

# Michal Heger

## List of Publications by Year in descending order

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119  
papers

4,405  
citations

126907

33  
h-index

118850

62  
g-index

121  
all docs

121  
docs citations

121  
times ranked

6414  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Molecular Basis for the Pharmacokinetics and Pharmacodynamics of Curcumin and Its Metabolites in Relation to Cancer. <i>Pharmacological Reviews</i> , 2014, 66, 222-307.	16.0	418
2	Physiological and Biochemical Basis of Clinical Liver Function Tests. <i>Annals of Surgery</i> , 2013, 257, 27-36.	4.2	269
3	Transporters involved in the hepatic uptake of <sup>99m</sup> Tc-mebrofenin and indocyanine green. <i>Journal of Hepatology</i> , 2011, 54, 738-745.	3.7	245
4	Mechanistic overview of reactive species-induced degradation of the endothelial glycocalyx during hepatic ischemia/reperfusion injury. <i>Free Radical Biology and Medicine</i> , 2012, 52, 1382-1402.	2.9	195
5	Tumor cell survival pathways activated by photodynamic therapy: a molecular basis for pharmacological inhibition strategies. <i>Cancer and Metastasis Reviews</i> , 2015, 34, 643-690.	5.9	191
6	An overview of clinical and experimental treatment modalities for port wine stains. <i>Journal of the American Academy of Dermatology</i> , 2012, 67, 289-304.e29.	1.2	179
7	The sterile immune response during hepatic ischemia/reperfusion. <i>Cytokine and Growth Factor Reviews</i> , 2012, 23, 69-84.	7.2	143
8	Sterile inflammation in hepatic ischemia/reperfusion injury: Present concepts and potential therapeutics. <i>Journal of Gastroenterology and Hepatology (Australia)</i> , 2013, 28, 394-400.	2.8	136
9	Antibacterial photodynamic therapy: overview of a promising approach to fight antibiotic-resistant bacterial infections. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 140-167.	0.3	118
10	Enhancing photodynamic therapy of refractory solid cancers: Combining second-generation photosensitizers with multi-targeted liposomal delivery. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2015, 23, 103-131.	11.6	104
11	Reactive Oxygen and Nitrogen Species in Steatotic Hepatocytes: A Molecular Perspective on the Pathophysiology of Ischemia-Reperfusion Injury in the Fatty Liver. <i>Antioxidants and Redox Signaling</i> , 2014, 21, 1119-1142.	5.4	98
12	An in vitro cell irradiation protocol for testing photopharmaceuticals and the effect of blue, green, and red light on human cancer cell lines. <i>Photochemical and Photobiological Sciences</i> , 2016, 15, 644-653.	2.9	87
13	Metabolic profiling during ex vivo machine perfusion of the human liver. <i>Scientific Reports</i> , 2016, 6, 22415.	3.3	85
14	Assessment of tissue oxygen saturation during a vascular occlusion test using near-infrared spectroscopy: the role of probe spacing and measurement site studied in healthy volunteers. <i>Critical Care</i> , 2009, 13, S4.	5.8	82
15	Inhibition of hypoxia-inducible factor 1 with acriflavine sensitizes hypoxic tumor cells to photodynamic therapy with zinc phthalocyanine-encapsulating cationic liposomes. <i>Nano Research</i> , 2016, 9, 1639-1662.	10.4	82
16	New Perspectives in the Assessment of Future Remnant Liver. <i>Digestive Surgery</i> , 2014, 31, 255-268.	1.2	79
17	Preparation and Practical Applications of $^{67}\text{Zn}^{2+}$ -Dichlorodihydrofluorescein in Redox Assays. <i>Analytical Chemistry</i> , 2017, 89, 3853-3857.	6.5	70
18	<sup>99m</sup> Tc-mebrofenin hepatobiliary scintigraphy predicts liver failure following major liver resection for perihilar cholangiocarcinoma. <i>Hpb</i> , 2017, 19, 850-858.	0.3	65

