

# Peter Ponsaerts

## List of Publications by Year in descending order

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115  
papers

4,467  
citations

109137

35  
h-index

114278

63  
g-index

121  
all docs

121  
docs citations

121  
times ranked

6254  
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly efficient gene delivery by mRNA electroporation in human hematopoietic cells: superiority to lipofection and passive pulsing of mRNA and to electroporation of plasmid cDNA for tumor antigen loading of dendritic cells. <i>Blood</i> , 2001, 98, 49-56.	0.6	438
2	Cellular and molecular neuropathology of the cuprizone mouse model: Clinical relevance for multiple sclerosis. <i>Neuroscience and Biobehavioral Reviews</i> , 2014, 47, 485-505.	2.9	352
3	Microglia: gatekeepers of central nervous system immunology. <i>Journal of Leukocyte Biology</i> , 2009, 85, 352-370.	1.5	275
4	Balancing between immunity and tolerance: an interplay between dendritic cells, regulatory T cells, and effector T cells. <i>Journal of Leukocyte Biology</i> , 2007, 82, 1365-1374.	1.5	192
5	The Use of TLR7 and TLR8 Ligands for the Enhancement of Cancer Immunotherapy. <i>Oncologist</i> , 2008, 13, 859-875.	1.9	192
6	Regulatory T Cells and Human Disease. <i>Clinical and Developmental Immunology</i> , 2007, 2007, 1-10.	3.3	139
7	Toward Cell Therapy Using Placenta-Derived Cells: Disease Mechanisms, Cell Biology, Preclinical Studies, and Regulatory Aspects at the Round Table. <i>Stem Cells and Development</i> , 2010, 19, 143-154.	1.1	127
8	Diffusion kurtosis imaging probes cortical alterations and white matter pathology following cuprizone induced demyelination and spontaneous remyelination. <i>NeuroImage</i> , 2016, 125, 363-377.	2.1	122
9	Cancer immunotherapy using RNA-loaded dendritic cells. <i>Clinical and Experimental Immunology</i> , 2003, 134, 378-384.	1.1	95
10	Reporter gene-expressing bone marrow-derived stromal cells are immune-tolerated following implantation in the central nervous system of syngeneic immunocompetent mice. <i>BMC Biotechnology</i> , 2009, 9, 1.	1.7	78
11	Immunosuppression induced by immature dendritic cells is mediated by TGF $\beta$ <sup>2</sup> /IL $\beta$ 10 double $\beta$ positive CD4 <sup>+</sup> regulatory T cells. <i>Journal of Cellular and Molecular Medicine</i> , 2008, 12, 690-700.	1.6	75
12	Current Challenges for the Advancement of Neural Stem Cell Biology and Transplantation Research. <i>Stem Cell Reviews and Reports</i> , 2012, 8, 262-278.	5.6	75
13	3D culture of murine neural stem cells on decellularized mouse brain sections. <i>Biomaterials</i> , 2015, 41, 122-131.	5.7	75
14	Cell-Based Delivery of Interleukin-13 Directs Alternative Activation of Macrophages Resulting in Improved Functional Outcome after Spinal Cord Injury. <i>Stem Cell Reports</i> , 2016, 7, 1099-1115.	2.3	65
15	mRNA-based gene transfer as a tool for gene and cell therapy. <i>Current Opinion in Molecular Therapeutics</i> , 2007, 9, 423-31.	2.8	61
16	Increased caspase activation and decreased TDP $\beta$ 43 solubility in progranulin knockout cortical cultures. <i>Journal of Neurochemistry</i> , 2010, 115, 735-747.	2.1	57
17	Targeted intracerebral delivery of the anti-inflammatory cytokine IL13 promotes alternative activation of both microglia and macrophages after stroke. <i>Journal of Neuroinflammation</i> , 2018, 15, 174.	3.1	57
18	CCR2 deficiency in monocytes impairs angiogenesis and functional recovery after ischemic stroke in mice. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2020, 40, S98-S116.	2.4	57

