

# Kevin Petrecca

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

4,241  
citations

172457  
29  
h-index

138484  
58  
g-index

64  
all docs

64  
docs citations

64  
times ranked

6601  
citing authors

#	ARTICLE	IF	CITATIONS
1	Intraoperative brain cancer detection with Raman spectroscopy in humans. <i>Science Translational Medicine</i> , 2015, 7, 274ra19.	12.4	457
2	First results on survival from a large Phase 3 clinical trial of an autologous dendritic cell vaccine in newly diagnosed glioblastoma. <i>Journal of Translational Medicine</i> , 2018, 16, 142.	4.4	376
3	Effects of Experimental Heart Failure on Atrial Cellular and Ionic Electrophysiology. <i>Circulation</i> , 2000, 101, 2631-2638.	1.6	356
4	Single-cell RNA-seq reveals that glioblastoma recapitulates a normal neurodevelopmental hierarchy. <i>Nature Communications</i> , 2020, 11, 3406.	12.8	300
5	MAFG-driven astrocytes promote CNS inflammation. <i>Nature</i> , 2020, 578, 593-599.	27.8	282
6	Failure pattern following complete resection plus radiotherapy and temozolomide is at the resection margin in patients with glioblastoma. <i>Journal of Neuro-Oncology</i> , 2013, 111, 19-23.	2.9	246
7	Detection, Characterization, and Inhibition of FGFR-TACC Fusions in IDH Wild-type Glioma. <i>Clinical Cancer Research</i> , 2015, 21, 3307-3317.	7.0	230
8	Phase III trial of chemoradiotherapy with temozolomide plus nivolumab or placebo for newly diagnosed glioblastoma with methylated <i>MGMT</i> promoter. <i>Neuro-Oncology</i> , 2022, 24, 1935-1949.	1.2	165
9	A new method using Raman spectroscopy for in vivo targeted brain cancer tissue biopsy. <i>Scientific Reports</i> , 2018, 8, 1792.	3.3	149
10	The oncometabolite 2-hydroxyglutarate activates the mTOR signalling pathway. <i>Nature Communications</i> , 2016, 7, 12700.	12.8	134
11	Characterization of a Raman spectroscopy probe system for intraoperative brain tissue classification. <i>Biomedical Optics Express</i> , 2015, 6, 2380.	2.9	123
12	Highly Accurate Detection of Cancer <i>In Situ</i> with Intraoperative, Label-Free, Multimodal Optical Spectroscopy. <i>Cancer Research</i> , 2017, 77, 3942-3950.	0.9	81
13	IBIS: an OR ready open-source platform for image-guided neurosurgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2017, 12, 363-378.	2.8	74
14	A Targetable EGFR-Dependent Tumor-Initiating Program in Breast Cancer. <i>Cell Reports</i> , 2017, 21, 1140-1149.	6.4	70
15	New prototype neuronavigation system based on preoperative imaging and intraoperative freehand ultrasound: system description and validation. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2011, 6, 507-522.	2.8	65
16	Neural networks improve brain cancer detection with Raman spectroscopy in the presence of operating room light artifacts. <i>Journal of Biomedical Optics</i> , 2016, 21, 094002.	2.6	65
17	Raman spectroscopy detects distant invasive brain cancer cells centimeters beyond MRI capability in humans. <i>Biomedical Optics Express</i> , 2016, 7, 5129.	2.9	64
18	Spatially mapping the immune landscape of melanoma using imaging mass cytometry. <i>Science Immunology</i> , 2022, 7, eabi5072.	11.9	60

