Amy Brock

List of Publications by Year in descending order

33 papers	2,333 citations	516710 16 h-index	477307 29 g-index
39 all docs	39 docs citations	39 times ranked	3795 citing authors

#	Article	IF	Citations
1	Non-genetic heterogeneity â€" a mutation-independent driving force for the somatic evolution of tumours. Nature Reviews Genetics, 2009, 10, 336-342.	16.3	455
2	High-Betweenness Proteins in the Yeast Protein Interaction Network. Journal of Biomedicine and Biotechnology, 2005, 2005, 96-103.	3.0	374
3	Non-Darwinian dynamics in therapy-induced cancer drug resistance. Nature Communications, 2013, 4, 2467.	12.8	244
4	Geometric Determinants of Directional Cell Motility Revealed Using Microcontact Printingâ€. Langmuir, 2003, 19, 1611-1617.	3.5	238
5	Nanoparticle targeting of anti-cancer drugs that alter intracellular signaling or influence the tumor microenvironment. Advanced Drug Delivery Reviews, 2014, 79-80, 107-118.	13.7	199
6	Mathematical models of tumor cell proliferation: A review of the literature. Expert Review of Anticancer Therapy, 2018, 18, 1271-1286.	2.4	91
7	Phenotypic Basis for Matrix Stiffness-Dependent Chemoresistance of Breast Cancer Cells to Doxorubicin. Frontiers in Oncology, 2018, 8, 337.	2.8	89
8	Silencing <i>HoxA1</i> by Intraductal Injection of siRNA Lipidoid Nanoparticles Prevents Mammary Tumor Progression in Mice. Science Translational Medicine, 2014, 6, 217ra2.	12.4	66
9	Control of cancer formation by intrinsic genetic noise and microenvironmental cues. Nature Reviews Cancer, 2015, 15, 499-509.	28.4	65
10	Cancer cell population growth kinetics at low densities deviate from the exponential growth model and suggest an Allee effect. PLoS Biology, 2019, 17, e3000399.	5.6	63
11	Single cell transcriptome profiling of the human alcohol-dependent brain. Human Molecular Genetics, 2020, 29, 1144-1153.	2.9	61
12	Precision Oncology: Between Vaguely Right and Precisely Wrong. Cancer Research, 2017, 77, 6473-6479.	0.9	56
13	Multifunctional barcoding with ClonMapper enables high-resolution study of clonal dynamics during tumor evolution and treatment. Nature Cancer, 2021, 2, 758-772.	13.2	52
14	A hybrid model of tumor growth and angiogenesis: In silico experiments. PLoS ONE, 2020, 15, e0231137.	2.5	42
15	Control of Lineage-Specific Gene Expression by Functionalized gRNA Barcodes. ACS Synthetic Biology, 2018, 7, 2468-2474.	3.8	34
16	Precision Medicine with Imprecise Therapy: Computational Modeling for Chemotherapy in Breast Cancer. Translational Oncology, 2018, 11, 732-742.	3.7	32
17	A multi-state model of chemoresistance to characterize phenotypic dynamics in breast cancer. Scientific Reports, 2018, 8, 12058.	3.3	26
18	Integrating Quantitative Assays with Biologically Based Mathematical Modeling for Predictive Oncology. IScience, 2020, 23, 101807.	4.1	22

#	Article	IF	Citations
19	A time-resolved experimental–mathematical model for predicting the response of glioma cells to single-dose radiation therapy. Integrative Biology (United Kingdom), 2021, 13, 167-183.	1.3	18
20	Integrating transcriptomics and bulk time course data into a mathematical framework to describe and predict therapeutic resistance in cancer. Physical Biology, 2021, 18, 016001.	1.8	17
21	Quantification of long-term doxorubicin response dynamics in breast cancer cell lines to direct treatment schedules. PLoS Computational Biology, 2022, 18, e1009104.	3.2	14
22	An experimental-mathematical approach to predict tumor cell growth as a function of glucose availability in breast cancer cell lines. PLoS ONE, 2021, 16, e0240765.	2.5	11
23	Cellular Reprogramming: A New Technology Frontier in Pharmaceutical Research. Pharmaceutical Research, 2012, 29, 35-52.	3.5	10
24	Ten simple rules for women principal investigators during a pandemic. PLoS Computational Biology, 2020, 16, e1008370.	3.2	10
25	Emerging Concepts and Tools in Cell Mechanomemory. Annals of Biomedical Engineering, 2020, 48, 2103-2112.	2.5	9
26	Intraductal Delivery to the Rabbit Mammary Gland. Journal of Visualized Experiments, 2017, , .	0.3	5
27	Applications of high-resolution clone tracking technologies in cancer. Current Opinion in Biomedical Engineering, 2021, 19, 100317.	3.4	5
28	A time-resolved experimental-mathematical model for predicting the response of glioma cells to single-dose radiation therapy. Integrative Biology (United Kingdom), 2021, 13, 167-183.	1.3	4
29	Functionalized Lineage Tracing for the Study and Manipulation of Heterogeneous Cell Populations. Methods in Molecular Biology, 2022, 2394, 109-131.	0.9	3
30	Novel Nanomaterials Enable Biomimetic Models of the Tumor Microenvironment. Journal of Nanotechnology, 2017, 2017, 1-8.	3.4	2
31	Proteomics in context. Trends in Biotechnology, 2001, 19, 435.	9.3	0
32	A bright new tool lights up promoters. Trends in Biotechnology, 2002, 20, 490.	9.3	0
33	Lineage Tracing in Chronic Lymphocytic Leukemia Reveals Clones with Stable Gene Expression States That Differentially Respond to Therapy. Blood, 2019, 134, 1229-1229.	1.4	0