Laura M Heiser

List of Publications by Year
in descending order

57 papers	5,069 citations	186265 28 h-index	138484 58 g-index
67 all docs	67 docs citations	67 times ranked	9379 citing authors

#	Article	IF	Citations
1	A community effort to assess and improve drug sensitivity prediction algorithms. Nature Biotechnology, 2014, 32, 1202-1212.	17.5	653
2	Subtype and pathway specific responses to anticancer compounds in breast cancer. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2724-2729.	7.1	417
3	Basal Subtype and MAPK/ERK Kinase (MEK)-Phosphoinositide 3-Kinase Feedback Signaling Determine Susceptibility of Breast Cancer Cells to MEK Inhibition. Cancer Research, 2009, 69, 565-572.	0.9	340
4	The Library of Integrated Network-Based Cellular Signatures NIH Program: System-Level Cataloging of Human Cells Response to Perturbations. Cell Systems, 2018, 6, 13-24.	6.2	327
5	Metrics other than potency reveal systematic variation in responses to cancer drugs. Nature Chemical Biology, 2013, 9, 708-714.	8.0	280
6	How Machine Learning Will Transform Biomedicine. Cell, 2020, 181, 92-101.	28.9	279
7	A Central Role for RAFâ†'MEKâ†'ERK Signaling in the Genesis of Pancreatic Ductal Adenocarcinoma. Cancer Discovery, 2012, 2, 685-693.	9.4	264
8	Modeling precision treatment of breast cancer. Genome Biology, 2013, 14, R110.	9.6	264
9	A community computational challenge to predict the activity of pairs of compounds. Nature Biotechnology, 2014, 32, 1213-1222.	17.5	264
10	Tumor-Derived Cell Lines as Molecular Models of Cancer Pharmacogenomics. Molecular Cancer Research, 2016, 14, 3-13.	3.4	230
11	Inferring causal molecular networks: empirical assessment through a community-based effort. Nature Methods, 2016, 13, 310-318.	19.0	209
12	Combating subclonal evolution of resistant cancer phenotypes. Nature Communications, 2017, 8, 1231.	12.8	124
13	FOXA1 overexpression mediates endocrine resistance by altering the ER transcriptome and IL-8 expression in ER-positive breast cancer. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6600-E6609.	7.1	119
14	A Multi-center Study on the Reproducibility of Drug-Response Assays in Mammalian Cell Lines. Cell Systems, 2019, 9, 35-48.e5.	6.2	95
15	HER2 Reactivation through Acquisition of the HER2 L755S Mutation as a Mechanism of Acquired Resistance to HER2-targeted Therapy in HER2+ Breast Cancer. Clinical Cancer Research, 2017, 23, 5123-5134.	7.0	85
16	MYC regulates ductal-neuroendocrine lineage plasticity in pancreatic ductal adenocarcinoma associated with poor outcome and chemoresistance. Nature Communications, 2017, 8, 1728.	12.8	83
17	Upregulation of ER Signaling as an Adaptive Mechanism of Cell Survival in HER2-Positive Breast Tumors Treated with Anti-HER2 Therapy. Clinical Cancer Research, 2015, 21, 3995-4003.	7.0	82
18	Spatial Updating in Area LIP Is Independent of Saccade Direction. Journal of Neurophysiology, 2006, 95, 2751-2767.	1.8	78

#	Article	IF	Citations
19	Microenvironment-Mediated Mechanisms of Resistance to HER2 Inhibitors Differ between HER2+ Breast Cancer Subtypes. Cell Systems, 2018, 6, 329-342.e6.	6.2	72
20	Overcoming endocrine resistance due to reduced PTEN levels in estrogen receptor-positive breast cancer by co-targeting mammalian target of rapamycin, protein kinase B, or mitogen-activated protein kinase kinase. Breast Cancer Research, 2014, 16, 430.	5.0	61
21	Integrated analysis of breast cancer cell lines reveals unique signaling pathways. Genome Biology, 2009, 10, R31.	9.6	56
22	Context Specificity in Causal Signaling Networks Revealed by Phosphoprotein Profiling. Cell Systems, 2017, 4, 73-83.e10.	6.2	41
23	Targeting the Mevalonate Pathway to Overcome Acquired Anti-HER2 Treatment Resistance in Breast Cancer. Molecular Cancer Research, 2019, 17, 2318-2330.	3.4	41
24	Pathway-Enriched Gene Signature Associated with 53BP1 Response to PARP Inhibition in Triple-Negative Breast Cancer. Molecular Cancer Therapeutics, 2017, 16, 2892-2901.	4.1	35
25	Quantification of sensitivity and resistance of breast cancer cell lines to anti-cancer drugs using GR metrics. Scientific Data, 2017, 4, 170166.	5.3	34
26	Enzalutamide response in a panel of prostate cancer cell lines reveals a role for glucocorticoid receptor in enzalutamide resistant disease. Scientific Reports, 2020, 10, 21750.	3.3	34
27	PEG-lipid micelles enable cholesterol efflux in Niemann-Pick Type C1 disease-based lysosomal storage disorder. Scientific Reports, 2016, 6, 31750.	3.3	33
28	Dynamic Circuitry for Updating Spatial Representations. II. Physiological Evidence for Interhemispheric Transfer in Area LIP of the Split-Brain Macaque. Journal of Neurophysiology, 2005, 94, 3249-3258.	1.8	32
29	Maintenance of MYC expression promotes de novo resistance to BET bromodomain inhibition in castration-resistant prostate cancer. Scientific Reports, 2019, 9, 3823.	3.3	32
30	Dynamic Circuitry for Updating Spatial Representations. I. Behavioral Evidence for Interhemispheric Transfer in the Split-Brain Macaque. Journal of Neurophysiology, 2005, 94, 3228-3248.	1.8	28
31	Dynamic Circuitry for Updating Spatial Representations. III. From Neurons to Behavior. Journal of Neurophysiology, 2007, 98, 105-121.	1.8	26
32	Corollary discharge and spatial updating: when the brain is split, is space still unified?. Progress in Brain Research, 2005, 149, 187-205.	1.4	25
33	BET bromodomain inhibition blocks the function of a critical AR-independent master regulator network in lethal prostate cancer. Oncogene, 2019, 38, 5658-5669.	5.9	23
34	Individual Cells Can Resolve Variations in Stimulus Intensity along the IGF-PI3K-AKT Signaling Axis. Cell Systems, 2019, 9, 580-588.e4.	6.2	20
35	ATM Suppresses SATB1-Induced Malignant Progression in Breast Epithelial Cells. PLoS ONE, 2012, 7, e51786.	2.5	20
36	A multi-encoder variational autoencoder controls multiple transformational features in single-cell image analysis. Communications Biology, 2022, 5, 255.	4.4	20

