, 371-81		97
213	Live-cell imaging demonstrates extracellular matrix degradation in association with active cathepsin B in caveolae of endothelial cells during tube formation. *Experimental Cell Research*, **2009** , 315, 1234-46	4.2	92
212	Commonly used caspase inhibitors designed based on substrate specificity profiles lack selectivity. *Cell Research*, **2006**, 16, 961-3	24.7	92
211	A nonpeptidic cathepsin S activity-based probe for noninvasive optical imaging of tumor-associated macrophages. *Chemistry and Biology*, **2012**, 19, 619-28		90
210	Inhibition of NGLY1 Inactivates the Transcription Factor Nrf1 and Potentiates Proteasome Inhibitor Cytotoxicity. *ACS Central Science*, **2017**, 3, 1143-1155	16.8	84
209	Proteomic analysis of fractionated Toxoplasma oocysts reveals clues to their environmental resistance. *PLoS ONE*, **2012**, 7, e29955	3.7	83
208	Aminopeptidase fingerprints, an integrated approach for identification of good substrates and optimal inhibitors. *Journal of Biological Chemistry*, **2010**, 285, 3310-8	5.4	82
207	Targeted disruption of Plasmodium falciparum cysteine protease, falcipain 1, reduces oocyst production, not erythrocytic stage growth. *Molecular Microbiology*, **2004**, 53, 243-50	4.1	82
206	Defining a link between gap junction communication, proteolysis, and cataract formation. *Journal of Biological Chemistry*, **2001**, 276, 28999-9006	5.4	82
205	Activity-based probes for the ubiquitin conjugation-deconjugation machinery: new chemistries, new tools, and new insights. *FEBS Journal*, **2017**, 284, 1555-1576	5.7	75
204	Design of Protease Activated Optical Contrast Agents That Exploit a Latent Lysosomotropic Effect for Use in Fluorescence-Guided Surgery. *ACS Chemical Biology*, **2015**, 10, 1977-88	4.9	75

203	Acid-mediated tumor proteolysis: contribution of cysteine cathepsins. *Neoplasia*, **2013**, 15, 1125-37	6.4	73
202	Proteomics evaluation of chemically cleavable activity-based probes. *Molecular and Cellular Proteomics*, **2007**, 6, 1761-70	7.6	72
201	IrAE: an asparaginyl endopeptidase (legumain) in the gut of the hard tick Ixodes ricinus. *International Journal for Parasitology*, **2007**, 37, 713-24	4.3	69
200	Chemical Strategies To Target Bacterial Virulence. *Chemical Reviews*, **2017**, 117, 4422-4461	68.1	68
199	Application of activity-based probes to the study of enzymes involved in cancer progression. *Current Opinion in Genetics and Development*, **2008**, 18, 97-106	4.9	68
198	Falstatin, a cysteine protease inhibitor of Plasmodium falciparum, facilitates erythrocyte invasion. *PLoS Pathogens*, **2006**, 2, e117	7.6	68
197	Autocatalytic processing of procathepsin B is triggered by proenzyme activity. *FEBS Journal*, **2009**, 276, 660-8	5.7	67
196	Caspase-3 feeds back on caspase-8, Bid and XIAP in type I Fas signaling in primary mouse hepatocytes. *Apoptosis: an International Journal on Programmed Cell Death*, **2012**, 17, 503-15	5.4	66
195	Mechanistic and structural insights into the proteolytic activation of Vibrio cholerae MARTX toxin. *Nature Chemical Biology*, **2009**, 5, 469-78	11.7	66
194	Non-invasive Imaging of Idiopathic Pulmonary Fibrosis Using Cathepsin Protease Probes. *Scientific Reports*, **2016**, 6, 19755	4.9	65
193	PD-1 Inhibitory Receptor Downregulates Asparaginyl Endopeptidase and Maintains Foxp3 Transcription Factor Stability in Induced Regulatory T Cells. *Immunity*, **2018**, 49, 247-263.e7	32.3	64
192	Probing structural determinants distal to the site of hydrolysis that control substrate specificity of the 20S proteasome. *Chemistry and Biology*, **2002**, 9, 655-62		64
