Lorenzo L Pesce

List of Publications by Year
in descending order

100 papers	3,004 citations	172207 29 h-index	189595 50 g-index
107 all docs	107 docs citations	107 times ranked	4729 citing authors

#	Article	IF	Citations
1	Risk Factors for Perioperative Acute Kidney Injury After Adult Cardiac Surgery: Role of Perioperative Management. Annals of Thoracic Surgery, 2012, 93, 584-591.	0.7	227
2	Information theory applied to the sparse gene ontology annotation network to predict novel gene function. Bioinformatics, 2007, 23, i529-i538.	1.8	148
3	The Structural Characterization of Oligonucleotide-Modified Gold Nanoparticle Networks Formed by DNA Hybridization. Journal of Physical Chemistry B, 2004, 108, 12375-12380.	1.2	145
4	Network Modeling Identifies Molecular Functions Targeted by miR-204 to Suppress Head and Neck Tumor Metastasis. PLoS Computational Biology, 2010, 6, e1000730.	1.5	140
5	Noise injection for training artificial neural networks: A comparison with weight decay and early stopping. Medical Physics, 2009, 36, 4810-4818.	1.6	134
6	Reliable and Computationally Efficient Maximum-Likelihood Estimation of â€œProperâ€•Binormal ROC Curves. Academic Radiology, 2007, 14, 814-829.	1.3	112
7	Bacterial Superinfection Pneumonia in Patients Mechanically Ventilated for COVID-19 Pneumonia. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 921-932.	2.5	108
8	EuroSCORE Performance in Valve Surgery: A Meta-Analysis. Annals of Thoracic Surgery, 2010, 89, 787-793.e2.	0.7	91
9	Osteonecrosis of the jaw and use of bisphosphonates in adjuvant breast cancer treatment: a metanalysis. Breast Cancer Research and Treatment, 2009, 116, 433-439.	1.1	80
10	Single Sample Expression-Anchored Mechanisms Predict Survival in Head and Neck Cancer. PLoS Computational Biology, 2012, 8, e1002350.	1.5	75
11	Safety of Pregnancy After Primary Breast Carcinoma in Young Women: A Meta-Analysis to Overcome Bias of Healthy Mother Effect Studies. Obstetrical and Gynecological Survey, 2010, 65, 786-793.	0.2	69
12	Network burst activity in hippocampal neuronal cultures: the role of synaptic and intrinsic currents. Journal of Neurophysiology, 2016, 115, 3073-3089.	0.9	66
13	Faber and Newton polynomial integrators for open-system density matrix propagation. Journal of Chemical Physics, 1999, 110, 5538-5547.	1.2	64
14	Variants Affecting Exon Skipping Contribute to Complex Traits. PLoS Genetics, 2012, 8, e1002998.	1.5	53
15	Targeted Analysis of Whole Genome Sequence Data to Diagnose Genetic Cardiomyopathy. Circulation: Cardiovascular Genetics, 2014, 7, 751-759.	5.1	53
16	Performance of EuroSCORE in CABG and off-pump coronary artery bypass grafting: single institution experience and meta-analysis. European Heart Journal, 2008, 30, 297-304.	1.0	52
17	Supercomputing for the parallelization of whole genome analysis. Bioinformatics, 2014, 30, 1508-1513.	1.8	52
18	Small Lung Cancers: Improved Detection by Use of Bone Suppression Imagingâ€"Comparison with Dual-Energy Subtraction Chest Radiography. Radiology, 2011, 261, 937-949.	3.6	51

