Joy M Burchell

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7378600/publications.pdf

Version: 2024-02-01

106 papers 10,169 citations

54 h-index 98 g-index

114 all docs

114 docs citations

times ranked

114

8772 citing authors

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Monoclonal antibodies to epithelium-specific components of the human milk fat globule membrane: Production and reaction with cells in culture. International Journal of Cancer, 1981, 28, 17-21. | 2.3 | 571 |
| 2 | Critical research gaps and translational priorities for the successful prevention and treatment of breast cancer. Breast Cancer Research, 2013, 15, R92. | 2.2 | 320 |
| 3 | A core protein epitope of the polymorphic epithelial mucin detected by the monoclonal antibody SM-3 is selectively exposed in a range of primary carcinomas. International Journal of Cancer, 1989, 43, 1072-1076. | 2.3 | 318 |
| 4 | Mechanisms Underlying Aberrant Glycosylation of MUC1 Mucin in Breast Cancer Cells. FEBS Journal, 1995, 233, 607-617. | 0.2 | 305 |
| 5 | Comparison of O-Linked Carbohydrate Chains in MUC-1 Mucin from Normal Breast Epithelial Cell Lines and Breast Carcinoma Cell Lines:. Journal of Biological Chemistry, 1996, 271, 33325-33334. | 1.6 | 296 |
| 6 | Mammosphere culture of metastatic breast cancer cells enriches for tumorigenic breast cancer cells. Breast Cancer Research, 2008, 10, R52. | 2.2 | 295 |
| 7 | Retargeting of Human T Cells to Tumor-Associated MUC1: The Evolution of a Chimeric Antigen Receptor. Journal of Immunology, 2008, 180, 4901-4909. | 0.4 | 294 |
| 8 | Substrate Specificities of Three Members of the Human UDP-N-Acetyl-α-d-galactosamine:Polypeptide N-Acetylgalactosaminyltransferase Family, GalNAc-T1, -T2, and -T3. Journal of Biological Chemistry, 1997, 272, 23503-23514. | 1.6 | 279 |
| 9 | The mucin MUC1 modulates the tumor immunological microenvironment through engagement of the lectin Siglec-9. Nature Immunology, 2016, 17, 1273-1281. | 7.0 | 277 |
| 10 | Cloning of partial cDNA encoding differentiation and tumor-associated mucin glycoproteins expressed by human mammary epithelium Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 6060-6064. | 3.3 | 266 |
| 11 | A short sequence, within the amino acid tandem repeat of a cancer-associated mucin, contains immunodominant epitopes. International Journal of Cancer, 1989, 44, 691-696. | 2.3 | 234 |
| 12 | Chemoenzymatically synthesized multimeric Tn/STn MUC1 glycopeptides elicit cancer-specific anti-MUC1 antibody responses and override tolerance. Glycobiology, 2006, 16, 96-107. | 1.3 | 233 |
| 13 | Cancer Biomarkers Defined by Autoantibody Signatures to Aberrant O-Glycopeptide Epitopes. Cancer Research, 2010, 70, 1306-1313. | 0.4 | 227 |
| 14 | The ST6GalNAc-I Sialyltransferase Localizes throughout the Golgi and Is Responsible for the Synthesis of the Tumor-associated Sialyl-Tn O-Glycan in Human Breast Cancer. Journal of Biological Chemistry, 2006, 281, 3586-3594. | 1.6 | 210 |
| 15 | An Â2,3 sialyltransferase (ST3Gal I) is elevated in primary breast carcinomas. Glycobiology, 1999, 9, 1307-1311. | 1.3 | 209 |
| 16 | Tumour-associated carbohydrate antigens in breast cancer. Breast Cancer Research, 2010, 12, 204. | 2.2 | 200 |
| 17 | Cloning of a Human UDP-N-Acetyl-î±-d-Galactosamine:PolypeptideN-Acetylgalactosaminyltransferase That Complements Other GalNAc-Transferases in Complete O-Glycosylation of the MUC1 Tandem Repeat. Journal of Biological Chemistry, 1998, 273, 30472-30481. | 1.6 | 196 |