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19	Multi-site and multi-depth near-infrared spectroscopy in a model of simulated (central) hypovolemia: lower body negative pressure. <i>Intensive Care Medicine</i> , 2011, 37, 671-677.	8.2	63
20	Towards optimization of selective photothermolysis: prothrombotic pharmaceutical agents as potential adjuvants in laser treatment of port wine stains. <i>Thrombosis and Haemostasis</i> , 2005, 93, 242-256.	3.4	57
21	Inhibition of hypoxia inducible factor 1 and topoisomerase with acriflavine sensitizes perihilar cholangiocarcinomas to photodynamic therapy. <i>Oncotarget</i> , 2016, 7, 3341-3356.	1.8	56
22	An Overview of Three Promising Mechanical, Optical, and Biochemical Engineering Approaches to Improve Selective Photothermolysis of Refractory Port Wine Stains. <i>Annals of Biomedical Engineering</i> , 2012, 40, 486-506.	2.5	54
23	Effect of Preoperative Biliary Drainage on Coagulation and Fibrinolysis in Severe Obstructive Cholestasis. <i>Journal of Clinical Gastroenterology</i> , 2010, 44, 646-652.	2.2	53
24	Quantitative Assessment of Hepatic Function During Liver Regeneration in a Standardized Rat Model. <i>Journal of Nuclear Medicine</i> , 2011, 52, 294-302.	5.0	48
25	Warm ischemia time-dependent variation in liver damage, inflammation, and function in hepatic ischemia/reperfusion injury. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2017, 1863, 375-385.	3.8	45
26	Reversal of hepatic steatosis by omega-3 fatty acids measured non-invasively by <sup>1</sup> H-magnetic resonance spectroscopy in a rat model. <i>Journal of Gastroenterology and Hepatology (Australia)</i> , 2011, 26, 356-363.	2.8	42
27	Darkfield orthogonal polarized spectral imaging for studying endovascular laser-tissue interactions in vivo-a preliminary study. <i>Optics Express</i> , 2005, 13, 702.	3.4	41
28	Cholestasis Is Associated with Hepatic Microvascular Dysfunction and Aberrant Energy Metabolism Before and During Ischemia-Reperfusion. <i>Antioxidants and Redox Signaling</i> , 2012, 17, 1109-1123.	5.4	40
29	Glycocalyx Degradation Is Independent of Vascular Barrier Permeability Increase in Nontraumatic Hemorrhagic Shock in Rats. <i>Anesthesia and Analgesia</i> , 2019, 129, 598-607.	2.2	39
30	Simple, rapid, and sensitive liquid chromatography-fluorescence method for the quantification of tranexamic acid in blood. <i>Journal of Chromatography A</i> , 2007, 1157, 142-150.	3.7	37
31	Photodynamic Therapy with Liposomal Zinc Phthalocyanine and Tirapazamine Increases Tumor Cell Death via DNA Damage. <i>Journal of Biomedical Nanotechnology</i> , 2017, 13, 204-220.	1.1	37
32	How much ischemia can the liver tolerate during resection?. <i>Hepatobiliary Surgery and Nutrition</i> , 2016, 5, 58-71.	1.5	36
33	Irreversible electroporation: Just another form of thermal therapy?. <i>Prostate</i> , 2015, 75, 332-335.	2.3	34
34	Multi-OMIC profiling of survival and metabolic signaling networks in cells subjected to photodynamic therapy. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 1133-1151.	5.4	34
35	The emerging role of transport systems in liver function tests. <i>European Journal of Pharmacology</i> , 2012, 675, 1-5.	3.5	33
36	The microcirculatory response to compensated hypovolemia in a lower body negative pressure model. <i>Microvascular Research</i> , 2011, 82, 374-380.	2.5	32