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19	Dual MAPK Inhibition Is an Effective Therapeutic Strategy for a Subset of Class II BRAF Mutant Melanomas. <i>Clinical Cancer Research</i> , 2018, 24, 6483-6494.	7.0	55
20	MGMT promoter methylation level in newly diagnosed low-grade glioma is a predictor of hypermutation at recurrence. <i>Neuro-Oncology</i> , 2020, 22, 1580-1590.	1.2	55
21	Antibody-Antisense Oligonucleotide Conjugate Downregulates a Key Gene in Glioblastoma Stem Cells. <i>Molecular Therapy - Nucleic Acids</i> , 2018, 11, 518-527.	5.1	48
22	Preclinical target validation using patient-derived cells. <i>Nature Reviews Drug Discovery</i> , 2015, 14, 149-150.	46.4	46
23	Glioblastoma cell populations with distinct oncogenic programs release podoplanin as procoagulant extracellular vesicles. <i>Blood Advances</i> , 2021, 5, 1682-1694.	5.2	46
24	Developmental trajectory of oligodendrocyte progenitor cells in the human brain revealed by single cell RNA sequencing. <i>Glia</i> , 2020, 68, 1291-1303.	4.9	44
25	Development and first in-human use of a Raman spectroscopy guidance system integrated with a brain biopsy needle. <i>Journal of Biophotonics</i> , 2019, 12, e201800396.	2.3	41
26	Intraoperative Radiotherapy in Newly Diagnosed Glioblastoma (INTRAGO): An Open-Label, Dose-Escalation Phase I/II Trial. <i>Neurosurgery</i> , 2019, 84, 41-49.	1.1	39
27	Rise of Raman spectroscopy in neurosurgery: a review. <i>Journal of Biomedical Optics</i> , 2020, 25, 1.	2.6	39
28	Inhibition of carbonic anhydrase IX in glioblastoma multiforme. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2016, 109, 81-92.	4.3	31
29	Single Cell Transcriptomics of Ependymal Cells Across Age, Region and Species Reveals Cilia-Related and Metal Ion Regulatory Roles as Major Conserved Ependymal Cell Functions. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 703951.	3.7	31
30	Inhibition of glioblastoma cell proliferation, invasion, and mechanism of action of a novel hydroxamic acid hybrid molecule. <i>Cell Death Discovery</i> , 2018, 4, 41.	4.7	30
31	Sensitivity to PRIMA-1MET is associated with decreased MGMT in human glioblastoma cells and glioblastoma stem cells irrespective of p53 status. <i>Oncotarget</i> , 2016, 7, 60245-60269.	1.8	29
32	Mechanisms and Antitumor Activity of a Binary EGFR/DNA-Targeting Strategy Overcomes Resistance of Glioblastoma Stem Cells to Temozolomide. <i>Clinical Cancer Research</i> , 2019, 25, 7594-7608.	7.0	28
33	Chemogenomic profiling of breast cancer patient-derived xenografts reveals targetable vulnerabilities for difficult-to-treat tumors. <i>Communications Biology</i> , 2020, 3, 310.	4.4	28
34	Combining intraoperative ultrasound brain shift correction and augmented reality visualizations: a pilot study of eight cases. <i>Journal of Medical Imaging</i> , 2018, 5, 1.	1.5	27
35	Feature engineering applied to intraoperative <i>in vivo</i> Raman spectroscopy sheds light on molecular processes in brain cancer: a retrospective study of 65 patients. <i>Analyst, The</i> , 2019, 144, 6517-6532.	3.5	24
36	STAT1 potentiates oxidative stress revealing a targetable vulnerability that increases phenformin efficacy in breast cancer. <i>Nature Communications</i> , 2021, 12, 3299.	12.8	24