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19	Experimental Design and Data Analysis in Receiver Operating Characteristic Studies: Lessons Learned from Reports in *Radiology* from 1997 to 2006. Radiology, 2009, 253, 822-830.	3.6	50
20	Network models of genome-wide association studies uncover the topological centrality of protein interactions in complex diseases. Journal of the American Medical Informatics Association: JAMIA, 2013, 20, 619-629.	2.2	43
21	Complex-disease networks of trait-associated single-nucleotide polymorphisms (SNPs) unveiled by information theory. Journal of the American Medical Informatics Association: JAMIA, 2012, 19, 295-305.	2.2	42
22	â€˜N-of-1-*pathways*â€™ unveils personal deregulated mechanisms from a single pair of RNA-Seq samples: towards precision medicine. Journal of the American Medical Informatics Association: JAMIA, 2014, 21, 1015-1025.	2.2	42
23	A functional genomic model for predicting prognosis in idiopathic pulmonary fibrosis. BMC Pulmonary Medicine, 2015, 15, 147.	0.8	42
24	Evaluation of Clinical Breast MR Imaging Performed with Prototype Computer-aided Diagnosis Breast MR Imaging Workstation: Reader Study. Radiology, 2011, 258, 696-704.	3.6	37
25	Experimental Modeling Supports a Role for MyBP-HL as a Novel Myofilament Component in Arrhythmia and Dilated Cardiomyopathy. Circulation, 2017, 136, 1477-1491.	1.6	34
26	Quantum dynamics simulation of the ultrafast photoionization of Li2. Journal of Chemical Physics, 2001, 114, 1259-1271.	1.2	31
27	On the Convexity of ROC Curves Estimated from Radiological Test Results. Academic Radiology, 2010, 17, 960-968.e4.	1.3	31
28	Association of Cardiomyopathy With *MYBPC3* D389V and *MYBPC3^{Δ25bp}* Intronic Deletion in South Asian Descendants. JAMA Cardiology, 2018, 3, 481.	3.0	31
29	Dynamic changes of RNA-sequencing expression for precision medicine: N-of-1-pathways Mahalanobis distance within pathways of single subjects predicts breast cancer survival. Bioinformatics, 2015, 31, i293-i302.	1.8	30
30	COVID-19 mRNA Vaccination Generates Greater Immunoglobulin G Levels in Women Compared to Men. Journal of Infectious Diseases, 2021, 224, 793-797.	1.9	30
31	Multiscale Aspects of Generation of High-Gamma Activity during Seizures in Human Neocortex. ENeuro, 2016, 3, ENEURO.0141-15.2016.	0.9	30
32	Performance of Breast Ultrasound Computer-aided Diagnosis. Academic Radiology, 2008, 15, 1234-1245.	1.3	29
33	N-of-1-pathways MixEnrich: advancing precision medicine via single-subject analysis in discovering dynamic changes of transcriptomes. BMC Medical Genomics, 2017, 10, 27.	0.7	29
34	Photodesorption of NO from a metal surface: quantum dynamical implications of a two-mode model. Chemical Physics, 2000, 251, 51-69.	0.9	28
35	Protein-network modeling of prostate cancer gene signatures reveals essential pathways in disease recurrence. Journal of the American Medical Informatics Association: JAMIA, 2011, 18, 392-402.	2.2	27
36	Improved detection of focal pneumonia by chest radiography with bone suppression imaging. European Radiology, 2012, 22, 2729-2735.	2.3	27

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37	Zodiac: A Comprehensive Depiction of Genetic Interactions in Cancer by Integrating TCGA Data. Journal of the National Cancer Institute, 2015, 107, .	3.0	27
38	Pathogenic and Uncertain Genetic Variants Have Clinical Cardiac Correlates in Diverse Biobank Participants. Journal of the American Heart Association, 2020, 9, e013808.	1.6	27
39	The coupled channel density matrix method for open quantum systems: Formulation and application to the vibrational relaxation of molecules scattering from nonrigid surfaces. Journal of Chemical Physics, 1998, 108, 3045-3056.	1.2	24
40	Breast US Computer-aided Diagnosis System: Robustness across Urban Populations in South Korea and the United States. Radiology, 2009, 253, 661-671.	3.6	24
41	Developing a â€˜personalomeâ€™ for precision medicine: emerging methods that compute interpretable effect sizes from single-subject transcriptomes. Briefings in Bioinformatics, 2019, 20, 789-805.	3.2	24
42	Patterns and persistence of SARS-CoV-2 IgG antibodies in Chicago to monitor COVID-19 exposure. JCI Insight, 2021, 6, .	2.3	24
43	A study of the effect of noise injection on the training of artificial neural networks. , 2009, , .		23
44	A genome-by-environment interaction classifier for precision medicine: personal transcriptome response to rhinovirus identifies children prone to asthma exacerbations. Journal of the American Medical Informatics Association: JAMIA, 2017, 24, 1116-1126.	2.2	23
45	Genomic Autopsy of Sudden Deaths in Young Individuals. JAMA Cardiology, 2021, 6, 1247.	3.0	22
46	Integrative genomics analyses unveil downstream biological effectors of disease-specific polymorphisms buried in intergenic regions. Npj Genomic Medicine, 2016, 1, .	1.7	19
47		1.6	18
48	Translating Mendelian and complex inheritance of Alzheimer's disease genes for predicting unique personal genome variants. Journal of the American Medical Informatics Association: JAMIA, 2012, 19, 306-316.	2.2	18
49	Towards a PBMC â€œvirogram assayâ€•for precision medicine: Concordance between ex vivo and in vivo viral infection transcriptomes. Journal of Biomedical Informatics, 2015, 55, 94-103.	2.5	18
50	Variational wave packet method for dissipative photodesorption problems. Chemical Physics Letters, 1998, 288, 383-390.	1.2	17
51	Computer-aided Detection Evaluation Methods Are Not Created Equal. Radiology, 2009, 251, 634-636.	3.6	17
52	Repeatability in computerâ€‘aided diagnosis: Application to breast cancer diagnosis on sonography. Medical Physics, 2010, 37, 2659-2669.	1.6	17
53	Interreader Scoring Variability in an Observer Study Using Dual-Modality Imaging for Breast Cancer Detection in Women with Dense Breasts. Academic Radiology, 2013, 20, 847-853.	1.3	17
54	â€œFreeâ€•nuclear density propagation in two dimensions the coupled-channel density matrix method and its application to inelastic molecule-surface scattering. Chemical Physics, 1997, 219, 43-55.	0.9	16