| 18 | O-linked glycosylation in the mammary gland: changes that occur during malignancy. Journal of Mammary Gland Biology and Neoplasia, 2001, 6, 355-364. | 1.0 | 196 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 19 | PLU-1 nuclear protein, which is upregulated in breast cancer, shows restricted expression in normal human adult tissues: A new cancer/testis antigen?. International Journal of Cancer, 2002, 101, 581-588. | 2.3 | 190 |
| 20 | Structure and Biology of a Carcinoma-associated Mucin, MUC1. The American Review of Respiratory Disease, 1991, 144, S42-S47. | 2.9 | 179 |
| 21 | Identification of a novel cancer-specific immunodominant glycopeptide epitope in the MUC1 tandem repeat. Glycobiology, 2007, 17, 197-209. | 1.3 | 171 |
| 22 | Selectin Ligand Sialyl-Lewis x Antigen Drives Metastasis of Hormone-Dependent Breast Cancers. Cancer Research, 2011, 71, 7683-7693. | 0.4 | 171 |
| 23 | Functional Conservation of Subfamilies of Putative UDP-N-acetylgalactosamine:Polypeptide N-Acetylgalactosaminyltransferases inDrosophila, Caenorhabditis elegans, and Mammals. Journal of Biological Chemistry, 2002, 277, 22623-22638. | 1.6 | 168 |
| 24 | The Relative Activities of the C2GnT1 and ST3Gal-I Glycosyltransferases Determine O-Glycan Structure and Expression of a Tumor-associated Epitope on MUC1. Journal of Biological Chemistry, 2001, 276, 11007-11015. | 1.6 | 165 |
| 25 | Autoantibodies to aberrantly glycosylated MUC1 in early stage breast cancer are associated with a better prognosis. Breast Cancer Research, 2011, 13, R25. | 2.2 | 165 |
| 26 | The Lectin Domain of UDP-N-acetyl-d-galactosamine:PolypeptideN-acetylgalactosaminyltransferase-T4 Directs Its Glycopeptide Specificities. Journal of Biological Chemistry, 2000, 275, 38197-38205. | 1.6 | 147 |
| 27 | MUC1 and the immunobiology of cancer. Journal of Mammary Gland Biology and Neoplasia, 2002, 7, 209-221. | 1.0 | 138 |
| 28 | Macrophage-tumour cell interactions: identification of MUC1 on breast cancer cells as a potential counter-receptor for the macrophage-restricted receptor, sialoadhesin. Immunology, 1999, 98, 213-219. | 2.0 | 126 |
| 29 | Over-expression of ST3Gal-I promotes mammary tumorigenesis. Glycobiology, 2010, 20, 1241-1250. | 1.3 | 124 |
| 30 | Tumor-Associated Tn-MUC1 Glycoform Is Internalized through the Macrophage Galactose-Type C-Type Lectin and Delivered to the HLA Class I and II Compartments in Dendritic Cells. Cancer Research, 2007, 67, 8358-8367. | 0.4 | 122 |
| 31 | MUC1 immunotherapy. Immunotherapy, 2010, 2, 305-327. | 1.0 | 120 |
| 32 | Functional Analysis of the Transcription Repressor PLU-1/JARID1B. Molecular and Cellular Biology, 2007, 27, 7220-7235. | 1.1 | 119 |
| 33 | Detection of the tumour-associated antigens recognized by the monoclonal antibodies hmfg-1 and 2 in serum from patients with breast cancer. International Journal of Cancer, 1984, 34, 763-768. | 2.3 | 115 |
| 34 | A Transfected Sialyltransferase That Is Elevated in Breast Cancer and Localizes to the medial/trans-Golgi Apparatus Inhibits the Development of core-2–based O-Glycans. Journal of Cell Biology, 1997, 137, 1229-1241. | 2.3 | 114 |
| 35 | Expression of fully and under-glycosylated forms of MUC1 mucin in gastric carcinoma. , 1998, 79, 402-410. | | 104 |