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37	Simultaneous multi-depth assessment of tissue oxygen saturation in thenar and forearm using near-infrared spectroscopy during a simple cardiovascular challenge. <i>Critical Care</i> , 2009, 13, S5.	5.8	30
38	Low-power photodynamic therapy induces survival signaling in perihilar cholangiocarcinoma cells. <i>BMC Cancer</i> , 2015, 15, 1014.	2.6	29
39	<i>In Vitro</i> and <i>In Vivo</i> Studies on HPMA-Based Polymeric Micelles Loaded with Curcumin. <i>Molecular Pharmaceutics</i> , 2021, 18, 1247-1263.	4.6	29
40	Protective Mechanisms of Hypothermia in Liver Surgery and Transplantation. <i>Molecular Medicine</i> , 2015, 21, 833-846.	4.4	28
41	Laser-induced primary and secondary hemostasis dynamics and mechanisms in relation to selective photothermolysis of port wine stains. <i>Journal of Dermatological Science</i> , 2011, 63, 139-147.	1.9	26
42	Quantitative Assessment of Liver Function after Ischemia-Reperfusion Injury and Partial Hepatectomy in Rats. <i>Journal of Surgical Research</i> , 2012, 172, 85-94.	1.6	26
43	Post-hepatectomy liver regeneration in the context of bile acid homeostasis and the gut-liver signaling axis. <i>Journal of Clinical and Translational Research</i> , 2018, 4, 1-46.	0.3	25
44	Endovascular laser-tissue interactions and biological responses in relation to endovenous laser therapy. <i>Lasers in Medical Science</i> , 2014, 29, 405-422.	2.1	24
45	Ablation with irreversible electroporation in patients with advanced perihilar cholangiocarcinoma (ALPACA): a multicentre phase I/II feasibility study protocol. <i>BMJ Open</i> , 2017, 7, e015810.	1.9	23
46	FXR agonist obeticholic acid induces liver growth but exacerbates biliary injury in rats with obstructive cholestasis. <i>Scientific Reports</i> , 2018, 8, 16529.	3.3	22
47	Exogenous hydrogen sulfide gas does not induce hypothermia in normoxic mice. <i>Scientific Reports</i> , 2018, 8, 3855.	3.3	21
48	The damage-associated molecular pattern HMGB1 is released early after clinical hepatic ischemia/reperfusion. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2019, 1865, 1192-1200.	3.8	21
49	Inhibition of NF- $\kappa$ B in Tumor Cells Exacerbates Immune Cell Activation Following Photodynamic Therapy. <i>International Journal of Molecular Sciences</i> , 2015, 16, 19960-19977.	4.1	20
50	Solutions to the discrepancies in the extent of liver damage following ischemia/reperfusion in standard mouse models. <i>Journal of Hepatology</i> , 2015, 62, 975-977.	3.7	20
51	The inflammatory response after laparoscopic and open pancreatoduodenectomy and the association with complications in a multicenter randomized controlled trial. <i>Hpb</i> , 2019, 21, 1453-1461.	0.3	19
52	Suture-free laser-assisted vessel repair using CO2 laser and liquid albumin solder. <i>Journal of Biomedical Optics</i> , 2008, 13, 1.	2.6	18
53	A Novel Oxygenated Machine Perfusion System for Preservation of the Liver. <i>Artificial Organs</i> , 2013, 37, 719-724.	1.9	18
54	Reduction of Cardiac Cell Death after Helium Postconditioning in Rats: Transcriptional Analysis of Cell Death and Survival Pathways. <i>Molecular Medicine</i> , 2014, 20, 516-526.	4.4	18