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19	High-level transgene expression in primary human T lymphocytes and adult bone marrow CD34+ cells via electroporation-mediated gene delivery. <i>Gene Therapy</i> , 2000, 7, 1431-1437.	2.3	56
20	Messenger RNA Electroporation of Human Monocytes, Followed by Rapid In Vitro Differentiation, Leads to Highly Stimulatory Antigen-Loaded Mature Dendritic Cells. <i>Journal of Immunology</i> , 2002, 169, 1669-1675.	0.4	56
21	RNA-based gene transfer for adult stem cells and T cells. <i>Leukemia</i> , 2004, 18, 1898-1902.	3.3	56
22	Efficient stimulation of HIV-1-specific T cells using dendritic cells electroporated with mRNA encoding autologous HIV-1 Gag and Env proteins. <i>Blood</i> , 2006, 107, 1818-1827.	0.6	56
23	Can cell therapy heal a spinal cord injury?. <i>Spinal Cord</i> , 2008, 46, 532-539.	0.9	56
24	Combination of cuprizone and experimental autoimmune encephalomyelitis to study inflammatory brain lesion formation and progression. <i>Glia</i> , 2017, 65, 1900-1913.	2.5	56
25	Antigen-specific cellular immunotherapy of leukemia. <i>Leukemia</i> , 2005, 19, 1863-1871.	3.3	54
26	mRNA-electroporated mature dendritic cells retain transgene expression, phenotypical properties and stimulatory capacity after cryopreservation. <i>Leukemia</i> , 2002, 16, 1324-1330.	3.3	53
27	Interleukin-13 immune gene therapy prevents CNS inflammation and demyelination via alternative activation of microglia and macrophages. <i>Glia</i> , 2016, 64, 2181-2200.	2.5	53
28	The Toll-like receptor 7/8 agonist resiquimod greatly increases the immunostimulatory capacity of human acute myeloid leukemia cells. <i>Cancer Immunology, Immunotherapy</i> , 2010, 59, 35-46.	2.0	51
29	Plasmid-based genetic modification of human bone marrow-derived stromal cells: analysis of cell survival and transgene expression after transplantation in rat spinal cord. <i>BMC Biotechnology</i> , 2007, 7, 90.	1.7	50
30	mRNA-Mediated Gene Delivery Into Human Progenitor Cells Promotes Highly Efficient Protein Expression. <i>Journal of Cellular and Molecular Medicine</i> , 2007, 11, 521-530.	1.6	48
31	Clinical Potential of Intravenous Neural Stem Cell Delivery for Treatment of Neuroinflammatory Disease in Mice?. <i>Cell Transplantation</i> , 2011, 20, 851-870.	1.2	45
32	Proinflammatory response of human leukemic cells to dsRNA transfection linked to activation of dendritic cells. <i>Leukemia</i> , 2007, 21, 1691-1699.	3.3	43
33	Quantitative and phenotypic analysis of mesenchymal stromal cell graft survival and recognition by microglia and astrocytes in mouse brain. <i>Immunobiology</i> , 2013, 218, 696-705.	0.8	37
34	Biological and Physicochemical Characterization of a Serum- and Xeno-Free Chemically Defined Cryopreservation Procedure for Adult Human Progenitor Cells. <i>Cell Transplantation</i> , 2011, 20, 1241-1257.	1.2	36
35	Cell Type-Associated Differences in Migration, Survival, and Immunogenicity following Grafting in CNS Tissue. <i>Cell Transplantation</i> , 2012, 21, 1867-1881.	1.2	36
36	Ex vivo induction of viral antigen-specific CD8+ T cell responses using mRNA-electroporated CD40-activated B cells. <i>Clinical and Experimental Immunology</i> , 2005, 139, 458-467.	1.1	35

