

# Kevin Petrecca

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6291036/publications.pdf>

Version: 2024-02-01

62  
papers

4,241  
citations

172207

29  
h-index

138251

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.  | 5.8  | 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.  | 1.8  | 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.   | 5.8  | 300       |
| 5  | MAFG-driven astrocytes promote CNS inflammation. <i>Nature</i> , 2020, 578, 593-599.  | 13.7 | 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.  | 1.4  | 246       |
| 7  | Detection, Characterization, and Inhibition of FGFR-TACC Fusions in IDH Wild-type Glioma. <i>Clinical Cancer Research</i> , 2015, 21, 3307-3317.  | 3.2  | 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.                                      | 0.6  | 165       |
| 9  | A new method using Raman spectroscopy for in vivo targeted brain cancer tissue biopsy. <i>Scientific Reports</i> , 2018, 8, 1792.   | 1.6  | 149       |
| 10 | The oncometabolite 2-hydroxyglutarate activates the mTOR signalling pathway. <i>Nature Communications</i> , 2016, 7, 12700.   | 5.8  | 134       |
| 11 | Characterization of a Raman spectroscopy probe system for intraoperative brain tissue classification. <i>Biomedical Optics Express</i> , 2015, 6, 2380.   | 1.5  | 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.  | 0.4  | 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.  | 1.7  | 74        |
| 14 | A Targetable EGFR-Dependent Tumor-Initiating Program in Breast Cancer. <i>Cell Reports</i> , 2017, 21, 1140-1149.   | 2.9  | 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. | 1.7  | 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.   | 1.4  | 65        |
| 17 | Raman spectroscopy detects distant invasive brain cancer cells centimeters beyond MRI capability in humans. <i>Biomedical Optics Express</i> , 2016, 7, 5129.   | 1.5  | 64        |
| 18 | Spatially mapping the immune landscape of melanoma using imaging mass cytometry. <i>Science Immunology</i> , 2022, 7, eabi5072.   | 5.6  | 60        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 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.  | 3.2  | 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.   | 0.6  | 55        |
| 21 | Antibody-Antisense Oligonucleotide Conjugate Downregulates a Key Gene in Glioblastoma Stem Cells. <i>Molecular Therapy - Nucleic Acids</i> , 2018, 11, 518-527.   | 2.3  | 48        |
| 22 | Preclinical target validation using patient-derived cells. <i>Nature Reviews Drug Discovery</i> , 2015, 14, 149-150.  | 21.5 | 46        |
| 23 | Glioblastoma cell populations with distinct oncogenic programs release podoplanin as procoagulant extracellular vesicles. <i>Blood Advances</i> , 2021, 5, 1682-1694.   | 2.5  | 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.  | 2.5  | 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.  | 1.1  | 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.  | 0.6  | 39        |
| 27 | Rise of Raman spectroscopy in neurosurgery: a review. <i>Journal of Biomedical Optics</i> , 2020, 25, 1.  | 1.4  | 39        |
| 28 | Inhibition of carbonic anhydrase IX in glioblastoma multiforme. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2016, 109, 81-92.   | 2.0  | 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. | 1.8  | 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.   | 2.0  | 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.   | 0.8  | 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.   | 3.2  | 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.  | 2.0  | 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.  | 0.8  | 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.                         | 1.7  | 24        |
| 36 | STAT1 potentiates oxidative stress revealing a targetable vulnerability that increases phenformin efficacy in breast cancer. <i>Nature Communications</i> , 2021, 12, 3299.   | 5.8  | 24        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Expanding the phenotypic and molecular spectrum of RNA polymerase III-related leukodystrophy. <i>Neurology: Genetics</i> , 2020, 6, e425.   | 0.9 | 20        |
| 38 | Improved sensitivity to fluorescence for cancer detection in wide-field image-guided neurosurgery. <i>Biomedical Optics Express</i> , 2015, 6, 5063.  | 1.5 | 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.  | 1.6 | 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.   | 0.6 | 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.   | 2.0 | 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. | 0.6 | 16        |
| 43 | Comparison of radiation regimens in the treatment of Glioblastoma multiforme: results from a single institution. <i>Radiation Oncology</i> , 2015, 10, 106.   | 1.2 | 15        |
| 44 | Handheld macroscopic Raman spectroscopy imaging instrument for machine-learning-based molecular tissue margins characterization. <i>Journal of Biomedical Optics</i> , 2021, 26, .  | 1.4 | 15        |
| 45 | Macroscopic-imaging technique for subsurface quantification of near-infrared markers during surgery. <i>Journal of Biomedical Optics</i> , 2015, 20, 036014.  | 1.4 | 14        |
| 46 | The Underlying Biology and Therapeutic Vulnerabilities of Leptomeningeal Metastases in Adult Solid Cancers. <i>Cancers</i> , 2021, 13, 732.   | 1.7 | 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.  | 0.7 | 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.   | 0.7 | 12        |
| 49 | Quantitative spectral quality assessment technique validated using intraoperative in vivo Raman spectroscopy measurements. <i>Journal of Biomedical Optics</i> , 2020, 25, 1.   | 1.4 | 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.   | 0.6 | 11        |
| 51 | Regional and age-related diversity of human mature oligodendrocytes. <i>Glia</i> , 2022, 70, 1938-1949.   | 2.5 | 9         |
| 52 | Rationale for intraoperative radiotherapy in glioblastoma. <i>Journal of Neurosurgical Sciences</i> , 2016, 60, 350-6.  | 0.3 | 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.  | 1.7 | 7         |
| 54 | Paraclinoid aneurysm concealed by sphenoid wing meningioma. <i>Acta Neurochirurgica</i> , 2009, 151, 171-172.   | 0.9 | 6         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Short Interval Infield Sarcoma Development following Resection of Glioblastoma and Adjuvant Radiotherapy and Temozolomide. Case Reports in Medicine, 2013, 2013, 1-4.   | 0.3 | 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 ET al. 0 0 rgBT /Overlo   | 0.6 | 0         |
| 57 | NCMP-12. GLIOMA RELATED EPILEPSY: CLINICAL AND PATHOLOGICAL CORRELATES. Neuro-Oncology, 2017, 19, vi137-vi137.  | 0.6 | 0         |
| 58 | Endoscopic third ventriculostomy for VP shunt malfunction during the third trimester of pregnancy: illustrative case. Journal of Neurosurgery Case Lessons, 2021, 1, .  | 0.1 | 0         |
| 59 | OPTC-5. Molecular signatures of podoplanin expressing glioblastoma cell subsets with putative role in cancer associated thrombosis and microthrombosis. Neuro-Oncology Advances, 2021, 3, ii7-ii7.  | 0.4 | 0         |
| 60 | TAMI-73. GLIOBLASTOMA CELL POPULATIONS WITH DISTINCT ONCOGENIC PROGRAMS RELEASE PODOPLANIN AS PROCOAGULANT EXTRACELLULAR VESICLES. Neuro-Oncology, 2021, 23, vi213-vi213.   | 0.6 | 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). Neuro-Oncology, 2021, 23, vi146-vi146. | 0.6 | 0         |
| 62 | IMMU-14. REVEALING THE MANY MYELOID STATES IN HUMAN BRAIN TUMORS AND WAYS TO PERTURB THEM. Neuro-Oncology, 2021, 23, vi94-vi95.   | 0.6 | 0         |