| 36 | PLU-1/JARID1B/KDM5B is required for embryonic survival and contributes to cell proliferation in the mammary gland and in ER+ breast cancer cells. International Journal of Oncology, 2011, 38, 1267-77. | 1.4 | 100 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Latest developments in MUC1 immunotherapy. Biochemical Society Transactions, 2018, 46, 659-668. | 1.6 | 95 |
| 38 | Synergism of Toll-like receptor-induced interleukin-12p70 secretion by monocyte-derived dendritic cells is mediated through p38 MAPK and lowers the threshold of T-helper cell type I responses. Cellular Immunology, 2007, 247, 72-84. | 1.4 | 93 |
| 39 | Breast cancer associated transcriptional repressor PLU-1/JARID1B interacts directly with histone deacetylases. International Journal of Cancer, 2007, 121, 265-275. | 2.3 | 87 |
| 40 | The product of the human MUC1 gene when secreted by mouse cells transfected with the full-length cDNA lacks the cytoplasmic tail. Biochemical and Biophysical Research Communications, 1992, 185, 1-8. | 1.0 | 86 |
| 41 | Recombinant MUC1 mucin with a breast cancer-like O-glycosylation produced in large amounts in Chinese-hamster ovary cells. Biochemical Journal, 2003, 376, 677-686. | 1.7 | 83 |
| 42 | Recombinant Tumor-Associated MUC1 Glycoprotein Impairs the Differentiation and Function of Dendritic Cells. Journal of Immunology, 2005, 174, 7764-7772. | 0.4 | 82 |
| 43 | NMR-based determination of the binding epitope and conformational analysis of MUC-1 glycopeptides and peptides bound to the breast cancer-selective monoclonal antibody SM3. FEBS Journal, 2002, 269, 1444-1455. | 0.2 | 79 |
| 44 | The Breast Cancer-Associated Glycoforms of MUC1, MUC1-Tn and sialyl-Tn, Are Expressed in COSMC Wild-Type Cells and Bind the C-Type Lectin MGL. PLoS ONE, 2015, 10, e0125994. | 1.1 | 78 |
| 45 | Effects of testosterone on messenger ribonucleic acid and protein synthesis in rat seminal vesicle. Biochemical Journal, 1978, 174, 543-551. | 3.2 | 77 |
| 46 | The polymorphic epithelial mucin: potential as an immunogen for a cancer vaccine. Cancer Immunology, Immunotherapy, 1996, 42, 71-80. | 2.0 | 77 |
| 47 | Sialyl-Tn vaccine induces antibody-mediated tumour protection in a relevant murine model. British Journal of Cancer, 2009, 100, 1746-1754. | 2.9 | 75 |
| 48 | Intramuscular immunisation with MUC1 cDNA can protect C57 mice challenged with MUC1-expressing syngeneic mouse tumour cells., 1996, 65, 664-670. | | 74 |
| 49 | Differential effect of interferon on DNA synthesis, 2-deoxyglucose uptake and ornithine decarboxylase activity in 3T3 cells stimulated by polypeptide growth factors and tumor promotors. Journal of Cellular Physiology, 1980, 104, 1-9. | 2.0 | 73 |
| 50 | Crystal structure at 1.95 Å resolution of the breast tumour-specific antibody SM3 complexed with its peptide epitope reveals novel hypervariable loop recognition. Journal of Molecular Biology, 1998, 284, 713-728. | 2.0 | 72 |
| 51 | O-linked mucin-type glycosylation in breast cancer. Biochemical Society Transactions, 2018, 46, 779-788. | 1.6 | 69 |
| 52 | Identification of new cancer biomarkers based on aberrant mucin glycoforms by <i>in situ</i> proximity ligation. Journal of Cellular and Molecular Medicine, 2012, 16, 1474-1484. | 1.6 | 67 |
| 53 | Form and pattern of MUC1 expression on T cells activated in vivo or in vitro suggests a function in T-cell migration. Immunology, 2003, 108, 32-41. | 2.0 | 63 |
| 54 | Bioprocess development for the production of a recombinant MUC1 fusion protein expressed by CHO-K1 cells in protein-free medium. Journal of Biotechnology, 2004, 110, 51-62. | 1.9 | 60 |