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55	Hepatic parenchymal transection increases liver volume but not function after portal vein embolization in rabbits. <i>Surgery</i> , 2017, 162, 732-741.	1.9	18
56	Cholestasis enhances liver ischemia/reperfusion-induced coagulation activation in rats. <i>Hepatology Research</i> , 2010, 40, 204-215.	3.4	17
57	New Insight into the Catalytic Mechanism of Bacterial MraY from Enzyme Kinetics and Docking Studies. <i>Journal of Biological Chemistry</i> , 2016, 291, 15057-15068.	3.4	17
58	Tranexamic Acid-Encapsulating Thermosensitive Liposomes for Site-Specific Pharmaco-Laser Therapy of Port Wine Stains. <i>Journal of Biomedical Nanotechnology</i> , 2016, 12, 1617-1640.	1.1	17
59	A liquid biopsy-based method for the detection and quantification of circulating tumor cells in surgical osteosarcoma patients. <i>International Journal of Oncology</i> , 2017, 50, 1075-1086.	3.3	17
60	Prospective analysis of the port-wine stain patient population in the Netherlands in light of novel treatment modalities. <i>Journal of Cosmetic and Laser Therapy</i> , 2018, 20, 77-84.	0.9	17
61	Clinical outcome measures and scoring systems used in prospective studies of port wine stains: A systematic review. <i>PLoS ONE</i> , 2020, 15, e0235657.	2.5	17
62	Endothelial cell preservation at hypothermic to normothermic conditions using clinical and experimental organ preservation solutions. <i>Experimental Cell Research</i> , 2013, 319, 2501-2513.	2.6	16
63	Postoperative peak transaminases correlate with morbidity and mortality after liver resection. <i>Hpb</i> , 2016, 18, 915-921.	0.3	16
64	Unravelling the Diagnostic Dilemma: A MicroRNA Panel of Circulating MiR-16 and MiR-877 as A Diagnostic Classifier for Distal Bile Duct Tumors. <i>Cancers</i> , 2019, 11, 1181.	3.7	16
65	Editor's inaugural issue foreword: perspectives on translational and clinical research. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 1-5.	0.3	16
66	Electrospun Poly( $\epsilon$ -Caprolactone) Scaffold for Suture-Free Solder-Mediated Laser-Assisted Vessel Repair. <i>Photomedicine and Laser Surgery</i> , 2011, 29, 19-25.	2.0	15
67	Optimization of Suture-Free Laser-Assisted Vessel Repair by Solder-Doped Electrospun Poly( $\mu$ -caprolactone) Scaffold. <i>Annals of Biomedical Engineering</i> , 2011, 39, 223-234.	2.5	15
68	Absence of Hydrogen Sulfide-Induced Hypometabolism in Pigs: A Mechanistic Explanation in Relation to Small Nonhibernating Mammals. <i>European Surgical Research</i> , 2015, 54, 178-191.	1.3	15
69	On the interaction of fluorophore-encapsulating PEGylated lecithin liposomes with hamster and human platelets. <i>Microvascular Research</i> , 2009, 78, 57-66.	2.5	14
70	Simple steatosis sensitizes cholestatic rats to liver injury and dysregulates bile salt synthesis and transport. <i>Scientific Reports</i> , 2016, 6, 31829.	3.3	14
71	Attritional evaluation of lipophilic and hydrophilic metallated phthalocyanines for oncological photodynamic therapy. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2021, 216, 112146.	3.8	14
72	Raman microspectrometry of laser-reshaped rabbit auricular cartilage: preliminary study on laser-induced cartilage mineralization. <i>Journal of Biomedical Optics</i> , 2006, 11, 024003.	2.6	13