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37	Allogeneic stromal cell implantation in brain tissue leads to robust microglial activation. <i>Immunology and Cell Biology</i> , 2009, 87, 267-273.	1.0	35
38	Identification and characterization of Huntington related pathology: An in vivo DKI imaging study. <i>NeuroImage</i> , 2012, 63, 653-662.	2.1	34
39	Spatiotemporal evolution of early innate immune responses triggered by neural stem cell grafting. <i>Stem Cell Research and Therapy</i> , 2012, 3, 56.	2.4	34
40	Intracerebral transplantation of interleukin 13-producing mesenchymal stem cells limits microgliosis, oligodendrocyte loss and demyelination in the cuprizone mouse model. <i>Journal of Neuroinflammation</i> , 2016, 13, 288.	3.1	34
41	Concise Review: Innate and Adaptive Immune Recognition of Allogeneic and Xenogeneic Cell Transplants in the Central Nervous System. <i>Stem Cells Translational Medicine</i> , 2017, 6, 1434-1441.	1.6	34
42	Multimodal imaging of subventricular zone neural stem/progenitor cells in the cuprizone mouse model reveals increased neurogenic potential for the olfactory bulb pathway, but no contribution to remyelination of the corpus callosum. <i>NeuroImage</i> , 2014, 86, 99-110.	2.1	33
43	Longitudinal monitoring of metabolic alterations in cuprizone mouse model of multiple sclerosis using 1H-magnetic resonance spectroscopy. <i>NeuroImage</i> , 2015, 114, 128-135.	2.1	33
44	Transmembrane protein 119 is neither a specific nor a reliable marker for microglia. <i>Glia</i> , 2022, 70, 1170-1190.	2.5	33
45	Expression of Translocator Protein and [18F]-GE180 Ligand Uptake in Multiple Sclerosis Animal Models. <i>Cells</i> , 2019, 8, 94.	1.8	32
46	Phospholipid Scramblase 1 Is Secreted by a Lipid Raft-dependent Pathway and Interacts with the Extracellular Matrix Protein 1 in the Dermal Epidermal Junction Zone of Human Skin. <i>Journal of Biological Chemistry</i> , 2010, 285, 37823-37837.	1.6	31
47	Distinct spatial distribution of microglia and macrophages following mesenchymal stem cell implantation in mouse brain. <i>Immunology and Cell Biology</i> , 2014, 92, 650-658.	1.0	30
48	Neuroprotective modulation of microglia effector functions following priming with interleukin 4 and 13: current limitations in understanding their mode-of-action. <i>Brain, Behavior, and Immunity</i> , 2020, 88, 856-866.	2.0	30
49	Oxidation of Innate Immune Checkpoint CD47 on Cancer Cells with Non-Thermal Plasma. <i>Cancers</i> , 2021, 13, 579.	1.7	26
50	Recognition of cellular implants by the brain's innate immune system. <i>Immunology and Cell Biology</i> , 2011, 89, 511-516.	1.0	23
51	Multimodal in vivo imaging reveals limited allograft survival, intrapulmonary cell trapping and minimal evidence for ischemia-directed BMSC homing. <i>BMC Biotechnology</i> , 2012, 12, 93.	1.7	23
52	Tackling the physiological barriers for successful mesenchymal stem cell transplantation into the central nervous system. <i>Stem Cell Research and Therapy</i> , 2013, 4, 101.	2.4	23
53	Intracerebral delivery of the M2 polarizing cytokine interleukin 13 using mesenchymal stem cell implants in a model of temporal lobe epilepsy in mice. <i>Epilepsia</i> , 2017, 58, 1063-1072.	2.6	23
54	Labeling of Luciferase/eGFP-Expressing Bone Marrow-Derived Stromal Cells with Fluorescent Micron-Sized Iron Oxide Particles Improves Quantitative and Qualitative Multimodal Imaging of Cellular Grafts In Vivo. <i>Molecular Imaging and Biology</i> , 2011, 13, 1133-1145.	1.3	21