| # | Article | lF | CITATIONS |
|----|---|-----|-----------|
| 55 | Endothelins Induce CCR7 Expression by Breast Tumor Cells via Endothelin Receptor A and Hypoxia-Inducible Factor-1. Cancer Research, 2006, 66, 11802-11807. | 0.4 | 57 |
| 56 | Characterizing the glycome of the mammalian immune system. Immunology and Cell Biology, 2008, 86, 564-573. | 1.0 | 57 |
| 57 | Elevated IgG4 in patient circulation is associated with the risk of disease progression in melanoma. Oncolmmunology, 2015, 4, e1032492. | 2.1 | 53 |
| 58 | Autoantibodies to MUC1 glycopeptides cannot be used as a screening assay for early detection of breast, ovarian, lung or pancreatic cancer. British Journal of Cancer, 2013, 108, 2045-2055. | 2.9 | 52 |
| 59 | Cancerâ€associated autoantibodies to MUC1 and MUC4—A blinded case–control study of colorectal cancer in UK collaborative trial of ovarian cancer screening. International Journal of Cancer, 2014, 134, 2180-2188. | 2.3 | 49 |
| 60 | Immunological analysis of mucin molecules expressed by normal and malignant mammary epithelial cells. International Journal of Cancer, 1987, 40, 319-327. | 2.3 | 44 |
| 61 | Repurposing Tin Mesoporphyrin as an Immune Checkpoint Inhibitor Shows Therapeutic Efficacy in Preclinical Models of Cancer. Clinical Cancer Research, 2018, 24, 1617-1628. | 3.2 | 44 |
| 62 | The Polymorphic Epithelial Mucin as a Target for Immunotherapy. Annals of the New York Academy of Sciences, 1993, 690, 69-79. | 1.8 | 43 |
| 63 | PLU-1, a transcriptional repressor and putative testis-cancer antigen, has a specific expression and localisation pattern during meiosis. Chromosoma, 2003, 112, 124-132. | 1.0 | 43 |
| 64 | Sialyl-Lewisx on P-Selectin Glycoprotein Ligand-1 Is Regulated during Differentiation and Maturation of Dendritic Cells: A Mechanism Involving the Glycosyltransferases C2GnT1 and ST3Gal I. Journal of Immunology, 2007, 179, 5701-5710. | 0.4 | 42 |
| 65 | Growth Hormone Is Secreted by Normal Breast Epithelium upon Progesterone Stimulation and Increases Proliferation of Stem/Progenitor Cells. Stem Cell Reports, 2014, 2, 780-793. | 2.3 | 42 |
| 66 | Cancer-associated hypersialylated MUC1 drives the differentiation of human monocytes into macrophages with a pathogenic phenotype. Communications Biology, 2020, 3, 644. | 2.0 | 36 |
| 67 | Two E-selectin ligands, BST-2 and LGALS3BP, predict metastasis and poor survival of ER-negative breast cancer. International Journal of Oncology, 2016, 49, 265-275. | 1.4 | 35 |
| 68 | Effects of Testosterone on Sequence Complexity of Polyadenylated RNA from Rat Seminal Vesicle. FEBS Journal, 1978, 91, 327-334. | 0.2 | 34 |
| 69 | Targeting of Tumor-Associated Glycoforms of MUC1 with CAR T Cells. Immunity, 2016, 45, 945-946. | 6.6 | 34 |
| 70 | A MUC1 tandem repeat reporter protein produced in CHO-K1 cells has sialylated core 1 O-glycans and becomes more densely glycosylated if coexpressed with polypeptide-GalNAc-T4 transferase. Glycobiology, 2004, 15, 177-191. | 1.3 | 32 |
| 71 | Targeting DNGRâ€1 (CLEC9A) with antibody/MUC1 peptide conjugates as a vaccine for carcinomas. European Journal of Immunology, 2014, 44, 1947-1955. | 1.6 | 32 |
| 72 | Transforming growth factor $\hat{\mathbb{P}}^2$ is constitutively secreted by chinese hamster ovary cells and is functional in human cells. Biotechnology and Bioengineering, 2011, 108, 2759-2764. | 1.7 | 29 |