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73	In Situ Hypothermic Perfusion with Retrograde Outflow During Right Hemihepatectomy: First Experiences with a New Technique. <i>Journal of the American College of Surgeons</i> , 2014, 218, e7-e16.	0.5	13
74	Ex Vivo proof-of-concept of end-to-end scaffold-enhanced laser-assisted vascular anastomosis of porcine arteries. <i>Journal of Vascular Surgery</i> , 2015, 62, 200-209.	1.1	13
75	Mycophenolate mofetil improves renal haemodynamics, microvascular oxygenation, and inflammation in a rat model of supra-renal aortic clamping-mediated renal ischaemia reperfusion injury. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2017, 44, 294-304.	1.9	13
76	Non-invasive Quantification of Triglyceride Content in Steatotic Rat Livers by 1H-MRS. <i>Academic Radiology</i> , 2011, 18, 1582-1592.	2.5	12
77	Analysis and Optimization of Conditions for the Use of 2,7-Dichlorofluorescein Diacetate in Cultured Hepatocytes. <i>Antioxidants</i> , 2021, 10, 674.	5.1	12
78	Endovascular Laser-Tissue Interactions Redefined: Shining Light on Novel Windows of Therapeutic Opportunity Beyond Selective Photothermolysis. <i>Photomedicine and Laser Surgery</i> , 2010, 28, 569-572.	2.0	11
79	Potential therapeutic benefits stemming from the thermal nature of irreversible electroporation of solid cancers. <i>Hepatobiliary and Pancreatic Diseases International</i> , 2015, 14, 331-333.	1.3	11
80	The pathophysiology of human obstructive cholestasis is mimicked in cholestatic Gold Syrian hamsters. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2018, 1864, 942-951.	3.8	11
81	A Clinical Perspective on the Criteria for Liver Resection and the Use of Liver Function Tests. <i>World Journal of Surgery</i> , 2010, 34, 868-869.	1.6	10
82	Mitochondrial Metabolomics Unravel the Primordial Trigger of Ischemia/Reperfusion Injury. <i>Gastroenterology</i> , 2015, 148, 1071-1073.	1.3	10
83	Site-specific pharmaco-laser therapy: A novel treatment modality for refractory port wine stains. <i>Journal of Clinical and Translational Research</i> , 2019, 5, 1-24.	0.3	10
84	Comparable liver function and volume increase after portal vein embolization in rabbits and humans. <i>Surgery</i> , 2017, 161, 658-665.	1.9	9
85	Preclinical evaluation of thermosensitive poly(N-(2-hydroxypropyl) methacrylamide) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267. <i>Pharmaceutics</i> , 2018, 550, 190-199.	5.2	9
86	Absence of 633-nm laser irradiation-induced effects on glucose phosphorylation by hexokinase. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2010, 98, 216-222.	3.8	8
87	Biodegradable polymer scaffold, semi-solid solder, and single-spot lasing for increasing solder-tissue bonding in suture-free laser-assisted vascular repair. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2012, 6, 803-812.	2.7	8
88	Assesment of apoptosis induced changes in scattering using optical coherence tomography. <i>Journal of Biophotonics</i> , 2016, 9, 913-923.	2.3	8
89	Metallated phthalocyanines and their hydrophilic derivatives for multi-targeted oncological photodynamic therapy. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2022, 234, 112500.	3.8	8
90	Treatment Outcome Measurement Instruments for Port Wine Stains: A Systematic Review of Their Measurement Properties. <i>Dermatology</i> , 2021, 237, 416-432.	2.1	7