#	Article	IF	Citations
37	Characterizing advanced breast cancer heterogeneity and treatment resistance through serial biopsies and comprehensive analytics. Npj Precision Oncology, 2021, 5, 28.	5.4	19
38	Decoupling of the PI3K Pathway via Mutation Necessitates Combinatorial Treatment in HER2+ Breast Cancer. PLoS ONE, 2015, 10, e0133219.	2.5	19
39	A robust prognostic signature for hormone-positive node-negative breast cancer. Genome Medicine, 2013, 5, 92.	8.2	18
40	Systems biology approaches to measure and model phenotypic heterogeneity in cancer. Current Opinion in Systems Biology, 2019, 17, 35-40.	2.6	17
41	A multiplex implantable microdevice assay identifies synergistic combinations of cancer immunotherapies and conventional drugs. Nature Biotechnology, 2022, 40, 1823-1833.	17.5	17
42	Activity of distinct growth factor receptor network components in breast tumors uncovers two biologically relevant subtypes. Genome Medicine, 2017, 9, 40.	8.2	16
43	Using Microarrays to Interrogate Microenvironmental Impact on Cellular Phenotypes in Cancer. Journal of Visualized Experiments, 2019, , .	0.3	16
44	Cellular androgen content influences enzalutamide agonism of F877L mutant androgen receptor. Oncotarget, 2016, 7, 40690-40703.	1.8	12
45	A scalable, open-source implementation of a large-scale mechanistic model for single cell proliferation and death signaling. Nature Communications, 2022, 13, .	12.8	12
46	Genome co-amplification upregulates a mitotic gene network activity that predicts outcome and response to mitotic protein inhibitors in breast cancer. Breast Cancer Research, 2016, 18, 70.	5.0	11
47	Integrative molecular network analysis identifies emergent enzalutamide resistance mechanisms in prostate cancer. Oncotarget, 2017, 8, 111084-111095.	1.8	11
48	A Network-Based Model of Oncogenic Collaboration for Prediction of Drug Sensitivity. Frontiers in Genetics, 2015, 6, 341.	2.3	9
49	Integrating Mathematical Modeling with High-Throughput Imaging Explains How Polyploid Populations Behave in Nutrient-Sparse Environments. Cancer Research, 2020, 80, 5109-5120.	0.9	8
50	Therapeutic Clues from an Integrated Omic Assessment of East Asian Triple Negative Breast Cancers. Cancer Cell, 2019, 35, 341-343.	16.8	7
51	Automatic Transformation and Integration to Improve Visualization and Discovery of Latent Effects in Imaging Data. Journal of Computational and Graphical Statistics, 2020, 29, 929-941.	1.7	7
52	Sensitivity to targeted therapy differs between HER2-amplified breast cancer cells harboring kinase and helical domain mutations in PIK3CA. Breast Cancer Research, 2021, 23, 81.	5.0	7
53	Transcriptional signatures in histologic structures within glioblastoma tumors may predict personalized drug sensitivity and survival. Neuro-Oncology Advances, 2020, 2, vdaa093.	0.7	5
54	Theoretical and experimental analysis of negative dielectrophoresis induced particle trajectories. Electrophoresis, 2022, , .	2.4	4

#	Article	IF	Citations
55	Variational autoencoding tissue response to microenvironment perturbation. , 2019, 10949, .		2
56	Annot: a Django-based sample, reagent, and experiment metadata tracking system. BMC Bioinformatics, 2019, 20, 542.	2.6	1
57	Androgen content and BET bromodomain proteins influence enzalutamide agonism of mutant F876L androgen receptor.. Journal of Clinical Oncology, 2016, 34, e16538-e16538.	1.6	0