191	Comparative assessment of substrates and activity based probes as tools for non-invasive optical imaging of cysteine protease activity. *PLoS ONE*, **2009**, 4, e6374	3.7	62
190	A selective activity-based probe for the papain family cysteine protease dipeptidyl peptidase I/cathepsin C. *Journal of the American Chemical Society*, **2006**, 128, 5616-7	16.4	62
189	Validation of the proteasome as a therapeutic target in Plasmodium using an epoxyketone inhibitor with parasite-specific toxicity. *Chemistry and Biology*, **2012**, 19, 1535-45		61
188	Cathepsin C is a tissue-specific regulator of squamous carcinogenesis. *Genes and Development*, **2013**, 27, 2086-98	12.6	61
187	Simplified, enhanced protein purification using an inducible, autoprocessing enzyme tag. *PLoS ONE*, **2009**, 4, e8119	3.7	61
186	Development of near-infrared fluorophore (NIRF)-labeled activity-based probes for in vivo imaging of legumain. *ACS Chemical Biology*, **2010**, 5, 233-43	4.9	60

185	Development of activity-based probes for trypsin-family serine proteases. *Bioorganic and Medicinal Chemistry Letters*, **2006**, 16, 2882-5	2.9	60
184	Topical application of activity-based probes for visualization of brain tumor tissue. *PLoS ONE*, **2012**, 7, e33060	3.7	60
183	Global Analysis of Palmitoylated Proteins in Toxoplasma gondii. *Cell Host and Microbe*, **2015**, 18, 501-11	23.4	59
182	Detection of intestinal cancer by local, topical application of a quenched fluorescence probe for cysteine cathepsins. *Chemistry and Biology*, **2015**, 22, 148-58		59
181	Small-molecule inhibitors and probes for ubiquitin- and ubiquitin-like-specific proteases. *ChemBioChem*, **2005**, 6, 287-91	3.8	59
180	Using small molecules to dissect mechanisms of microbial pathogenesis. *ACS Chemical Biology*, **2009**, 4, 603-16	4.9	58
179	Defining an allosteric circuit in the cysteine protease domain of Clostridium difficile toxins. *Nature Structural and Molecular Biology*, **2011**, 18, 364-71	17.6	57
178	Design, synthesis, and evaluation of in vivo potency and selectivity of epoxysuccinyl-based inhibitors of papain-family cysteine proteases. *Chemistry and Biology*, **2007**, 14, 499-511		57
177	Lanthanide-Cyclodextrin Complexes as Probes for Elucidating Optical Purity by NMR Spectroscopy. *Journal of the American Chemical Society*, **1994**, 116, 4858-4865	16.4	56
176	Reactive-site-centric chemoproteomics identifies a distinct class of deubiquitinase enzymes. *Nature Communications*, **2018**, 9, 1162	17.4	55
175	The antimalarial natural product symplostatin 4 is a nanomolar inhibitor of the food vacuole falcipains. *Chemistry and Biology*, **2012**, 19, 1546-55		55
174	The role of cathepsin X in the migration and invasiveness of T lymphocytes. *Journal of Cell Science*, **2008**, 121, 2652-61	5.3	55
173	The lysosomal protein cathepsin L is a progranulin protease. *Molecular Neurodegeneration*, **2017**, 12, 55	19	54
172	Ubiquitin-like modifiers and their deconjugating enzymes in medically important parasitic protozoa. *Eukaryotic Cell*, **2007**, 6, 1943-52		54
171	Sequential autolytic processing activates the zymogen of Arg-gingipain. *Journal of Biological Chemistry*, **2003**, 278, 10458-64	5.4	53
170	Proteomics meets microbiology: technical advances in the global mapping of protein expression and function. *Cellular Microbiology*, **2005**, 7, 1061-76	3.9	53
169	Rational design of inhibitors and activity-based probes targeting Clostridium difficile virulence factor TcdB. *Chemistry and Biology*, **2010**, 17, 1201-11		52