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91	Platelet aggregation but not activation and degranulation during the acute post-ischemic reperfusion phase in livers with no underlying disease. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 107-115.	0.3	7
92	How reproducible are rat steatosis models using high-fat diets?. <i>Journal of Hepatology</i> , 2009, 51, 822-823.	3.7	6
93	2- <sup>7</sup> -Dichlorofluorescein is not a probe for the detection of reactive oxygen and nitrogen species. <i>Journal of Hepatology</i> , 2012, 56, 1214-1216.	3.7	6
94	Platelets and PEGylated lecithin liposomes: When stealth is allegedly picked up on the radar (and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.5	5
95	Hypothermic perfusion with retrograde outflow during right hepatectomy is safe and feasible. <i>Surgery</i> , 2017, 162, 48-58.	1.9	5
96	Atorvastatin does not protect against ischemia-reperfusion damage in cholestatic rat livers. <i>BMC Surgery</i> , 2017, 17, 35.	1.3	5
97	Reactive Oxygen and Nitrogen Species and Liver Ischemia-Reperfusion Injury: An Overview. , 2018, , 79-96.		5
98	Site-specific pharmaco-laser therapy: a novel treatment modality for refractory port wine stains. <i>Journal of Clinical and Translational Research</i> , 0, , .	0.3	5
99	Thrombosis versus thermal coagulum formation as a result of endovenous laser treatment: Biochemistry versus photophysics. <i>Phlebology</i> , 2014, 29, 701-705.	1.2	4
100	<i>Bacillus subtilis</i> MraY in detergent-free system of nanodiscs wrapped by styrene-maleic acid copolymers. <i>PLoS ONE</i> , 2018, 13, e0206692.	2.5	4
101	Unaltered Liver Regeneration in Post-Cholestatic Rats Treated with the FXR Agonist Obeticholic Acid. <i>Biomolecules</i> , 2021, 11, 260.	4.0	4
102	IL-23 and IL-17A are not involved in hepatic/ischemia reperfusion injury in mouse and man. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 180-189.	0.3	4
103	Fluorescent labeling of platelets with polyanionic fluorescein derivatives. , 2009, 31, 227-32.		4
104	Laser-assisted vessel welding: state of the art and future outlook. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 1-18.	0.3	3
105	Thermodynamic profiling during irreversible electroporation in porcine liver and pancreas: a case study series. <i>Journal of Clinical and Translational Research</i> , 2020, 5, 109-132.	0.3	3
106	Optimal Use of 2- <sup>7</sup> -Dichlorofluorescein Diacetate in Cultured Hepatocytes. <i>Methods in Molecular Biology</i> , 2022, 2451, 721-747.	0.9	3
107	Reactive Oxygen and Nitrogen Species and Liver Ischemia-Reperfusion Injury: Role of Lipoic Acid. , 2018, , 109-119.		2
108	Carotid chemoreceptor denervation does not impair hypoxia-induced thermal downregulation but vitiates recovery from a hypothermic and hypometabolic state in mice. <i>Scientific Reports</i> , 2019, 9, 5132.	3.3	2

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109	In Vivo Assessment of Thermosensitive Liposomes for the Treatment of Port Wine Stains by Antifibrinolytic Site-Specific Pharmaco-Laser Therapy. <i>Pharmaceutics</i> , 2020, 12, 591.	4.5	2
110	The physiology of artificial hibernation. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 78-93.	0.3	2
111	The Role of Farnesoid X Receptor in Accelerated Liver Regeneration in Rats Subjected to ALPPS. <i>Current Oncology</i> , 2021, 28, 5240-5254.	2.2	2
112	Emerging local ablative therapies for unresectable perihilar cholangiocarcinoma: Time for re-appraisal. <i>United European Gastroenterology Journal</i> , 2017, 5, 455-457.	3.8	1
113	Transcriptional regulation of cardiac cell death and survival signaling by helium postconditioning in a rat model of regional cardiac ischemia/reperfusion. <i>FASEB Journal</i> , 2013, 27, 1b623.	0.5	1
114	Laser-assisted vascular welding: optimization of acute and post-hydration welding strength. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 31-45.	0.3	1
115	Survey and critical appraisal of pharmacological agents with potential thermo-modulatory properties in the context of artificially induced hypometabolism. <i>Journal of Clinical and Translational Research</i> , 2015, 1, 6-21.	0.3	1
116	Inhibition of the HIF-1 Survival Pathway as a Strategy to Augment Photodynamic Therapy Efficacy. <i>Methods in Molecular Biology</i> , 2022, 2451, 285-403.	0.9	1
117	Strategies for Improving Photodynamic Therapy Through Pharmacological Modulation of the Immediate Early Stress Response. <i>Methods in Molecular Biology</i> , 2022, 2451, 405-480.	0.9	1
118	Application of modified small bladder patch-to-bladder double-layer sutures to improve renal transplantation in mice. <i>European Surgery - Acta Chirurgica Austriaca</i> , 2017, 49, 17-22.	0.7	0
119	Super-Resolution Imaging of Intracellular Lipid Nanocarriers to Study Drug Delivery in Photodynamic Therapy. <i>Methods in Molecular Biology</i> , 2022, 2451, 703-709.	0.9	0