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55	Concordance of deregulated mechanisms unveiled in underpowered experiments: PTBP1 knockdown case study. BMC Medical Genomics, 2014, 7, S1.	0.7	16
56	Usefulness of Temporal Subtraction Images for Identification of Interval Changes in Successive Whole-Body Bone Scans: JAFROC Analysis of Radiologists' Performance. Academic Radiology, 2007, 14, 959-966.	1.3	15
57	Analysis of aggregated cell–cell statistical distances within pathways unveils therapeutic-resistance mechanisms in circulating tumor cells. Bioinformatics, 2016, 32, i80-i89.	1.8	15
58	kMEn: Analyzing noisy and bidirectional transcriptional pathway responses in single subjects. Journal of Biomedical Informatics, 2017, 66, 32-41.	2.5	15
59	Non-contrast Enhanced MRI for Evaluation of Breast Lesions. Academic Radiology, 2011, 18, 1467-1474.	1.3	13
60	Complex genetics of pulmonary diseases: lessons from genome-wide association studies and next-generation sequencing. Translational Research, 2016, 168, 22-39.	2.2	13
61	Testing for differentially expressed genetic pathways with single-subject N-of-1 data in the presence of inter-gene correlation. Statistical Methods in Medical Research, 2018, 27, 3797-3813.	0.7	13
62	Comparison of spin echo T1-weighted sequences versus fast spin-echo proton density-weighted sequences for evaluation of meniscal tears at 1.5ÂT. Skeletal Radiology, 2009, 38, 21-29.	1.2	12
63	Semiparametric Estimation of the Relationship between ROC Operating Points and the Test-result Scale. Academic Radiology, 2011, 18, 1537-1548.	1.3	12
64	Receiver-operating characteristic curves for somatic cell scores and California mastitis test in Valle del Belice dairy sheep. Veterinary Journal, 2013, 196, 528-532.	0.6	11
65	eQTL networks unveil enriched mRNA master integrators downstream of complex disease-associated SNPs. Journal of Biomedical Informatics, 2015, 58, 226-234.	2.5	10
66	Curation-free biomodules mechanisms in prostate cancer predict recurrent disease. BMC Medical Genomics, 2013, 6, S4.	0.7	9
67	The mechanism of cancer drug addiction in ALK-positive T-Cell lymphoma. Oncogene, 2020, 39, 2103-2117.	2.6	9
68	Genomic Context Differs Between Human Dilated Cardiomyopathy and Hypertrophic Cardiomyopathy. Journal of the American Heart Association, 2021, 10, e019944.	1.6	9
69	A scaling transformation for classifier output based on likelihood ratio: Applications to a CAD workstation for diagnosis of breast cancer. Medical Physics, 2012, 39, 2787-2804.	1.6	8
70	Novel disease syndromes unveiled by integrative multiscale network analysis of diseases sharing molecular effectors and comorbidities. BMC Medical Genomics, 2018, 11, 112.	0.7	8
71	Evaluating single-subject study methods for personal transcriptomic interpretations to advance precision medicine. BMC Medical Genomics, 2019, 12, 96.	0.7	8
72	Towards mechanism classifiers: expression-anchored Gene Ontology signature predicts clinical outcome in lung adenocarcinoma patients. AMIA ... Annual Symposium proceedings, 2012, 2012, 1040-9.	0.2	7