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37	Expanding the phenotypic and molecular spectrum of RNA polymerase III-related leukodystrophy. <i>Neurology: Genetics</i> , 2020, 6, e425.	1.9	20
38	Improved sensitivity to fluorescence for cancer detection in wide-field image-guided neurosurgery. <i>Biomedical Optics Express</i> , 2015, 6, 5063.	2.9	19
39	Development and characterization of a handheld hyperspectral Raman imaging probe system for molecular characterization of tissue on mesoscopic scales. <i>Medical Physics</i> , 2018, 45, 328-339.	3.0	19
40	Invasive growth associated with cold-inducible RNA-binding protein expression drives recurrence of surgically resected brain metastases. <i>Neuro-Oncology</i> , 2021, 23, 1470-1480.	1.2	18
41	Age-related injury responses of human oligodendrocytes to metabolic insults: link to BCL-2 and autophagy pathways. <i>Communications Biology</i> , 2021, 4, 20.	4.4	17
42	CTIM-25. A RANDOMIZED PHASE 3 STUDY OF NIVOLUMAB OR PLACEBO COMBINED WITH RADIOTHERAPY PLUS TEMOZOLOMIDE IN PATIENTS WITH NEWLY DIAGNOSED GLIOBLASTOMA WITH METHYLATED MGMT PROMOTER: CHECKMATE 548. <i>Neuro-Oncology</i> , 2021, 23, vi55-vi56.	1.2	16
43	Comparison of radiation regimens in the treatment of Glioblastoma multiforme: results from a single institution. <i>Radiation Oncology</i> , 2015, 10, 106.	2.7	15
44	Handheld macroscopic Raman spectroscopy imaging instrument for machine-learning-based molecular tissue margins characterization. <i>Journal of Biomedical Optics</i> , 2021, 26, .	2.6	15
45	Macroscopic-imaging technique for subsurface quantification of near-infrared markers during surgery. <i>Journal of Biomedical Optics</i> , 2015, 20, 036014.	2.6	14
46	The Underlying Biology and Therapeutic Vulnerabilities of Leptomeningeal Metastases in Adult Solid Cancers. <i>Cancers</i> , 2021, 13, 732.	3.7	14
47	Decompressive Craniectomy for Ischemic Stroke: Effect of Hemorrhagic Transformation on Outcome. <i>Journal of Stroke and Cerebrovascular Diseases</i> , 2016, 25, 2177-2183.	1.6	13
48	DZ-2384 has a superior preclinical profile to taxanes for the treatment of triple-negative breast cancer and is synergistic with anti-CTLA-4 immunotherapy. <i>Anti-Cancer Drugs</i> , 2018, 29, 774-785.	1.4	12
49	Quantitative spectral quality assessment technique validated using intraoperative in vivo Raman spectroscopy measurements. <i>Journal of Biomedical Optics</i> , 2020, 25, 1.	2.6	11
50	Glioblastoma scRNA-seq shows treatment-induced, immune-dependent increase in mesenchymal cancer cells and structural variants in distal neural stem cells. <i>Neuro-Oncology</i> , 2022, 24, 1494-1508.	1.2	11
51	Regional and age-related diversity of human mature oligodendrocytes. <i>Glia</i> , 2022, 70, 1938-1949.	4.9	9
52	Rationale for intraoperative radiotherapy in glioblastoma. <i>Journal of Neurosurgical Sciences</i> , 2016, 60, 350-6.	0.6	8
53	Interstitial imaging with multiple diffusive reflectance spectroscopy projections for in vivo blood vessels detection during brain needle biopsy procedures. <i>Neurophotonics</i> , 2019, 6, 1.	3.3	7
54	Paraclinoid aneurysm concealed by sphenoid wing meningioma. <i>Acta Neurochirurgica</i> , 2009, 151, 171-172.	1.7	6

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55	Short Interval Infield Sarcoma Development following Resection of Glioblastoma and Adjuvant Radiotherapy and Temozolomide. <i>Case Reports in Medicine</i> , 2013, 2013, 1-4.	0.7	2
56	RTHP-05. INTRAOPERATIVE RADIOTHERAPY (IORT) USING LOW-ENERGY X-RAYS IN A COHORT OF PREDOMINANTLY INCOMPLETELY RESECTED NEWLY DIAGNOSED GLIOBLASTOMA MULTIFORME (INTRAGO) Tj ETQ 0 0 rgBT /Overlo	0.4	0
57	NCMP-12. GLIOMA RELATED EPILEPSY: CLINICAL AND PATHOLOGICAL CORRELATES. <i>Neuro-Oncology</i> , 2017, 19, vi137-vi137.	1.2	0
58	Endoscopic third ventriculostomy for VP shunt malfunction during the third trimester of pregnancy: illustrative case. <i>Journal of Neurosurgery Case Lessons</i> , 2021, 1, .	0.3	0
59	OPTC-5. Molecular signatures of podoplanin expressing glioblastoma cell subsets with putative role in cancer associated thrombosis and microthrombosis. <i>Neuro-Oncology Advances</i> , 2021, 3, ii7-ii7.	0.7	0
60	TAMI-73. GLIOBLASTOMA CELL POPULATIONS WITH DISTINCT ONCOGENIC PROGRAMS RELEASE PODOPLANIN AS PROCOAGULANT EXTRACELLULAR VESICLES. <i>Neuro-Oncology</i> , 2021, 23, vi213-vi213.	1.2	0
61	NIMG-74. RESPONSE ASSESSMENT AFTER DOSE-ESCALATED RADIOTHERAPY: IMAGING PROTOCOL OF A MULTICENTER PHASE III TRIAL ON INTRAOPERATIVE RADIOTHERAPY IN NEWLY DIAGNOSED GLIOBLASTOMA (INTRAGO-II;ARO2016-1;AG-NRO-03). <i>Neuro-Oncology</i> , 2021, 23, vi146-vi146.	1.2	0
62	IMMU-14. REVEALING THE MANY MYELOID STATES IN HUMAN BRAIN TUMORS AND WAYS TO PERTURB THEM. <i>Neuro-Oncology</i> , 2021, 23, vi94-vi95.	1.2	0