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55	On the Role of Fibrocytes and the Extracellular Matrix in the Physiology and Pathophysiology of the Spiral Ligament. <i>Frontiers in Neurology</i> , 2020, 11, 580639.	1.1	21
56	Cuprizone-induced demyelination and demyelination-associated inflammation result in different proton magnetic resonance metabolite spectra. <i>NMR in Biomedicine</i> , 2015, 28, 505-513.	1.6	20
57	Clinical and immunological control of experimental autoimmune encephalomyelitis by tolerogenic dendritic cells loaded with MOG-encoding mRNA. <i>Journal of Neuroinflammation</i> , 2019, 16, 167.	3.1	20
58	PapRIV, a BV-2 microglial cell activating quorum sensing peptide. <i>Scientific Reports</i> , 2021, 11, 10723.	1.6	20
59	Early Inflammatory Responses following Cell Grafting in the CNS Trigger Activation of the Subventricular Zone: A Proposed Model of Sequential Cellular Events. <i>Cell Transplantation</i> , 2015, 24, 1481-1492.	1.2	19
60	Murine iPSC-derived microglia and macrophage cell culture models recapitulate distinct phenotypical and functional properties of classical and alternative neuro-immune polarisation. <i>Brain, Behavior, and Immunity</i> , 2019, 82, 406-421.	2.0	19
61	Increased soluble amyloid-beta causes early aberrant brain network hypersynchronisation in a mature-onset mouse model of amyloidosis. <i>Acta Neuropathologica Communications</i> , 2019, 7, 180.	2.4	19
62	Highly Efficient mRNA-Based Gene Transfer in Feeder-Free Cultured H9 Human Embryonic Stem Cells. <i>Cloning and Stem Cells</i> , 2004, 6, 211-216.	2.6	18
63	Efficient generation of stably electrotransfected human hematopoietic cell lines without drug selection by consecutive FACSsorting. <i>Cytometry</i> , 2000, 41, 31-35.	1.8	17
64	Efficient removal of LoxP-flanked genes by electroporation of Cre-recombinase mRNA. <i>Biochemical and Biophysical Research Communications</i> , 2003, 305, 10-15.	1.0	17
65	Messenger RNA electroporation is highly efficient in mouse embryonic stem cells: successful FLPe- and Cre-mediated recombination. <i>Gene Therapy</i> , 2004, 11, 1606-1610.	2.3	17
66	In Vivo Interleukin-13-Primed Macrophages Contribute to Reduced Alloantigen-Specific T Cell Activation and Prolong Immunological Survival of Allogeneic Mesenchymal Stem Cell Implants. <i>Stem Cells</i> , 2016, 34, 1971-1984.	1.4	17
67	Neuroglobin Expression Models as a Tool to Study Its Function. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-17.	1.9	17
68	On the pathophysiology of DFNA9: Effect of pathogenic variants in the COCH gene on inner ear functioning in human and transgenic mice. <i>Hearing Research</i> , 2021, 401, 108162.	0.9	17
69	Stem cell therapy for multiple sclerosis: preclinical evidence beyond all doubt?. <i>Regenerative Medicine</i> , 2012, 7, 245-259.	0.8	16
70	Heparin-based, injectable microcarriers for controlled delivery of interleukin-13 to the brain. <i>Biomaterials Science</i> , 2020, 8, 4997-5004.	2.6	15
71	The ratio of SRPK1/SRPK1a regulates erythroid differentiation in K562 leukaemic cells. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2010, 1803, 1319-1331.	1.9	13
72	Smooth muscle cell transplantation improves bladder contractile function in streptozocin-induced diabetic rats. <i>Cytotherapy</i> , 2013, 15, 869-878.	0.3	13