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73	Emergence of pathway-level composite biomarkers from converging gene set signals of heterogeneous transcriptomic responses. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2018, 23, 484-495.	0.7	7
74	Exploring Wound-Healing Genomic Machinery with a Network-Based Approach. Pharmaceuticals, 2017, 10, 55.	1.7	6
75	Interpreting personal transcriptomes: personalized mechanism-scale profiling of RNA-seq data. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2013, , 159-70.	0.7	6
76	Interpretation of 'Omics dynamics in a single subject using local estimates of dispersion between two transcriptomes. AMIA ... Annual Symposium proceedings, 2019, 2019, 582-591.	0.2	6
77	Comparative Effectiveness of Surgical Approaches for Lung Cancer. Journal of Surgical Research, 2021, 263, 274-284.	0.8	5
78	Large-Scale Modeling of Epileptic Seizures: Scaling Properties of Two Parallel Neuronal Network Simulation Algorithms. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-10.	0.7	4
79	The Effect of Two Priors on Bayesian Estimation of â€œProperâ€•Binormal ROC Curves from Common and Degenerate Datasets. Academic Radiology, 2010, 17, 969-979.	1.3	3
80	Granger causality analysis of functional connectivity of spiking neurons in orofacial motor cortex during chewing and swallowing. , 2012, 2012, 4587-90.		3
81	binomialRF: interpretable combinatoric efficiency of random forests to identify biomarker interactions. BMC Bioinformatics, 2020, 21, 374.	1.2	3
82	Personalized beyond Precision: Designing Unbiased Gold Standards to Improve Single-Subject Studies of Personal Genome Dynamics from Gene Products. Journal of Personalized Medicine, 2021, 11, 24.	1.1	3
83	A Bayesian interpretation of the "proper" binormal ROC model using a uniform prior distribution for the area under the curve. , 2007, , .		2
84	Imputation methods for temporal radiographic texture analysis in the detection of periprosthetic osteolysis. , 2007, , .		2
85	Granger causality analysis of state dependent functional connectivity of neurons in orofacial motor cortex during chewing and swallowing. , 2012, , .		2
86	Estimating Sensitivity and Specificity for Technology Assessment Based on Observer Studies. Academic Radiology, 2013, 20, 825-830.	1.3	2
87	Epithelial cell responses to rhinovirus identify an early-lifeâ€"onset asthma phenotype in adults. Journal of Allergy and Clinical Immunology, 2022, 150, 604-611.	1.5	2
88	Comparison of ROC methods for partially paired data. , 2009, , .		1
89	Estimating Screening-Mammography Receiver Operating Characteristic (ROC) Curves from Stratified Random Samples of Screening Mammograms. Academic Radiology, 2015, 22, 580-590.	1.3	1
90	Convergent downstream candidate mechanisms of independent intergenic polymorphisms between co-classified diseases implicate epistasis among noncoding elements. , 2018, , .		1

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91	A Single-Subject Method to Detect Pathways Enriched With Alternatively Spliced Genes. Frontiers in Genetics, 2019, 10, 414.	1.1	1
92	COPD Hospitalization Risk Increased with Distinct Patterns of Multiple Systems Comorbidities Unveiled by Network Modeling. AMIA ... Annual Symposium proceedings, 2014, 2014, 855-64.	0.2	1
93	Repeatability and classifier bias in computer-aided diagnosis for breast ultrasound. Proceedings of SPIE, 2010, , .	0.8	0
94	Fundamental limitations in developing computer-aided detection for mammography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 648, S251-S254.	0.7	0
95	SUâ€GGâ€Iâ€04: Gridâ€Computing for Optimization of CAD. Medical Physics, 2008, 35, 2643-2643.	1.6	0
96	Stratified Sampling for Case Selection Criteria for Evaluating CAD. Lecture Notes in Computer Science, 2010, , 534-539.	1.0	0
97	SUâ€GGâ€Tâ€444: Normal Tissue Complication Probability (NTCP) Modeling Using Selfâ€Organizing Map (SOM). Medical Physics, 2010, 37, 3288-3288.	1.6	0
98	In Memory of Dr. Charles E. Metz. Japanese Journal of Radiological Technology, 2013, 69, 190-207.	0.0	0
99	Toward Networks from Spikes. Springer Series in Computational Neuroscience, 2015, , 277-292.	0.3	0
100	Reading Between the Genes: Computational Models to Discover Function from Noncoding DNA. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2018, 23, 507-511.	0.7	0