168	Identification of a cDNA encoding an active asparaginyl endopeptidase of Schistosoma mansoni and its expression in Pichia pastoris. *FEBS Letters*, **2000**, 466, 244-8	3.8	52

167	Development of small molecule inhibitors and probes of human SUMO deconjugating proteases. *Chemistry and Biology*, **2011**, 18, 722-32		51
166	Chemical genetic screen identifies Toxoplasma DJ-1 as a regulator of parasite secretion, attachment, and invasion. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 10568-73	11.5	51
165	Toxoplasma depends on lysosomal consumption of autophagosomes for persistent infection. *Nature Microbiology*, **2017**, 2, 17096	26.6	50
164	Design of a highly selective quenched activity-based probe and its application in dual color imaging studies of cathepsin S activity localization. *Journal of the American Chemical Society*, **2015**, 137, 4771-7	16.4	50
163	Minitags for small molecules: detecting targets of reactive small molecules in living plant tissues using R‐click chemistryR. *Plant Journal*, **2009**, 57, 373-85	6.9	50
162	Caspase-1 activity is required to bypass macrophage apoptosis upon Salmonella infection. *Nature Chemical Biology*, **2012**, 8, 745-7	11.7	49
161	Functional studies of Plasmodium falciparum dipeptidyl aminopeptidase I using small molecule inhibitors and active site probes. *Chemistry and Biology*, **2010**, 17, 808-19		49
160	An optimized activity-based probe for the study of caspase-6 activation. *Chemistry and Biology*, **2012**, 19, 340-52		48
159	Toxoplasma gondii cathepsin L is the primary target of the invasion-inhibitory compound morpholinurea-leucyl-homophenyl-vinyl sulfone phenyl. *Journal of Biological Chemistry*, **2009**, 284, 26839-50	5.4	48
158	Small-molecule inhibition of a depalmitoylase enhances Toxoplasma host-cell invasion. *Nature Chemical Biology*, **2013**, 9, 651-6	11.7	47
157	Identification of a S. aureus virulence factor by activity-based protein profiling (ABPP). *Nature Chemical Biology*, **2018**, 14, 609-617	11.7	47
156	Activity profiling of vacuolar processing enzymes reveals a role for VPE during oomycete infection. *Plant Journal*, **2013**, 73, 689-700	6.9	46
155	Nuclear cysteine cathepsin variants in thyroid carcinoma cells. *Biological Chemistry*, **2010**, 391, 923-35	4.5	46
154	Treatment of arthritis by macrophage depletion and immunomodulation: testing an apoptosis-mediated therapy in a humanized death receptor mouse model. *Arthritis and Rheumatism* , **2012**, 64, 1098-109		45
153	Cysteine protease inhibitors block Toxoplasma gondii microneme secretion and cell invasion. *Antimicrobial Agents and Chemotherapy*, **2007**, 51, 679-88	5.9	45
152	A biocompatible in vivo ligation reaction and its application for noninvasive bioluminescent imaging of protease activity in living mice. *ACS Chemical Biology*, **2013**, 8, 987-99	4.9	44
151	Proteasome function is dispensable under normal but not under heat shock conditions in Thermoplasma acidophilum. *FEBS Letters*, **1998**, 425, 87-90	3.8	43
150	Labeling of active proteases in fresh-frozen tissues by topical application of quenched activity-based probes. *Nature Protocols*, **2016**, 11, 184-91	18.8	40

149	Genomics and proteomics. *Current Opinion in Chemical Biology*, **2007**, 11, 1-3	9.7	40
148	Cathepsin X is secreted by human osteoblasts, digests CXCL-12 and impairs adhesion of hematopoietic stem and progenitor cells to osteoblasts. *Haematologica*, **2010**, 95, 1452-60	6.6	39
147	Maturation of dendritic cells depends on proteolytic cleavage by cathepsin X. *Journal of Leukocyte Biology*, **2008**, 84, 1306-15	6.5	39