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73	Simultaneous Activation of Viral Antigen-specific Memory CD4+ and CD8+ T-cells Using mRNA-electroporated CD40-activated Autologous B-cells. <i>Journal of Immunotherapy</i> , 2006, 29, 512-523.	1.2	12
74	Connecting the Dots in the Neuroglobin-Protein Interaction Network of an Unstressed and Ferroptotic Cell Death Neuroblastoma Model. <i>Cells</i> , 2019, 8, 873.	1.8	12
75	Modulation of cellular behavior by exogenous messenger RNA. <i>Leukemia</i> , 2006, 20, 767-769.	3.3	11
76	Cellular Immunotherapy for Cytomegalovirus and HIV-1 Infection. <i>Journal of Immunotherapy</i> , 2006, 29, 107-121.	1.2	10
77	Multimodal imaging of micron-sized iron oxide particles following <i>in vitro</i> and <i>in vivo</i> uptake by stem cells: down to the nanometer scale. <i>Contrast Media and Molecular Imaging</i> , 2014, 9, 400-408.	0.4	9
78	Interleukin-25 is detrimental for recovery after spinal cord injury in mice. <i>Journal of Neuroinflammation</i> , 2016, 13, 101.	3.1	9
79	Immune remodelling of stromal cell grafts in the central nervous system: therapeutic inflammation or (harmless) side-effect?. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017, 11, 2846-2852.	1.3	9
80	Loss of Neuroglobin Expression Alters Cdkn1a/Cdk6-Expression Resulting in Increased Proliferation of Neural Stem Cells. <i>Stem Cells and Development</i> , 2018, 27, 378-390.	1.1	9
81	Injury-Dependent Retention of Intraportally Administered Mesenchymal Stromal Cells Following Partial Hepatectomy of Steatotic Liver Does Not Lead to Improved Liver Recovery. <i>PLoS ONE</i> , 2013, 8, e69092.	1.1	8
82	Except for C-C chemokine receptor 7 expression, monocyte-derived dendritic cells from patients with multiple sclerosis are functionally comparable to those of healthy controls. <i>Cytotherapy</i> , 2014, 16, 1024-1030.	0.3	8
83	CD56 Homodimerization and Participation in Anti-Tumor Immune Effector Cell Functioning: A Role for Interleukin-15. <i>Cancers</i> , 2019, 11, 1029.	1.7	7
84	Long-term ovarian hormone deprivation alters functional connectivity, brain neurochemical profile and white matter integrity in the Tg2576 amyloid mouse model of Alzheimer's disease. <i>Neurobiology of Aging</i> , 2021, 102, 139-150.	1.5	7
85	Histological Characterization and Quantification of Cellular Events Following Neural and Fibroblast(-Like) Stem Cell Grafting in Healthy and Demyelinated CNS Tissue. <i>Methods in Molecular Biology</i> , 2014, 1213, 265-283.	0.4	7
86	Multimodal Imaging of Stem Cell Implantation in the Central Nervous System of Mice. <i>Journal of Visualized Experiments</i> , 2012, , e3906.	0.2	6
87	Quantitative Evaluation of Stem Cell Grafting in the Central Nervous System of Mice by In Vivo Bioluminescence Imaging and Postmortem Multicolor Histological Analysis. <i>Methods in Molecular Biology</i> , 2013, 1052, 125-141.	0.4	6
88	Distinct In Vitro Properties of Embryonic and Extraembryonic Fibroblast-Like Cells are Reflected in their in Vivo Behavior following Grafting in the Adult Mouse Brain. <i>Cell Transplantation</i> , 2015, 24, 223-233.	1.2	6
89	Functional consequences of a close encounter between microglia and brain-infiltrating monocytes during CNS pathology and repair. <i>Journal of Leukocyte Biology</i> , 2021, 110, 89-106.	1.5	6
90	Transduction Efficiency and Immunogenicity of Viral Vectors for Cochlear Gene Therapy: A Systematic Review of Preclinical Animal Studies. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 728610.	1.8	5