| # | Article | IF | Citations |
|----|--|-----|-----------|
| 73 | Models of Breast Morphogenesis Based on Localization of Stem Cells in the Developing Mammary Lobule. Stem Cell Reports, 2015, 4, 699-711. | 2.3 | 29 |
| 74 | RFA strongly modulates the immune system and anti-tumor immune responses in metastatic liver patients. International Journal of Oncology, $0, \dots$ | 1.4 | 28 |
| 75 | Antibodies to Human Milk Fat Globule Molecules. Cancer Investigation, 1989, 7, 53-61. | 0.6 | 27 |
| 76 | Selection of a Relevant In Vitro Blood-Brain Barrier Model to Investigate Pro-Metastatic Features of Human Breast Cancer Cell Lines. PLoS ONE, 2016, 11, e0151155. | 1.1 | 26 |
| 77 | Mucins and their receptors in chronic lung disease. Clinical and Translational Immunology, 2020, 9, e01120. | 1.7 | 25 |
| 78 | Sialylated core 1 based O-linked glycans enhance the growth rate of mammary carcinoma cells in MUC1 transgenic mice. International Journal of Oncology, 2004, 25, 937-43. | 1.4 | 24 |
| 79 | Characterisation and developmental expression of mouse Plu-1, a homologue of a human nuclear protein (PLU-1) which is specifically up-regulated in breast cancer. Mechanisms of Development, 2002, 119, S239-S246. | 1.7 | 23 |
| 80 | Microvesicle Cargo of Tumor-Associated MUC1 to Dendritic Cells Allows Cross-presentation and Specific Carbohydrate Processing. Cancer Immunology Research, 2014, 2, 177-186. | 1.6 | 23 |
| 81 | Breast carcinoma cell lysate-pulsed dendritic cells cross-prime MUC1-specific CD8+ T cells identified by peptide-MHC-class-I tetramers. Cellular Immunology, 2004, 231, 112-125. | 1.4 | 22 |
| 82 | Cyclooxygenase-2 Enzyme Induces the Expression of the Â-2,3-Sialyltransferase-3 (ST3Gal-I) in Breast Cancer. Journal of Biological Chemistry, 2012, 287, 44490-44497. | 1.6 | 22 |
| 83 | Targeted Macrophage Cytotoxicity Using a Nonreplicative Live Vector Expressing a Tumor-Specific Single-Chain Variable Region Fragment. Human Gene Therapy, 2000, 11, 1417-1428. | 1.4 | 21 |
| 84 | JARID1/KDM5 demethylases as cancer targets?. Expert Opinion on Therapeutic Targets, 2017, 21, 5-7. | 1.5 | 21 |
| 85 | Expression of recombinant multi-coloured fluorescent antibodies in gor -/trxB- E. colicytoplasm. BMC Biotechnology, 2011, 11, 117. | 1.7 | 20 |
| 86 | Apoptosis of monocytes and the influence on yield of monocyte-derived dendritic cells. Journal of Immunological Methods, 2004, 294, 67-80. | 0.6 | 19 |
| 87 | Responses of human T cells to peptides flanking the tandem repeat and overlapping the signal sequence of MUC1. International Journal of Cancer, 2005, 115, 760-768. | 2.3 | 19 |
| 88 | Protection against MUC1 expressing mouse tumours by intra-muscular injection of MUC1 cDNA requires functional CD8+ and CD4+ T cells but does not require the MUC1 tandem repeat domain. International Journal of Cancer, 2004, 109, 691-697. | 2.3 | 18 |