146	Functional characterization of a SUMO deconjugating protease of Plasmodium falciparum using newly identified small molecule inhibitors. *Chemistry and Biology*, **2011**, 18, 711-21		38
145	Development of activity-based probes for cathepsin X. *ACS Chemical Biology*, **2011**, 6, 563-72	4.9	38
144	Substrate specificity of schistosome versus human legumain determined by P1-P3 peptide libraries. *Molecular and Biochemical Parasitology*, **2002**, 121, 99-105	1.9	38
143	Identification of a serine protease inhibitor which causes inclusion vacuole reduction and is lethal to Chlamydia trachomatis. *Molecular Microbiology*, **2013**, 89, 676-89	4.1	37
142	Design of cell-permeable, fluorescent activity-based probes for the lysosomal cysteine protease asparaginyl endopeptidase (AEP)/legumain. *Bioorganic and Medicinal Chemistry Letters*, **2007**, 17, 649-53	2.9	37
141	Novel aza peptide inhibitors and active-site probes of papain-family cysteine proteases. *ChemBioChem*, **2006**, 7, 943-50	3.8	37
140	Frontline Science: Multiple cathepsins promote inflammasome-independent, particle-induced cell death during NLRP3-dependent IL-1 activation. *Journal of Leukocyte Biology*, **2017**, 102, 7-17	6.5	36
139	Assessing subunit dependency of the Plasmodium proteasome using small molecule inhibitors and active site probes. *ACS Chemical Biology*, **2014**, 9, 1869-76	4.9	36
138	Biochemical analysis of the 20 S proteasome of Trypanosoma brucei. *Journal of Biological Chemistry* , **2003**, 278, 15800-8	5.4	36
137	Subfamily-Specific Fluorescent Probes for Cysteine Proteases Display Dynamic Protease Activities during Seed Germination. *Plant Physiology*, **2015**, 168, 1462-75	6.6	35
136	A Mild Chemically Cleavable Linker System for Functional Proteomic Applications. *Angewandte Chemie*, **2007**, 119, 1306-1308	3.6	35
135	Identification of potent and selective non-covalent inhibitors of the Plasmodium falciparum proteasome. *Journal of the American Chemical Society*, **2014**, 136, 13562-5	16.4	34
134	A major cathepsin B protease from the liver fluke Fasciola hepatica has atypical active site features and a potential role in the digestive tract of newly excysted juvenile parasites. *International Journal of Biochemistry and Cell Biology*, **2009**, 41, 1601-12	5.6	34
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131	Non-invasive imaging of cysteine cathepsin activity in solid tumors using a 64Cu-labeled activity-based probe. *PLoS ONE*, **2011**, 6, e28029	3.7	33
130	Development of calpain-specific inactivators by screening of positional scanning epoxide libraries. *Journal of Biological Chemistry*, **2007**, 282, 9600-9611	5.4	33
129	Challenges for Targeting SARS-CoV-2 Proteases as a Therapeutic Strategy for COVID-19. *ACS Infectious Diseases*, **2021**, 7, 1457-1468	5.5	33
128	Engineered hybrid dimers: tracking the activation pathway of caspase-7. *Molecular Cell*, **2006**, 23, 523-33	17.6	32
127	Inhibition of cathepsin B reduces β-amyloid production in regulated secretory vesicles of neuronal chromaffin cells: evidence for cathepsin B as a candidate β-secretase of Alzheimer's disease. *Biological Chemistry*, **2005**, 386, 1325-1325	4.5	32
126	Dual-Modality Activity-Based Probes as Molecular Imaging Agents for Vascular Inflammation. *Journal of Nuclear Medicine*, **2016**, 57, 1583-1590	8.9	32
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124	Coupling protein engineering with probe design to inhibit and image matrix metalloproteinases with controlled specificity. *Journal of the American Chemical Society*, **2013**, 135, 9139-48	16.4	31
123	Biochemical characterization of Plasmodium falciparum dipeptidyl aminopeptidase 1. *Molecular and Biochemical Parasitology*, **2011**, 175, 10-20	1.9	31