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91	Cochlin Deficiency Protects Aged Mice from Noise-Induced Hearing Loss. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11549.	1.8	5
92	Application of Perinatal Derivatives in Ovarian Diseases. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 811875.	2.0	5
93	Luminescent Human iPSC-Derived Neurospheroids Enable Modeling of Neurotoxicity After Oxygen-glucose Deprivation. <i>Neurotherapeutics</i> , 2022, 19, 550-569.	2.1	5
94	Macrophage-based delivery of interleukin-13 improves functional and histopathological outcomes following spinal cord injury. <i>Journal of Neuroinflammation</i> , 2022, 19, 102.	3.1	5
95	Sensitive detection of human papillomavirus type 16 E7-specific T cells by ELISPOT after multiple in vitro stimulations of CD8+ T cells with peptide-pulsed autologous dendritic cells. <i>Molecular Cancer</i> , 2006, 5, 49.	7.9	4
96	Interferon- $\beta$ modulates the functional profile of in-vitro-cultured porcine microglia. <i>NeuroReport</i> , 2012, 23, 519-524.	0.6	4
97	Murine induced pluripotent stem cell-derived neuroimmune cell culture models emphasize opposite immune effector functions of interleukin 13-primed microglia and macrophages in terms of neuroimmune toxicity. <i>Glia</i> , 2021, 69, 326-345.	2.5	4
98	Focal white matter lesions induce long-lasting axonal degeneration, neuroinflammation and behavioral deficits. <i>Neurobiology of Disease</i> , 2021, 155, 105371.	2.1	4
99	Promising Strategies for the Development of Advanced In Vitro Models with High Predictive Power in Ischaemic Stroke Research. <i>International Journal of Molecular Sciences</i> , 2022, 23, 7140.	1.8	4
100	Multipotent adult progenitor cells improve the hematopoietic function in myelodysplasia. <i>Cytotherapy</i> , 2017, 19, 744-755.	0.3	3
101	Attitudes of Potential Participants Towards Potential Gene Therapy Trials in Autosomal Dominant Progressive Sensorineural Hearing Loss. <i>Otology and Neurotology</i> , 2021, 42, 384-389.	0.7	3
102	Morpho-functional comparison of differentiation protocols to create iPSC-derived cardiomyocytes. <i>Biology Open</i> , 2022, 11, .	0.6	3
103	Biochemical Parameters for Longitudinal Monitoring of Liver Function in Rat Models of Partial Hepatectomy Following Liver Injury. <i>PLoS ONE</i> , 2013, 8, e66383.	1.1	1
104	Cell-Based Therapies in Lower Urinary Tract Disorders. <i>Cell Transplantation</i> , 2015, 24, 1679-1686.	1.2	0
105	Effect of Oral Allylnitrile Administration on Cochlear Functioning in Mice Following Comparison of Different Anesthetics for Hearing Assessment. <i>Frontiers in Toxicology</i> , 2021, 3, 641569.	1.6	0
106	Editorial: Perinatal Derivatives and the Road to Clinical Translation, Volume I. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 741156.	2.0	0
107	Immunotargeting of the Wilms' Tumor WT1 Antigen for Dendritic Cell and B-Cell-Based Vaccination of Leukemia. <i>Blood</i> , 2004, 104, 2541-2541.	0.6	0
108	Efficient Non-Viral Transfection of Mouse and Human Embryonic Stem Cells. <i>Blood</i> , 2004, 104, 5267-5267.	0.6	0

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109	RNA Electroporation as a New Gene Transfer Method in Hematopoietic Progenitor Cells, Mesenchymal Cells and Activated T-Cells.. Blood, 2004, 104, 5269-5269.	0.6	0
110	Activation of HIV-1-Specific CD8+ and CD4+ Autologous Memory T-Cells by Dendritic Cells and B-Cells Electroporated with mRNA Encoding Consensus or Autologous HIV-1 Proteins.. Blood, 2005, 106, 326-326.	0.6	0
111	Induction of Potentially Protective HIV-Specific T-Cell Responses In Vitro by Gag mRNA-Electroporated Dendritic Cells.. Blood, 2006, 108, 1261-1261.	0.6	0
112	Highly Efficient mRNA- and cDNA-Based Transient Gene Delivery into Human Progenitor Cells.. Blood, 2006, 108, 5471-5471.	0.6	0
113	Double-Stranded RNA Acts as a Strong Danger Signal in Human Myeloid Leukemia Cells Leading to Increased Immunogenicity.. Blood, 2006, 108, 5203-5203.	0.6	0
114	Dendritic Cell-Induced T Cell Non-Responsiveness Is Mediated by FOXP3+ and TGF-beta+IL-10+ CD4+ T Cells.. Blood, 2006, 108, 3891-3891.	0.6	0
115	Increased Soluble A $\beta$ 2 in adult mice causes pathological brain network hypersynchronisation early after induction. Frontiers in Neuroscience, 0, 13, .	1.4	0