| 89 | Cyclooxygenase-2 Enzyme Induces the Expression of the α-2,3-Sialyltransferase-3 (ST3Gal-I) in Breast Cancer. Journal of Biological Chemistry, 2012, 287, 44490-44497. | 1.6 | 18 |
| 90 | O-linked mucin-type glycosylation regulates the transcriptional programme downstream of EGFR. Glycobiology, 2021, 31, 200-210. | 1.3 | 18 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 91 | Production and Characterization of Monoclonal Antibodies to Human Casein. A Monoclonal Antibody That Cross-Reacts With Casein and α-Lactalbumin. Hybridoma, 1985, 4, 341-350. | 0.9 | 17 |
| 92 | Radioimmunoscintigraphy Using Monoclonal Antibodies before Second-Look Surgery in Patients Suffering from Ovarian Cancer. Gynecologic and Obstetric Investigation, 1987, 24, 212-216. | 0.7 | 17 |
| 93 | Tn and STn are members of a family of carbohydrate tumor antigens that possess carbohydrate–carbohydrate interactions. Glycobiology, 2018, 28, 437-442. | 1.3 | 16 |
| 94 | Effective Immunotherapy of Cancer in MUC1-Transgenic Mice Using Clonal Cytotoxic T Lymphocytes Directed Against an Immunodominant MUC1 Epitope. Journal of Immunotherapy, 2002, 25, 46-56. | 1.2 | 14 |
| 95 | Interactions between the breast cancer-associated MUC1 mucins and C-type lectin characterized by optical tweezers. PLoS ONE, 2017, 12, e0175323. | 1.1 | 12 |
| 96 | Histone Methylases and Demethylases Regulating Antagonistic Methyl Marks: Changes Occurring in Cancer. Cells, 2022, 11, 1113. | 1.8 | 12 |
| 97 | Lack of \hat{l}^2 -Casein production by human breast tumours revealed by monoclonal antibodies. European Journal of Cancer & Clinical Oncology, 1987, 23, 1557-1563. | 0.9 | 11 |
| 98 | Interactions of mucins with the Tn or Sialyl Tn cancer antigens including MUC1 are due to GalNAc–GalNAc interactions. Glycobiology, 2016, 26, 1338-1350. | 1.3 | 8 |
| 99 | Radioimmunoscintigraphy with technetium-99m-labelled monoclonal antibody, SM3, in gynaecological cancer. European Journal of Nuclear Medicine and Molecular Imaging, 1993, 20, 483-9. | 2.2 | 7 |
| 100 | T cells reactive with HLAâ€A*0201 peptides from the histone demethylase JARID1B are found in the circulation of breast cancer patients. International Journal of Cancer, 2011, 128, 2114-2124. | 2.3 | 6 |
| 101 | KDM5B protein expressed in viable and fertile ΔARID mice exhibit no demethylase activity. International Journal of Oncology, 2021, 59, . | 1.4 | 3 |
| 102 | Structure and Functions of Mucins. , 0, , 669-683. | | 2 |
| 103 | Mucins and Cancer., 2013,,. | | 2 |
| 104 | Changes in mucin-type O-glycosylation in breast cancer: implications for the host immune response. International Journal of Experimental Pathology, 2004, 85, A52-A52. | 0.6 | 1 |
| 105 | Epithelial Mucin Antibodies and Their Epitopes: Core Protein Epitopes of a Polymorphic Epithelial Mucin (PEM)., 1989,, 81-93. | | 0 |
| 106 | Characterization and Evolution of an Expressed Hypervariable Gene for a Tumor-Associated Mucin, MUC-1., 1991, , 15-23. | | 0 |