122	Design, syntheses, and evaluation of Taspase1 inhibitors. *Bioorganic and Medicinal Chemistry Letters* , **2009**, 19, 5086-90	2.9	31
121	Covalent Plasmodium falciparum-selective proteasome inhibitors exhibit a low propensity for generating resistance in vitro and synergize with multiple antimalarial agents. *PLoS Pathogens*, **2019**, 15, e1007722	7.6	30
120	Protein Degradation Systems as Antimalarial Therapeutic Targets. *Trends in Parasitology*, **2017**, 33, 731-743	7.4	30
119	Optimization of a Protease Activated Probe for Optical Surgical Navigation. *Molecular Pharmaceutics*, **2018**, 15, 750-758	5.6	30
118	Myoepithelial cell-specific expression of stefin A as a suppressor of early breast cancer invasion. *Journal of Pathology*, **2017**, 243, 496-509	9.4	29
117	The protease cathepsin L regulates Th17 cell differentiation. *Journal of Autoimmunity*, **2015**, 65, 56-63	15.5	29
116	Bifunctional Probes of Cathepsin Protease Activity and pH Reveal Alterations in Endolysosomal pH during Bacterial Infection. *Cell Chemical Biology*, **2016**, 23, 793-804	8.2	29
115	Cysteine cathepsin activity suppresses osteoclastogenesis of myeloid-derived suppressor cells in breast cancer. *Oncotarget*, **2015**, 6, 27008-22	3.3	29
114	AND-gate contrast agents for enhanced fluorescence-guided surgery. *Nature Biomedical Engineering*, **2021**, 5, 264-277	19	29

113	A coupled protein and probe engineering approach for selective inhibition and activity-based probe labeling of the caspases. *Journal of the American Chemical Society*, **2013**, 135, 9130-8	16.4	28
112	Chemical proteomics applied to target identification and drug discovery. *BioTechniques*, **2005**, 38, 175-7	2.5	28
111	The Antimalarial Natural Product Salinipostin A Identifies Essential α/β Serine Hydrolases Involved in Lipid Metabolism in P. falciparum Parasites. *Cell Chemical Biology*, **2020**, 27, 143-157.e5	8.2	27
110	Cysteine Cathepsin Inhibitors as Anti-Ebola Agents. *ACS Infectious Diseases*, **2016**, 2, 173-179	5.5	27
109	The apoptosis repressor with a CARD domain (ARC) gene is a direct hypoxia-inducible factor 1 target gene and promotes survival and proliferation of VHL-deficient renal cancer cells. *Molecular and Cellular Biology*, **2014**, 34, 739-51	4.8	27
108	4-Bromophenacyl bromide specifically inhibits rhoptry secretion during Toxoplasma invasion. *PLoS ONE*, **2009**, 4, e8143	3.7	27
107	Live Cell Imaging and Profiling of Cysteine Cathepsin Activity Using a Quenched Activity-Based Probe. *Methods in Molecular Biology*, **2017**, 1491, 145-159	1.4	26
106	A fragmenting hybrid approach for targeted delivery of multiple therapeutic agents to the malaria parasite. *ChemMedChem*, **2011**, 6, 415-9	3.7	25
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104	A general solid phase method for the preparation of diverse azapeptide probes directed against cysteine proteases. *Organic Letters*, **2005**, 7, 5649-52	6.2	24
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102	Three-dimensional cultures modeling premalignant progression of human breast epithelial cells: role of cysteine cathepsins. *Biological Chemistry*, **2012**, 393, 1405-16	4.5	23
101	Influenza A virus elevates active cathepsin B in primary murine DC. *International Immunology*, **2007**, 19, 645-55	4.9	23
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99	Cathepsin Activity-Based Probes and Inhibitor for Preclinical Atherosclerosis Imaging and Macrophage Depletion. *PLoS ONE*, **2016**, 11, e0160522	3.7	23
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